SELF-LEADERSHIP STRATEGIES OF NURSES IN AN OUTREACH SERVICE AT A PRIVATE HOSPITAL GROUP IN GAUTENG

Student Name: Cathrina Johanna Prinsloo
Student number: 3211054

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Faculty of Community and Health Sciences
School of Nursing

Supervisor: Prof K. Jooste
Co-Supervisor: Dr. Firdouza Waggie
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DECLARATION

I, Cathrina Johanna (Carine) Prinsloo declare that this research study titled “Self-leadership strategies of nurses in an outreach service at a private hospital group in Gauteng” is my own original work. It has not been submitted before for any degree or examination at any university and all the sources that I have used or quoted are indicated and acknowledged as complete references.

Catharina Johanna (Carine) Prinsloo
Student number: 3211054

Signature: [Signature]
Date: November 2018

This thesis has been read and approved for submission by:
Professor Karien Jooste (Supervisor)

Signature: [Signature]
Date: November 2018
DEDICATION

Die eer kom God toe!!
God deserves all the honour!!
ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to:

- My husband for his love, support, understanding and encouragement, for the many other roles and tasks you have undertaken for me during my studies.
- My children for their love and support.
- My supervisor Professor Karien Jooste, being a mentor and for her guidance, assistance and motivation.
- SANTRUST for their coaching and belief in supporting nursing doctoral students.
- National Research Foundation for the funding assistance.
ABSTRACT

Critical Care Outreach Services (CCOSs) recognize early sign of deterioration in medical units, regarding the condition of the patient, by using elements of vital sign tracking namely modified early warning score (MEWS). Nurses as leaders should be proactive by using influence to obtain a desired outcome. It is unclear how nurses experience self-leadership in this outreach service in a private hospital in Pretoria. The purpose of this research was to understand nurses’ experience of their self-leadership in the current CCOS at a private hospital in Pretoria, in order to develop self-leadership strategies that could contributes to the implementation of a CCOS (for the broader population of nurses) in a private hospital group in Gauteng. In this research the steps as outlined in the self-leadership strategic framework of Neck and Milliman (1994) were adapted for this research. The theoretical assumptions furthermore informed the methodological steps followed in the research process. The theoretical assumptions of the Practice Orientated Theory of Dickoff, James and Wiedenbach (1968) were adapted and the survey lists of this theory served as a reasoning map in this research. The central statement of this research was that, nurses need to lead themselves in implementing a CCOS in general wards in a private hospital group in Gauteng.

In this study a sequential mixed method design was used. A qualitative phase was undertaken followed by a quantitative phase. The self-leadership strategic framework of Neck and Milliman (1994) outlines the first step of observing and recording of a phenomenon. In Phase 1, a qualitative, exploratory, descriptive and contextual design was conducted. The accessible population consisted of nurses (N=203) who implemented the CCOS at a private hospital in Pretoria. Non-probability purposive sampling was followed. Sampling was conducted until data saturating occurred. Eight focus groups interviews were held to gather data in Phase 1 and data was analysed through open coding. The qualitative phase findings, confirmed that the three approaches; (i) behaviour-focussed actions; (ii) natural reward (motivational) actions; and (iii) constructive thought (cognitive) patterns are part of self-leadership of nurses. The qualitative data was analysed and three themes emerged; mindfulness of self-leadership through developing self-motivation and self-direction, acknowledgment of the role of the nurse in the patient outreach service as part of a team to obtain quality patient care, and power of self-affirmation while delivering nursing care to a patient.
In Theme 1, participants indicated that self-leadership in the patient outreach service was implemented through the behavioural and natural reward approaches and through initiating constructive thought patterns. Mindfulness was found to be an underlying attitude in which nurses performed their tasks with full involvement in what was happening in a specific place and time, and in which they took ownership of their tasks and carried them out with a sense of responsibility. Nurses in an outreach service should be competent at using their clinical observation skills and be knowledgeable enough both to deliver care to their patients and to call for outreach experts when a patient’s MEWS indicates this is necessary. The findings in Theme 2 on ‘acknowledgement of patient outreach service, suggest that participants focus on motivation in delivering quality care and that they need further training in MEWS to ensure patients receive the appropriate level of care. The participants should be confident in their knowledge about their patients, their understanding of the importance of vital data monitoring and take responsibility for the nursing care of their patients. The participants should have the expertise to call outreach experts for assistance when in need. The relative status of healthcare is reflected in the nurse-outreach team’s interactions during the implementation of the outreach service. Participants expressed a positive attitude regarding the outreach team and seemed to have no reservations about calling them when in need. In Theme 3, Participants were aware of the positive feelings they experienced when caring for deteriorating patients. Having the skills and knowledge to know what to do produced these positive feelings which were a form of natural reward for them. Participants indicated that they felt proud (and were thus engaged in a self-reward strategy) when they were appreciated for the nursing care they rendered.

The second step, according to Neck and Milliman’s (1994) self-leadership strategic framework, was to develop a new framework for self-leadership and to replace the old one with it (Phase 2). The survey list of Dickoff et al. (1968) provided answers to six key questions on self-leadership of nurses and provided the reasoning map for the conceptual framework. The context of this activity was CCOS, while the agent in the CCOS was the nurse expert who liaised with the medical practitioner when support was needed. The recipient of self-leadership (activity) is the nurse working in general wards, and the secondary recipient refers to the patient at risk of deteriorating or the already deteriorating patient who benefits from the service. The nurse demonstrates his or her competencies in four processes, namely: 1) self-motivation; 2) self-direction through acting as a role-model; 3) acknowledgement of own role in CCOS; and 4) self-affirmation. The guiding procedures in self-leadership of nurses in CCOS are self-motivation, role-modelling, teamwork and self-affirmation. The endpoint refers to the activities
(strategies) the nurse engages in to mobilise his or her self-leadership in the CCOS. The conclusions made were organised according to the survey list of Dickoff et. al (1968) which provided the overall conceptual framework for the study. The conceptual framework served as a point of departure from which a questionnaire was created to measure the extent to which nurses led themselves in implementing the CCOS. The underlying assumptions for the phenomenon were two aspects of nursing leadership, one personal and one professional; namely being mindful of oneself in implementing nursing care for a deteriorating patient, and secondly the importance for high-quality training of nurses when implementing a high standard of care in a Critical Care Outreach Services.

In Phase 3, a quantitative exploratory and descriptive design was followed by means of a survey. This was the third adapted step from Neck and Milliman (1994) followed to explore the perceptions of participants in the private hospital group on initiating the phenomenon according to the framework developed in Phase 2. A questionnaire was developed from the conceptual framework (Phase 3). A total of 123 questionnaires were distributed and 83 questionnaires were returned, giving a response rate of 67.8%. However, of the 83 questionnaires returned, only 74 questionnaires were found valid for analysis, as some were incomplete and missing answers. The data was analysed by means of descriptive and inferential statistics. Descriptive statistics in the form of frequency distributions (f), mean values ($\bar{x}$) and standard deviations (SD) were used to describe and to summarise data. An exploratory factor analysis was conducted and extracted 8 factors. The KMO test was used to measure the sample adequacy. The participants’ ages were between 30 and 63 years, with an average age of 45.51. The majority fell in the age group 40 to 44 years (Figure 6.1). Just over half the participants had been nurse managers for over six years and half had a nursing management qualification. Just over half (54.1%) of them said that the CCOS was available in their hospitals, while nearly a third of the nurse managers indicated that there were no plans to implement the CCOS in their hospital. More than 90.0% of the participants indicated that their unit applied MEWS when measuring patients’ vital data. The factor analysis extracted eight factors. For purposes of the study criteria were set to include findings in the strategies (Phase 4). The criteria related to items with the highest loads for each factor; agreement on the items, mean values and SD of items. Those items which met the above criteria were viewed as important in the strategy. Reliability and validity of the research process in the quantitative phase was ensured.
The fourth step in this study, according to Neck and Milliman’s (1994) steps, was to create an environment where a greater sense of self-leadership prevailed in the workplace under investigation. **Phase 4** entailed the development of five self-leadership strategies for nurses in CCOS. Strategies were developed that related to (i) self-motivation, (ii) leading by example/role-modelling, (iii) patient outcome/quality of patient care/patient satisfaction, (iv) assistance and guidance from the patient outreach service team and (v) power of self-affirmation. The purpose of the strategies was to each outline objectives towards self-leadership, each with a proposed action plan. Each of the plans was aimed at facilitating self-leadership strategies among nurses in a CCOS to improve the health outcomes of the deteriorating patient in a private healthcare organisation in Gauteng.

In conclusion, this strategy is the first of its kind to be used in the CCOS. The findings of this study have highlighted the nurses’ experiences of their self-leadership in an outreach service. There is a need for self-leadership among nurses, and nurses should be empowered to influence their own behaviour in an outreach service. The implementation of self-leadership strategies could benefit the nursing practice, and nursing education and management.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>ACLS</td>
<td>Advanced cardiac life support</td>
</tr>
<tr>
<td>CABG</td>
<td>Coronary artery bypass graft</td>
</tr>
<tr>
<td>CAT</td>
<td>Cardiac arrest team</td>
</tr>
<tr>
<td>CBT</td>
<td>Code blue team</td>
</tr>
<tr>
<td>CCO</td>
<td>Critical care outreach</td>
</tr>
<tr>
<td>CCOS</td>
<td>Critical care outreach services</td>
</tr>
<tr>
<td>CCOT</td>
<td>Critical care outreach team</td>
</tr>
<tr>
<td>CHS</td>
<td>Community and Health Sciences</td>
</tr>
<tr>
<td>CNS</td>
<td>Clinical nurse specialist</td>
</tr>
<tr>
<td>EN</td>
<td>Enrolled nurse</td>
</tr>
<tr>
<td>ENA</td>
<td>Enrolled nursing assistant</td>
</tr>
<tr>
<td>EWS</td>
<td>Early warning score</td>
</tr>
<tr>
<td>ICU</td>
<td>Intensive care unit</td>
</tr>
<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin test</td>
</tr>
<tr>
<td>MCT</td>
<td>Medical crises team</td>
</tr>
<tr>
<td>MEWS</td>
<td>Modified early warning score</td>
</tr>
<tr>
<td>MET</td>
<td>Medical Emergency Team</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service</td>
</tr>
<tr>
<td>PALS</td>
<td>Paediatric advanced life support</td>
</tr>
<tr>
<td>PART</td>
<td>Patient at risk team</td>
</tr>
<tr>
<td>RRT</td>
<td>Rapid response team</td>
</tr>
<tr>
<td>SA</td>
<td>South Africa</td>
</tr>
<tr>
<td>SANC</td>
<td>South African Nursing Council</td>
</tr>
<tr>
<td>SD</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical package for Social Science</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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CHAPTER 1: ORIENTATION TO THE RESEARCH

1.1 INTRODUCTION

Self-leadership refers to a person’s influence to reach set goals in a specific situation; in this research, an outreach service. A nurse in an outreach service should detect at-risk patients to prevent further deterioration in their health condition. In self-leadership, nurses use their authority to reach the desired goals in a situation, such as quality nursing care in an outreach service, and their power to influence a situation to obtain set goals, as set out for an outreach service (Jooste & Mia, 2015:63).

For many years, patients were considered either well enough to be treated in general wards or sick enough to benefit from being treated in an intensive care unit (ICU). Serious illness often begins long before admission to an ICU is needed (Sankey, McAvay, Siner, Barsky & Chaudhry, 2016:895, Hillman, 2008:77). However, serious adverse events still occur in general wards, including deaths, and approximately 70% of those are preventable. Hillman (2008:77) mentions that over 80% of in-hospital cardiac arrests in general wards are preceded by serious abnormalities in vital signs within eight hours of the cardiac arrest. Actions were taken to identify and prevent these adverse events. One of these actions was the implementing of an outreach service. Outreach services recognize early signs of deterioration in the condition of the patient (Smith & Aitken, 2015:176; Carter, 2008:50). Although slightly different models of outreach services have evolved in Australia, England and the USA, all contain common elements of vital sign tracking, such as respiratory rate, heart rate and blood pressure (Flabouris, Nandal, Vater, Flabouris, O’Connell & Thompson, 2015:2; Tarassenko, Hann & Young, 2010:2; Barbetti & Lee, 2008:80). These approaches are based on the premise that early recognition of physiological abnormalities, coupled with the rapid intervention of proactive staff, may result in an improvement in functional outcomes or mortality rate. Nurses as leaders should be proactive by using their influence to obtain a desired outcome (Preecey & Rodríguez Entrena, 2011:72). This research specifically focused on the concept of self-leadership and on strategies for nurses to implement self-leadership in a critical care outreach service (CCOS). Self-leadership is broadly defined as “the process” of influencing oneself to establish the self-direction and self-motivation needed to perform (Furtner, Rauthmann & Sachse 2015:106; Neck & Houghton, 2006:271). Self-leadership requires entirely autonomous behaviour without regard for the team or organisation (Neck & Manz, 2012:n.p.). Anonymous (2011:n.p.) states that one of the primary, aims of self-leadership is to improve performance.
and effectiveness through behavioural and cognitive strategies that individuals use to influence themselves. Self-leadership is a comprehensive view of self-influence that considers behaviour to be a result of factors both internal and external to the individual.

Self-leadership of nurses is required in critical care situations in hospitals. Current ward-care of critically ill patients is suboptimal; the consequences of this may be costly in terms of time, resources and patient outcomes (Baruch & Messer, 2015:158; Halter, Mast, Bedker, Johnson, Cordella, Torres, King & Plueger, 2009:85). Odell, Victor and Olivier (2009:1993) and Hillman (2008:77) state that admissions to ICU’s could have been potentially avoided as approximately half of those patients received sub-standard care before admission to the ICU. De Vita, Hillman and Bellomo (2017:3) and De Vleminck, Houttekier, Deliens, Van der Stichele and Pardon (2016:2) mention that critical care physicians reason that, managers could create functional criteria for nurses to use in the early recognition of impending deterioration. They could then empower these staff members to bring a team of critical care physicians and/or nurses outside the ICU to the bedside, and improve the outcomes of these patients. Nurses should take the lead in recognising the deteriorating patients and utilise behaviour and cognitive strategies in managing deteriorating patients according to the hospital’s strategy (Neck, Manz & Houghton, 2017:16; Neck & Milliman, 1994:11). There has been an increased interest in strategies for detecting at-risk patients in order to trigger the timely intervention of an outreach service, also known as a rapid response team (RRT) in America, critical care outreach services (CCOS) in England, and medical emergency team (MET) in Australia (De Vita et al., 2017:4). There has been very little emphasis on how nurses lead themselves to implement the CCOS (Jones, King & Wilson, 2009:3380).

Barbetti and Lee (2008:82) and Hillman (2008:78) state that as many as 80% of ward patients have physiological parameters outside normal ranges within the 24 hours preceding ICU admission. A nurse as a leader usually sets a clear aim and acts upon situations by her own influence, power and authority (Jooste, 2017:113). The overall aim of a critical care outreach service is to provide critical care where needed. (Intensive Care Society 2015; Pedersen, Psirides & Coombs, 2014:233; Carter, 2008:51). The failure to respond to patient deterioration promptly and appropriately can lead to an increased need for intensive care and elevated costs (Intensive Care Society, 2015; Tarassenko et al., 2010:2). It is assumed that a nurse should be able to take action through self-leadership, and to respond promptly to the early warning system of a patient. Jones et al. (2009:3385) indicate that uncertainty and a lack of confidence can
negatively affect nurses’ decisions to call the medical emergency team. It is therefore necessary to develop strategies for self-leadership in an outreach service.

1.1.1 Brief overview of self-leadership

Self-leadership is a process through which individuals control their own behaviour, influencing and leading themselves through the use of specific sets of behavioral and cognitive strategies (Neck & Houghton, 2006:270). In this research, the theoretical assumptions were based on the self-leadership framework of Neck and Milliman (1994:11) (Point 1.6.2), which identifies certain self-leadership behaviours or traits. Van Wart (2015:133) mentions traits related to self-leadership that include self-confidence, decisiveness, resilience, energy, need for achievement, willingness to assume responsibility, flexibility, emotional maturity and the skill of continual learning. The central insight of self-leadership theory is that the attitudes, beliefs, self-designed behavioral patterns and motivational preferences of individuals make a critical difference in both accomplishments and personal satisfaction in work (Van Wart, 2015:133).

Frameworks according to which self-leadership could be implemented are necessary (Neck & Milliman, 1994:11). The theoretical foundation of self-leadership is built upon the social learning theory (Bandura, 1977:191) and the social cognitive theory (Bandura, 1986:487). The social learning theory (Bandura, 1977) assumes that people can influence their own cognition, motivation and behaviour (Yun, Cox & Sims, 2006:374). Social cognitive theory assumes that people and their environment interact continually (LaMorte, 2018) and that behavioral consequences serve as sources of information and motivation (Zimmerman & Schunk, 2001:128; Bandura, 1986:132).

Constructive thoughts and sharing of ideas could enhance the perceptions of self-leadership of individuals (Neck & Milliman, 1994:13). Strategies associated with self-leadership include behavior-focused, natural reward and constructive thought strategies (Furtner, et.al., 2015:106; Carmeli, Meitar & Weisberg, 2006:76; Houghton & Yoho, 2005:67; Pearce & Manz, 2005:133). Self-leadership is demonstrated through how selfleaders think and how they behave according to cognitive, motivational and behavioral strategies (Neck et al., 2017:16; Yun et al., 2006:374). Self-leadership also entails the ability to develop yourself and others by means of self-influence, which eventually will lead to higher performance and effectiveness (Neck et al., 2017:16; Germain & Cummings, 2010: 426).
According to Neck and Milliman (1994:13), a greater sense of self-leadership should be created in the work environment of employees. These authors state that self-leadership clarifies individual goals and tasks to drive performance towards quality care. It furthermore enables individuals to make the shift from re-active to pro-active nursing practice and improves problem solving and accountability in implementing nursing care, in this research through an outreach service in a general ward (Neck & Houghton, 2006:276.). Through self-leadership, engagement and empowerment in nursing care is created.

1.2 RESEARCH PROBLEM

The increased acuity and complexity of patient needs within general wards create challenges for nursing staff. These challenges resulted in the development of critical care outreach teams (CCOT) to visit wards and advise them on the management of any patients giving cause for concern (Odell, 2015:174; Ryan, Cadman & Hann, 2004:1186). Flabouris et al. (2015:2) and Odell et al. (2009:1993) state that rapid response systems (RRS) are implemented to address the problem of managing deteriorating ward patients. Monitoring vital signs is fundamental in patient care and one of the most significant clinical skills of nurses in their preventive role. However, in recent years it appears to have become less of a priority for nurses and vital sign monitoring is done infrequently and not according to policy (Cardona-Morrell, Prigomet, Lake, Nicholson, Harrison, Long, Westbrook, Braitwaite & Hillman, 2016:9) and is often delegated to junior nurses or support workers (Higgins, Maries-Tillott, Quinnot & Richmond, 2008:35).

In a private hospital in Pretoria, which is part of a private hospital group, an outreach service was implemented mainly in general wards in 2005. The outreach team consisted of ICU qualified and experienced nurses working during the day and night, 24 hours a day and seven days a week. This outreach team is the critical component of the outreach service because team members should clarify their individual goals and tasks in order to drive performance towards quality care.

The literature supports the following problematic observations of the researcher, who is an outreach expert in a private hospital:

- Nurses fail to recognize patient deterioration in time and overlook the significance of ward-based vital sign observations (Trinkle & Flabouris, 2011:810; Higgins et al., 2008:35).
- The Medical Emergency Team (MET) system is under-used by nurses in the outreach service (Subbe & Welch, 2013:8; Barbetti & Lee, 2008:84).
Only a few nurses feel confident about calling for expert help, with most feeling nervous and uncertain, worrying about doing the right thing and looking unskilled in front of medical colleagues. Nurses rather seek the opinions of others and wait to see if the patient’s condition worsens before calling the outreach team (De Vleminck et al., 2016:2; Odell et al., 2009:2002).

Uncertainty of nurses of when to call for help causes delays and non-compliance with following the protocols available, resulting in delays in calling for help, non-compliance with implementing the calling criteria and a lack of knowledge about the hospital’s outreach service policy (Van Galen, Struijk, Driesen, Merten, Ludikhuize, Van der Spoel, Kramer & Nanayakkara 2016:8; Odell et al., 2009:2002).

Problems with how observations are being taken and failure to use the early warning score tool correctly cause inappropriate care to patients (Van Galen et al., 2016:8; Subbe & Welch, 2013:7; Higgens et al., 2008:36).

Although some problems are experienced with the implementation of self-leadership of team members in the CCOS in one private hospital in Pretoria, the management of the overall hospital group envisions that other private hospitals in their hospital group in Gauteng should implement CCOS. Nurses in general wards of the CCOS in the other private hospitals should therefore become skilled at using self-leadership strategies in implementing such a service in the overall hospital group. Outcomes for patients are dependent on nurses’ ability to identify and respond to signs of increasing illness or deterioration and initiating medical intervention for the patient (Van Galen et al., 2016:8; Trinkle & Flabouris, 2011:813; Jones et al., 2009:3379). The ability to respond and initiate health interventions confirms the role of self-leadership in a CCOS. However, it is unclear how nurses experience self-leadership in the current CCOS, according to the parameters set in the early warning system, in a private hospital in Pretoria. An understanding of their experiences of self-leadership in the CCOS in the private hospital could inform the development of self-leadership strategies for members of the outreach team in the broader hospital group. Mayfield and Mayfield (2016:14) and Pearce and Manz (2005:130) argue that nurses should exercise responsible self-leadership in the workplace. Organisations need employees to take more responsibility and participate in decision-making. This requires that employees lead themselves to make the correct decisions. Jensen (2011:30) and Pearce and Manz (2005:130) are of the opinion that there is a need to develop thoughtfull leaders at all levels of organisations, particulary when it comes to knowledgable work, such as e.g. in a CCOS. Strategies on self-leadership for nurses in a CCOS at a private hospital group
in Gauteng are therefore essential. From the problem, the following research questions were posed:

- How do nurses experience their self-leadership in the current CCOS at a private hospital in Pretoria?
- What is the conceptual framework within which nurses lead themselves in the current CCOS at a private hospital in Pretoria?
- How will nurses lead themselves in implementing the CCOS to be initiated at a private hospital group in Gauteng?
- What self-leadership strategies can be implemented in a CCOS at a private hospital group in Gauteng?

1.3 PURPOSE

The purpose of this research was to understand nurses’ experience of their self-leadership in the current CCOS at a private hospital in Pretoria, in order to develop self-leadership strategies that could contribute to the implementation of a CCOS (for the broader population of nurses) in a private hospital group in Gauteng.

1.4 OBJECTIVES

In this research, the objectives were to:
- Explore and describe nurses’ experience regarding their self-leadership in a current CCOS at a private hospital in Pretoria (Phase 1).
- Develop a conceptual framework on self-leadership of nurses in a current CCOS at a private hospital in Pretoria (Phase 2).
- Explore and describe nurses’ views on their self-leadership in a CCOS to be initiated at a private hospital group in Gauteng (Phase 3).
- Develop self-leadership strategies for nurses to be implemented in a CCOS at a private hospital group in Gauteng (Phase 4).
1.5 PARADIGMATIC ASSUMPTIONS OF THE RESEARCH

1.5.1 Meta-theoretical assumptions

A paradigm is a framework that guides the resolution of problems, the conduct of research and the development of theories. For nursing scientists, paradigms direct the perspective from which research questions are asked, problems are investigated, and research is designed. They also determine what methods are used and how data are collected, analysed and interpreted (Barker, 2009:435). In this research, the assumptions underlying the Theory for Health Promotion in Nursing (University of Johannesburg, 2018:4) were accepted. The four concepts common in nursing theory that influence and determine nursing practice are the person, the environment, health and nursing (CCOS). In this research it was assumed that:

- A person is a holistic individual who interacts in an integrated and interactive manner with her/his internal and external environments. The nurse is a sensitive healthcare provider in different categories who demonstrates knowledge, skills and values to facilitate the promotion of health (Point 1.6.3) and to monitor the vital signs of a patient in a general ward. She can be supported by a medical practitioner. The patient is a person who is ill or is undergoing treatment for disease (http://www.encyclo.co.uk/define/patient), especially in a hospital. In this research, patient means a person in a hospital who is undergoing treatment or who is ill and is under observation for vital data (recipient).

- The environment refers to an internal and external environment. The person’s internal environment consists of the three dimensions namely body, mind and spirit. Body includes all physical structures and biological processes. Mind, also known as psyche, refers to all intellectual, emotional and volition processes of the nurse. The intellect includes the competence and quality of psychological processes of thinking, association, analysis and understanding. The emotions of the nurse and patient are complex and include affection, desires and feelings. Volition refers to the process of decision-making in the carrying out of choices. The spirit of the nurse and patient reflects their relationship with God and consists of two interrelated and integrated components, namely relationships and conscience. The external environment consists of physical, social and spiritual dimensions. The physical environment of medical practitioner and nurse includes physical and chemical structures in a rapid response environment (MEWS). The social dimension refers to the human resources in the external environment of the nurse. The spiritual dimension refers to the religious
aspects of the environment. The nurse is in constant interaction with both his/her internal and external environments (University of Johannesburg, 2018:4).

- **Health** is an interactive, dynamic process in the nurse-patient environment. The relative status of health is reflected by the interaction in nurse-patient environments during implementation of a CCOS. Promotion of health implies the mobilisation of resources such as individual and professional resources.

- **Nursing** refers to the patterning of human behaviour in interaction with the environment (in this research self-leadership) in critical care situations in general wards (monitoring vital signs), the nursing actions or processes by which positive changes in health status are affected and the wholeness of health of human beings recognizing that they are in continuous interaction with their environments (Zaccagnini & White, 2017:4) and implementation of CCOS, later referred to as an outreach service.

### 1.5.2 Theoretical assumptions

#### 1.5.2.1 Self-leadership

In this research, the steps as outlined in the self-leadership strategic framework of Neck and Milliman (1994:11–14) were adapted for this research, and it was assumed that a self-leadership strategy entails the following:

- A phenomenon should be observed and recorded. In this research, nurses’ experiences of their self-leadership during the implementation of a current CCOS were observed, recorded and analysed.
- A framework for the phenomenon should be developed. A conceptual framework for nurses’ self-leadership in implementing a CCOS was developed.
- Perceptions of the phenomenon in the framework should be explored. The views of nurses in a private hospital group on the future implementation of self-leadership in a CCOS in a private hospital group were explored and described.
- A work environment with a greater sense of self-leadership should be created. Nurses’ self-leadership actions in implementing a CCOS in a private hospital group were developed.

These theoretical assumptions furthermore informed the methodological steps followed in the research process (Table 1.2). The central statement of this research was: Nurses need to lead themselves in implementing a CCOS in general wards in a private hospital group in Gauteng.
1.5.2.2 Practice Orientated Theory

Theoretical assumptions of the Practice Orientated Theory of Dickoff et al. (1968:434) were adapted. The survey lists of this theory served as a reasoning map (Table 1.1) in this research, in order to develop a conceptual framework for the findings from Phase 1. Dickoff et al. (1968) provided the reasoning map for describing the conceptual framework by asking the following six questions:

1. Who or what performs the activity (Agency)?
2. Who or what is the recipient of the activity (Recipient)?
3. In what context is the activity performed (Framework)?
4. What is the endpoint of the activity (Terminus)?
5. What is the guiding procedure, technique or protocol of the activity (Procedure)?
6. What is the energy source for the activity (Dynamics)?

Table 1.1: Reasoning map

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>MEANING OF CONCEPT IN THIS RESEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framework</td>
<td>The private hospital group that implemented the CCOS.</td>
</tr>
<tr>
<td>Agent</td>
<td>The critical outreach nurse expert who is a professional nurse with critical care skills.</td>
</tr>
<tr>
<td>Recipient</td>
<td>Primary recipient nurses working in general wards in the CCOS. Secondary recipient is the patient in general wards who is at risk of deteriorating in health status or the already deteriorating patient.</td>
</tr>
<tr>
<td>Dynamics</td>
<td>The underlying dynamics in self-leadership of a CCOS are mindfulness and training of nurses.</td>
</tr>
<tr>
<td>Procedure</td>
<td>The agent influences the primary recipient to perform activities of self-leadership to enable the primary recipient to implement self-leadership in the CCOS to manage the secondary recipient in stabilising a patient health status.</td>
</tr>
<tr>
<td>Terminus</td>
<td>The accomplishment of the activities (procedure) or end results in nurses engaging to in their self-leadership in the CCOS.</td>
</tr>
</tbody>
</table>

1.5.3 Other definitions

*Private hospital*

“Private hospital” means any hospital or any other institution, building or place where provision is made for the treatment and care of people requiring medical or surgical treatment and nursing care but excluding a hospital or any such institution, building or place conducted
by the state, a provincial administration, local authority, hospital board or any other public body (South Africa, 1980). It is a health establishment that is not owned or controlled by an organ of state (South Africa, 2003:14). In this research, private hospital meant a hospital that is privately funded by a hospital group in Gauteng.

General ward
A general ward is an area in a hospital of healthcare delivery setting where patients with similar needs are grouped together to facilitate the delivery of care by healthcare professionals trained in that specialty (http://en.wikipedia.org/wiki/Nursing_unit). In this research, a general ward was a division of the hospital where patients with similar needs were grouped together in order to facilitate the delivery of care by healthcare professionals.

Nurse
According to the Nursing Act No. 33 of 2005, the definition of a nurse is a person registered as a nurse under section 31(1), in order to practice nursing or Midwifery (South Africa, 2005:5). In this research, “nurse” referred to a person who is formally educated and trained in the care of the sick and who is registered as a nurse under section 31(1) of the Nursing Act No. 33 of 2005 to practice as a nurse, as a professional nurse, staff nurse (currently called enrolled nurse) and auxiliary nurse. According to Jooste (2017:77), a nurse is central to all activities in a ward and carries out certain fundamental functions such as planning, organising, leading and controlling. In this research, the term nurse referred to all categories of nurses who is responsible for the general nursing care of patients in general wards of a CCOS in a private hospital.

Nurse expert
The SA Nursing Council (2012) defines a Clinical Nurse Specialist (CNS), as a person having a qualification in the area of specializing, in-depth knowledge and expertise that enables her/him to focus on facility care and work closely with medical officers on a consultative basis. In this study a professional nurse with a qualification in ICU referred to as the outreach nurse expert. The outreach nurse expert liaises with a medical practitioner and is responsible for guidance and advise to ward nurses in general wards of an outreach service in a private hospital.

Outreach service
Manchester (2015:12) defines CCOS as a service that provides early recognition and intervention of patients physiological deterioration. It focuses on optimising ward management before the patient becomes critically ill and thereby reduces admission/readmission to the intensive care unit (ICU). On the other hand the Intensive Care Society (2015) defines CCOS as an approach that functions at hospital level to manage patients at risk of deteriorating or
deteriorating patients. It arranges timely admission to the critical care unit when required, provide advice on patient management and follow up and educates and shares critical care skills with nurses in general wards. In this research, the CCOS was described as a predominantly nurse-led service in which patients in general wards who are at risk of deteriorating or who are starting to deteriorate are identified by nurses and individualised interventions implemented, tailored for the needs of the patient in question and the education of nurses, by outreach nurse experts.

**Outreach team**

The outreach team is a team of expert professional nurses with experience in providing critical and acute care 24 hours a day, seven days a week (University Hospital Southampton, 2018). The role of the team is to assess the patient, assist the bedside nurse in providing the most appropriate care for the patient and to determine whether the patient needs more advanced treatment and a higher level of care in an ICU (University Hospital Southampton, 2018).

**Outreach expert**

A critical care outreach expert is a professional nurse with critical care skills who acts as an agent and guide nurses as primary recipients, to attend to patients (secondary recipients) in general wards of the hospital experiencing acute clinical changes.

**Experience**

Experience refers to the insight or learning that a person derives from previous successes and disappointments (Guy, 2009:183). In this research, “experience” means the learning and encountering of nurses during their involvement in the CCOS.

**View**

This concept means to think in a particular way, regard something, a personal belief or judgement that is not founded on proof or certainty (Collins English dictionary, 2014). In this research, the term view refers to the thinking patterns of nurses during a CCOS.

**Strategies**

Wilczek (2008:2) defines strategies as the pattern of objectives, purposes or goals and essential policies of plans for achieving these goals. In this research, strategies mean the rationale, objectives, actions and methods of a plan to bring a desired solution.

**Self-leadership**

Self-leadership has been broadly defined as "the process" of influencing oneself to establish the self-direction and self-motivation needed to perform (Neck et al., 2017:7). Self-leadership also deals with finding the balance between your own power, authority and influence during a particular set of circumstances (Jooste, 2017). In this study self-leadership refers to the balance
between your own power, authority and influence in order to influence yourself to establish the self-direction and self-motivation needed to perform during particular set of circumstances.

1.5.4 Methodological assumptions
In this research, a mixed method design was followed. Mixed method research is the type of research in which a researcher combines elements of qualitative and quantitative research approaches for the purposes of increasing the breadth and depth of understanding and corroboration (Creswell & Plano Clark, 2018:4; Creswell, 2015:2).

Table 1.2 Framework of the research

<table>
<thead>
<tr>
<th>Phases</th>
<th>Research questions</th>
<th>Objectives</th>
<th>Adapted self-leadership strategic framework (Neck and Milliman, 1994)</th>
<th>Mixed method</th>
<th>Reasoning strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How do nurses experience their self-leadership in the current CCOS at a private hospital in Pretoria?</td>
<td>Explore and describe nurses’ experiences regarding their self-leadership in a current CCOS at a private hospital in Pretoria</td>
<td>Observe, record and analyse the phenomenon</td>
<td>Focus groups</td>
<td>Inductive</td>
</tr>
<tr>
<td>2</td>
<td>What is the conceptual framework within which nurses lead themselves in the current CCOS at a private hospital in Pretoria?</td>
<td>Develop a conceptual framework on nurses’ self-leadership in a current CCOS at a private hospital in Pretoria</td>
<td>Develop a new framework for the phenomenon</td>
<td>Conceptualisation with literature control according to Dickoff et al. (1986)</td>
<td>Synthesis</td>
</tr>
<tr>
<td>3</td>
<td>How could nurses lead themselves in implementing the CCOS to be initiated at a private hospital group in Gauteng?</td>
<td>Explore and describe nurses’ views on self-leadership in a CCOS to be initiated at a private hospital group in Gauteng</td>
<td>Explore perceptions of the phenomenon based on the framework</td>
<td>Questionnaire</td>
<td>Deductive</td>
</tr>
<tr>
<td>4</td>
<td>What self-leadership strategies can be implemented in a CCOS, at a private hospital group in Gauteng?</td>
<td>Develop self-leadership strategies for nurses to be implemented in a CCOS at a private hospital group in Gauteng</td>
<td>Create a greater sense of self-leadership in the workplace</td>
<td>Strategies</td>
<td>Synthesis</td>
</tr>
</tbody>
</table>
The assumptions of a mixed method are that it can combine the strengths of quantitative and qualitative data; build from one type of data to the other; and answer more than one question (Plano Clark & Creswell, 2010:299). A qualitative phase was followed by a second quantitative phase, as seen in Table 1.2.

1.6 RESEARCH DESIGN
Mixed method research is the type of research in which a researcher combines elements of qualitative and quantitative research approaches for the purposes of increasing the breadth and depth of understanding and for corroboration (Creswell & Plano Clark, 2018:4; DeCuir-Gunby & Schutz, 2016:n.p.). A sequential exploratory, descriptive mixed method design was used.

The researcher collects and analyses qualitative data first, followed by the collection of quantitative data. The qualitative phase is primarily used to generate theoretical constructs, whereas the quantitative phase is used to test the theory generated from the qualitative phase (Hesse-Biber & Johnson, 2015:704; Holloway & Wheeler, 2010:273). By employing a mixed method research design, the integrity of the findings is enhanced (Creswell & Plano Clark, 2018:62). Table 1.2 outlines the framework and the four phases of the mixed method followed in this research.

1.6.1 Phase 1
The self-leadership strategic framework of Neck and Milliman (1994:11) outlines the first step of observing and recording a phenomenon. In Phase 1, a qualitative, exploratory, descriptive and contextual design was followed. Exploratory research takes place when there is little or no prior knowledge of a phenomenon. Leavy (2017:57) and Churchill and Iacobucci (2010:58) are of the meaning that the major emphasis in exploratory research is on the discovery of ideas and insights and on generating possible explanations of a phenomenon. The experiences of the participants (nurses) in the CCOS were explored to determine their experiences described in Phase 1 of the research study. The experiences of participants about the current CCOS in a Pretoria hospital were uncovered to obtain insight into unknown variables. Babbie (2015:97) states that descriptive studies answer questions of “how” e.g. nurses’ experience of the phenomenon of self-leadership. Descriptive studies refer to a thick examination of a phenomena and its deeper meaning. Qualitative descriptions tend to provide richer details about the environment, interactions, meanings and everyday lives than when generalizing with precision to a larger population (Klenke, 2016:10; Johnson & Christensen, 2012:508; Rubin &
Babbie, 2011:134). This research provided an accurate description of the experiences of the nurses involved in the CCOS, without influencing the data obtained. A contextual design is a powerful approach in obtaining and analysing behavioural data (Bennet & Bennet, 2006:329). According to Terry (2012:163), a contextual design samples cases within specific groups to accurately describe characteristics of the groups’ contexts, such as the CCOS in general wards in a private hospital.

1.6.1.1 Population and sample
An accessible population refers to that portion of the population to which the researcher has reasonable access (Grove, Gray & Burns, 2015:251; Teddlie & Tashakkori, 2009:170; Burns & Grove, 2005:342). The accessible population consisted of nurses (N=203) all colleagues, of who implemented the CCOS at a private hospital in Pretoria (Table 1.3).

The sample was purposefully drawn from an accessible population with eligibility criteria. Participants in the sample were all full-time and permanently appointed nurses (all nursing categories), directly involved in delivering direct nursing care, with the responsibility to implement the outreach services at a private hospital in Pretoria. Non-permanent nurses (e.g. agency nurses) were excluded from the research, due to some only working a few hours a week in this study environment.

<table>
<thead>
<tr>
<th>Ward Discipline</th>
<th>Professional Nurses</th>
<th>Staff Nurses</th>
<th>Auxiliary nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical wards x2</td>
<td>12</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Medical wards x2</td>
<td>11</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Orthopaedic wards x2</td>
<td>8</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Gynaecology ward</td>
<td>12</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Oncology ward</td>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Paediatric ward</td>
<td>6</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Day ward</td>
<td>8</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>n=62</td>
<td>n=71</td>
<td>n=70</td>
</tr>
</tbody>
</table>

In qualitative data collection, no specified numbers of focus groups are stipulated (Brennen, 2017:n.p; Plano Clark & Creswell, 2010:259.). A total of eight focus groups were conducted with a focus group from each nursing discipline (Table 3.2). Liamputtong (2011:42) and Langer (2006:35) mention that the group size is crucial for the success of the focus group.

http://etd.uwc.ac.za/
method and they recommend that there should be six to ten participants in one focus group. On the other hand, Krueger and Casey (2015:n.p.) recommend that focus groups should be between ten and twelve people. Stewart and Shamdasani (2015:89) state that the ideal focus group size is between eight to twelve participants. For the purpose of this research, focus groups consisted of eight to ten participants. This included focus groups with each of the professional, staff and auxiliary nurses categories, held separately due their different scopes of nursing practice. Data was collected until data saturation was reached when the researcher no longer found any new information during the focus group discussions, and no new categories or new inputs in new categories (Ravitch & Carl, 2016:n.p.; Teddlie & Tashakkori, 2009:344). Field notes were made by the researcher during the focus group discussions (Merriam & Tisdell, 2016:151; Plano Clark & Creswell, 2010:260).

1.6.1.2 Data gathering
The focus group is valuable for obtaining an in-depth understanding of the rich and detailed words of participants (Klenke, 2016:138; Liamputtong, 2011:6; Langer, 2006:4) on their self-leadership during implementing a CCOS. Focus groups were conducted in a private room. The focus groups were digitally recorded, and open-ended questions were posed by a moderator. Data was gathered through voice recording, supported by the taking of field notes. This enabled data triangulation, which occurs when data from digital recordings are used to corroborate data from field notes (Glasper & Rees, 2016:71). A preliminary (pilot) focus group was conducted to investigate if the research questions will elicit the data needed. Proposed broad probing questions, relating to the definition of the concept of self-leadership, were stipulated on an interview schedule. Liamputtong (2011:46) and Langer (2006:35) indicate that a focus group should not last longer than two hours and that most focus groups are conducted within one and a half hours. The focus groups lasted between 45 and 75 minutes. The researcher made use of a moderator who had experience in facilitating focus groups to assist with conducting the focus groups (Phase 1 of the research). The reason for this was that the researcher worked in the hospital and is known to the participants, although not known to all.

1.6.1.3 Data analysis
The data collected was transcribed verbatim and the coding of the data was guided by a computer assisted NCT model analysis approach (Friese, 2014:12) on Atlas Ti, a computerised qualitative data analysis program. The NCT model refers to the components of Noticing things, Collecting things and Thinking about things, starting with noticing interesting things in the
data, collecting these things and thinking about them and coming up with insightful results (Friese, 2014:92). The data was cross-checked as each bit of data was viewed with all the other bits of data (Cuesta & Kumar, 2016:16; Grove, Burns & Gray, 2012:280). The data was broken down into discrete parts, closely examined for similarities and differences. Event happenings and actions/interactions that were found to be similar in nature or related in meaning were grouped under categories named after more abstract concepts (Babbie, 2015:401). Content analysis is designed to classify the data into categories. The researcher looked for repeated ideas or patterns of thoughts as guided by the theoretical framework (Gray, Grove & Burns, 2013:281). The credibility of the coding was confirmed by an independent, experienced coder (Annexure G).

1.6.1.4 Trustworthiness
Quality is essential to qualitative research. The term used to describe the desirable characteristics of the process and the product in qualitative research is rigor (Klenke, 2016:216; Tappen, 2016:153). De Chesnay (2015:135) and Burns and Grove (2005:55) state that rigor is associated with openness, scrupulous adherence to a philosophical perspective, thoroughness in collecting data, and consideration of all data in the subjective theory development phase. Evaluation of the rigor of a qualitative research study is partly based on the logic of the emerging theory and the clarity with which it sheds light on the studied phenomenon.

De Chesnay (2015:134), Leavy (2017:653), Streubert and Carpenter (2011:48) identify the following terms to describe techniques supporting rigor/trustworthiness: credibility, dependability, confirmability and transferability. Credibility was obtained through prolonged engagement and persistent in-depth focus group discussions in Phase 1. Denzin and Lincoln (2017:n.p.) and Tappen (2016:155) mention that prolonged engagement and persistent observation allow time and opportunity to test possible explanations and develop emerging explanations. Persistent observation enables researchers to systematically observe and record people’s behaviour on field notes. During focus group discussions, participants were observed while their behaviours, expressions and interactions, as well as the setting or context in which they were situated, were recorded (Hennink, Hutter & Bailey, 2011:170). Holloway and Galvin (2016:n.p.) and Ridenour and Newman (2008:57) claim that the purpose of prolonged engagement is to be able to detect cultural trends or idiosyncrasies, while persistent observation will identify or estimate whether particular behaviour is frequent or infrequent.
Dependability was achieved through an audit trail that was created while the research was being done (Holloway & Galvin, 2016:n.p.). Tappen (2016:160) and Flick (2014:n.p.) indicate that an audit trail is a carefully compiled record of the conduct of the research itself, and of the investigators’ thoughts and decisions that were made along the way.

Conformability refers to evidence of the researchers’ objectivity (Holloway & Galvin, 2016:n.p.; Tappen, 2016:161). Holloway and Galvin (2016:n.p.) and Teddlie and Tashakkori (2009:298) further state that conformability is an examination of the inquiry, in order to gain confidence that the interpretations are supported by the results and are internally coherent. Member checking assumes that participants are the ultimate authority on and have complete insight into their experiences (Braun & Clarke, 2013:285). Member checking was done to check on the accuracy of the themes, interpretations and conclusions. The participants agreed with the moderator’s interpretations, which gave evidence of the trustworthiness of the results that were provided (Holloway & Galvin, 2016:n.p; Teddlie & Tashakkori, 2009:298).

Transferability refers to the degree to which conclusions may be applied to other similar settings or people (Holloway & Galvin, 2016:n.p.; Tappen, 2016:160; Streubert & Carpenter, 2011:49). A thick description of the research setting, observed processes and focus group discussions were done. The research participants and their research settings were described thoroughly to enable the utility of the evidence to be used by others. Merriam and Tisdell (2016:257) and Polit and Beck (2016:202) describe a “thick description” as a widely used term among qualitative researchers which refers to a rich and thorough description of the research setting.

1.6.2 Phase 2
The second step in the self-leadership strategic framework of Neck and Milliman (1994:11–14) was the development of a new conceptual framework for the phenomenon. In Phase 2, a conceptual framework was developed from the results of Phase 1. The conceptual framework (Chapter 5) informed Phase 3, a quantitative phase. There are many ways to explain a conceptual framework. With a conceptual framework, we can describe a phenomenon (e.g. a CCOS), based on the experiences of others and on what we ourselves would like to explore or discover (Regoniel, 2015). In this research, a measuring tool was then developed in Phase 3, to explore and describe nurses’ views on self-leadership in a CCOS to be initiated at a private hospital group in Gauteng. The survey list of Dickoff et al. (1968:420) was used as a framework.
to develop the conceptual framework, as described in Chapter 5. Themes emerged from Phase 1, and were confirmed with existing literature, whilst important categories and sub-categories were outlined integrating different concepts on self-leadership. The framework therefore provided a focus, a rationale, that guided the development of a measuring tool towards addressing Objective 3. This was to explore and describe nurses’ views on their self-leadership in a CCOS to be initiated at a private hospital group in Gauteng (Phase 3).

Ravitch and Riggan (2016:n.p.) define a conceptual framework as an argument about why the topic one wishes to research matters and why the means proposed to research is appropriate and rigorous. From the conceptual framework, based on the findings of participants in a specific private hospital in Pretoria, deductive reasoning was followed in developing a questionnaire for Phase 3. The purpose of this questionnaire was to gain empirical data from the broader population of nurses in the private hospital group.

1.6.3 Phase 3
The third adapted step from Neck and Milliman (1994:11) was followed to explore the perceptions of participants in the private hospital group on initiating the phenomenon according to the framework developed in Phase 2. In Phase 3, a quantitative exploratory and descriptive design was followed by means of a survey (questionnaire). In terms of a quantitative research design, data was collected in the form of numbers and statistical data analysis was used (Teater, Devaney, Forrester, Scourfield & Carpenter, 2017:57; TerreBlanche, Durheim & Painter, 2006:47). The views of nurses on implementing self-leadership of nurses in a CCOS in a private hospital group in Gauteng were explored and described in Phases 3 of the research study. The researcher explored private hospital group nurses’ perceptions of the extent to which they will lead themselves in an outreach programme using a 5-point Likert scale. Hair Jr, Celsi, Money, Samouel and Page (2015:147) and Sim and Wright (2000:18) explain that an exploratory research design is generally used when either an area is poorly understood or when the topic concerned has been partially explored. Exploratory research often serves to prepare the ground for descriptive research. In the descriptive design, the researcher searches for accurate information about the nurses’ views on implementing self-leadership in a CCOS. Variables may be classified as opinions, views or perceptions and these variables were described in order to provide a complete picture of the phenomenon (Center for Inovation in Research and Teaching, 2018; Polit & Beck, 2016:274).
1.6.3.1 Population and sample
The accessible population for this research was the nurses (N = 123) of wards/units from the 12 hospitals in the private hospital group in Gauteng. The accessible population (nurses) served as the sample (n=123) in this research. Total population sampling is a type of purposive sampling where the total population of interest is studied. This is done when the total population is of manageable size and the target group is small (Laerd, 2012).

1.6.3.2 Data gathering
A questionnaire was developed from the conceptual framework in Phase 2, based on the findings from the focus group discussions. The questionnaires were distributed to nurse managers from the private hospital group in Gauteng where the CCOS still needed to be implemented. Appointments were arranged after the necessary permission was obtained from the ethical committee of the head office of the private hospital group and the nursing service managers of the private hospitals. The researcher waited while the participants completed the questionnaires and thereafter collected them. These questionnaires consisted of close-ended questions that aimed to explore and describe nurses’ views on the implementation of self-leadership in a CCOS in a private hospital group in Gauteng. The questionnaire took around 15 minutes to complete. The data collection took place over 6 months. The private hospital that was included in Phase 1 was not part of this survey.

1.6.3.3 Data analysis
Albers (2017) Hesse-Biber (2010:104) and Brink (2006:171) are of the opinion that statistics is the most powerful tool available to the researcher for analysing quantitative data. Without the aid of statistics, quantitative data would simply be a chaotic mass of numbers. Statistical methods enabled the researcher to reduce, summarise, organise, manipulate, evaluate, interpret and communicate quantitative data. In Phase 3, the data was analysed statistically using descriptive (frequencies, means and standard deviations) and inferential statistics (a factor analysis). Factor analysis is used to identify the underlying dimensionality of a set of measures. It determines the structure of a set of variables by analysing the inter-correlations between them.
These underlying dimensions are called factors (Blokdyk, 2018; Verma, 2013:359). There are three phases in the factor analysis, namely: 1) factor extraction, in which clusters of variables with a high degree of commonality were identified; 2) factor rotation, where variables were aligned more distinctly with a particular factor and 3) factor loadings, which were examined to identify and name the underlying dimensions of the original set of variables (Grove et al., 2015; Burns & Grove, 2005:490). The Kaiser-Meyer-Olkin (KMO) test was used to measure the sampling adequacy that should be greater than 0.7 for a satisfactory factor analysis to proceed (Plonsky, 2015:n.p.). Anti-image matrix statistics were used to verify that the value on the diagonal is greater than 0.6. Items with a measure of sampling adequacy of less than 0.6 were not included in the analysis. An indicator of the strength of the relationship between variables is Bartlett's test for sphericity, which will test the null hypothesis that the variables in the population correlation matrix are uncorrelated. The observed significance level of 0.0000 was small enough to reject the hypothesis (Filho, Paranhos, da Rocha, Batista, da Silva Jr, Santos & Marino, 2013). The eigenvalues provided, indicated the sum of the squared loadings for a specific factor. It is an index of how much variance in the factor solution is explained by the given factor (Kent, 2015; Burns & Grove, 2005:490).

1.6.3.4 Validity and reliability

Validity is the degree to which an instrument measures what it is supposed to measure. Validation efforts should be viewed as evidence-gathering enterprises, in which the goal is to assemble sufficient evidence from which validity can be inferred (Babbie, 2015:160; Little, 2014:296). The more evidence gathered, using various methods to assess validity, the stronger the inference (Polit & Beck, 2016:458).

Face validity refers to whether the instrument looks as though it is measuring the appropriate construct (Polit & Beck, 2016:458; Parahoo, 2014:299). Face validity was established through consultation with experts (nursing management lecturers) who scrutinized the questionnaire in order to ascertain the appropriateness of questions and whether the questions correspond with the objectives of the research (Waltz, Strickland & Lenz, 2017:167; Parahoo 2014:299; Salkind, 2008:114). Five experts in nursing management were asked to comment on the clarity and relevance of the content/items on self-leadership.

Content validity concerns the degree to which an instrument has an appropriate sample of items for the construct being measured and adequately converse the construct domain (Teater, et.al.,
Content validity was achieved through an intensive literature review and findings from a qualitative inquiry. According to Waltz et al. (2017:66) and Babbie (2015:157), a particular technique is reliable when it yields the same result each time it is applied to the same object. The reliability of a questionnaire refers to the consistency with which participants understands, interpret and responds to all the questions contained in the questionnaire (Fallon, 2016:11; Hammersley, 2008:43).

The reliability of the measurement was enhanced by questions in the instrument that were relevant to participants and by ensuring that the questions are clear and unambiguous. Reliability was also enhanced by reproducibility. Reproducibility refers to the degree to which a measurement made on one occasion agrees with the same measurement made on a subsequent occasion (Bruce, Pope & Stanistreet, 2009:174). A similar self-administrative questionnaire was handed out to participants that took around 15 minutes to complete.

1.6.4 Phase 4
The fourth step according to Neck and Milliman (1994:11) was to create a work environment with a greater sense of self-leadership. In Phase 4, self-leadership strategies for nurses in a CCOS were developed (synthesis) from the results of Phase 3. The factors that were extracted from a factor analysis (Point 1.6.3.3) served as the main headings of the strategies. The objectives and actions in the strategies were based on the findings on items analysed in Phase 3.

1.7. ETHICAL CONSIDERATIONS
The following ethical principles of autonomy, beneficence and justice were adhered to, as outlined by Waltz et al. (2017:402) and Streubert and Carpenter (2011:60).

1.7.1 Autonomy
Informed consent and voluntary informant participation of participants, which supported the principle of autonomy, were obtained (Waltz et al., 2017:402). The participants in the focus group discussions (Annexure D, E) and survey were informed (Annexure I, J), of the nature and intention of the research in a reasonably understandable language of their choice (Babbie, 2015:64; Polonsky & Waller, 2015:n.p.). Consent was obtained from the top management of the private hospital group in Gauteng (Annexure C) to gather data at their hospitals (Mustajoki & Mustajoki, 2017; Creswell, 2014:90). There was no harmful procedure involved (Mustajoki
Focus group discussions were held at a convenient time for the hospital staff in order to minimize the disruption of activities and intrusion on the flow of activities of the participants (Creswell, 2014:90). The participants were informed of their right to withdraw from the research at any stage of the research process.

1.7.2 Confidentiality

The principles of beneficence and justice were upheld by assuring participant confidentiality and anonymity and by ensuring that participants were treated with dignity and respect (Streubert & Carpenter, 2011:61). Pseudonyms were used to protect participants’ identities when the results were published (Plano Clark & Creswell, 2010:264). Participants from focus groups were requested to keep all discussions in the group confidential and not to divulge the content of the focus group to anyone outside of the group. In the survey, no names appeared on questionnaires, as only numbers were used. Participants were also informed that all data gathered would be kept in a safe place e.g. password protected document on a computer, for five years after the results of the research have been published and then the data will be deleted. Only the researcher, supervisor, independent coder and statistician had access to the data.

1.7.3 Rights of the community

The results of the research will be published in an accredited peer reviewed journal. Information acquired through this research project will be shared with all participants prior to public dissemination (Babbie & Mouton, 2001:530).

1.8. CONTRIBUTION OF THE RESEARCH

A CCOS is currently implemented in one private hospital in Pretoria. Research on CCOSs in South Africa has not been conducted. The first contribution of this research is an original conceptual framework that emerged from Phase 1 through inductive reasoning. The original framework, developed from a private hospital in Pretoria through deductive reasoning, led to the development of an instrument that was tested in a broader population of nurses in a private group of hospitals in Gauteng (12 hospitals). The results of the data gathering informed the development of self-leadership strategies for nurses in a CCOS. A CCOS recognises early signs of deterioration in the condition of the patient by using elements of vital sign tracking. The second contribution of the research was the development of self-leadership strategies for a CCOS that could enable nurses to act proactively by using their influence, power and authority to obtain a desired outcome for patients. The outcome of this research could be implemented
in a private hospital group in Gauteng and can be evaluated in other private hospitals in South Africa. These strategies can e.g. be used at orientation sessions of nurses in the private hospital group.

1.9 CONCLUSION

In Chapter 1, the rationale and overview of this research project were discussed. The research questions and objectives supported the focus of the scope of this research. The methodological approach used in developing self-leadership strategies for nurses in a CCOS was outlined and the mixed method design found to be suitable to develop strategies on self-leadership for nurses. The contribution of the study is highlighted as well as the ethics and trustworthiness to be demonstrated throughout the study.

In Chapter 2, an overview of the concept critical care outreach will be given to clarify the concept.
CHAPTER 2: OVERVIEW OF CRITICAL CARE OUTREACH SYSTEMS WORLD-WIDE

2.1 INTRODUCTION
The aim of this chapter is to offer an overview of critical care outreach in order to clarify the current use of this concept. This chapter begins by introducing the importance of the early recognition of a deteriorating patient, as well as the different global approaches to a CCOS (critical care outreach service). According to Creswell (2014:28), the literature in a research study accomplishes several purposes. First, it shares the results of other studies that are closely related to the study being reported on. It secondly integrates and extends on what other researchers have done and said and connects the research to more ongoing discussions about a topic; thereby building bridges between the related topics and identifying the central issues in the field.

2.2 THE IMPORTANCE OF A CRITICAL CARE OUTREACH SERVICE: STARTING WITH A NEED FOR ACTION
The records of the majority of hospitalised patients requiring emergency transfers to intensive care units (ICUs), indicate abnormal physiological values in the hours preceding the event. Not all patients who need care in higher level care units, like an ICUs, are transferred in a timely manner. Delays may cause physiological deterioration, a less favourable outcome or a prolonged stay in hospital (Tucker, Unsworth & Hindmarsh, 2015:32; Vlayen, Verelst, Bekkering, Schrooten, Hellings & Claes, 2012;).

Effective observation of ward patients is the first key in identifying the deterioration and effectively managing their care (Van Galen et al., 2016:7; Gao, Harrison, Parry, Daly, Subbe & Rowan, 2007:n.p.). A serious adverse event can be defined as an unfortunate event that is life threatening or results in death (World Health Organization, 2011; Odell et.al., 2009:1992). This means that the event was life-threatening, required prolonged hospitalisation, resulted in persistent or significant disability or incapacity, resulted in avoidable in-hospital cardiac arrest without a pre-existing not-for-resuscitation-order, or required urgent and unforeseen admission to an ICU. There is growing evidence that early detection and response to physiological deterioration can improve outcomes for patients (Adam, Osborne & Welch, 2017:5). The incidence of adverse events and negligence of staff caring for hospitalised patients is receiving
serious attention on national level in developed healthcare systems, such as those in England. There is particular concern over infrequent and incomplete monitoring and recording, misinterpretation of clinical data, delays in reporting and the paucity of convincing evidence for appropriate interventions (Kyriacos, Jelsma & Jordan, 2011:311). Flavour, et al. (2015:2) state that failure to respond to deteriorating trigger systems is common. The failure to immediately and correctly respond to patient deterioration can lead to increased undesirable events, such as an escalating number of patients to higher levels of care, such as the ICU, an increased mortality and morbidity rate and an increased cost to the patients.

Globally, several healthcare systems have been developed and implemented to prevent these adverse events. These healthcare systems have been known under different names, such as the critical care outreach team (CCOT), patient at risk team (PART), medical emergency team (MET) and the rapid response team (RRT). Distinction is also made between different approaches, where one is nurse-led and the other is physician-led (Pedersen, et al., 2014:233). Research done by Pirret, Takerei and Kazula (2015:138) demonstrates that nurse-led PART resulted in a reduction of cardiac arrests, ward patients admitted directly to the ICU and patients’ length of hospital stay.

2.2.1 Establishing an outreach team

Literature describes different service models, mentioning multi-disciplinary teams. The concept of a medical emergency team (MET) was established in Australia in 1990 (Baxter, 2006:613). Medical emergency teams (MET), also known as critical care outreach (CCO), was conceived in England in 2000 (Gao et al., 2007:n.p.) and rapid response systems (RRSs) in America in 2005 as part of the Protecting 5 million lives from harm campaign initiative (Institute for Healthcare Improvement, 2018). These systems have globally developed into a variety of models. CCO is an approach used for identifying and managing patients at risk of critical illness through collaborative care and education. It aims to empower ward staff by offering them regular support, usually led by critical care trained nurses visiting the wards, with the facility to call on more expert assistance if required (Manchester, 2015:12; Elliot, Aitken & Chaboyer, 2012:52).

Critical care is seen as occurring within a defined environment, where the ICU and patient must reach a certain level of severity of illness to justify admission. CCOS facilitate a more flexible approach, based on both the needs of the patient, as well as the skills and abilities of the ward.
staff (Tait, James, Williams & Barton, 2016:11). According to De Vita et al. (2017:6), the early RRSs were most commonly named the MET, although other terms were also used. These terms included medical emergency response teams (MERTs), patient at risk teams (PARTs), critical care outreach teams (CCOTs) and rapid response teams (RRTs). The main difference between the calling criteria for the CCOS and MET (or RRS), is that the CCOS employs “track and trigger” systems, which include a graded criteria for calling them. The “track and trigger” systems rely on routine recording and charting of patients’ vital data, which include the following:

- Pulse
- Respiratory rate
- Temperature
- Urine output
- Blood pressure
- SPO2 (saturation).

Individual clinical vital data is scored and summed, and when a particular threshold is reached, the CCOT is called. For example, a score of 1 point requires more frequently obtaining nursing vital data and recalculation of the patient’s score. A score of 2 requires the primary team to review the patient, and a score of 3 activates the CCOT. The set of calling criteria and the threshold scores varies between different hospitals and regions (De Voe, Roth, Maurer, Tamuz, Lesser, Pekmezaris, Makaryua, Hartman & DiMaizio, 2016:498; De Vita, Hillman & Bellomo, 2006:107). Two general “track and trigger” systems are used, namely the early warning score (EWS) and the modified early warning score (MEWS) system. The values of these scores may differ from country to country, but are mostly the same.

The MET calling criteria is objective and produces a binary (yes/no) response for each of the criteria (e.g. is the heart rate exceeding 140 beats per minute?). If the answer to any of the questions is “yes”, the team is called. The MET criteria also incorporates a subjective “seriously worried” criterion, which can be used to activate the team for non-specific or life-threatening emergencies not covered by the other criteria (O’Connel, Flabouris, Kim, Horwood, Hakendorf & Thompson, 2016:910). The RRT calling criteria is similar to that of the MET.
In general, the “track and trigger” systems used by CCOT are more complicated than the MET calling criteria. The benefit of calling the CCOS is that the threshold may be set for higher specificity, thereby decreasing the number of times the service is activated. The MET calling criteria has lower specificity but a higher sensitivity to patients who are clinically deteriorating, and therefore provides a guaranteed and immediate expert review of a greater proportion of patients who have been identified, either subjectively or objectively, as being at risk (De Vita et al., 2017:109; O’Connel et al., 2016:910).

The different systems are defined through consensus, based on the teams’ structure and functionality. Teams that include physicians, along with nurses, and often respiratory therapists and others, were called METs. They have the full capability for assessment, treatment and triage planning, while teams that do not include responding physicians, but mainly rely on nurses, are referred to as RRTs (De Vita et al., 2017:7). The nurse-led RRT often has physician consultation available, but the physician does not respond to the bedside as a member of the RRT. Teams that regularly provide follow-up services and surveillance of patients discharged from the ICU, as well as respond to any general ward patient, are described as CCOS. These teams are often staffed by nurses; therefore their response to deteriorating patients would be a RRT-type of response (De Vita et al., 2017:7). Manchester (2015:12) mentions that the three main objectives of CCOS were to avert admissions or ensure timely admission to critical care units, enable discharge from critical care, and share skills with ward staff. Although there are some differences between these services, they all have the same primary aim of preventing critical illness, along with its associated mortalities. However, in a CCOS, clear strategies on how healthcare professionals, specifically nurses, can be guided to play a positive role in an outreach system are needed.

2.3 GLOBAL TRENDS IN OUTREACH TEAMS

2.3.1 Australia

Hillman (2008:78) states that medical emergency teams (METs) were first established in 1989 at a hospital in Sydney, Australia. The cardiac arrest team (CAT) was renamed the medical emergency team (MET), and a set of criteria, based on abnormal vital data, was developed as triggers. Topple, Ryan, Bakdwin, McKay, Blythe, Rogan, Radford and Jones (2016:14) point out that the MET provides an immediate response to all at-risk patients in the hospital. The MET has developed from the CAT, which was formerly employed by most hospitals. The MET was modelled on the idea of the trauma team, which was incorporated into Australian hospitals.
before (Cretikos & Hillman, 2003:512). The MET concept relies on the ability of staff in general care areas to recognise when a patient’s condition is deteriorating, and then to call the MET to attend to the patient (Williams, Leslie, Finn, Brealey, Asthifa, Hay, Laurie, Leen, O’Brien, Stuart & Watt, 2010:64). The primary role of the MET is to improve the early identification and management of acutely deteriorating ward patients (Ng, Pilchert, Bailey, Bain, MacManus & Bucknall, 2018:88; Iyengar, Baxter & Forster, 2009:n.p.). De Vita et al. (2006:106) indicate that the potential benefits of the MET is not only limited to a reduction in the rate of adverse outcomes; it is also capable of facilitating a change in attitude and systematic thinking across the hospital.

Allen, Elliott and Jackson (2017:2) mention that a hospital’s MET usually consists of an ICU or Emergency Department Registrar, an ICU or Emergency Department Nurse and a Medical Registrar. In smaller hospitals, the MET may consist of as few as two nurses trained in advanced resuscitation. The Australian Intensive Care Liaison Nurse has a similar role to that of the critical care outreach expert (Elliot, Chaboyer, Dorie & Endacott, 2012). All members of the medical and nursing staff are encouraged to call the MET whenever they are seriously concerned about a patient’s condition, or if the patient’s vital data meets at least one of the physiological calling criteria. The response team will assess the patient and institute any treatment that is immediately necessary. If the patient is not responding to the initial therapy, he/she may be escalated to a higher level of care (Topple et al., 2016:14; Cretikos & Hillman, 2003:512). In 2008, approximately 60% of hospitals in Australia and New Zealand had a MET service in place (Jones, George, Hart, Bellomo & Martin, 2008:n.p.). The Australian model is focused on a team approach; however, the self-leadership roles of nurses regarding calling the outreach team when identifying attention (based on the patient’s vital data and calling criteria) are unclear.

### 2.3.2 England

In England, the Audit Commission’s (1999) report, “Critical to Success”, drew awareness to the need for the involvement of critical care teams in the care of patients preceding their admission to intensive care. In June 2000, the Department of Health published a report titled “Comprehensive Critical Care: A Review of Adult Critical Care Services” (Department of Health, 2000), which emphasised the importance of a multi-disciplinary team and recommended the establishment of CCOSs. Pittard (2003:882) describes the CCOS in a UK hospital as consisting of senior critical care nurses and medical staff. The service was available
from 09h00–17h00, Monday to Friday. A multi-disciplinary ward round was conducted every morning, and the patients who were seen included those discharged from the ICU, as well as those referred from wards. These patients were followed up until they were considered well enough for discharge by the outreach team. The Modified Early Warning Score (MEWS) was adapted to suit the CCOS. The process was facilitated by the use of a callout algorithm. A score of 3 triggers a call to a junior member of both the primary team and the outreach team. If there is no response from the junior doctor, or the patient fails to improve, or the score increases to over 5, a senior member of the primary team, along with the outreach team, is called. If there is no response from the primary team, the patient does not improve, or the score is over 8, the consultant is called, along with the outreach team, and the ICU is also contacted (Pittard, 2003:882).

In one hospital in York, England, the CCOS consisted of a team that was led by a nurse consultant and five nurses from various specialities, with eight sessions supporting sessions from consultant anaesthetists (who have a special interest in critical care) per week. This service generally operated from 08h00–20h30, with limited services provided by night bed managers afterwards. The outreach team responded to all calls for help or referrals and visited all patients on the team’s list. This included patients already identified as being “at risk”, as well as patients recently discharged from critical care (Watson, Mozly, Cope, Hart, Kay, Cowley, Pateraki & Priestley, 2006:106).

There was initially no prescribed model for CCOS or critical care networks in England. The National Health Services (NHS) Trust’s Critical Care Delivery Groups were encouraged to develop their own local customised services. The NHS’s Service Delivery and Organisation Research and Development Program called for an evaluation of CCOSs, as well as track-and-trigger systems. The report (2000) found that there was a wide variety of track-and-trigger systems in use, and that the nature and use of track-and-trigger systems were extremely varied between, and within, the surveyed hospitals in England. The report also identified extreme variations in the structure and functions of the CCOS across the country (Holder & Cuthbertson, 2009:4). According to Gao et al. (2007:n.p.), CCOSs vary in terms of their objectives (e.g. meeting one or more of the three main objectives or other additional objectives), activities (e.g. direct bedside support, follow-up of patients discharged from critical care to the ward, or education and training), working hours (24 hours/7 days per week, or office hours), staffing (e.g. doctor-led or nurse-led, or size of team) and coverage of wards (e.g.
selected wards only or complete coverage). The CCOS have since been established in many acute hospitals in England since it was recommended in 2000 (North West London Critical Care Network, 2018).

The current outreach system in England is similar to that of South Africa (Section 2.3.6). It is mainly focused on a team approach; however, if one member of the team does not play their part, severe consequences could become evident. It seems as if specific roles of the nurses and healthcare professionals regarding to calling the CCOS, through the use of a call-out algorithm, is lacking.

2.3.3 America
America has implemented three systems for responding to patients in crisis. The first is referred to as the ICU outreach team, and the second is known as the medical crisis team (MCT), which is similar to the medical emergency team (MET). The third approach is not team-based, and is known as the Hospitalist System. This system relies on a 24-hour, on-site hospitalist consultant to cover all hospital patients (De Vita et al., 2006:107). These teams have the same basic principle, which involves recognising and promptly responding to patients who have been identified as deteriorating. Garretson, Rauzi, Meister and Schuster (2006:36) indicate that rapid response team’s role is to assess the patient, assist the bedside nurse in providing the most appropriate care for the patient, and determine whether the patient needs more advanced treatment at a higher level of care. However, there is little focus on how healthcare professionals, like nurses, can know how to respond promptly to deteriorating patients.

2.3.4 Canada
CCOSs with Medical emergency teams (METs) were first introduced in hospitals in Ottawa, Canada. These services also had variations, like in England, such as the daily availability of the service, as well as the composition of the teams ranging from only nurses, through junior doctors and a critical care nurse. There was also a difference in the response to the call criteria, cardiac arrest attendance and length of follow-up after ICU discharge (Baxter, 2006:613). In January 2006, the Ontario Health Minister announced Provincial Government’s intention to create critical care response teams in 26 Ontario hospitals as part of a new “critical care strategy” (Upadhve, Rivers & Worster, 2007:34). In this team approach, nurses are not expected to respond to a patient at risk of deteriorating.
2.3.5  New Zealand

New Zealand only developed rapid response services after an independent advisory body advised hospitals to implement a system of care to identify and promptly respond to physiologically unstable patients (Pedersen et al., 2014:234). CCOSs in this country are called patient at risk teams (PARTs) a service that provides early recognition and intervention of ward patients’ physiological deterioration. It focuses on optimising ward management before the patients become critically unwell, thereby reducing admission/re-admission to the Intensive Care Unit (ICU) or, when necessary, facilitating early admission to the ICU. The PART team uses a multi-tiered approach to support the multidisciplinary team in preventing or acting on patient deterioration (Manchester, 2015:12). At a hospital in Middlemore, the PART primarily consisted of ward nurses, whereas the CCOS included the sharing of critical care nursing skills and critical thinking. The PART uses a multi-tiered approach to support the multi-disciplinary team in preventing and/or acting on patient deterioration (Manchester, 2015:12).

The PART was established at the hospital in 2009 – two years after the introduction of an Early Warning Score System. Before the PART was established, an MET would respond to a deteriorating patient. This team consisted of an Intensive Care Registrar, Intensive Care Unit Nurse and medical staff. Unlike other critical care models, where the team mainly consisted of intensive care nurses, this hospital’s PART mainly consisted of experienced ward nurses who were available 24/7 (Manchester, 2015:12). Little emphasis is given to nurses’ self-leadership in calling outreach teams for deteriorating patients.

2.3.6  South Africa: The establishment of a CCOS in a hospital in Pretoria

A private hospital in Pretoria was the first hospital in South Africa to add CCOSs to the existing code blue service in 2005. The Code Blue Team (CBT) has the same function as the medical emergency team in England, and responds to medical emergencies. The CBT consisted of a doctor from the emergency department, a professional nurse from the emergency department, a professional nurse from one of the ICUs, a professional nurse from the paediatric or neonatal ICU, and an outreach nurse. All team members received training in advanced cardiac life support (ACLS) and/or paediatric advanced life support (PALS). CCOSs were introduced in two phases:

- Nurses were trained on the quick response parameters (vital data calling criteria); and the CCOS was introduced to the wards. The quick response parameters were based on the
identification of abnormal vital data and subsequent calling of the outreach. After the patients
vital data was taken by the nurse, the nurse need to compare the vital data to the quick response
parameters. If the vital data was abnormal according to the quick response parameters the nurse
needed to call the outreach nurse. In November 2012, the calling criteria was changed to the
MEWS system, which was aimed at the early detection of a patient’s deterioration. A score
was given according to the MEWS algorithm that indicated what actions a nurse need to take
after the patients vital data was taken. The patient’s MEWS was calculated every time his/her
vital data was measured. If the MEWS had a score of 3 or more, the healthcare professional,
mainly the nurse, needed to call the outreach nurse expert on duty to evaluate the patient and
facilitate the nurses in caring for the patient. Extensive training was given over a period of three
months to introduce the MEWS system to the ward staff. The other hospitals within the private
hospital group were already using the MEWS system to identify a patient at risk of deteriorating
or deteriorating patient and inform the patient’s doctor of any changes in his/her vital data. The
CCOS are not yet implemented in the other hospitals of this private hospital group.

The outreach service consisted of professional nurses who are ICU-trained or ICU experienced
nurses. Initially, the outreach service was only available during the day, from 07h00–19h00,
every day of the week. In 2010, the outreach service was extended to 24 hours a day, seven
days a week. The outreach nurse expert who possesses the ICU skills and knowledge guides
the ward nurse in taking care of deteriorating patients and patients whom the ward nurse is
concerned about. These patients are seen by the outreach nurse expert. The outreach nurse
expert assesses and monitors these patients by doing frequent visits to them for 24 hours, either
until the patient is stabilised, or until his/her MEWS is below 3. The outreach nurse expert
guides the ward nurse in caring for these patients, whose vital data is monitored more frequently
(two-hourly) than the other patients in the ward. Patients who have been discharged from a
higher level of care (ICU or high care) are monitored by the assigned outreach nurse expert on
duty. These patients, who have been discharged from a higher level of care, are seen as
patients at risk of deterioration, in need of more frequent monitoring. The outreach nurse expert
functions as a facilitator to the ward nurse and empowers, educates and supports the ward
nurses in caring for their patients.

2.4 CONCLUSION
In conclusion, the establishment of medical emergency teams – first in Australia, and then
globally – occurred in response to evidence of ward patients who were not recognised as
deteriorating, or whose treatment was delayed. Over the past few years, various models of these teams have been created globally. CCOS were implemented in South Africa in 2005, with the role of empowering, educating and supporting ward nurses in caring for their patients. All the outreach models and systems world-wide focus on a much needed team approach. However, in an environment with scarce resources, the individual – as a leader – should be proactive and play a major self-empowering role in leading himself/herself and activating such a system.
CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION
Research methodology deals with the concepts and principles of scientific research (World Health Organization, 2001:vii). Hesse-Biber (2016:n.p.) and Daniel and Sam (2011:15) define research methodology as a way to systematically solve research problems. The methodology describes the various steps that the researcher adopts to study the research problem, and the logic behind them. According to Kara (2015:4), the researcher needs to be knowledgeable about research methods, techniques and methodologies. The research methodology is composed of many dimensions and research methods; it includes not only the research methods but also the logic behind the methods. A description of the methodology explains why particular methods or techniques were used and why other methods or techniques were not used. It comprises the various rational and systematic approaches to conducting research (Kara, 2015:4).

3.2 RESEARCH PHILOSOPHICAL BASIS
A research paradigm is an accepted pattern of enquiry (Johnson & Christensen, 2012:36). A pragmatic approach was followed in this study. Creswell (2014:11) is of the opinion that pragmatism is a philosophical basis for research and is not committed to any one system of philosophy and reality. It applies to mixed methods research in that enquirers draw liberally from quantitative and qualitative assumptions when they engage in their research. The researcher was free to choose the methods, techniques and procedures of research that best meet their needs and purposes. With a pragmatic, mixed methods approach, the researcher looks at many approaches for collecting and analysing data rather than only one, for example, the quantitative or qualitative approach. Mixed method is a research approach with both philosophical assumptions and methods of enquiry. As a methodology, it involves philosophical assumptions that guide the collection and analysis of data and the mixture of qualitative and quantitative approaches during various phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single research or series of researches (Hesse-Biber & Johnson, 2015:630).

Mixed method researchers use both quantitative and qualitative data because these works together to provide the best understanding of a research problem. Thus, for the mixed methods researcher, pragmatism opens the door to multiple methods, different worldviews and different assumptions, as well as different forms of data collection and analysis (Creswell, 2014:11).
Barano (2016:137) is of the opinion that pragmatism views knowledge as being both constructed and based on the reality of the world one experiences and in which one lives.

### 3.3 DESIGN

According to Bazeley (2017) and Maxwell (2013:2), a research design is a model for conducting research and a prescriptive guide that arranges the tasks involved in planning or conducting research in what is seen as optimal order. The research design allows the reader to assess the validity of the research (Bazeley, 2017). Generally, there are two approaches to be used in order to draw conclusions on a research topic. Inductive research starts with collecting data and generates a theory as a result of the data analysis. A deductive approach starts with the theory to develop a proposition and then designs a research framework to test that proposition (Plano Clark & Ivankova, 2015:n.p.; Collins, 2010:42). Thyer (2010:33) is of the opinion that there is not an absolute distinction between these two strategies but rather an integration of the two. In this study, the researcher started with an exploratory approach to generate theory (a conceptual framework) and then moved to finalise the strategies by basing it on the results of the quantitative phase of the research.

Creswell (2014:45) states that a qualitative design has certain characteristics that differ from quantitative design, namely:

- **A natural setting**: Researchers often collect data in the field or at the site where participants experience the issue or problem under investigation. Researchers gather ‘up-close’ information by talking directly to the participants. On the other hand, in a quantitative design the researcher sends out instruments for individuals to complete, such as questionnaires in a survey.

- **Researcher as key instrument**: In qualitative research, researchers collect data themselves through examining documents, observing behaviour and discussing issues with participants. They may use an instrument, but it will be one designed by the researcher, making use of open-ended questions. They tend not to rely on questionnaires or instruments developed by other researchers.

- **Multiple methods**: In qualitative research, researchers typically gather multiple forms of data such as results of discussions and observations, rather than relying on a single data source. They review all the data and make sense of it, organising it into codes or themes that cut across all the data sources.

- **Complex reasoning through inductive and deductive logic**: Qualitative researchers build their patterns, categories and themes from the bottom up, by organising data inductively into
increasingly more abstract units of information. The inductive process involves researchers working back and forth between themes and the database until they establish a comprehensive set of themes. Researchers also use deductive thinking; they build themes that are constantly being checked against the data (Creswell, 2014). On the other hand, Boswell and Cannon (2015:206) are of the opinion that control, manipulation of the independent variable and randomisation are important characteristic of quantitative research designs. These characteristics enable the researcher to be confident that the outcome is caused by the intervention and not by any other variable, and that it can be generalised to a target population. Both qualitative and quantitative phases formed part of the mixed method approach used in this research (Figure 3.1).

**Figure 3.1: Research phases**

In this research, four phases were followed. Each phase represented an objective of the study and was aligned to the self-leadership framework of Neck and Milliman (1994) as shown in Figure 3.2. Phase 1 (the qualitative phase) was fundamental to the research and was used to generate theoretical constructs. The first objective of this research study was to explore and describe the experiences of nurses in the area of self-leadership, in a current outreach service in a private hospital in Pretoria. Phase 2 focused on developing a conceptual framework. The second objective of this research was to develop a conceptual framework on the self-leadership of nurses in a current outreach service in a private hospital in Pretoria. In Phase 3 (the quantitative phase), a questionnaire was developed that tested the ideas generated from the conceptual framework (Hesse-Biber, 2010:71). The third objective was to explore and describe the views of nurses on self-leadership, in an outreach service to be initiated at a private hospital group in Gauteng. This enhanced constructive thoughts of the phenomenon.
In Phase 4 self-leadership strategies were developed from the results of Phase 3 (Figure 3.2) according to the fourth objective – to develop self-leadership strategies for nurses to be implemented in an outreach service in a private hospital group in Gauteng. This led to greater sense of self-leadership among nurses.

Figure 3.2: Neck and Milliman’s self-leadership framework (adapted)
3.3.1 Phase 1: Qualitative phase

3.3.1.1 Design

In Phase 1, a qualitative, exploratory, descriptive and contextual design was followed. This was the first step, according to Neck and Milliman (1994:11). The strategic framework was to observe, record and analyse the phenomenon. A qualitative design was used for collecting rich data about the experiences of nurses in the area of self-leadership in the current critical care outreach service (CCOS) in general wards at a hospital in Pretoria. The qualitative design made use of flexible methods to gain an understanding of the experiences of the nurses in their self-leadership (Holloway & Wheeler, 2010:3).

*Exploratory research* takes place where there is little or no prior knowledge of the phenomenon – in this case, the self-leadership practices of nurses in the wards. Olson, Young and Schultz (2016:539) and Churchill and Iacobucci (2010:58) state that the major emphasis in exploratory research is the discovery of ideas and insights and the generation of possible explanations for the phenomenon; in this case, self-leadership. The experiences of nurses in the CCOS were explored to discover insights of their understanding of self-leadership. The exploration of nurses’ experiences in the CCOS uncovered variables that were unknown at the time. Klenke (2016:6) and Holloway and Wheeler (2010:3) are of the opinion that qualitative research is a form of social enquiry that focuses on the way people make sense of their experiences and the world in which they live. It is the exploration of the perspectives and the meanings they give to their experiences.

Babbie (2015:97) states that *descriptive studies* answer questions of what, where, when and how, while exploratory studies address questions of why. In this research, the nurses’ experiences in the CCOS were described. Descriptive studies refer to a ‘thicker’ examination of phenomena and their deeper meanings. Qualitative descriptions tend to be more concerned with conveying a sense of what it is like to walk in the shoes of the people being described, providing rich details about their environment, interactions, meanings and everyday lives, rather than generalising with precision to a larger population (Klenke, 2016:11; Rubin & Babbie, 2011:134). The purpose of this research was to provide an accurate description of the experiences of the nurses about their self-leadership in the specific context of a CCOS. A *contextual* approach is a powerful approach for obtaining and analysing behavioural data (Bennet, & Bennet 2006:329). According to Terry (2012:163), a contextual design samples cases within specific groups to accurately describe characteristics of the groups’ contexts, such
as, in this case, the CCOS in general wards. The interpretation of findings should take into account the context of a research and the interaction between the research participants and the setting where they function (Henning, Van Rensburg & Smit, 2007:62). This research was contextual in nature because it focused on the experiences of nurses on their self-leadership in the CCOS.

3.3.1.2 Population and sample

The CCOS was initiated in a private hospital in Pretoria in 2005 in order to promote the healthcare and quality of service in the hospital. This is the only hospital in Gauteng (Figure 3.3) to have implemented a CCOS; other hospitals in the private hospital group are starting to implement CCOS. The private hospital group has 47 hospitals in South Africa, of which 27 are in Gauteng; therefore, the researcher decided to conduct her research in Gauteng.

Figure 3.3: South Africa, with Gauteng in blue

To gain permission from this hospital group to do research was a lengthy process, taking six months to achieve (Annexure A). An accessible population refers to that portion of the population to which the researcher has reasonable access (Patten, 2017:n.p.; Privitera, 2015:n.p.). The accessible population in this study consisted of full-time and permanently appointed nurses in all categories (N=203), who worked day or night shifts in general wards that used the CCOS at the selected private hospital in Pretoria. In South Africa, there are three types of nursing qualifications as defined in the Nursing Act No 33 of 2005:

- A professional nurse is a person who is qualified and competent to independently practise comprehensive nursing in the manner and to the level prescribed in their scope of practice, and who is capable of assuming responsibility and accountability for such practice.
A staff nurse is a person educated to practise basic nursing in the manner and to the level prescribed in their scope of practice.

An auxiliary nurse is a person educated to provide elementary nursing care in the manner and to the level prescribed in their scope of practice (South-Africa, 2005).

Table 3.1 shows the number of nurses at each level of qualification who were accessed during this study.

Table 3.1: Accessible population

<table>
<thead>
<tr>
<th>Ward Discipline</th>
<th>Professional nurses (n)</th>
<th>Staff nurses (n)</th>
<th>Auxiliary nurses (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical wards x2</td>
<td>12</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Medical wards x2</td>
<td>11</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Orthopaedic wards x1</td>
<td>8</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Gynaecology ward x1</td>
<td>12</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Oncology ward x1</td>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Paediatric ward x1</td>
<td>6</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Day ward x1</td>
<td>8</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>62</strong></td>
<td><strong>71</strong></td>
<td><strong>70</strong></td>
</tr>
</tbody>
</table>

Sampling requires the researcher to follow specific rules that dictate the nature of the situation to be observed (Waltz et al., 2017:312). Gray (2017:227) states that the purpose of purposive, homogeneous sampling is to describe a small, homogeneous group in depth. Gray (2017) cites Krueger (1994) in stating that researchers prefer homogeneity when selecting participants for focus groups because the cohesions within the focus group help to generate positive group dynamics and discussions. Homogenous, purposeful sampling was done for each of the three categories of nurses, since the participants in each group had the knowledge and experiences that were helpful for exploring their self-leadership in the CCOS. Perry (2017:n.p.) is of the opinion that purposeful sampling focuses on the specific characteristics of the person or persons selected for the sample. Holloway and Wheeler (2010:138) state that in purposeful sampling, the researcher chooses a sample on the basis of group membership or on the common experiences that participants share. A sample is homogenous when it involves individuals who belong to the same subculture or have similar characteristics.
The three categories of participants were selected according to certain common eligibility criteria. Polit and Beck (2016:338) define eligibility criteria as the criteria that specify population characteristics. In this study the inclusion criteria were:

- all nurses (professional nurses, staff nurses and auxiliary nurses) permanently employed in the private hospital in Pretoria;
- the section of the staff that needed to activate the CCOS according to its activating criteria;
- nurses working in general wards day and/or night shifts that used the CCOS.

Nurses that worked in ICU, High Care and theatre were excluded from the sample because they did not make use of the outreach service. Agency nurses who worked in the general wards were excluded since agency nurses were not permanently employed by the hospital group. Focus groups were held until data saturation occurred. Data was saturated when the researcher no longer found any new information during the focus group discussions, and no new categories or new inputs came to light (Holloway & Galvin, 2016:n.p.). Eight focus groups were conducted.

3.3.1.3 Method

A method refers to the manner of conducting a critical enquiry that will yield facts or information which increase our understanding of the phenomenon being researched (WHO, 2001:1). Research methods can be seen as the specific way in which the researcher chooses to conduct his research within the design he chooses (Gray, Grove & Sutherland; 2016:38). In this research, a questioning method, conducted in focus groups, was undertaken.

a) Preparation of the field

Ethical clearance

Ethical clearance for this research was obtained from the Higher Degrees Committee of the Faculty of Community and Health Sciences (CHS) and the Senate Research Committee of a university in the Western Cape, South Africa (ethical clearance number:12/7/6 Annexure B). Approval was received from the Research Operational Committee at the private hospital group (approval number: UNIV-2013-0007B Annexure C).
**Moderator preparation**

The moderator needs to prepare for the focus groups so as to gain an understanding of group dynamics. This will help the moderator to anticipate problems and to design strategies that will moderate the disruptive behaviour of emergent leaders among the focus group participants (Stewart & Shamdasani, 2015:89). The moderator needs to thoroughly understand the topic to be discussed so that he or she may prioritise the various objectives of the research, determine the appropriate depth of probing and be up to date and familiar with the topic (Stewart & Shamdasani, 2015:89). In this study, preparation involved understanding the nature of the research problem and the nature of group dynamics that might arise due to the various groups’ compositions. The researcher made an appointment with the moderator a month ahead of the focus group discussions, in November 2016. The moderator and researcher discussed the purpose and objectives of the research. The objectives were translated into research questions and an interview outline was developed to ensure that all the important points were covered during the focus group discussions (O’Hair & Kreps, 2013:n.p.).

**Recruitment of focus group participants**

The recruiting of participants was effected by contacting the nurse managers of the private hospital, who gave permission for the researcher to enter the site. In the hospital where the research was conducted, nine general wards made use of the outreach service. The unit managers of the nine wards were informed individually about the research. Each was asked to release one nurse who met the inclusion criteria to participate in a focus group discussion during a particular lunch hour. One participant from each ward was considered sufficient, since they represented the scope of nurse delivering of the CCOS. Participants who were willing to participate received invitation letters with a written informed consent form (Annexure D) that needed to be completed and signed. According to Liamputtong (2011:25), the principles for running focus groups include informed consent, accuracy, privacy and confidentiality. It was therefore pre-arranged with the hospital to have a private room in the hospital to conduct the focus groups. This provided privacy and minimised interruptions during discussions. An interview schedule for the focus groups was developed, listing the questions to be asked. Planning was done for the recording of focus groups, the kinds of observational data to be noted and the taking of field notes (Creswell & Plano Clark, 2018:178).
b) Pilot focus group
A preliminary exploration focus group (pilot) discussion was held to give the moderator the opportunity to establish whether the wording of the questions was suitable for the focus group discussions and whether they promoted discussion on self-leadership in such a way that would fulfil the purpose of the research. The pilot interview showed that the questions were easily understood and gave an indication of the time required for the focus group discussions. For the pilot focus group, nine professional nurses were invited and five finally participated. This focus group took 46 minutes to conduct. The data from this discussion was useful and the data was included in the data analysis. (focus group 1).

c) Focus groups for enquiry
Streubert and Carpenter (2011:33) state that there are a variety of strategies that may be used to generate qualitative research data. Munhall (2012:362) states that data collection approaches must be appropriate in relation to the research question and aims of the research. According to Krueger and Casey (2015:n.p.), a focus group is a special type of group in terms of purpose, size, composition and procedures. The essential purpose of choosing focus group discussions were to identify a range of different views around the research topic and to gain an understanding of the issues from the perspective of the participants.

Focus group discussions are structured to generate data that are easily comparable between different groups. Therefore, focus group discussions have a wide range of applications, such as exploratory research (Krueger & Casey, 2015:n.p.; Hennink, 2014:16). According to Hennink (2014:17), focus group discussions are particularly effective for exploratory research in mixed method studies. Hennink further states that focus groups can be used before quantitative work, such as a survey, is undertaken, to identify issues on which to develop questionnaire questions, identify relevant response categories and to define concepts that need to be included in the questionnaire. Davis (2017:3) states that focus groups are used for exploratory research rather than individual interviews, because the group dynamics contribute to a rich source of data.

When very little is known about a topic, focus groups can be conducted as an initial step into the field to give researchers the background information they need to design a more quantitative project (Davis, 2017:125). The focus group is valuable for obtaining understanding of the rich and detailed own words of participants (Liamputtong, 2011:6). In this study, the focus groups yielded rich information on self-leadership by the participants during implementation of the CCOS. The interactive nature of focus groups allowed participants to build on one another’s
ideas in a way that would not have emerged in one-on-one interviews. Participants challenged each other’s views, which forced participants to be thorough and logical in their thinking, thus increasing the validity of their contributions (Dakubo, 2011:79). Focus groups provide opportunities for participants to interactively exchange views in a relatively free-flowing process (Davis, 2017:4).

d) Data collection
Data was collected by means of focus group discussions. Focus groups allowed the researcher to specifically ask the participants about their experiences and views. Liamputtong (2011:46) indicates that a focus group should not last longer than two hours and that most focus groups are conducted within one and a half hours. Hennink (2014:68) indicates that an appropriate length for a focus group is between 60-90 minutes. For this research, the duration of focus groups discussions was between 45 minutes and 75 minutes.

For the semi-structured focus groups, the researcher and moderator used an interview guide (Annexure E). The groups had to be rescheduled a few times, because the nurses were too busy in the wards and unable to attend the initially scheduled discussions. The researcher introduced the moderator and herself and made the participants feel at ease and comfortable. They were provided an explanation of the research objectives and gave the participants the opportunity to read the information letter. Participants were encouraged to ask questions, which were answered by the researcher. The participants were reminded of their right to withdraw from the research at any point in time. The focus groups were guided by a moderator (Hennink, 2014:2) who was experienced in guiding focus groups, while the researcher observed and helped with taking field notes. The field notes were descriptive accounts of what happened during the focus group discussions. The researcher decided to use a moderator because most of the participants worked in a hospital she knew well, and she wanted to prevent participants from feeling intimidated by her and possibly changing their answers to suit what the researcher might want to hear. Focus groups were conducted for each nurse category (Table 3.2). Two focus groups were held with professional nurses, three with staff nurses and three with auxiliary nurses. The researcher could hold only two focus group discussions with the professional nurses since there was usually only one professional nurse working in a ward at any given time, and so they were generally unable to leave the ward to attend focus group discussions. Focus groups were conducted during the day and night to accommodate the nurses who worked both day and night shifts.
Table 3.2: Focus group sample

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Nurse category</th>
<th>Total number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus group 1 (pilot)</td>
<td>Professional nurses</td>
<td>5</td>
</tr>
<tr>
<td>Focus group 2</td>
<td>Staff nurses</td>
<td>6</td>
</tr>
<tr>
<td>Focus group 3</td>
<td>Auxiliary nurses</td>
<td>6</td>
</tr>
<tr>
<td>Focus group 4</td>
<td>Auxiliary nurses</td>
<td>5</td>
</tr>
<tr>
<td>Focus group 5</td>
<td>Professional nurses</td>
<td>6</td>
</tr>
<tr>
<td>Focus group 6</td>
<td>Staff nurses</td>
<td>7</td>
</tr>
<tr>
<td>Focus group 7</td>
<td>Staff nurses</td>
<td>9</td>
</tr>
<tr>
<td>Focus group 8</td>
<td>Auxiliary nurses</td>
<td>6</td>
</tr>
</tbody>
</table>

Stewart and Shamdasani (2015:89) mention that the group size is crucial for the success of the focus group method and recommend that there should be eight to twelve participants in one focus group. In this research, the size of the focus groups varied from five to nine participants.

Segmentation of the focus groups was done to allocate nurses from the different nursing categories to separate groups. This ensured that the focus groups were homogenous in terms of qualifications (Hesse-Biber, 2016:n.p.; Stewart & Shamdasani, 2015:20). Focus groups with professional, staff and auxiliary nurses were held separately due to their different scopes of practice as outlined by the Nursing Act (South Africa, 2005). Professional nurses have authority over staff and auxiliary nurses, which might have impacted on their willingness to speak freely had the three groups participated in the same focus groups. The different nurse categories were also separated when the researcher conducted the focus groups, to prevent nurses from feeling threatened by the different dynamics between the nurse categories. The professional nurse has more power than auxiliary nurses and this power might have influenced the participation of the auxiliary nurses in the focus groups. Most of the individuals in these groups knew each other as colleagues.

The semi-structured focus groups started with one open-ended question: “How is it for you to lead yourself in the current outreach service in the ward where you are placed?” Probing questions followed. For example: e.g. “Tell me about the outreach service” and “What do you understand around the goals of the outreach service or desired goals of the service?” According to Krueger and Casey (2015:n.p.) and Given (2008:341), field notes are
in-depth written account of the details, happenings and experiences of the researcher during the research process, and are used to assist the qualitative researcher to recall and explore the focus group discussion thoroughly. Field notes include information such as the quantity of participants, their demographic features, the setting, the behaviour of the participants and the thoughts and feelings of the researcher (Myers, 2013:144). Polit and Beck (2016:549) state that field notes can also contain summarised highlights of the conversations between the researcher and the participants. During the focus groups, participants were observed for their verbal and nonverbal gestures, such as their facial expressions, level of eye contact, tone of voice and body postures. Notes were made about the location, date and time when the focus group discussions were held and the personal experiences, thoughts, feelings and reflections of the focus group participants were all written down. After each focus group the researcher and the moderator discussed the processes followed and the data obtained. Data was gathered through digital recordings supported by the taking of field notes. Notes were taken by the researcher regarding key issues emerging in the sessions and other factors that might be important in the analysis and interpretation of results (Liamputtong, 2011:63). The digital recordings of the focus groups were transcribed verbatim by the researcher (Hennink et al., 2011:211).

e) The skills of the researcher and moderator during data collection

O’Hair and Kreps (2013:n.p.) state that researchers and moderators must prepare emotionally for the task at hand. A person who is relaxed, interested and enthusiastic will generate similar responses in the focus group participants. The authors are also of the opinion that moderators must cultivate an appropriate style, somewhere between highly directive at one end of the continuum and highly nondirective at the other. Some key interpersonal skills are discussed below.

- Bracketing

Bracketing is a concept common to all qualitative methods. In bracketing, the researcher identifies her own personal biases and beliefs about the phenomenon and sets them aside in order to fully understand the experiences of the participants. Bracketing commences during data collection and continues through the data analysis process (Gerrish & Lathlean, 2015:217; Boswell & Cannon, 2015:235). Polit and Beck (2016:228) and Holloway and Wheeler (2010:221) explain bracketing as the exclusion of the researcher’s prior assumptions gained through experience so that he or she may see and hear the topic under discussion with an open mind. The researcher was unclear how the nurses experienced their self-leadership. Bracketing
requires researchers to remain neutral with respect to belief or disbelief in the existence of the phenomenon being discussed, in this case, nurses’ self-leadership. Bracketing begins the reductive process and, like that process, must continue throughout the investigation. Bracketing must be constant and ongoing if descriptions are to achieve their purest form (Streubert & Carpenter, 2011:77). Rigor was demonstrated by bracketing, as the researcher focused on the informants’ perspectives and faithfully records and transcribes their inputs. In this study, the researcher remained open to the meanings attributed to the phenomenon of self-leadership by those who had experienced it.

- **Non-reflective listening**
  Non-reflective listening is a physical and psychological process that requires minimal responses, for example, saying “Hmm …” and nodding the head. Minimal responses are not coercive or threatening, but invite participants to talk. Participants tend to talk for longer times in response to this kind of listening (Brennen, 2017:n.p.; Fern, 2001:81). Non-reflective listening sets the tone for an unstructured and empathetic style of moderating, which encourages participants to participate in the discussion but does not influence the nature of their participation (Brennen, 2017:n.p; Fern, 2001:81). The moderator took care to ensure that the participants did most of the talking during the focus group discussions. She gave the participants sufficient time to respond to the questions that were asked and avoided interrupting them while they were speaking. She used subtle, non-intrusive encouragements such as saying “Hhmm …” and nodding the head during discussions.

- **Active listening**
  Active listening is showing an interest and giving absolute awareness to and focus on what the participant is saying. It is the key to a productive and effective interaction because it enables the moderator to comprehend and clarify what is being said and to provide appropriate feedback (Miller & Meinzinger, 2014:330). Hennink (2014:74) states that active listening involves the moderator carefully listening to participants’ comments and building on these to guide the discussion. It allowed the moderator to follow issues of importance to participants, exploring these more fully and maintaining a natural flow of the discussions. The moderator and reseacher ensured that she listened actively to the participants while they were making their contributions by means of eye-contact, occasionally nodding her head and having an open and responsive disposition during the discussions. They listened to the discussions and http://etd.uwc.ac.za/
simultaneously considered the research objectives, constantly deciding whether to follow
issues raised or redirect the discussion back to issues in the discussion guide (Hennink,
2014:74).

- **Reflective listening**

  Reflective listening is non-judgmental and differs from non-reflective listening in that it seeks
to clarify the accuracy of what is being said. There are three types of responses that may be
used to increase communication accuracy: clarifying, paraphrasing and summarising (Brennen,

  - **Clarifying**

    Clarifying responses means asking the speaker to clarify what he or she has said, by saying,
    for example, “I don’t understand”. These responses point out that we don’t understand what
    the participant means (Brennen, 2017:n.p; Fern, 2001:82). The moderator sought clarification
    from participants when points made were unclear or vague. The moderator used clarifying
    responses to ensure that she accurately understood the ideas, thoughts and feelings of the
    participants.

  - **Paraphrasing**

    Paraphrasing is a verbal response where the moderator restates what the participant has said
    using different words but without compromising the meaning of what was said. It is done to
    increase understanding and clarity (Brennen, 2017:n.p; De Vos, Strydom, Fouche & Delport,
    2011:345). The moderator used paraphrasing during the focus group discussions by stating
    what the participants had said in her own words when it was needed, in order to seek
    clarification.

  - **Summarising**

    Kadushin and Kadushin (2013:168) define summarising as a selective condensation of what
    has transpired during a focus group discussion over a period of time. It involves emphasising
    only the main points or ideas and leaving out the less important things. Summarising is
    important during focus group discussions because it enabled the moderator to review the issues
    that have been discussed and provide direction to the discussion. Fern (2001:82) mentions that
    summarising is particularly effective for ‘playing back’ the important points that participants
    may have been attempting to make. At the end of the focus group discussions the moderator
    summarised the key concepts mentioned by the participants to emphasise the important
    concepts raised as accurately as possible. This was done to allow the participants to reflect on
the key concepts that they had communicated and to confirm that the moderator had accurately understood the information provided.

- **Probing**
Probing comprises short verbal cues used by the moderator to encourage participants to speak. It can be an encouraging word or phrase that is typically unspecific, for example, uttering “Uh-huh” or “I see” as a participant is speaking. It is very effective for gaining greater depth, clarity and nuance on the issues discussed which may greatly increase the quality and richness of the data (Hennink, 2014:76). Probing is as an important technique used in the collection of qualitative data because it supports the discussion process and assists the moderator with clarifying issues and getting more details about a matter (Taylor, Bogdan & De Vault, 2016:114; Hennink et al., 2011:161). The moderator used probing techniques such as “Uh-huh” and “I see” to stimulate and encourage the participants to continue talking. She also used explanatory probing techniques like, “What do you mean?”, “Can you explain?” and “Can you tell us more about that?”

- **Silence**
During the focus group discussions, keeping quiet for short periods of time can be an effective technique to promote effective communication. A too-long pause may have the opposite effect; a five-second pause is recommended (Hennink, 2014:77). A brief period of silence after questioning gave a participant responding to a question, time to think through the answer that he or she was going to provide (Hennink et al., 2011:163). This time gave participants an opportunity to expand on their points he or she has made, or for another participant to make a contribution to what has been said. The moderator used the technique of silence during the focus group discussions to encourage the participants to unconditionally add to discussions on how they experienced their self-leadership in an outreach service.

3.3.1.4 Data analysis process: Phase 1
Qualitative data analysis is described as a rigorous and interactive process in which a researcher engages with the data collected to create meaning out of the data (Grove et al., 2015:88).

*Transcribing*
Focus group discussions were transcribed after each discussion. Any personal data, e.g., names that could identify the participants, were removed to preserve the participants’ anonymity (Hennink et al., 2011:215). The data from the digital recordings was used to corroborate data from the field notes (De Chesnay, 2015:160). This enabled data triangulation. Triangulation of
the data exposed noteworthy similarities in the responses of individuals in the different focus
groups, as shown in Chapter 4. Data was collected from different groups of participants, which
widened the perspective on the phenomenon of self-leadership (Boswell & Cannon, 2015:197).
The digital recordings of the focus groups were transcribed verbatim by the researcher after
she had listened to the voice recordings as soon after the discussions as possible and several
times thereafter (Gray et al., 2016:325). The process of verbatim transcription included writing
down the details of the focus groups word for word without leaving out information. The
researcher read through the field notes several times.

Coding
Coding of the transcribed data was guided by open coding on Atlas Ti, a computerised
qualitative data analysis programme. Inductive data reasoning was used which involved
arguing from the data; discovering patterns, themes and categories in the data, and
extrapolating these to the general theory (Rodwell, 2015:n.p; Teddlie & Thashakkori,
2009:25,). The data was broken down into discrete parts, closely examined and compared for
similarities and differences. Events, objects and actions/interactions that were found to be
similar in nature or related in meanings, were grouped under more abstract concepts, termed
categories (Babbie, 2015:401). Polit and Beck (2017:527) and Rodwell (2015:n.p) state that
during this process, the researcher focusses on generating categories and defining their
properties and dimensions through open coding.

Data analysing
Data analysis was done using the Computer-assisted NCT analysis approach (Friese, 2014:12).
It is a systematic method for preparing data, creating a project file, coding the data and sorting
and structuring them with the aim of discovering patterns and relations (Friese, 2014:15). The
NCT analysis approach has three basic components; noticing things (noticing interesting
things in the data,) collecting these things, and thinking about them. NCT data analysis does
not prescribe any particular way of coding. Noticing things refers to the process of finding
things in the data when reading through the transcripts and field notes. The researcher captured
these things by making notes, or attaching preliminary codes. Collecting things was done by
reading further and noticing items that were similar to others; some items were attached to the
preliminary code or, if the item did not quite fit under the same heading, the code was rename
do subsume the two. The thinking process refers to thinking about the things one has noticed
and coded, finding patterns and relations in the data and developing categories and sub-
categories (Friese, 2014:13). The transcribed data and field notes were read, notes were made
and preliminary codes were attached to interesting data. The moderator and the researcher read
further and attached preliminary codes to similar data or changed the codes to subsume similar data. Final codes were attached to the data, patterns and relations were identified and categories and sub-categories were developed. An independent coder and the researcher analysed the data and got together for a consensus discussion of data (Annexure F). The credibility of the coding was checked by an experienced coder who had a PhD in Nursing and is a lecturer in research at a university.

3.3.1.5 Measures to ensure trustworthiness/rigour
The term used to describe the desirable characteristics of the process and the product of qualitative research is rigour (Tappen, 2016:153). Evaluation of the rigour of qualitative research is based in part on the logic of the emerging theory and the extent to which it sheds light on the studied phenomenon. Polit and Beck (2016:36), Tappen (2016:155) and Streubert and Carpenter (2011:48) list the techniques supporting rigour/trustworthiness as credibility, dependability, confirmability, transferability and authenticity.

Credibility was obtained through prolonged engagement and persistent observation, during in-depth discussions in the focus groups in Phase 1. Tappen (2016:155) states that prolonged engagement and persistant observation allow time and opportunity to test possible explanations and develop emerging explanations. The researcher spent time answering any questions that participants had. Persistent observation enabled the researcher to systematically observe and record behaviour. During observation, the researcher systematically watched, listened, questioned and recorded the participants’ behaviours, expressions and interactions, taking into consideration the social setting, location and context in which the participants were situated (Hennink et al., 2011:170). The researcher and independent coder reached consensus on the themes obtained from the data (Annexure F).

Dependability was enhanced by digitally recording focus group discussions. The discussion guide was piloted during a focus group to confirm that participants understood the questions and that the questions elicited appropriate discussions. A journal was kept of the steps taken during data gathering and data analysis. Tappen (2016:160) indicates that an audit trail is a carefully compiled record of the conduct of the research itself, the investigators thoughts and the decisions that were made along the way. Tappen (2016:160) furthermore proposes different types of materials to be complied:
• Raw data: All field notes from the observer and digital recordings that were made during the focus group discussions.

• Data analysis products: Any summaries or ideas that occur to the moderator during the research.

• Process notes: Descriptions of how data was obtained and how analysis was done.

• Reflections of the moderator: The personal notes and reflective journal kept by the moderator and assistant moderator.

**Confirmability** refers to evidence of the researcher’s objectivity (Polit & Beck, 2016:216; Tappen, 2016:161). Korrapati (2016:n.p.) states that confirmability refers to the degree to which results can be confirmed or supported by others. The concept is concerned with establishing that the data represent the information participants provided and that the interpretations of the data reflect the participants’ voices and the conditions of the enquiry – and not the biases, motivations or perspectives of the researcher (Polit & Beck, 2017:492). Member checking was done to check on the accuracy of the themes, interpretations and conclusions. The participants agreed with the moderator (member checking); therefore interpretations were evidence of the trustworthiness of the results. The focus group discussions were transcribed verbatim. An audit trail confirmed the accuracy of the transcriptions. The moderator further enhanced confirmability by clarifying and paraphrasing during the focus group discussions.

**Transferability** refers to the degree to which a study’s conclusions may be applied in other similar settings, or to other people under similar conditions (Tappen, 2016:160; Streubert & Carpenter, 2011:49; Teddlie & Tashakkori, 2009:288). A thick description of the research setting, observed processes and focus group discussions was done. The research participants and their research settings were described thoroughly so that the utility of the evidence could be established for others. Polit and Beck (2016:202) describe ‘thick description’ as a widely used term in qualitative research, referring to a rich and thorough description of the research setting.

**Authenticity** refers to whether participants’ perspectives have been genuinely represented in the research (Taylor, 2017:129). Holloway and Wheeler (2010:304) are of the opinion that authenticity consists of the following:

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• Fairness: The researcher was fair to participants and gained their acceptance throughout the whole of the research. The moderator and researcher were non-judgemental, both verbally and non-verbally, during focus group discussions.

• Ontological authenticity: This was achieved by providing time and space for participants to engage in dialogue about their experiences, understanding and knowledge regarding the research problem. Dialogue was open and non-judgemental (Higgs, Titchen, Horsfall & Bridges, 2011:220). The participants were engaged in the focus group discussions and their interactive nature allowed participants to build on one another’s ideas. This ensured that participants developed a better understanding of their self-leadership in the outreach service.

• Educative authenticity: This was achieved through creating space for dialogue and exchange between the participants during focus group discussions. The participants shared their experiences, understandings and knowledge with one another about their self-leadership in the outreach service. At the end of the focus group discussions, the moderator clarified and paraphrased what had been said, in order to heighten the awareness and understanding of each person regarding the constructions of other participants (Higgs et al., 2011:220).

3.3.2 Phase 2: Conceptualisation
The second step in Neck and Milliman’s (1994:11) self-leadership strategic framework is to develop and substitute a new framework for a phenomenon. Babbie (2017:198) indicates that a framework is the conceptual underpinning of a piece of research. The specified conceptual model in which research is rooted is called its conceptual framework. Jabereen (2009:51) defines a conceptual framework as a network of interlinked concepts that together provide a comprehensive understanding of a phenomenon. A conceptual framework explains, either graphically or in narrative form, the main things to be studied – the key factors, variables or constructs and the presumed relationships among them (Ravitch & Riggan, 2016: n.p.). Babbie (2017:200) states that nurse researchers have used both nursing and non-nursing frameworks to provide conceptual contexts for their studies.

Phase 2 of this research focused on the development of a conceptual framework for the phenomenon of how nurses led themselves in the current CCOS. The researcher developed the
conceptual framework according to an adapted methodology of Jabareen (2009:53). The following steps were undertaken:

**Studying the themes and categories**
The researcher scrutinised the data from Phase 1 for themes and categories that described the data.

**Deconstructing and categorising the concepts**
The researcher identified the main attributes, characteristics, assumptions, themes and categories, and organised and categorised their concepts according to the main components in the survey list provided by Dickoff et al. (1968) in *The Practice Oriented Theory*.

**Integrating concepts**
The researcher triangulated and integrated the concepts from the findings on the self-leadership of nurses in the outreach service into one framework, utilising Dickoff et al.’s (1968) The Practice Orientated Theory to organise these concepts.

**Synthesis, re-synthesis and explaining of concepts**
This step involves describing the framework with the purpose of providing a complete understanding of the phenomenon. Ravitch and Riggan (2016:n.p.) state that a conceptual framework includes relevant theoretical literature, empirical knowledge, beliefs, commitments and values of the phenomenon. Jabareen (2009:51) indicates that conceptual frameworks contain assumptions like Dickoff et al.’s (1968), upon which a research study is based and which encourage the development of a theory. The findings of Phase 1 led to conclusions that were integrated into the framework. The researcher had to describe the framework with the aim of providing a clear understanding of the phenomenon.

The survey list of *The Practice Orientated Theory* by Dickoff et al. (1968) provided the ‘reasoning map’ for describing the conceptual framework. The ‘reasoning map’ was based on the following six questions:

- Who or what performs the activity (agency)?
- Who or what is the recipient of the activity (recipient)?
- In what context is the activity performed (framework)?
- What is the endpoint of the activity (terminus)?
- What is the guiding procedure, technique or protocol of the activity (procedure)?
- What is the energy source for the activity (dynamics)?

(Dickoff et al., 1968:422-423)
Table 3.3 shows how these questions were answered in the context of this research.

**Table 3.3: Reasoning map**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Meaning of concept in this research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framework</td>
<td>The private hospital group that implemented the CCOS</td>
</tr>
<tr>
<td>Agent</td>
<td>The critical outreach nurse expert who is a professional nurse with critical care skills</td>
</tr>
<tr>
<td>Recipient</td>
<td>Primary recipient nurses working in general wards in the CCOS. Secondary recipient is the patient in general wards who is at risk of deteriorating in health status or the already deteriorating patient.</td>
</tr>
<tr>
<td>Dynamics</td>
<td>The underlying dynamics in self-leadership of a CCOS are mindfulness and training of nurses.</td>
</tr>
<tr>
<td>Procedure</td>
<td>The agent influences the primary recipient to perform activities of self-leadership to enable the primary recipient to implement self-leadership in the CCOS to manage the secondary recipient in stabilising a patient health status.</td>
</tr>
<tr>
<td>Terminus</td>
<td>The accomplishment of the activities (procedure) or end results in nurses engaging to in their self-leadership in the CCOS.</td>
</tr>
</tbody>
</table>

3.3.3 **Phase 3: Quantitative phase**

The third step in Neck and Milliman’s (1994) self-leadership framework is to explore the perceptions of the phenomenon based on the framework. The third objective in this research was to explore and describe nurses’ views on their self-leadership in an outreach service at a private hospital group in Gauteng.

**Design**

Phase 3 followed a quantitative exploratory and descriptive design by means of a questionnaire that was developed to test the ideas generated from the conceptual framework (Hesse-Biber, 2010:71). In terms of a quantitative research design, data are collected in the form of numbers, and statistical types of data analysis are used (Gray et al., 2016:37). Exploratory research design is a design which is generally used either where an area is poorly understood or where the topic concerned has been partially explored. In descriptive research on the topic of this study, the researcher would merely search for accurate information about the nurse managers’ views on implementing self-leadership in the CCOS (Hair et al., 2015:147; Sim & Wright, 2000:18). Beaudry and Miller (2016:98) describe a variable as the characteristics, attributes, conditions or qualities of subjects (such as the nurses in the outreach service) that can be observed. These
variables are described to provide a complete picture of the phenomenon, such as, in this case, the CCOS.

3.3.3.1 Population and sample
A population refers to the collective or totality of all objects or members that conform to a set of specifications (Polit & Beck, 2017:306). In this research, the target population in Phase 3 was identified as all the nurse managers working in the private hospital group in Gauteng. In total, 27 private hospitals in the private hospital group in the Gauteng region were approached for the research.

An accessible population refers to that portion of the population to which the researcher has reasonable access and which can be clearly identified and directly sampled from (Privitera, 2015:n.p.). Only twelve (n=12) hospitals were accessible for this study. The accessible participants in the population for this section of the research were identified as the nurse managers (n=123) who were working in the 12 hospitals located in Gauteng (Table 3.4).

Table 3.4: Hospitals and participants

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Nurse managers handed out</th>
<th>Questionnaires received back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital 1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Hospital 2</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Hospital 3</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Hospital 4</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Hospital 5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Hospital 6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Hospital 7</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Hospital 8</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Hospital 9</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Hospital 10</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Hospital 11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Hospital 12</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>123</td>
</tr>
</tbody>
</table>

The total sample implied purposive sampling, which refers to the likelihood of each element of the population being included in the sample. A purposive sample is a non-probability sample that is selected based on characteristics of the population and the objective of the study (Crossman, 2018). In total sampling the researcher chooses to examine the entire population that share one or more characteristics (Crossman, 2018) and is typically small (Laerd, 2012).
In this case nurse managers working in the 12 private hospitals in Gauteng. The total population was 123, and to account for the attrition rate, total sampling was done. A total of 123 questionnaires were distributed and 83 questionnaires were returned, giving a response rate of 67.8%. However, of the 83 questionnaires returned, only 74 questionnaires were found valid for analysis, as some were incomplete with missing answers.

3.3.3.2. Permission

It was an extremely time-consuming process to acquire permission from this private hospital group. It took about six months to acquire the necessary permission during 2013. According to this hospital group’s policy, the researcher needed to contact all 27 hospitals situated in the Gauteng region for permission. After numerous communications between the researcher and these hospitals, only 12 hospitals granted permission for research to be conducted. Head-office had the final say for providing permission. The benefits of the research were explained to them and thereafter the written permission was obtained (Annexure F).

3.3.3.3. Data collection instrument

A structured questionnaire was developed from the conceptual framework (Phase 2) regarding nurses’ self-leadership in an outreach programme. A similar questionnaire (Annexure L) was developed for all participants to complete anonymously. Patten (2017:n.p.) is of the opinion that anonymous questionnaires encourage participants to be truthful. The researcher selected this data collection instrument to enable all the participants to respond to exactly the same questions in exactly the same order and according to the same scale. The questionnaire consisted of close-ended questions.

Closed-ended questions comprise questions to which the response alternatives are pre-specified by the researcher. These questions typically ask the respondent to choose from a distinct set of responses, such as in a multiple-choice list like a Likert scale. Closed-ended questions are critical for collecting survey responses from a limited frame of options. These types of questions are seen as the foundation of all statistical analysis techniques applied on questionnaires and surveys (Anonymous, 2018b). Polit and Beck (2017:343) state that closed-ended questions ensure the comparability of responses and facilitate the analysis of data. Close-ended questions expose all participants to the same response categories and allow standardised quantitative statistical analysis (Johnson & Christensen, 2012:n.p.). The researcher chose mainly closed-ended questions because she believed that this type of questions was more
efficient than open-ended questions in the sense that the participant is able to complete the answers in a given amount of time. In addition, participants may be unwilling to compose lengthy written responses to open-ended questions (Brink, 2006:149). In this research, the closed-ended questions comprised of five-point Likert-scale statements. A Likert scale consists of several declarative items that express a viewpoint on a topic. The Likert scale is a composite measure of perceptions that involves a summation of scores on sets of items (statements) to which participants are asked to indicate their degree of disagreement to agreement (Sharma, 2014:263).

Participants were asked to indicate the extent to which they agreed or disagreed with the perception expressed by the statement (Item) (Polit & Beck, 2016:354) and thus an ordinal level of measurement was applicable. Ordinal measurement ranks objects based on their relative standing in respect of a specific attribute. However, ordinal measurement does not indicate how much greater one level is than another (Polit & Beck, 2017:371). A five-point Likert scale was used with responses ranging from “Totally disagree”, “Disagree”, “Agree”, “Totally agree”, “Do not know” (Polit & Beck, 2016:418–420). The Likert scale allowed the researcher to collect and assess the different perceptions of the participants regarding self-leadership. According to Sharma (2014:263), Likert scales are used to measure the attitudes of participants to specific concepts and are also used to yield quantified measurements of qualitative attributes of people, such as perceptions. The questionnaire included a covering letter which provided details of the proposed study and instructions on how to complete the questionnaire. The questionnaire was further divided into two sections. Section 1 required participants to furnish their biographical information, e.g., age, education (Items 1–6).

Table 3.5: Section 2, self-leadership in patient outreach service

<table>
<thead>
<tr>
<th>Section 2</th>
<th>Concepts addressed</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heading 1</td>
<td>Self-motivation</td>
<td>1–12</td>
</tr>
<tr>
<td>Heading 2</td>
<td>Leading by example/role-modelling</td>
<td>13–26</td>
</tr>
<tr>
<td>Heading 3</td>
<td>Patient outcomes/quality of patient care/patient satisfaction</td>
<td>27–33</td>
</tr>
<tr>
<td>Heading 4</td>
<td>Assistance and guidance from the patient outreach service team</td>
<td>34–45</td>
</tr>
<tr>
<td>Heading 5</td>
<td>Challenges with regard to the activation of the patient outreach service</td>
<td>46–47</td>
</tr>
<tr>
<td>Heading 6</td>
<td>Power of self-affirmation</td>
<td>48–51</td>
</tr>
</tbody>
</table>
3.3.3.4 Data collection

LoBiondo-Wood and Haber (2017:240) indicate that a survey represents the broadest category of all non-experimental research designs. The survey is a method to gather information from individuals and can be conducted through a printed questionnaire. The information is collected through the use of standardised procedures so that every participant is asked the same questions in the same way (Anonymous, 2018a). The researcher made an appointment with the various hospital managers to hand out the questionnaires, and requested nurse managers to complete the questionnaire while she waited, to ensure a high return rate. With three of the hospitals the researcher had to arrange to collect the completed questionnaires a week later. Questionnaires enabled the researcher to draw reasonable conclusions about the research phenomenon (in this research, self-leadership) in an effort to reduce bias. The questionnaire was cost-effective and convenient to administer, since participants completed their questionnaires individually without supervision, as opposed to interviews. It took about 15 minutes for participants to complete the questionnaires that were returned in closed envelopes to maintain participants’ anonymity. The data collection took place over a period of six months (August 2015- January 2016).

3.3.3.5 Data analysis

According to Polit and Beck (2016:265), the benefit of a questionnaire is that it can accurately document outcomes and define associations among variables in a sample. Brink (2006:171) is of the opinion that statistics are the most powerful tool available to the researcher for analysing quantitative data. Without the aid of statistics, quantitative data would simply be a chaotic mass of numbers.Statistical methods enable the researcher to reduce, summarise, organise, manipulate, evaluate, interpret and communicate quantitative data (Lee, Saunders & Narayanan 2015:n.p.). In Phase 3, the data was analysed using SPSS (Statistical Package for Social Science) Version 22, using descriptive statistics (frequencies, mean values and standard deviations) and inferential statistics (factor analysis). According to Rubin and Babbie (2011:290) and Lee et al. (2015:n.p.), quantitative data analysis can be descriptive or inferential; for this study, the researcher employed both. Descriptive data analysis does not necessarily provide a basis for generalising beyond a particular research or sample, and for this
reason, after descriptive statistics have been examined, inferential statistics should also be examined (Rubin & Babbie, 2011:290).

a) **Descriptive statistics**

Descriptive statistics in the form of frequency distributions (f), mean values ($\bar{x}$) and standard deviations (SD) were used to describe and to summarise data (Table 3.6).

**Table 3.6: Number of items with mean values and standard deviations**

<table>
<thead>
<tr>
<th>Section</th>
<th>No of Items</th>
<th>Items</th>
<th>$\bar{x}$</th>
<th>SD</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-motivation</td>
<td>8</td>
<td>4</td>
<td>3.95</td>
<td>.874</td>
<td>74</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>4.20</td>
<td>.758</td>
<td>74</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>3.84</td>
<td>.828</td>
<td>74</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>3.69</td>
<td>.964</td>
<td>74</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>3.70</td>
<td>.989</td>
<td>74</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>3.82</td>
<td>.984</td>
<td>74</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>4.00</td>
<td>.907</td>
<td>74</td>
<td>100.0</td>
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<tr>
<td></td>
<td></td>
<td>12</td>
<td>3.62</td>
<td>1.119</td>
<td>74</td>
<td>100.0</td>
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</table>
These statistics convert and condense a collection of data into an organised, visual representation or picture in a variety of ways so that the data will have meaning for the readers of a research report (Babbie, 2015:435; Brink, 2006:171). Conducting frequency distributions (f) was the first strategy used to organise data. These distributions represent a method of tallying and representing how often certain scores occur (Schmuller, 2017:131; Salkind, 2008:51). A measure of tendency is often referred to as an average. The most commonly used measure of central tendency is the mean ($\bar{x}$), which is the sum of the scores divided by the number of scores being added. The mean is an appropriate measure of central tendency for approximately normally distributed populations (Scott & Mazhindu, 2014:49). The standard deviation (SD) is a measure of dispersion which represents the square root of the variance. The standard deviation provides a measure of the average deviation of a score from the mean in a particular sample (Scott & Mazhindu, 2014:51).

b) Inferential statistics

Babbie (2015:435) and Salkind (2008:163) maintain that inferential statistics may be used to assist researchers to draw conclusions from the sample about their observations of the population. In this research, a factor analysis was used to establish the interrelationships between the variables and to disentangle these relationships to identify clusters of relationships (factors) which were closely linked (Grove et al., 2015:343; Salkind, 2008:277). In view of the fact that there were no predefined ideas in respect of the number of dimensions in a set of variables in the questionnaire, an exploratory factor analysis was conducted (Osborne & Banjanovic, 2016:n.p.; Torres-Reyna, 2008:2).

Table 3.7: Factors extracted from headings in the questionnaire

<table>
<thead>
<tr>
<th>Questionnaire headings</th>
<th>Factor</th>
<th>Description of factor</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-motivation</td>
<td>1</td>
<td>Self-motivation</td>
<td>4, 5, 6, 7, 8</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Authority</td>
<td>9, 11, 12</td>
</tr>
<tr>
<td>Leading by example/role-modelling</td>
<td>3</td>
<td>Role-modelling</td>
<td>13, 14, 19, 20, 21</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Knowledge</td>
<td>15, 16, 18, 23, 24</td>
</tr>
<tr>
<td>Patient outcomes/quality of patient care/patient satisfaction</td>
<td>5</td>
<td>Patient outcome</td>
<td>30, 31, 32, 33</td>
</tr>
<tr>
<td>Assistance and guidance from the patient outreach service team</td>
<td>6</td>
<td>Assistance and guidance</td>
<td>34, 35, 36, 41, 43</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Responsibility</td>
<td>37, 38, 39, 40</td>
</tr>
</tbody>
</table>

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The factors that were extracted via the statistical analysis are presented in Table 3.7. A principal axis-factoring analysis was conducted because this type of analysis seeks the least number of factors which may account for the common correlation in a set of variables (Osborne & Banjanovic, 2016:n.p.)

Table 3.8: KMO test values for factor analysis

<table>
<thead>
<tr>
<th>Factors extracted</th>
<th>KMO statistics for factor analysis</th>
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</thead>
<tbody>
<tr>
<td>Self-motivation</td>
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<tr>
<td>Authority</td>
<td>.638</td>
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<tr>
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<tr>
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<td>.803</td>
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<tr>
<td>Patient outcomes</td>
<td>.736</td>
</tr>
<tr>
<td>Assistance and guidance</td>
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<tr>
<td>Responsibility</td>
<td>.800</td>
</tr>
<tr>
<td>Power of self-affirmation</td>
<td>.690</td>
</tr>
</tbody>
</table>

Only items which were answered by all 74 (100.0%) participants were included in the factor analysis for which their mean values and standard deviations are indicated. The Kaiser-Meyer-Olkin (KMO) test was used to measure the sampling adequacy which should, in turn, be greater than 0.5 for a satisfactory factor analysis to proceed (Hinton, McMurry & Brownlow, 2014:341; Dwivedi, 2008:120-121). Table 3.8 presents the KMO test values. Anti-image matrices statistics were used to verify that the value on the diagonal was greater than 0.5. Items with a measure of sampling adequacy of less than 0.6 were not included in the analysis. Items with a loading of less than 0.6 were excluded from the factor analysis; hence Item 5 (0.531) and Item 12 (0.500) were excluded. Eigenvalues form part of factor analysis. For each factor, an eigenvalue is calculated. An eigenvalue of 1 means that the factor can explain as much variability in that data as a single original variable. Factors with an eigenvalue of 1 or more can be seen as important (Hinton et al., 2014:340). Only one component per factor had an eigenvalue above 1, as seen in Table 3.9. No rotation was done.
Table 3.9: Eigenvalues

<table>
<thead>
<tr>
<th>Questionnaire headings</th>
<th>Factor</th>
<th>Description of factor</th>
<th>Component</th>
<th>Eigenvalue</th>
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3.3.3.6 Validity and reliability

Pre-testing of the instrument was conducted with ten professional nurses with experience in an emergency setting. Pre-testing the questionnaire ensured that the questionnaire is appropriate for the survey in terms of structure and language, and it enables the researcher to check that the information obtained from the target population is collected through the research instrument
(Beri, 2013:134; Bajpai, 2011:86). No changes to the instrument were needed after the pre-testing group had completed the questionnaire for face and content validity. Validity is the degree to which an instrument measures what it is supposed to measure. Validation efforts should be viewed as evidence-gathering enterprises, in which the goal is to assemble sufficient evidence from which validity can be inferred (Polit & Beck, 2016:457-458; Babbie, 2015:160). The more evidence gathered, using various methods to assess validity, the stronger the inference (Polit & Beck, 2016:458).

Face validity refers to whether the instrument looks as though it is measuring the appropriate construct (Polit & Beck, 2016:458; Brink, 2006:160). Face validity was further established through consultation with four experts who lectured in nursing management and research, who scrutinised the questionnaire to ascertain the appropriateness of questions and whether the questions corresponded with the framework developed for the research (Monette, Sullivan, DeJonge & Hilton, 2014:114; Salkind, 2008:114). They were asked to provide comment on the clarity and relevance of the content/items on self-leadership. Content validity concerns the degree to which an instrument has an appropriate sample of items for the concept being measured and adequately covers the construct domain (Polit & Beck, 2016:458; Brink, 2006:160). Content validity was reached through looking at the content of the findings from the qualitative enquiry that informed the conceptual framework and then the instrument.

Construct validity involves the validity of inferences from the research and concerns the degree to which an intervention is a good representation of the underlying construct (Polit & Beck, 2016:287). To ensure construct validity, the researcher conducted a factor analysis of items of Section 2 of the questionnaire. The reliability of a questionnaire refers to the consistency with which participants understand, interpret and respond to all the questions contained in the questionnaire (Boswell & Cannon, 2015:346; Hammersley, 2008:43). The reliability of the measurement was enhanced by questions in the instrument that were relevant to participants and by ensuring that the questions were clear and unambiguous.
### Table 3.10: Factor analysis and Cronbach’s alpha

<table>
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</table>

Internal consistency, as a type of reliability, is appropriate only when the instrument is examining one concept or construct at a time (Polit & Beck, 2016:455; Brink, 2006:164). In this research, Cronbach’s alpha (α) test for internal consistency was conducted (Polit & Beck, 2016:455). According to LoBiondo-Wood, Haber, Cameron and Singh (2017:308) and Salkind (2008:106–108), Cronbach’s alpha test for internal consistency may be defined as a special measure of reliability in terms of which the more consistently individual item scores vary from the total score on the test. The higher the value, the more confident the researcher may feel that

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the test is internally consistent. Cronbach’s alpha (∝) reliability coefficients usually ranges from 0 to 1, while a range of > 0.7 is deemed acceptable and values > 0.8 are considered to indicate good internal consistency (Curtis & Drennan, 2013:320). Table 3.10 presents the Cronbach’s alpha values for each factor in the factor analysis. Asthana and Bhushan (2016:207) state that factor loadings of 0.550 and above are significant. Items with a loading of less than 0.600 are normally excluded from the factor analysis. Items with a weak loading (<0.600) are factors that have less than 20.0% shared variance with the construct they represent (Matsunaga, 2010:101; Pett, Lackey & Sullivan, 2003: 208). Items with a factor loading of less than 0.600 were excluded from the factor analysis; hence, Items 10, 17, 22, 25, 26, 27, 28, 29, 45, 46, 47 and 48 were excluded for this study.

### 3.3.4 Phase 4: Strategy

The last objective of this research was to develop self-leadership strategies for nurses to implement in an outreach service at a private hospital group in Gauteng. The four phases of Neck and Milliman (1994) were followed to lead to a strategy. The qualitative and quantitative phases were informed the strategy. The fourth step in this study, according to Neck and Milliman’s (1994:11) guidelines, was to create an environment where a greater sense of self-leadership prevailed in the workplace under investigation. The self-leadership strategies were derived from the results of the previous phases. Factors were extracted from the factor analysis. These factors (Table 3.11) were used as the departure point for the development of self-leadership strategies for the nurses in the CCOS.

<table>
<thead>
<tr>
<th>Questionnaire Headings</th>
<th>Factor description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-motivation</td>
<td>Self-motivation</td>
</tr>
<tr>
<td></td>
<td>Authority</td>
</tr>
<tr>
<td>Leading by example/role-modelling</td>
<td>Role-modelling</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
</tr>
<tr>
<td>Patient outcomes/ quality of patient care/ patient satisfaction</td>
<td>Patient outcome</td>
</tr>
<tr>
<td>Assistance and guidance from patient outreach service</td>
<td>Assistance and guidance</td>
</tr>
<tr>
<td></td>
<td>Responsibility</td>
</tr>
<tr>
<td>Power of self-affirmation</td>
<td>Power of self-affirmation</td>
</tr>
</tbody>
</table>
3.4 REASONING STRATEGIES FOLLOWED DURING THE FOUR PHASES

Grove et al. (2015:546) describe reasoning as the processing and organising of ideas in order to reach conclusions. In this research, the researcher made use of inductive reasoning, deductive reasoning, analysing, synthesis, bracketing and reflexivity.

- **Inductive reasoning**
  Inductive reasoning starts with collecting data and then generates a theory as a result of the data analysis. (Babbie, 2015:23; Collins, 2010:42). Inductive reasoning involves observing as many examples of a phenomenon as possible and then looking for the general underlying principles that explain that phenomenon (Teddlie & Thashakkori, 2009:47). This means that reasoning moves from a concrete or specific set of observations to the detection of a general theoretical pattern or form (Babbie, 2015:22; De Vos et al., 2011:49). Inductive reasoning does not give conclusive reasons for the inference that has been drawn (Babbie, 2015:22). The researcher applied inductive reasoning during Phases 1 and 2 of this research. This was done following the collection of data about the experiences of nurses on their self-leadership in an outreach service, through focus group discussions, observations and field notes. The conclusions the researcher drew from the data was later used to conceptualise, using the literature as a control mechanism. Inductive reasoning was also used during the discussion on the findings of the research.

- **Deductive reasoning**
  Deductive reasoning involves the use of a theory to develop a proposition; a research framework is then designed to test that proposition (Babbie, 2017; Collins, 2010:42). Polit and Beck (2016:11) describe deductive reasoning as the process of developing specific predictions from general principles. The researcher used deductive reasoning in Phases 3 and 4 of this research when she developed a questionnaire of the conceptualised findings and during the development of self-leadership strategies for nurses in an outreach service. Thyer (2010:33) believes there is not an absolute distinction between these two reasonings but rather an integration of the two. The researcher starts with an exploratory approach to generate theory and then moves to generate a conceptual framework based on the results.
• Synthesis
Synthesis is the process of grouping and connecting ideas from various sources to form a completely new description of what is known or not known in an area (Gray et al., 2016:32). In this research the researcher synthesised the data collected during Phase 1 and the focus group findings from Phase 2 to develop an original conceptual framework for nurses working in an outreach service to lead themselves.

• Analysis
The Oxford Advanced Learner’s Dictionary (2016) defines analysis as a thorough research or scrutiny of something to understand more about it. Mixed methods research data analysis involves the integration of statistical and thematic data analytic techniques, plus other strategies unique to mixed method research (e.g., conversion or transformation) (Creswell & Plano Clark, 2018:n.p.). In mixed method research, investigators go back and forth seamlessly between statistical and thematic analysis (Teddlie & Tashakkori, 2009:8). An experienced moderator was used to conduct the focus group discussions and data was analysed by an experienced analyst (Polit & Beck, 2017:268).

3.5 ETHICAL CONSIDERATIONS
The following ethical principles of autonomy, beneficence and justice, as stated by Waltz et al. (2017:488) and Streubert and Carpenter (2011:60), were adhered to.

• Autonomy
Consent was obtained from top management at the private hospital group in Gauteng to gather data at their hospitals (Creswell, 2014:90). Informed consent and voluntary participation supported the principle of autonomy (Waltz et.al., 2017:488). The participants in the focus groups and survey were given clear and understandable information about the nature and intention of the research. The participants voluntarily participated in the study and were informed of their right to withdraw from the research at any stage without consequences. Focus groups and the handing out of questionnaires were conducted at times that were convenient to hospital staff to minimise disruption of activities and so as not to intrude on the flow of activities of the participants (Creswell, 2014:90). There were no harmful procedures involved (Creswell, 2014:89).
• Confidentiality
The principles of beneficence and justice were upheld by assuring participants of confidentiality and anonymity. Participants were also treated with dignity and respect (Streubert & Carpenter, 2011:61). The participants all had the right to anonymity and self-determination and were entitled to assume that the data collected would remain confidential. According to Grove et al. (2015:107), complete anonymity exists when the participants’ identities cannot be uncovered by the researcher or anyone else. The focus group participants were identified by numbers and no other identifying information was recorded, to ensure confidentiality (Grove et al., 2015:111). Participants from focus groups were asked to keep all discussions in the group confidential and not to divulge the content of the focus group to anyone outside the group. The quantitative phase of research was conducted in such a way that it was not possible to link the data to any specific participant. The questionnaire did not reveal either the names of the hospitals or the identities of participants, and were returned in a closed envelope. All data gathered in the study was kept under lock and key and on a password protected harddrive. The data will be kept so for five years after the results of the research have been published, after which it will be destroyed. Only the researcher, supervisor, independent coder and statistician had access to the data.

• Respect for persons
Participants who declined to participate were not coerced to participate or harassed in any way. The researcher obtained voluntary, informed, written consent from each participant and treated all participants in ways that respected their individual human dignity. Sufficient information about the nature, purpose and implications (benefits) of the research study was disclosed to all participants. The researcher communicated to the participants the ways in which their confidentiality and privacy in a private room would be safeguarded. According to Babbie (2015:66) and Polit and Beck (2016:147), the concept of informed consent serves to enhance the ethical norms of voluntary participation. Voluntary participation in a research project implies that participants have a full understanding of the possible risks involved. The right of the participants to withdraw or to terminate their participation in the research at any time was both acknowledged and respected by the researcher. It took only 15 minutes to complete the questionnaire and focus groups took about an hour. The researcher disclosed her identity, affiliation and qualification to the participants.
• **Beneficence**

Fick (2015:n.p.) and Grove et al. (2015:108) state that the right to protection from discomfort and harm in research is based on the ethical principle of beneficence, which states that the researcher should do good and produce positive and identifiable benefit. The researcher attempted to maximise the benefits that the research would afford to the participants in the research study. It is hoped that the research will be of benefit to hospitals in Pretoria through the knowledge gained. This knowledge takes the form of describing strategies for implementing self-leadership among nurses in outreach programmes.

• **Non-maleficence**

Byrne (2017:65) and Roussel and Swansburg (2008:80) indicate that the purpose of the ethical category of non-maleficence is to avoid intentional harm or the risk of inflicting harm on any individual. The researcher refrained from any actions that would bring harm or discomfort to the participants as a direct or indirect consequence of the research study. In this research, the researcher further avoided deception and did not raise unrealistic expectations on the part of the research participants. Only those items which were considered necessary to realise the aims of the research were included in the questionnaire and any words or phrases in the items that might have offended participants were avoided.

• **Justice**

The researcher treated all the participants fairly by giving them a change to partake in this study. The researcher and the participants were clear about the participants’ participation in the research as well as the researcher’s role in the research study. While conducting the research, the researcher respected this agreement (Polit & Beck, 2016:149).

• **Rights of the community**

Results of the research will be published in an accredited journal or a peer reviewed journal. Information acquired through this research project was shared with all participants prior to public dissemination (Babbie & Mouton, 2001:530).
• **Access to information**

The researcher offered to answer any questions the participants might raise after the focus group discussion. The researcher provided the researcher’s contact details to the participants in case they should need support the research process (Farrimond, 2013:192).

• **Obligation to adhere to practices of scientific value**

The researcher maintained the highest degree of integrity with respect to scientific research by adhering to the Code of Academic and Research Ethics of the University of Western Cape (University of the Western Cape, 2018). This included:

  * complying with the highest standards in the planning, implementation and reporting of her scientific research, and consulting with the supervisor;
  * acknowledging and indicating the limitations of the research;
  * avoiding any unethical manipulation of evidence or fabrication of data or information;
  * committing no form of plagiarism and justifying all conclusions derived at;
  * not practising or promoting any form of constitutionally recognised unfair discrimination in the research study;
  * maintaining neutrality, non-bias and honesty at all times; and
  * reporting all findings fully and with no misrepresentations in the dissemination of the research information and findings.

### 3.6 CONCLUSION

This chapter presented the research methodology of this research. The researcher followed a mixed methods approach and outlined its phases clearly, showing these both in writing and in graphic form. The phases were logically discussed with reference to the population, design, method, data gathering and analysis. Appropriate reasoning strategies were followed in the description of the mixed method, and methods were shown to complement the phases. The researcher used appropriate frameworks to guide the methodology and it remained within ethical principles. The required intellectual rigour of the research was taken into consideration throughout the process. The study started with a qualitative phase, conducted in one specific hospital, and went on to confirm the qualitative data through the obtaining of numerical data in twelve hospitals within the same private hospital group. The researcher used reasoning strategies in processing and organising the ideas and in drawing conclusions in the research. Chapter 4 presents the findings of the focus groups.
CHAPTER 4: FINDINGS FROM PHASE 1

4.1 INTRODUCTION
This chapter focuses on findings from the qualitative phase, Phase 1, of the research, namely the experiences of nurses regarding their self-leadership. The inductive approach is employed, whereby data is analysed to derive the overall structure of the findings. This approach is comprehensive and is most suitable where little or nothing is known about the study phenomenon (Huges & Lavery, 2016:n.p.; Burnard, Gill, Treasure & Chadwick, 2008:429). The objective was to explore and describe the experiences of nurses regarding their self-leadership in a current outreach service at a private hospital in Pretoria (Phase 1). The findings in this chapter are supported by literature.

4.2 BRIEF OVERVIEW OF THE FIELDWORK ACTIVITIES
Eight focus groups were conducted over a period of seven months from August 2014 to January 2015. After permission to conduct focus groups had been granted, the researcher visited the different wards in the hospital and recruited nurses as participants. The participants all received consent forms, which were collected at the focus group interviews. The focus groups were held in a pre-arranged venue, as described in Chapter 3. The room was conducive to data gathering because it was free from noise and distractions and accommodated all participants. A moderator facilitated all the sessions. The participants understood and spoke English, and therefore discussions were facilitated in English. The discussions were digitally recorded, and the researcher wrote field notes while conducting interviews. These recordings were transcribed, and the field notes were incorporated into the transcribed data so that the gathered data was as complete as possible. The focus groups were conducted to the point of data saturation.

4.3 DEMOGRAPHIC DESCRIPTION OF PARTICIPANTS
In South Africa’s private healthcare sector there are three major private hospital groups. The private hospital group chosen for this research was the only organisation with an outreach service, having 47 hospitals in South Africa, of which the majority (27) are located in Gauteng. From the accessible population (N = 203) that served as the sample, purposive sampling was
conducted from among full-time and permanently appointed nurses (professional nurses, staff nurses and auxiliary nurses) who worked day and night shifts in general wards and who formed part of the CCOS for patients at a single private hospital in Pretoria.

4.3.1 Participants

Eight focus groups were held (Table 4.1), with participants ranging in age from 22 to 55. Focus groups were conducted for each nurse category. Two focus groups (n = 2) were held with professional nurses, three (n = 3) with staff nurses and three (n = 3) with auxiliary nurses.

Table 4.1: Focus groups

<table>
<thead>
<tr>
<th>Focus group</th>
<th>Nurse category</th>
<th>Total participants in group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus group 1 (pilot)</td>
<td>Professional nurses</td>
<td>5</td>
</tr>
<tr>
<td>Focus group 2</td>
<td>Staff nurses</td>
<td>8</td>
</tr>
<tr>
<td>Focus group 3</td>
<td>Auxiliary nurses</td>
<td>6</td>
</tr>
<tr>
<td>Focus group 4</td>
<td>Auxiliary nurses</td>
<td>9</td>
</tr>
<tr>
<td>Focus group 5</td>
<td>Professional nurses</td>
<td>6</td>
</tr>
<tr>
<td>Focus group 6</td>
<td>Staff nurses</td>
<td>7</td>
</tr>
<tr>
<td>Focus group 7</td>
<td>Staff nurses</td>
<td>9</td>
</tr>
<tr>
<td>Focus group 8</td>
<td>Auxiliary nurses</td>
<td>7</td>
</tr>
</tbody>
</table>

Each focus group consisted of participants in the same nursing category and represented the following wards that offered the outreach service: (i) medical wards; (ii) orthopaedic wards; (iii) surgical wards; (iv) paediatric wards; and (v) oncology wards. Segmentation of the focus groups was done by sorting the nurses into separate groups based on the level of nursing (different nursing categories) they performed, which ensured that the focus groups were homogeneous in terms of qualifications (Stewart & Shambasani, 2015:26). This was done to prevent the lower qualified nurses from feeling inhibited and to prevent any problems that might have arisen due to ward dynamics. The professional nurse has more power than the auxiliary nurse and this power imbalance might have influenced the participation of the auxiliary nurse in the focus group. Most of the group members knew each other as colleagues.

Only two focus group discussions (Focus groups 1 and 5) were held with the professional nurses, since there was only one professional nurse on duty in a ward at any given time,
meaning that the person was unable to leave in order to attend the focus group. Focus groups with professional, staff and auxiliary nurses were also held separately due to their different scopes of practice as outlined by the Nursing Act (South Africa, 2005). Krueger and Casey (2015:n.p.) and Langer (2006:35) indicate that a focus group should not last longer than two hours and that most focus groups are conducted within one and a half hours. For this research, the duration of focus groups discussions was between 45 minutes and 75 minutes.

4.4 DISCUSSION OF RESULTS
The data collected during the focus group discussions was analysed, and three themes, five categories and twelve sub-categories were identified (Table 4.2). Each of these categories and sub-categories are discussed below, in conjunction with the participants’ supporting quotations and some reference to the literature. This study drew from the definition of self-leadership as presented in Chapter 1, that self-leadership is the process of influencing oneself to establish the self-direction and self-motivation needed to perform (Neck et al., 2017:7; Neck & Houghton, 2006:271). In this study, it became evident that self-leadership helps the individual to develop personal effectiveness through three categories of individual-level action; namely (i) behaviour-focused actions; (ii) natural reward (motivational) actions; and (iii) constructive thought (cognitive) patterns (Van Wart, 2015:90). All these categories of action were evident in the themes drawn from the data in this study. At the end of Chapter 4, an overview of the concepts embedded in these approaches is presented (Figure 4.1).

Manz (1986:585) is of the opinion that behaviour-focused strategies are close to the concept of individual self-management. According to Marques-Quinteiro and Curral (2012:562), these behavioural strategies are intended to regulate personal behaviour with the goal of increasing individual performance. Participants practised their self-leadership through various behavioural strategies in this study. Nurses could change their behaviour and improve their performance. To achieve increased individual performance, behaviour-focused strategies embrace regulatory functions like self-observation, self-goal-setting, self-reward administration and self-cueing (Neck et al., 2017:14; Neck & Houghton, 2006:271).
Table 4.2: Summary of the categories and sub-categories identified from the data regarding the experiences of nurses’ self-leadership in the outreach service

<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
</table>
| 1. Mindfulness of self-leadership through developing self-motivation and self-direction in the patient outreach service | Self-motivating in a CCOS by the team | - Calling the outreach experts  
- Taking charge/assessing the patient  
- Self-motivated to act as advocate for patients during doctor rounds |
| | Leading (directing) by example/role-modelling to peers | - Taking the lead when in charge of calling outreach experts  
- Staff involvement in communication |
| | Training (mentoring and teaching) in self-leadership | - Viewing positive outcomes/quality of patient care/patient satisfaction as essential  
- Knowledge about patients’ conditions |
| 2. Acknowledgment of the role of the nurse in the patient outreach service as part of a team to obtain quality patient care | An outreach service as an essential service in delivering care to at-risk patients | - Management of modified early warning system (MEWS)  
- Support for nurses (recipients) asking for assistance  
- Teamwork as a critical component of healthcare |
| | Assistance/support and guidance from patient outreach service team (agents) | - The role of ward nurses as part of the team  
- A need for outreach experts to facilitate a positive outcome for a deteriorating patient |
| | Challenges in calling the patient outreach experts (agents) | - Self-confidence  
- Being appreciated at work  
- Passion for nursing and caring |
| 3. Power of self-affirmation while delivering nursing care to a patient | Staff’s (recipients) sense of being affirmed for contributions towards the wellness of patients (terminus) | - The role of ward nurses as part of the team  
- A need for outreach experts to facilitate a positive outcome for a deteriorating patient |

Natural reward strategies are designed to help create feelings of competence and self-determination, which in turn energise performance-enhancing, task-related behaviours.
Self-determination is an important motivator that forms part of intrinsic motivation and is closely intertwined with the need to feel competent (Manganelli, Thibault-Landry, Forest, Carpentier, 2018:236; Deci & Ryan, 2013:31). Riley (2016:n.p.) and Deci and Ryan (2013:31) describe cognitive evaluation theory as consisting of two systems of motivation: intrinsic motivation and extrinsic motivation.

Cognitive evaluation theory suggests that the basis of intrinsic motivation stems from three psychological needs: competence, relatedness and autonomy (Riley, 2016:n.p.; Deci & Ryan, 2013:318). In intrinsic motivation, people are motivated to perform tasks that meet and satisfy specific internal needs. These three approaches; (i) behaviour-focussed actions; (ii) natural reward (motivational) actions; and (iii) constructive thought (cognitive) patterns come to the fore in self-leadership, the process through which individuals control their own behavior, influencing and leading themselves through the use of specific sets of cognitive and behavioural strategies (Neck et al., 2017:7; Neck & Houston, 2006:270). These strategies can be seen in the themes and categories revealed in this study. (Figure 4.1, developed by the researcher from the literature and confirmed in the findings).

Theme 1 was mindfulness of self-leadership through developing self-motivation and self-direction in the patient outreach service. 4.4.1 Theme 1: Mindfulness of self-leadership through developing self-motivation and self-direction in the patient outreach service Mindfulness is the practice of focussing on the present surroundings and activities and remaining so without being distracted by thoughts about the past or future (Guillaumie, Boiral & Champagne, 2017:1018). Arthur, Dizon, Jooste, Li, Salvador and Yao (2017:n.p.) mention that mindful people tend to be more focussed and relaxed and are able to manage stress in a positive way. From the focus group discussions, the nurses gave a detailed description of their experiences of self-leadership in the outreach service and explained how they used their authority and influence in the process of self-leadership. Jooste and Le Roux (2014:278) assume that people use their own authority to reach personal and professional objectives. Rodriguez (2017:63) states that influence is the desire to meaningfully affect direction and outcomes; it is the impetus moving us to act and generate change.
4.4.1.1 Category 1: Self-motivating in a CCOS by the team

Cziraki, Read, Spence Laschinger and Wong (2018:48) and Bledow (2013:17) are of the opinion that self-motivation draws from Bandura’s (1989) definition of self-efficacy insofar as it refers to the self-initiated mobilisation of cognitive and behavioral resources rather than to belief in one’s capabilities. Self-motivation originates from within the self. Self-motivation is a process in which the individual simply motivates him- or herself. Self-motivation reflects the individual’s own self-driven efforts and is internally based (Ross, 2015:64). Motivation can be seen as the force that drives an individual’s behaviour, and the inspiration to do any task (Pramilaa, 2016:82). Self-motivation is expressed through behaviour, constructive thought patterns and the activation of natural reward strategies.

Self-leadership provides employees with a sense of responsibility, autonomy and control over the work process while allowing for external influences from management, such as various empowering actions that a leader might deliver. It is a quality that focuses largely on the creation of one’s own, intrinsic rewards (Kokemuller, 2018; Stewart, Courtright & Manz, 2011:189). The latter links with natural reward strategies. Employees have expectations regarding their own performance and react positively or negatively towards themselves in response to their own self-evaluation (Sims & Manz, 2011:23). The nurses in this study experienced the need for self-motivation in order to align and develop their self-leadership in the outreach service. The nurses demonstrated different behaviours in self-motivation when, for example, identifying that a patient’s MEWS markers are elevated and that they need to call the outreach experts.

a) Sub-category: Calling the outreach experts

In practice, calling refers to informing outreach experts about a patient with an elevated MEWS. An elevated MEWS indicates that a patient is at risk of deteriorating or that deterioration has begun. An elevated MEWS means that nurses need to take action by calling outreach nurse experts in order to provide timely quality care to the patient and prevent further deterioration. This may include transferring the deteriorating patient to a higher level of care.

As indicated in the underlying assumptions of the theoretical framework (Chapter 1) of the Theory for Health Promotion in Nursing (University of Johannesburg, 2018:4), nurses have the responsibility to engage in the intellectual process of making decisions and to carry out the choices they make. The nurses in this study elaborated on how, through behaviour-focused strategies, they initiated their self-motivation to take action when calling outreach experts:
We’re very observant, you do observations, you monitor them, are they normal or abnormal? Then you can see with the – what the next step is you can take ... (FG1; P4).

It could be interpreted that the nurse debates within herself (self-assessment) about the next step to follow, and the calculation of a MEWS score. The nurses use the MEWS as a cue to determine if the patient is at risk of deteriorating (i.e. they engage in self-cueing), and whether there is a need to call outreach experts (Neck et al., 2017). Bandura (1982:127), a seminal thinker, posits that the self-perception derived from a self-assessment process influences the motivation and behaviour of an individual. Furthermore, Sutton (2016:646) and Neck and Manz (2012) describe self-observation as providing the foundations for managing behaviour.

A participant demonstrated her self-leadership in that she realised through self-observation (behaviour) and self-determination (natural reward) that she lacked the knowledge to provide the appropriate nursing care for an at-risk patient. She initiated self-motivation in making a decision to call outreach experts when she needed support in an emergency:

... when you don’t know any more what to do for this patient, you pick up the phone, “Sister (referring to expert), come help me please”. That is nice to know, because you don’t know everything, you try up to a point and the doctors that not answering his phone, and the blood is just coming out everywhere and you don’t know what to do any more. Then you just phone, “Sister ...” (FG2; P4).

The ward nurses lead themselves and take responsible action to control their personal behaviour (Pearce & Manz, 2005:133) when calling the outreach experts. In doing so, nurses maintain a sense of ownership for the care and nursing of their patient. Participants demonstrated the quality of self-motivation when they used their cognitive resources to take action and call the outreach experts:

A constructive thought pattern was mentioned by a participant who heard “a little voice” (positive self-talk):

... it is that little voice in your head that says to you, something is wrong, it is not something specific, but something tells you something is going on here, then you phone the sister, “Sister, (referring to expert) come... ” (FG2; P4).

Self-talk leads to the suppression of unsuitable behaviours and the promotion of the most adaptive ones. Self-talk (constructive thought patterns) could be intertwined with self-observation (a behaviour strategy). Neck et al. (2017:38) and Sutton (2016:646) state that self-
observation involves raising one’s awareness of when and why one engages in specific behaviours.

A participant spoke of having a gut feeling that a patient was going to deteriorate:

... you know what, as your gut says like this, trust your gut, let’s just do this and this. With us, it helps a lot in paediatric ward ... (FG2; P8).

Through self-observation the nurses determine the most effective action to be taken in relation to the patient with an elevated MEWS (Marques-Quinteiro & Curral, 2012:562). Self-observation evokes the concept of mindfulness, concerning as it does personal behaviour observation, self-reflection and self-awareness with regard to the effectiveness of an individual’s performance in relation to the task, the team and the organisation (Jooste & Frantz, 2017:200; Marques-Quinteiro & Curral, 2012:562).

Self-motivated persons choose the actions they believe are best in order to accomplish a goal (Ross, 2014:312). A participant thought about doing the right thing while busy with a patient, as she responded to what she called her sixth sense:

... I am also supporting the one with the gut feeling because all of us, we’ve got a sixth sense sometimes, you feel that something is wrong but you cannot pick it up .... (FG4; P9).

It could be inferred from this that nurses demonstrate self-leadership when they utilise behavioural strategies, motivate themselves to develop and change their behaviour, and call the outreach expert. Ross (2014:302) is of the opinion that an individual with a positive attitude is self-motivated and demonstrates self-motivation through personal, action-orientated behaviours. The latter is in line with the assertion, made in Chapter 1, that the nurse is a sensitive healthcare provider who demonstrates knowledge, skills and values to facilitate the promotion of health (University of Johannesburg, 2018:4).

Natural reward strategies are intended to increase motivation by enhancing the enjoyment of completing tasks (Marques-Quinteiro & Curral, 2012:562). Self-determination as a natural reward strategy involves the belief that one has control, choice or autonomy over one’s work behaviours and processes (Deci & Ryan, 2013:38). In practice, nurses should make use of their clinical observation skills to identify a deteriorating patient even when the MEWS is normal. The findings indicated that nurses do act and involve the team when they observe that a patient’s condition is changing, and call outreach experts:

http://etd.uwc.ac.za/
... then also when you see the patient condition is changing there is something wrong with the patient, then you just call the outreach to come and help ... (FG2; P6).

Taking action (a behaviour focussed strategy) creates a feeling of competence (a natural reward) among nurses, which enhances intrinsic motivation and allows for satisfaction of the basic psychological need to feel competent (Deci & Ryan, 2013:5). In this setting the outreach experts assists and supports the ward nurse in the nursing care of the patient, which empowers the ward nurses. Empowered nurses feel a sense of competence, which is natural reward to them (Neck, Houghton, Murray, 2017:n.p.).

Nurses used their authority while monitoring elevated MEWS and were empowered by outreach experts when the outreach experts helped with the nursing care of the patient. Empowerment interventions and practices have also emerged as important approaches to promote and develop constructive attitudes and behaviours among employees. Work designs that flow from such approaches are characterised by autonomy and the delegation of responsibility and decision-making authority (Amundsen & Martinsen, 2015:1).

b) Sub-category: Taking charge/assessing a patient

Nurse leaders at all levels, from students to nurse managers, hold key positions and are required to make decisions that affect patient care (Howatson-Jones, Standing, Roberts, 2015:n.p.). As stated in Chapter 1, nurses possess intellectual skills associated with analysis and understanding (University of Johannesburg, 2018:4), and use these to assess a patient. Nurses are responsible for measuring a patient’s vital signs on a regular basis, so that they can respond to the patient’s needs (Howatson-Jones et al., 2015:n.p.). Self-leadership based on natural rewards is essential if nurses want their work to be meaningful and motivating. Measuring a patient’s vital data and having the knowledge to allocate a MEWS score to these vital data could create a feeling of competence and purpose for the nurse. Work is more naturally rewarding when the task delivers three basic elements: a sense of competence, self-control (determination) and purpose (Manz, 2015:135).

The participants made use of constructive thought patterns when they made nursing care decisions. The participants indicated how they had to think ahead (using mental imagery) about what actions to take for patients. Nurses process the image (using mental imagery) of an action before they undertake the action, to better understand what is likely to occur and to make adjustments to the plan for achieving a goal (Ross, 2015:66).
You must make decisions, because of you are there (four others nodding) you are alone then, okay, my patient, the blood pressure is very high, what is my next step? For example, I am using a dinamap, the blood pressure is 200 over what, what, what. Now okay my next step is I am going to take the manual one – ehe ehe – then raise the blood monitors and check it again. I took one step, second step is this, then now, okay, there is something wrong with this patient (FG1; P2).

Another participant indicated how she made use of constructive thought patterns in planning the actions she need to implement in order to care for a patient. It could be stated that these actions create a feeling of competence and purpose (examples of natural rewards) in the nurse when she assesses the patient and identifies abnormal vital data, such as pain and hypertension:

... after observations you must plan, maybe that blood pressure is high. Like she said, then patient can be in pain, but not verbalising he is in pain, then if you can give something for pain then the blood pressure can go down, and then after, yes, it can go down ... (FG1; P3).

It may be deduced from this that the nurse takes charge of the patient when dealing with abnormal vital data and is motivated to implement actions to respond to the abnormal data, which increases the sense of self-determination and autonomy (a natural reward). Self-determination involves the belief that one has control, choice or autonomy over one’s work behaviours and processes (Deci & Ryan, 2013:38).

The same participant also experienced a sense of competence when taking charge of a patient after assessing the patient. She was motivated to employ actions to nurse a deteriorating patient, which gave rise to a sense of purpose and self-control:

For instance, if the patient is from theatre and then you see that patient, the blood pressure is going down, the patient is pale then you know the first thing you must do is Hb. At least when the outreach sister comes, she is having a base line on what to do ... (FG1; P3).

Natural reward strategies are designed to help create feelings of competence and self-determination, which in turn energise performance-enhancing, task-related behaviours (Neck & Houghton, 2006:272).

From the above it can be seen that as nurses interact with their internal environment they are mindful and demonstrate aspects of self-leadership, motivated by the feelings of competence and purpose that result from assessing and taking charge of patients. It is naturally rewarding
for nurses to take charge of deteriorating patients; it creates a feeling of competence and self-control for them. Nurses are motivated by these feelings to take charge of deteriorating patients and thereby develop themselves.

c) **Sub-category: Self-motivated to act as advocate for patients during doctor rounds**

Ross (2014:307) and Manz (1986:592) are of the opinion that when individuals overcome challenges, moving out of their comfort zones, the self-perception of personal competence and efficacy increase, and the individual becomes more self-confident. It is naturally rewarding for nurses to participate in doctors’ rounds, since these give them a feeling of competence, which in turn increases their motivation. The participants in this study accompanied doctors during rounds. These nurses were empowered to do so; they felt it enhanced their self-perception and increased their sense of competence. It was mentioned that nurses move out of their comfort zone (with a purpose) and became self-confident:

> ... we said to them that they must do rounds with doctors, and the doctors must accept it, that’s how it is. We cannot – we work with one sister on a shift, then we have 32 patients and it doesn’t work, so the doctors know now, it is discuss with them, and all of them together ... (FG2; P2).

A participant in a ward explained how she motivated the other nurses in her ward when they needed to accompany doctors on rounds to increase their knowledge:

> ... what we do in our ward, if the sister is doing rounds with the doctor, the EN and ENA working with those patients must escort you, so if the doctor wants to ask something they are there, then he can ask them, and they can answer ... (FG2; P1).

Work is more naturally rewarding when the task delivers three basic elements: a sense of competence, opportunities for self-control (self-determination) and a sense of purpose (Manz, 2015:135). Nurses learn from doctors regarding their patients’ treatment, which could increase their feeling of competence (a natural reward). A participant mentioned how she motivated herself by taking control of the situation:

> Self-leadership ... you have to take control of that situation, not just rush, you must take the situation and you must deal with the situation. Make it yours ... (FG4; P1).

The motivated individual can motivate another (Cziraki et al., 2018:49). However, assuming authority can be a challenge for those accustomed to following, especially when they move out of their comfort zones and must deal with unfamiliar situations. Moving out of one’s comfort
zone and handling a situation competently increases self-confidence, which contributes to self-motivation (Ross, 2014:307).

4.4.1.2 Category 2: Leading (directing) by example/role-modelling to peers

The term ‘role-modelling’ was first used in 1950 by Merton, who stated that people compare themselves to a reference group (Merton, 1957). It is suggested that role-models are a way of motivating individuals to set and achieve goals (Morgenroth, Ryan & Peters, 2015:465). There was agreement amongst the participants in this study that nurses should lead by example. Participants viewed themselves as role-models (attributing to themselves self-efficacy), and were motivated to empower their peers (the ward nurses) and involve them in nursing at-risk patients:

... and also with the leadership you must, ehm, I want to say role-model, you must stand out, you must, if you are working with your nurses and they come to and report to you, you have to involve them as well (FG4; P1).

This means that the nurse has the opportunity to exhibit nursing self-leadership qualities in her clinical work (Xu, 2017:156) by being a role-model. Leaders’ positive role-modeling, support, empowerment and inspiration fulfill employees’ psychological needs (Hetland, Hetland, Andreassen, Pallensen & Notelaers, 2011:508).

a) Sub-category: Taking the lead when in charge of calling outreach experts

By taking control calmly and firmly when a patient is deteriorating, the nurse is motivated to look ahead to how tasks ought to be performed. Nurses create a mental image (using mental imagery) of the desired outcomes or goals and make a choice to nurse the patient without delay to achieve a desired end (Neck et al., 2017; Neck & Houghton, 2006:272). The self-leader should initiate responsibility and demonstrate self-efficacy in his or her actions in an outreach situation, for example, because self-confidence creates the basis for acting in ways required to accomplish goals (Ross, 2014:313). This is in line with the statement that nursing is the patterning of human behaviour in interactions with the environment in critical care situations (University of Johannesburg, 2018:4). A participant described how she used her authority to avoid any negligence in practice with a deteriorating patient. She focussed on the broader purpose, and called the outreach experts to ensure a quick response:

My authority, I think, is to make sure that the patient’s condition is handled correctly, not to deteriorate but for improvement. So if she needs to be transferred she must be
transferred urgently. So I have to be firm that everything is done quickly, not delay or being negligent ... (FG1; P3).

Self-leadership provides employees with more responsibility, autonomy and control over the work process. It still allows for external influences like empowering actions from the leader or experts, which yield intrinsic rewards (Stewart et al., 2011:189). Self-leadership develops autonomy (ownership of choice) which leads to greater sense of responsibility and accountability (Bryant, 2016).

A participant felt leadership to be meaningful, in that she directed herself and took control of situations, while obtaining adequate information from all relevant parties; this was empowering and increased her self-efficacy:

... being the leader taking control, going to the, maybe to the shift leader ... getting her input as well and reporting back to the staff, because doesn’t help they come and report and you have to go back to him ... (FG4; P7).

Self-efficacy is highly and positively related to individual motivation, self-confidence, proactive behaviour, and work performance (Lyons & Bandura, 2018:n.p.).

Another participant expressed her sense of satisfaction when she demonstrated self-leadership and competence, even though she worked in a lower category than her senior colleagues. She could still act in ways that showed competence and initiative:

... you know what, I just feel like we are, we can do something, we – we – we don’t have to wait for the seniors, you know – “I can’t do anything because I am ENA ...” (FG8; P7).

A participant felt she had purpose, that she set goals for herself, which she needed to achieve by being the best:

... I should expect more of myself and I should show them what I expect of me before I can expect anything from them, so that is what it is all about to me, because this role-model that I have had ... the juniors looking up to me as I am looking up to her. So for me it is this a personal thing about being the best that I can be in the situation that I am and it is about respect. Because I respected her so much I want the others to respect me the same. I want that respect. I want others to know that if they come to me I am not going to be a “sit sister. I am not going to be the person that sits behind the desk and tell them go and do this or go and do that, I will go and have a look at the patient myself, because I want it (FG3; P2).
Self-goal setting is based on the goal setting theory, which suggests that setting challenging and specific goals for oneself can significantly increase individual performance levels (Houghton, Carnes & Ellison, 2014:415). Participants seemed motivated to enhance their knowledge further and created a picture of an environment of competence and self-efficacy that motivated them further to be role-models. (When this was pointed out, many participants in the group nodded their heads.) It could therefore be interpreted that training towards self-leadership ought to be increased and that the leadership aspect in all decisions, even the decision to call for outreach experts, ought to be emphasised in training.

b) Sub-category: Staff involvement in communication

Staff need to engage in clear and effective communication, which can be seen as a facet of self-leadership (Holroyd, 2015:94). The findings indicate that nurses felt that they needed proper orientation through communication, in which all role-players should be involved, to assist one another to do tasks correctly when their patients needed them.

A participant was internally driven and wanted to help others by communicating:

... it is all about communication, about communicating to the staff and telling them what your expectations are. When you do orientation make sure that every new member in the ward gets orientated, and a proper orientation. Then it is also about repetition, not saying it once to them and think they going remember all of that ... (FG3; P2).

Another participant indicated how she involved her colleagues through communication:

... you can also involve the staff that you are working with. As an EN I can also talk to my ENA so that they can report each and every patient, every intervention that is due to the patient ... (FG4; P1).

Schwarzer (2014:4) states that higher levels of perceived self-efficacy go together with higher performance accomplishments, of which communication may be considered a component. It was mentioned that the use of self-observation was important and a participant acknowledged that she did not know everything, and thus sometimes had to change her behaviour by communicating with other persons:

... but you need to acknowledge first that you do not know everything, the same way that I do, and then you ask if you not sure, you must communicate. You communicate with the patient, you communicate with other staff members, we communicate with the doctors, we communicate with everyone ... (FG3; P1).
Neck and Houghton (2006:271) indicate that improved individual performances go with behaviour-focused strategies of self-observation, self-goal setting, the administering of self-rewards and self-cueing. Being mindful of these actions may form a part of enhanced training.

4.4.1.3 Category 3: Training (mentoring and teaching) in self-leadership

Training provides employees with competencies they need in their current job and builds competence and motivation (Tarique, 2014:5). In self-leadership, Neck et al. (2017) and Sims and Manz (2011:98) indicate that work is more naturally rewarding when a task delivers a sense of competence, obtained through training.

Participants noted that they did a lot of training which created a feeling of reward and competence among nurses:

... we do a lot of training. I mean we do, there is a sister that does bloodgas training so you know for this little one’s – I mean, when they young professional nurses, when they finish, it is good to go for a course on … a little bit more advanced, like reading of ECG’s, understanding bloodgasses, and all those things and we do ... (FG2; P4).

Nurses make use of natural reward strategies through focusing on the positive aspects of their work. They then focus on the benefit that they will acquire from training and increasing their competence (Van Zyl, 2015:92; Sims & Manz, 2011:98). Staff are also trained through on-the-job coaching and mentoring, which clearly empowered them:

What we also do is when we hand over in the mornings and ... like for instance there is something that they don’t know, professional nurse, they ask you to Google it. At 14h00 when we hand over again you come back with feedback and tell them. So everyone is learning about that … (FG2; P5).

In-service training empowered a participant with an increased feeling of competence:

Give in-service training about giving medication. If, uhmm, I told them I only going to teach you oral medication, not IV and then we do ampicillin and amoxil if the doctor prescribe ampicillin, and you can only give amoxil. This is how we calculate it. I write the formula, make copies and give to each one of them... (FG2; P5).

It could be interpreted that participants experienced their self-leadership in patient outreach service as self-motivating and felt that training enhanced their competence (their natural reward). They also felt that these aspects were needed in order for them to act as role-models for other nurses.
4.4.1.4 Summary
From the findings of Theme 1, participants indicated that self-leadership in the patient outreach service was implemented through the behavioural and natural reward approaches and through initiating constructive thought patterns. Mindfulness was found to be an underlying attitude in which nurses performed their tasks with full involvement in what was happening in a specific place and time, and in which they took ownership of their tasks and carried them out with a sense of responsibility. Nurses in an outreach service should be competent at using their clinical observation skills and be knowledgeable enough both to deliver care to their patients and to call for outreach experts when a patient’s MEWS indicates this is necessary.

4.4.2 Theme 2: Acknowledgment of a patient outreach service in a team to obtain quality patient care
Hospital patients located in general wards tend to have more complex problems and a higher number of co-morbidities than in the past, increasing the likelihood that general ward patients will show signs of deterioration. Delayed or missed recognition of deteriorating patients contributes to serious adverse events in general wards, with abnormal vital signs observable up to 48 hours before an adverse event (Preece, Hill, Horswill & Watson, 2012:1111).

4.4.2.1 Category 1: An outreach service as an essential service in delivering care to at-risk patients
   a) Sub-category: Viewing positive outcomes/quality of patient care/patient satisfaction as essential
Studies have shown that negative outcomes for patient care happen mainly through adverse events. Adverse events, including cardiac arrests, unplanned admissions to intensive care and unexpected deaths in hospitals around the world, and are usually preceded by signs of deterioration that standard hospital systems frequently fail to spot (Jones, Mitchell, Hillman & Story, 2013:1031). Effective observation of ward patients is the first key for quality care, since identifying deterioration and effectively managing the care of patients is critical to patient survival and wellbeing (Preece et al. 2012:239). One participant expressed her positive view of outreach experts in this regard:

   I think the patients they also feel that comfort, when they know there is someone else that can assist them as well ... (FG2; P1)

Critical care outreach professional nurses (outreach experts) are called when wards identify patients at risk of critical illnesses, so that they may assist in managing patients through...
collaborative care and education. The outreach team aims to empower ward staff by offering them regular support, usually led by critical care trained nurses, with the facility to call on more expert assistance if required (Pedersen et al., 2014:234).

The participants strongly expressed that the senior outreach sisters were experts, called out during the outreach service to guide them, and that they were helpful with the nursing care of deteriorating and high-risk patients. This included outreach support, giving advice and assisting the participants in the nursing care of their patients. This support of the outreach experts empowered the participants, enabling them to experience nursing care as more satisfying, which provided natural rewards for their efforts. One of the participants indicated how she found the care of patients more satisfying due to the outreach experts:

... the outreach service – very good, and it’s improving, because what I am saying it improves the lives of the patients ... (FG6; P4).

Another participant conveyed how the involvement of the outreach experts in the nursing of her patients made her work more pleasing and transformed nursing care into a more positive experience:

... I can see the outreach thing is ... they much better improve the life of the patient and also the way in which, when you call the outreach sister, as quick as possible we going to solve the problems ... (FG6; P2).

Assistance by outreach experts was helpful and increased the enjoyment of staff (yielding constructive thought processes) in nursing their patients:

... what I think more about the outreach sister, I think it is very helpful in a way that, let’s say in a ward we have outreachs, we have eight patients on outreach and we have one sister in the ward, and we have other patients, like maybe 30 patients, that sister is responsible for. That 30 patients and those eight outreachs, if we have an outreach sister, outreach sister is concentrating more specifically on those patients, even the deterioration of the patient ... (FG4; P2).

Constructive thought processes tend to increase motivation by enhancing the nurse’s enjoyment in completing tasks and turning a task into a more positive experience (Marques-Quinteiro & Curral, 2012:562; Lee & Turban, 2010:2268). Participants indicated that the positive aspects contributed by the outreach service gave them a sense of fulfilment in their work. Problems were more readily solved. There was strong agreement amongst the nurses that a good service rendered in wards resulted in more recovering patients:
... we are not having more deaths because of the outreach services; we rarely see death in the wards. What I have seen, I can say the outreach service is very good. They improve life, really ... (FG6; P4).

The outreach service was seen as a worthy cause in extending the life of human beings. It could be said that nurses congratulate themselves mentally (give self-rewards) for achieving the goal (evidence of a behaviour focus) in delivering quality nursing care:

*Outreach is a good thing, it must always be here in the hospital, because due to it, it saves more lives of the patients.* (FG6; P4).

One participant expressed that the outreach service was beneficial in life-threatening situations:

*Outreach service is really very good, because there we receive patients from high care who has done major procedures like craniotomy, CABG, and other procedures like laparotomy and lobectomy and thyroidectomy. So those patients are very critical ...* (FG6; P3).

Self-reward as a behaviour-focused strategy is evident when nurses experience success in providing nursing to their patients, which results in feelings of satisfaction. They are indirectly involved in mentally congratulating themselves, which yields a positive and optimistic mindset and motivates nurses to serve their patients even better. The giving of self-rewards thus influences self-motivation (Neck et al., 2017:n.p.). In addition to giving self-rewards, the participants also made it clear that the setting of goals is an important part of successful self-leadership. These goals should be challenging but achievable and specific in order to have optimal effect (Sims & Manz, 2011:80). Participants made use of behaviour-focused strategies by changing their behaviour to stabilise a deteriorating patient, and by striving to behave in the correct way with patients, so that deterioration of patients could be prevented. A participant indicated that certain behaviour led to attaining the goal of the outreach service:

*I think the goals of the outreach – I think we want the patient to be stable, so that is why we are monitoring all the observations, everything, and then if the patient is stable, then we no longer do the outreach. The focus is on the patient to be stable ....* (FG5; P2).

Another participant mentioned another goal of the outreach service that required changes in nursing actions to achieve:
It is about getting the patient as quick as possible in the correct ward. So if you see that a patient is deteriorating in any way, to get as much as help, as much help as possible, to get that person in the correct ward, with the least time that passed … (FG2; P2).

Goal setting concerns the establishment of goals aimed at the fulfilment of personal and professional interests. Goals are set by the team or the organisation for patients (Marques-Quinteiro & Curral, 2012:562). A participant indicated how she set goals for herself to be there for the patient:

Okay the first thing that you must not forget, first thing – to communicate with your patient. If the patient is responsive, then keep on explaining. If the other staff are busy organising, getting some medication, just keep the patient. The other one must keep the patient calm, explain the procedure to the patient, what’s going to happen, minimise the anxiety for the patient and the … whatever is safety of the patient …(FG1; P2).

Another participant indicated the challenges she had that required goal setting in nursing her patient:

My concern is to take care of the patient, to make sure that the patient’s condition is okay. If I see the patient is complicating and the condition is not, is unstable, then I have to report to the sister, if they see it is possible … (FG8; P1).

Setting goals guides and motivates persons to accomplish tasks (Latham, 2012:243). Goals are generally effective for managing our immediate behaviour if they are specific and challenging, yet achievable. Realistic and achievable goals tend to be most effective and motivational. Attaining such goals can provide immense satisfaction (Neck et al., 2017:40).

b) Sub-category: Knowledge about patients’ health conditions

O’Dell and Hubert (2011:n.p.) define knowledge as information in action. Until people take information and use it, it is not knowledge. Neck et al. (2017:66) are of the opinion that natural reward strategies are designed to help create feelings of competence and self-determination, which in turn strengthen performance-enhancing, task-related behaviours. As mentioned by one of the participants, nurses use self-determination as a dimension of natural reward strategies, in that they take responsibility for their patients and have to be knowledgeable about them, which increases their feeling of competency. A participant reflected that she needed to take responsibility for performing adequate actions during care, and that such an attitude improved her competency:
I think we must take responsibility, we must make sure, we must know our patient. Whatever condition changes, you must know, and even the medication you give the patient, you must also explain, know it. We learn from our actions ... (FG1; P4).

Another participant mentioned that nurses need to have the knowledge to recognise abnormal test results:

You need to know about your patients, you need to know about blood tests. If you read it, what does it say? If you see a doctor don’t want to read, to see the patient looking queasy, is nauseas, you make all the observations, then you’ve got to be clever and awake enough with the blood tests. At least pick them up, then you see the potassium is high, I see the CRP is high ... (FG3; P5).

Natural reward strategies can be seen as ways to achieve the positive feeling that comes from knowing one has what it takes to understand a patient’s condition and to do something to help (Neck et al., 2017:n.p.). It was confirmed that there is a need for nurses to know their patients and their diagnosis:

I think you have to know your patient and know their diagnosis, because if you know your patient, for example, let me say you are working from 1 to 4 and then there are ten patients ... (FG4; P7).

It is naturally rewarding to have the knowledge about patients’ health conditions, and to be able redefine one’s tasks in the light of one’s knowledge. In this way, desired performance frequently results form a natural motivational process (Neck et al., 2017:n.p.).

4.4.2.2 Category 2: Assistance and guidance from patient outreach experts

a) Sub-category: Management of MEWS

Vital data monitoring in patients is the most common form of observing patients in a hospital (Newman, 2017:16). Nurses engage in intellectual and volitional processes when observing vital signs; they use their processes of thinking, association, analysis and understanding (intellectual processes) and they engage in decision making in the carrying out of choices (volitional processes) (University of Johannesburg, 2018:4). Nurses use the MEWS as cues to help them in assessing and managing the patient. The MEWS guides them in selecting the appropriate nursing behaviour. A participant mentioned how she used MEWS as a cue to make her work easier and another participant agreed by nodding her head:

I think I can say with this thing of the MEWS score; it makes our life more easier. Because you can say you can see at the chart that when the patient MEWS score is like,
let’s say, 5, you can see that this patient is really in serious trouble, so you need to activate an outreach sister so she can come ... (FG5; P1).

Nurses set behaviour-altering goals for themselves, using concrete cues like the MEWS to help focus attention on goal attainment (Ross, 2015:77).

A participant confirmed MEWS as a cue in the assessment and nursing of patients:

*The MEWS score* (all supported saying ‘MEWS score’), *it tells you what to do, you must call the outreach and to be safe, on the safety side for yourself, for the patient, especially the patient ...* (FG1; P2).

Nurses used the MEWS chart to change their behaviour when managing patients:

... now we got the MEWS, the MEWS score chart, they have done the chart for our MEWS. If the observations are like this, you can call the outreach, if like this you have to inform the doctors. So that chart help us a lot. The MEWS chart, because you can see if the observation is like this it means it is abnormal, so the outreach must be informed or the doctor must be informed ... (FG6; P1).

b) Sub-category: Support for nurses/asking for assistance

The outreach service empowers nurses through the support and assistance of expert nurses in their assessment and nursing of patients. In practice, nurses feel safe knowing that they can call the outreach experts to lend support where a patient is deteriorating. Participants expressed their need for support from experts:

There is somebody that you can call if you really need help or support for a patient because we all are RNs, and most of us actually know really. We know what to do when we are worried about a patient, but it is always nice to have somebody that you can call that has a little bit more knowledge and can support you ... (FG1; P4).

... we have to call an outreach sister so that she can guide us here, if we can do this ... (FG4; P7).

The guidance and assistance of outreach experts could empower nurses:

... so it is very, very important for outreach sister to be there (field note – positive aspect mentioned) and to guide because if you don’t know what signs to look for, the outreach sister can always say, “Look out for this, look out for that.” so she is a very important guide for us as students, and also for the staff in the wards ... (FG4; P1).
It seemed that nurses focused on the pleasant aspects of their work, which makes tasks naturally rewarding. They make use of an intrinsic reward system, which helped them to find something positive in most of what they are required to do. Empowering actions are known to create intrinsic rewards (Stewart et.al., 2011:189; Sims & Manz, 2011:25). These authors are also of the opinion that motivation tends to increase when work is designed in such a way that it enhances feelings and thoughts of competence. The relationship between work environment and the amount of support employees receive to use their learned knowledge also influences positive work outcomes (Chauhan, Ghosh, Rai, Shukla, 2016:200).

c) Sub-category: Teamwork as a critical component of healthcare

The literature links effective nursing teamwork with high-quality patient care (Berry & Curry, 2012:n.p.). With an increasing focus on a higher acuity of nursing care, and with intensified workloads and greater responsibilities, research has begun to focus more on nursing teamwork, especially in the area of patient safety. Salas and Frush (2013:3) state that teamwork is now recognised and embraced as a critical component of healthcare and an integral part of the continuum of care. This idea drew high agreement from participants; teamwork, it was agreed, is an important aspect of the outreach service:

*It’s teamwork (every one repeated ‘teamwork’), it’s all about teamwork. Immediately when you work you hear emergency bell* (P5: ‘You run!’) *we attend that emergency bell* (FG1; P3).

In the same discussion, assistance in a team environment was mentioned:

*I’ve got emergency in the ward, at least we are advanced what to do with the patient, so we can help each other, maybe phone the ICU sisters, they can come and help, meanwhile that one is busy somewhere …* (FG1; P3).

Healthcare has over the years become specialised, and nursing care is provided by the multidisciplinary team, for example doctors, auxiliary staff and professional nurses. In many ways teamwork is in itself naturally rewarding. Working as a team to deliver nursing care for at-risk patients creates a pleasant working environment (Maryville University, 2018). One participant mentioned her expectations of teamwork in the ward and being trusted as a team member:

*So if you make your colleagues happy and you help them, uhm, you can ask them – I very seldom sit, you know I always help them, and then they trust you. If something goes wrong or they think something goes wrong, they go to you and they ask …* (FG3; P4).
Teamwork amongst nurses is essential to ensure effective nursing care (Mosser & Begun, 2014:1). Teamwork is associated with higher levels of job satisfaction, higher quality care, and an increase in patient safety. Highly functioning teams have also been shown to offer a wider range of support to inexperienced staff (Peteva, 2017:122). In the category of assistance and guidance from patient outreach experts, participants use the MEWS as a cue (a behaviour focused strategy) to guide them in selecting the appropriate behaviour for the patient’s wellbeing. Participants experience the support, guidance and advice gained during teamwork as areas where natural rewards come into play, keeping them motivated.

4.4.2.3 Category 3: Challenges in calling for patient outreach experts

Outreach nurses (experts) strive to create an inclusive culture, wherein they provide the support for ward-based nursing teams to manage deteriorating patients. In the context of this study, the outreach nurse’s role is not to intervene or take over the care of the patient, but to provide appropriate support, education and potential care strategies. An understanding of the operational knowledge, both explicit and tacit, in each ward can provide great advantage in overcoming the challenges of effectively managing deteriorating patients (Aiken, Marshall & Chaboye, 2015:12).

a) Sub-category: The role of ward nurses as part of the team

According to Oyira, Ella, Usochukwu and Akpan (2016:181), nurses need to be equipped with knowledge for proper understanding of the care of their patients. The nurse needs to apply this knowledge in the care of patients through rational, evidence-based care and prompt nursing interventions. Carrying out an appropriate assessment and determining the best course of action is related to both clinical exposure and appropriate education and training. Participants confirmed that they felt that they did always have the knowledge they needed:

... but the people who are doing the observations who are reporting, they don’t have enough information about on what they are doing ... (FG1; P2).

Some of the nurses they don’t do the score right, they know they going to call outreach, so if you saw the score is 4, some, they reduce it ... (FG8; P7).

A participant indicated that many simply lacked confidence to assert and use their knowledge:

I think it is also a question of assertiveness, a lot of the ENs and ENAs come over as not been assertive and not knowing. So the – its not that they know what they are doing, they are so scared of the doctors, and they are not assertive. They don’t tell him, doctor
this is my name I am going to walk with you, tell me what you need, tell me what I must do for the patient. They not like that, they tend to withdraw and avoid the situation. (FG2; P2).

An article on self-confidence from the counseling center at the University of Illinois Urbana-Champaign defines self-confidence as having a positive attitude, but with realistic views (Gruber, 2015:n.p.). Confidence is what one believes about oneself, allowing one to move forward and achieve goals. Quirke, Coombs and McEldowney (2011:1840) specify that there is a widespread lack of knowledge and understanding in interpreting the signs of acute illness, which gives rise to a lack of confidence. Mok, Wang, Liaw (2015:94) and Cioffi (2000:110) state that nurses experience uncertainty regarding whether they should call the outreach experts when they are confronted by changes in patients’ conditions. The nurse could make use of behaviour-focused strategies by setting specific goals in risk situations. According to Marques-Quinteiro and Curral (2012: 562), behavioural strategies are intended to regulate personal behaviour with the goal of enhancing individual performances. A nurse indicated her confusion with MEWS:

For me, if I can say, with the new MEWS score – I think, a little bit, it is stupid, because patients who come back from theatre, their vitals are not normal. After say 30 minutes it only becomes normal. So if ... do I call the outreach sister every time I get a reading of the MEWS score for 3 and 4? I go to the sister and they say no, it is fine (FG8; P4).

Nurses need to measure patients’ vital data and uses this to calculate the MEWS. Some of the nurses were unsure how to calculate MEWS:

... because I can’t deny that outreach sister always – maybe sometimes I did get the MEWS score right, but she, she did correct me with some of the MEWS scores, sometimes I do neurological and then I didn’t count the MEWS score off neurological observations. Maybe you find that the score is 14 and then you have to count it, maybe you got the patient who is confused and then it is another point, it must be added there ... (FG6: P2).

Another participant mentioned the positive input of outreach experts who corrected her actions:

... the MEWS is a new thing that we started doing now, in our hospital, and we are not accurate about counting. Sometimes we count only the vitals, now I put the MEWS and you find out when the outreach sister come, she starts it from the glucose to the urine and then now she put the MEWS. Now my MEWS is wrong ... (FG7; P5). ( A participant agreed by nodding and saying, “Ja”.)
A study conducted by Van Galen et al. (2016:8) showed a high adherence to MEWS protocol among nurses, however MEWS was found to be frequently calculated incorrectly. Van Galen et al. (2016:9) further state that the MEWS is a useful triage tool (a cue) to identify patients at risk of deterioration. Therefore it is important that nurses reflect on their behaviour and adjust it when calculating patients’ MEWS. The importance of being mindful of conducting the MEWS should be pointed out during training. Nurses need to be mindful of their attitudes. Payne (2013:17) indicates that negative attitudes in the workplace are becoming more and more evident and can lead to a hostile work environment. Participants mentioned how they experienced other nurses’ attitudes having an influence on their work environment:

> I can say that the attitudes ... mostly the thing with attitude, its more like a problem to us when coming to the nursing field. Like, you have stress, you are not managing at home, like, then you bring your attitude to the hospital and also you make other people’s working environment not good. Because the way the stress is, maybe, like, lets say the sister can report to you, “Sister the MEWS score of this patient is what, what, what,” then she will start throwing tantrums and stuff, which is not good for us (FG6; P1).

Another participant mentioned the overall attitude of permanent and contract staff:

> ... then I just want to talk about this thing of attitude of the nurses. Yes, as nurses we got attitude and then it’s not only the agency staff – even the permanent staff of the hospital, they got – yes, all the nurses they’ve got attitude ... even one will tell you, “You don’t know how many years I have been working in this hospital!” but she is doing the wrong thing ... (FG6; P6).

One participant indicated the challenge when trying to address wrong attitudes:

> ... it’s very difficult. Eee! If somebody’s attitude is .... you know, “I don’t care” everybody, you know it’s like a Cain attitude, “I don’t care for my brother.” What must you do? It is very difficult to change the attitude of people. If the attitude is bad, it’s very difficult ... (FG3; P4).

It was clear that some experienced unpleasant attitudes while working. they needed to be proactive and mindful in building more pleasant features into caring for their patients. For example, they may divert their own attention away from the unpleasant aspects of their work and refocus it on the rewarding aspects of caring for patients. Natural reward strategies could bring out more pleasant features of an activity, for these are known to motivate or reward the individual (Neck et al., 2017:n.p.; Neck & Houghton, 2006:272). Mueller (2017) and Neck et
al. (2017:n.p.) mention the idea of self-responsibility; if people work at developing a positive mood, the positive effect of this alone may be sufficient to constitute self-motivation.

b) Sub-category: A need for outreach experts to facilitate positive outcomes for deteriorating patients

Findings from a study conducted by Moody (2014) indicated that the CCOS has a positive effect on patient and service-related outcomes (Moody & Griffiths, 2014:1). Outreach expert nurses monitor and guide ward nurses in nursing patients at risk of deterioration. The participants regard the availability of the CCOS as a safety net in nursing patient at risk of deteriorating. Participants noted that:

... we really need outreach sisters as well. Sometimes there are two professional nurses in the ward, there is 38 patients and we get say seven or eight outreaches, we can quite cope with that. But I think, especially at night, you’ve got one professional nurse and the ward is full and as you say, five or six patients then they, they – it is very difficult to make sure that all those patients are OK. It helps if you know the outreach sister will come and just access them as well ...(FG2; P3).
... must have more outreach sisters... (FG2; P6).

Another participant expressed the negative implications of a lack of experts:

I think one outreach in this big hospital is really not enough. An example, they are calling her for outreach, it’s in high care, I mean code blue in high care. Another code blue is activated in ward 1c, but she is still busy with that code blue. What is happening with that other second code blue? At this stage, must she leave the first code blue and go to the second code blue? Must she leave the second code blue and continue with the first code blue? I think, really, we need a second one ...(FG4; P6).

4.4.2.4 Summary

The findings in Theme 2 on ‘acknowledgement of patient outreach service, suggest that participants focus on motivation in delivering quality care and that they need further training in MEWS to ensure patients receive the appropriate level of care. The participants should be confident in their knowledge about their patients, and their understanding of the importance of vital data monitoring and take responsibility for the nursing care of their patients. The participants should have the expertise to call outreach experts for assistance when in need. As stated in Chapter 1, healthcare can be seen as an interactive dynamic process in the nurse-patient environment (University of Johannesburg, 2018:4). The relative status of healthcare is
reflected in the nurse-outreach team’s interactions during the implementation of the outreach service. Participants expressed a positive attitude regarding the outreach team and seemed to have no reservations about calling them when in need.

4.4.3 Theme 3: Power of self-affirmation while delivering nursing care to a patient

Self-affirmation theory proposes that people are motivated when they view themselves as good and competent (Carrol, Arkin & Wichman, 2015:268). According to Poser (2017:41) and Carmeli et al. (2006:77), natural reward strategies focus on the positive experience associated with a task and the process through which it is achieved.

4.4.3.1 Category 1: A sense of being affirmed for contributions towards the wellness of the patient

Self-affirmation promotes positive attitudes and behaviours towards other people (Chancellor & Lyubomirsky, 2013:825) and has the power to temper negative effects (Nelson, Fuller, Choi & Lyubomirsky, 2014:1010)

a) Sub-category: Self-confidence

The findings indicated that the presence of the expert in the ward contributed to a sense of self-confidence in nurses:

... you feel good and you handling together with the outreach sister, caring on what must be done ... (FG1; P6).

Another participant expressed her positive feelings when helping the patient during the nursing care:

... and also comes a lot of confidence and passion for what you are doing when you feel that that patient, you are the one who is close to that patient, you are the one who assists the patient ... (FG7; P4).

Nurses view work practices as pleasant, rewarding and enjoyable, because success in their work imparted a sense of competence and self-control which eventually increases performance (Manz, 2015:136; Manz, 1986:592). Participants found their work rewarding:

You know I feel proud, after I see the patient, eishh! You know what, I saved a life today (FG8; P5).

You have done something ... (FG8; P3).

According to Neck et al. (2017:n.p.) natural reward strategies follow after positive experiences associated with a task and the process of achieving goals.
b) **Sub-category: Being appreciated at work**

Shonubi, Hashim and Hamid (2016:47) mention that if a person wants someone else to repeat a behaviour, that person should immediately acknowledge the behaviour when it is shown. Many participants need to modify their behaviour to be appreciated. Nurses experienced appreciation as self-rewarding, and thus tried to keep up the appreciated behaviour (an example of a behaviour-focussed strategy). A participant revealed how a patient showed appreciation:

*Maybe it is from the appreciation from the patient, you see the patient appreciating, telling the family this nurse is taking care of me, or only her smile, by her smile, they are thinking. That is when you are really satisfied ... the patient doesn’t have to give you anything, just by saying thank you, I am motivated ...* (FG7; P4).

Another participant was proud of her work:

*For me I just feel proud, especially after hearing “thank you”. Only “thank you”. I feel like OK, so they appreciate what I did, at least I managed to do this ...* (FG8; P5)

A positive work experience could also come in the form of a note or other patient feedback, and a certificate:

*... I was just looking after the patient, the whole of the patient, and then suddenly I just find that I am the best nurse. The patient even write on the, the note for the matron office so that they can say ... then with the patient’s information feedback, then I see OK, I was to be known by the ... appreciated and then they give me the certificate ...* (FG6; P4).

It could be viewed that it is self-rewarding (and therefore a behaviour-focussed strategy) when nurses are proud of their work and feel appreciated (Neck et al., 2017:n.p.). It creates a feeling of competence and promotes performance-enhancing, task-related actions (Manz, 2015:136; D’Intino, Goldsby, Houghton & Neck., 2007:107).

c) **Sub-category: Passion for nursing and caring**

People who love their work find it important and invest time and energy in it, since they feel a sense of passion for what they do. Work passion may enhance employees’ positive experiences and work performance (Li, Zhang & Yang, 2017:n.p.). Nurses are motivated because they enjoy what they are doing, as stated below:

*I think it is the passion, and wanting to do it, wanting to help that patient ...* (FG7; P4).

Natural reward strategies are intended to increase motivation by enhancing the enjoyment of completing tasks; they involve converting a task into a more positive experience or modifying
the task completion process (Manz, 2015:136; Manz, 1986:592). This we see in action when nurses find satisfaction in what they do. A participant pointed out principles of professionalism being practised in her work:

*Nursing is a calling. I think if you are here for that calling, you will do the right thing... the life of the patient will be saved always, because you are happy while you are doing your work, you are committed...* (FG6; P3).

Various elements work together to enhance a sense of competence and enjoyment in the nurses’ working environment, of which passion for the task forms a part. Teamwork and excellent communication were other parts of the total positive experience:

*... then they can see the passion that you have for profession, for your ... as well with your colleagues, you have to have communication, you have to have trust and teamwork. That’s when things are going to happen, just not one person running the ward ...* (FG4; P1).

It seemed that nurses (the recipients) received support from experts (the agents) and trusted them to provide guidance in risky situations. This created a sense of teamwork which enhanced working relationships and a sense of achievement.

### 4.4.3.2 Summary

Participants were aware of the positive feelings they experienced when caring for deteriorating patients. Having the skills and knowledge to know what to do produced these positive feelings which were a form of natural reward for them (Neck et al., 2017:n.p.). Participants indicated that they felt proud (and were thus engaged in a self-reward strategy) when they were appreciated for the nursing care they rendered.

### 4.5 THIRD STEP IN THE FRAMEWORK DEVELOPMENT PROCESS

Table 4.3 presents and overview of the themes, categories, conclusions of the findings from the focus group interviews with the nurses and the essential concepts in the conceptual framework. Step 2 in the development of the conceptual framework addressed the deconstructing and categorising of concepts. In this step, the themes and categories with the conclusions were reviewed to identify main attributes, characteristics, roles and subsequently to organise the concepts according to their features. The concepts were then organised according to the survey list of the Practice Orientated Theory of Dickoff et al. (1968).
Table 4.3: Conclusions from the findings

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Conclusions</th>
<th>Essential concepts in the conceptual framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-motivating in a CCOS by the team</td>
<td>Calling the outreach experts</td>
<td>Nurses need to use the MEWS as a cue for assessing patients.</td>
<td>Self-cueing</td>
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<tr>
<td></td>
<td></td>
<td>Nurses need to focus on their self-control and authority to plan the nursing care for their patients and to call the nurse expert when needed.</td>
<td>Create feelings of self-determination</td>
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<tr>
<td></td>
<td>Taking charge/assessing the patient</td>
<td>Competent nurses need to have the knowledge and clinical observation skills to monitor patients’ vital data and calculate the MEWS.</td>
<td>Self-awareness</td>
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<tr>
<td></td>
<td></td>
<td>Nurses had a sense of responsibility to look after patient.</td>
<td>Create feelings of self-efficacy</td>
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<td>Nurses need to take ownership, nursing their patients, they need to be pro-active in following the MEWS guidelines.</td>
<td>Create feelings of self-determination</td>
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<tr>
<td></td>
<td>Self-motivated to act as advocate for patients during doctors’ rounds</td>
<td>Nurses need to use self-talk to focus on what they need to do after measuring a patient’s vital data.</td>
<td>Examine thought patterns</td>
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<tr>
<td></td>
<td></td>
<td>Nurses need to share their knowledge with other nurses with the purpose of assisting one another in the nursing care of deteriorating patients</td>
<td>Building pleasant and enjoyable features into given activity</td>
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<tr>
<td>Leading (directing) by example/role-modelling to peers</td>
<td>Taking the lead when in charge of calling outreach experts</td>
<td>Planning is needed to address patients’ needs.</td>
<td>Examine thought patterns</td>
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<td>Experienced nurses visualise the activities needed to do when assisting a patient.</td>
<td>Identify and replace dysfunctional beliefs</td>
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<td></td>
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<td>Nurses need to be knowledgeable about MEWS</td>
<td>Self-awareness</td>
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<td>Nurses need to set goals to execute their duties excellently and diligently.</td>
<td>Self-goalsetting</td>
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<td>Nurses need to have self-control to assess a deteriorating patient personally</td>
<td>Self-observation</td>
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<td>Knowledge about their own capabilities is needed when nurses care for a deteriorating patient</td>
<td>Self-assessment</td>
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<td>Nurses need to be pro-active when attending to patients with an elevated MEWS</td>
<td>Self-goalsetting</td>
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<tr>
<td></td>
<td>Self-observation among nurses is needed to determine their need for more knowledge to nurse a deteriorating patient</td>
<td>Self-observation</td>
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<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Conclusions</th>
<th>Essential concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff involvement in communication</td>
<td></td>
<td>Nurses need to be committed to their patients and show interest in their patient</td>
<td>Building pleasant and enjoyable features into a given activity</td>
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<td></td>
<td>Communication skills is needed among nurses to inform them what is expected from them</td>
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<td>Self-assessment</td>
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<td></td>
<td>Nurses need to focus being role-models when they work in teams to care for a deteriorating patient.</td>
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<td>Create feelings of self-determination</td>
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<tr>
<td>Training (mentoring, and teaching) to peers</td>
<td>Nurses need to share their knowledge to empower their colleagues.</td>
<td>Create feelings of self-efficacy</td>
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<tr>
<td></td>
<td>Self-observation is needed to determine nurses’ knowledge in the nursing care of their patients.</td>
<td>Self-observation</td>
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<td></td>
<td>Nurses need to be knowledgeable about MEWS.</td>
<td>Self-assessment</td>
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<td>Nurses need to attend skills developing training to develop their ability to nurse patients.</td>
<td>Self-assessment</td>
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</tbody>
</table>

**Theme 2 Acknowledgement of role in the patient outreach service as part of a team to obtain quality patient care**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Conclusions</th>
<th>Essential concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>An outreach service as an essential service in delivering care to at-risk patients</td>
<td>Viewing positive outcomes/quality of patient care/patient satisfaction as essential</td>
<td>Nurses need to be motivated to care for their patient.</td>
<td>Self-goalsetting</td>
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<td></td>
<td></td>
<td>Nurses need to be confident in their knowledge that CCOS will assist them in dealing with a deteriorating patient.</td>
<td>Create feelings of self-efficacy</td>
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<td></td>
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<td>Nurses need to share the vision that CCOS improve patients’ lives.</td>
<td>Identify and replace dysfunctional beliefs</td>
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<td></td>
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<td>Nurses need to behave correctly working in teams when dealing with a deteriorating patient.</td>
<td>Self-goalsetting</td>
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<tr>
<td>Knowledge about patients’ conditions</td>
<td>Nurses need insight into the MEWS to ensure patients receive appropriate care.</td>
<td>Self-perception</td>
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<tr>
<td></td>
<td>Nurses need to be experienced to deliver timely quality care to patients.</td>
<td>Create feelings of self-determination</td>
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<td></td>
<td>Nurses need to be knowledgeable about their patients.</td>
<td>Self-assessment</td>
<td></td>
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<tr>
<td>Assistance/support and guidance from patient outreach service team</td>
<td>Management of modified early warning system (MEWS)</td>
<td>Insight on the purpose of measuring a patients’ vital data by nurses is needed.</td>
<td>Examine thought patterns</td>
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<td></td>
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<td>Nurses need to be enthusiastic to empower themselves.</td>
<td>Building pleasant and enjoyable features into tasks</td>
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<td>Nurses need to take responsibility with their knowledge, and be accountable for delivering care to their patients.</td>
<td>Create feelings of self-determination</td>
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<tr>
<td>Awareness should be demonstrated on calculating MEWS making nursing care of their patients easier.</td>
<td>Shaping perceptions by focussing attention away from unpleasant aspects</td>
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<td>The MEWS chart should be known and guides nurses in self-determination of their actions.</td>
<td>Self-cueing</td>
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<td>Support for nurses asking for assistance</td>
<td>Support for nurses asking for assistance</td>
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<td>Communication channels should be available for nurses to call the outreach expert in case of an elevated MEWS.</td>
<td>Self-goalsetting</td>
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<tr>
<td>Nurses need to exercise self-control when delivering care for their patients and call the outreach expert when needed.</td>
<td>Self-goalsetting</td>
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<tr>
<td>Nurses need to be aware that CCOS contributes to the quality care delivered to patients.</td>
<td>Shaping perceptions by focussing attention away from the unpleasant aspects</td>
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<tr>
<td>Teamwork as a critical component of healthcare</td>
<td>Self-confidence should be demonstrated in supporting their peers.</td>
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<td>Communication channels should be available for nurses to call the outreach expert in case of an elevated MEWS.</td>
<td>Create feeling of self-efficacy</td>
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<tr>
<td>The role of ward nurses as part of the team.</td>
<td>NURSES NEED TO FOCUS HAVING A POSITIVE ATTITUDE TO CALL THE OUTREACH EXPERT.</td>
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<tr>
<td>Nurses need to regard the CCOS as a safety net, nursing patients.</td>
<td>SELF-GOALSETTING</td>
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<tr>
<td>A need for outreach experts to facilitate a positive outcome for a deteriorating patient</td>
<td>Identify and replace dysfunctional beliefs assumptions</td>
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<tr>
<td>Nurses need to regard the CCOS as a safety net, nursing patients.</td>
<td>IDENTIFY AND REPLACE DYSFUNCTIONAL BELIEFS ASSUMPTIONS</td>
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</table>

**Theme 3: Power of self-affirmation while delivering nursing care to a patient**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Conclusions</th>
<th>Essential concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff’s sense of being affirmed for contributions towards the wellness of patients</td>
<td>Self-confidence</td>
<td>Nurses confidence increased when they managed a deteriorating patient in collaboration with CCOS</td>
<td>Self-reward</td>
</tr>
<tr>
<td>Being appreciated at work</td>
<td>Nurses felt proud when they have done something that saved a patient live</td>
<td>Self-reward</td>
<td></td>
</tr>
<tr>
<td>Passion for nursing and caring</td>
<td>Nurses felt content when a patient was grateful to them</td>
<td>Self-reward</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nurses need to focus on behaving in a proper manner when they are certain that their endeavours are going to result in positive outcomes.</td>
<td>SELF-GOALSETTING</td>
<td></td>
</tr>
</tbody>
</table>
4.6 CONCLUSIONS FROM THE FINDINGS

The findings were then organised according to the survey list of the Practice Orientated Theory of Dickoff et al. (1968), which provided the overall framework for the study (Chapter 5).

The context was a private hospital with an outreach team. The agents were experts in the nursing outreach service, having self-confidence, self-efficacy and self-direction in acting as role-models as they supported and guided nurses in the care of their patients. The recipients were the nurses who were self-confident, self-motivated and self-directed and who set goals and exercised self-control in the care of their patients. From the findings, the main processes or procedures (Dickoff et al., 1968) that emerged as elements of self-leadership among the participants in this study were:

- Self-motivation
- Leading by example/role-modelling
- Acknowledgement of own role in outreach as an important service in nursing, with reference to patient outcomes, assistance of the team, and various challenges
- Self-affirmation

The underlying requirement or assumption for all of the above to function correctly were two aspects of nursing, one personal and one professional; the quality of being mindful of oneself in implementing nursing care for a deteriorating patient, and the clear need for high-quality training when implementing a high standard of care.

Figure 4.1 presents an overview with the concepts that emerged under the themes, categories and sub-categories of this study (Table 4.3). These concepts were all related to the behaviour and natural reward approaches, and to constructive thought patterns that nurses formed intrinsically. These concepts were incorporated with the conclusions into the conceptual framework.
Figure 4.1: Components of self-leadership
CHAPTER 5: CONCEPTUAL FRAMEWORK FOR THE SELF-LEADERSHIP OF NURSES IN A CRITICAL CARE OUTREACH SERVICE (CCOS)

5.1 INTRODUCTION
This chapter incorporates the findings of Phase 1 into a conceptual framework, based on the data from the group discussions as described in Chapter 4. The second objective in the study was to develop a conceptual framework for nurses’ self-leadership in their implementation of an outreach service. The framework will be described in this chapter with the aim of providing an overview of the phenomenon of self-leadership among nurses in the outreach service in a private hospital in Pretoria.

5.2 DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK
The development of the conceptual framework, the second step as outlined by the self-leadership strategic framework of Neck and Milliman (1994:11), is drawn from the

- meta-theoretical assumptions of the Theory for Health Promotion in Nursing (University of Johannesburg, 2018:4), discussed according to the concepts identified in the reasoning map (Figure 5.1);
- survey list in the Practice Orientated Theory of Dickoff et al. (1968:421) to organise the concepts (the reasoning map for linking and mapping the identified concepts);
- concluding statements derived from the results in Chapter 4; and
- literature supporting the findings.

The survey list of Dickoff et al. (1968:421) was utilised as the reasoning map for describing the conceptual framework for the self-leadership of nurses in a current CCOS in general wards at a private hospital in Pretoria. The survey list intends to provide answers to six key questions on the self-leadership of nurses (the activity). These questions are:

- In what context is the activity (self-leadership) performed?
- Who performs the activity (the agent)?
- Who are the recipients of the activity?
- What is the energy source for the activity (the dynamics)?
- What are the guiding procedures of the activity?
- What is the endpoint of the activity (the terminus)? (Dickoff et al., 1968:423).

The questions led to the creation of a framework or reasoning map of the self-leadership of nurses in the outreach service of a private hospital in Pretoria (Figure 5.1). that will be discussed in this chapter.

**Figure 5.1: Framework on the self-leadership of nurses in a CCOS**
5.2.1 In what context is the activity performed (framework)?

Professional and legal context

CCOS is an approach in which patients in general wards who are at risk of deteriorating or who are starting to deteriorate are identified and given individualised interventions, tailor made for the needs of the patient in question and the education of nurses (Wood, Pirret, Takerei & Harford, 2017:96). (Point 1.5.3.)

The context is a private hospital, in a private healthcare group in Gauteng. The hospital has around 500 beds, which includes six ICU units, two high care units, and 18 theatres, where orthopaedic procedures, cardiothoracic, nephrology, neurology and general surgery are done. The hospital’s emergency department has an accredited level 2 trauma unit. The CCOS was established to serve patients at risk of deteriorating in their health status, in different wards, namely medical, orthopaedic, surgical, oncology and paediatric. The CCOS is delivered by a team which performs a number of roles; for example, identifying and responding to ward patient deterioration, supporting ward staff and patients after discharge from ICU, and training and education of ward staff (Pirret et al., 2015:135). The CCOS is essential for the nursing management of at-risk patients, outreach expert support, giving advice and helping nurses in the nursing management of patients. It empowers the nurses and increases their confidence (Wood et al., 2017:94).

The Critical Care Outreach Team (CCOT) includes a medical practitioner but is predominantly nurse led. It comprises a nurse expert and all categories of nurses as team members. They work in general wards in the private hospital group in Gauteng, serving patients at risk of deteriorating. Both team members and patients are regarded as individuals who interact in an integrated and interactive manner with their internal and external environments (University of Johannesburg, 2018:4). Nurses in the wards are divided into different categories (professional, staff and auxiliary nurses), and all are registered with SANC. A nurse needs to identify the patient at risk of deteriorating by applying MEWS (modified early warning system), a set of criteria for early detection of the patient at risk of deteriorating, and then interact with the team leader/nurse expert when needed (Pirret et al., 2015:134). Nursing in this study refers to the patterning of human behaviour in interaction with the environment in critical care situations.
Nursing actions or processes promote positive changes in the health status of patients, with a holistic approach taken; all human beings involved in nursing interactions are recognised as whole entities, continuously in relationship with various environments (Zaccagnini & White, 2017:4). This recognition is one of the factors underlying the implementation of the outreach service. The external environment of a person consists of physical, social and spiritual dimensions. The physical environment in which the CCOS is delivered includes various physical and chemical structures. The social dimension refers to the human resources available to deliver the outreach service. The spiritual dimension refers to the religious aspects of the environment, which is culturally and religiously diverse.

Work environments that are supportive of professional practice are associated with better nursing and patient outcomes (Stein-Parbury, 2017:288). Appu, Kumar Sia and Sahoo (2015:177) are of the opinion that the support of supervisors (nurse experts) influences employees’ (nurses’) creative behaviour in the workplace, which influences employee self-motivation and self-leadership – in this case, in the nursing care of deteriorating patients. The CCOS has set MEWS calling criteria (the cue) to be used for the activation of a critical care outreach nurse expert. The critical care outreach nurse expert (agent) of the service, who has the necessary skills and knowledge (competence), assists nurses in the wards with the management of patients at risk of deteriorating within the ethical framework of the nursing code of practice and ethics. The CCOS should be viewed and acknowledged as an important contribution to the nursing care of at-risk patients.

5.2.2 Who performs the activity (agent)?

The CCOS, as mentioned under Point 5.2.1, consists of a medical practitioner, an outreach nurse expert (professional nurse), and a team of nurses in all categories who care for the patient. The
agent in the CCOS is the outreach nurse expert who liaises with a medical practitioner when support is needed by the nurse (primary recipient) to deliver care to the patient (secondary recipient). The outreach nurse expert or agent is a professional nurse trained in critical care nursing.

Outreach experts are holistic beings with physical, social and spiritual dimensions. They function in integrated and interactive manner with other nurses as well as with their environment (University of Johannesburg, 2018:4). They are self-directed ICU trained nurses (therefore experts) who have the knowledge, skills (competence) and positive attitudes to promote the health of the deteriorating patient, through advising nurses (the primary recipients) on nursing care for at-risk patients (the secondary recipients). In so doing, they empower the nurse. The expert acts in a position of authority, taking the lead and providing guidance and support (practising self-direction) to the nurse in interpreting the MEWS. As a team leader, the outreach expert has the expertise (knowledge and skills) to make decisions on what actions to take regarding patients at risk of deteriorating.

One must be able to lead oneself before one can lead others. Neck et al. (2017:16) state that self-leadership draws from intrinsic motivation theory and more specifically self-determination theory. The agent portrays self-leadership by being confident about his or her own knowledge and skills when nursing patients. Ayub, Kokkalis and Hassan (2017:634) and Neck and Houghton (2006:29) state that self-efficacy is the belief that one has the necessary resources (knowledge and skills) to meet the demands of one’s specific goals (behaviour focussed action). This is the primary mechanism through which self-leadership affects performance.

- **Being an expert**

Hansen-Turton, Sherman and King (2015:186) define nursing expertise in individuals as the practice of all aspects of nursing delivery for which evidence is presented of a direct impact in solving healthcare problems. To deliver nursing care to patients at risk of deterioration or the already-deteriorating patient, outreach nurse experts require knowledge, skills and correct values (Wangensteen, Finnbakk, Adolfsson, Kristjansdotir, Roodbol, Ward & Fagerstorm, 2018:101). The critical care outreach expert has critical care skills and experience that he or she shares with nurses to care for at-risk patients in wards. The clinical expertise of the outreach expert enables nurses to holistically assess patients. She communicates with the nurse to ensure that the patient receives timeous interventions and that correct treatment decisions are made.
(Wood et al., 2017:95). The outreach expert uses self-assessment to determine his or her strengths and areas in need of improvement when delivering nursing care to a patient at risk of deteriorating or the already-deteriorating patient (USDA Virtual University, 2013).

- **A mentor**

Nurses in wards need a mentor to train them in managing the deteriorating patient. Gopee (2015:n.p.) defines a mentor as a nurse who facilitates learning, and supervises and assesses students in the clinical setting. The outreach expert act as a mentor, guiding and supporting the ward nurse in the nursing management and nursing care of her patient. The agent as a mentor needs to be able to reflect on her own practice (showing evidence of self-awareness) (bang & Hallam, 2014:10). It is essential for the agent to show the nurse that he or she is willing to support and advise nurses on the nursing care of patients at risk of deteriorating or already-deteriorating patients (Craig & Smith, 2014).

- **Team leader/guide**

A team leader is someone who guides and oversees the functionality of an assigned team; for example, the CCOS. The role of team leader or guide is to provide guidance, support and direction to the team members so that they can complete assigned tasks successfully (Dupree, 2018). As a team leader, the outreach expert guides and supports the nurse in the nursing care of the at-risk patient. The critical care outreach expert empowers through self-direction (guidance, support) and educates through supporting the nurse with her deteriorating patients, while being self-motivated. Self-direction entails that the agent directs their own thoughts, feelings and behaviours; the agent must be able to modify her behaviour to gain desirable outcomes (Watson & Tharp, 2014:2). The outreach expert guides the nurse when needed in the nursing care of a deteriorating or at-risk-of-deteriorating patient. The support from the outreach expert converts the act of nursing into a more positive experience (Cherry, 2018), which makes related tasks more naturally rewarding.
5.2.3 Who is the recipient of the activity?

A recipient is an ‘heir’, a successor to the agent (expert), when leading herself in the CCOS context. The recipient is a nurse working in a general ward who forms part of the CCOS. The secondary recipient refers to the patient at risk of deteriorating in health or the already deteriorating patient, who benefits from the service, and is therefore the beneficiary. The nurse and the patient as recipients are whole persons with the dimensions of body, mind and spirit (University of Johannesburg, 2018:4). The nurse (primary recipient) interacts in an integrated manner with the outreach expert (the agent) in the environment of the CCOS on behalf of the patient (the beneficiary) to promote the patient’s health (University of Johannesburg 2018:4).

The nurse in the CCOS is a sensitive therapeutic practitioner, who demonstrates knowledge, clinical skills, attitudes and values (competencies) in the promotion of at-risk patients’ health, by monitoring vital data, among other things. The primary recipient must demonstrate self-leadership as a team member of the CCOS through the four processes of (i) self-motivation, (ii) self-direction through role-modeling, (iii) acknowledgement of own role in outreach as an important service in nursing, with regard to patient outcomes, team assistance and challenges, and (iv) self-affirmation. The primary recipient demonstrates his or her competencies in these four processes.

- **Self-motivation**

The nurse needs self-motivation in order to align and direct her self-leadership in the outreach service. Self-motivation occurs when a nurse independently uses one or more strategies to keep herself on track towards a goal (Pramilaa, 2016:82). Pramilaa (2016:82 further states that a nurse must establish her own goals (must be behaviour focussed) and find motivation from within to make progress toward those goals.
Certain actions of the nurse constitute behaviour-focused strategies. The nurse should demonstrate her sense of responsibility when addressing the needs of the patient through appropriate behaviour, thereby contributing to the quality of care delivered to the patient (the secondary recipient). Nurses need to motivate themselves by setting goals for themselves, so that they may become the best at what they do or at least improve their performance. For this, self-control and a proactive attitude are required in a nurse who cares for a patient at risk of deteriorating. Nurses lead themselves cognitively through self-talk (constructive thought processes) about what to do next while nursing the at-risk patient and trying to assist others. The nurse could practise natural reward strategies by exercising self-control (autonomy) when deterioration of a patient is observed. The nurse should report a crisis to a more senior nurse while also taking ownership of the situation by following the MEWS guidelines. Nurses are required to have knowledge and skills to monitor the MEWS when measuring patients’ vital data. If a patient’s MEWS is elevated, the nurse has the authority to call the outreach expert for assistance. Nurses should be competent (have the necessary knowledge and skills) to fulfil standards of care, and to demonstrate a firm sense of self-efficacy (Ayub et al., 2017:634).

- **Self-direction through acting as a role-model**

Nurses have to be role-models for their peers, to encourage each other and be mindful of their own self-leadership in the outreach service. As role-model, the nurse sets high expectations for her nursing care by setting goals and executing her duties excellently and diligently. Through self-assessment (a behaviour-focused action), nurses can develop realistic expectations about their own capabilities while managing the deteriorating patient. They need to recognise (through self-observation) their own need for more knowledge at certain points of nursing the at-risk patient. They develop their knowledge and skills by attending training. Nurses need to demonstrate their interest and commitment to all their patients’ wellbeing.

As part of being a role-model to others, the nurse practises self-control and self-direction when she personally assesses a patient and reports the condition and the need for help. As a role-model, the nurse needs to share knowledge (a naturally self-rewarding action) and involve (empower) colleagues in the nursing care of their patients. A role-model motivates others to change their behaviour when they nurse their patients. A nurse should be proactive and demonstrate her competence when attending to patients at risk. This could be through communicating expectations to other nurses on the nursing care of patients with an elevated MEWS. He or she should be able to answer questions regarding the MEWS when asked by a
patient or the outreach expert. As a role-model, the nurse also plans what to do next, using visualisation (i.e., mental imagery) for the successful completion of tasks, all directed toward addressing the patient’s needs. This might involve replacing dysfunctional beliefs or assumptions that hamper the treatment of the patient. It is a general truism that one’s goals can only go as far as ones belief system goes (Pathways, 2018).

- **Acknowledgement of own role in outreach**

  Through self-awareness, nurses acknowledge their own role as an important one with regard to patient outcomes, team functioning and various challenges related to activating the team. Zuckerman, Friedman and Castro (2018:17) state that self-awareness refers to introspection; the process of understanding one’s own preferences, motivation and behaviour. Nurses should acknowledge their role as a team member in the CCOS and find within themselves the motivation to care for their patients. Their motivation will be evidenced in action; they will do everything for the patient to ensure the patient remains stable. They should use their insight into MEWS (the cue) to behave in the correct manner when dealing with a patient at risk, to ensure the patient receives appropriate care (the goal). The MEWS guides the nurse on what to do when a patient is at risk of deterioration or is already deteriorating, and experience is used to deliver timely and quality care to the patient (behaviour-focussed action).

  Nurses should display confidence in their knowledge about their patients’ needs (thus reaping natural rewards). They should create an environment that affirms their willingness to call the outreach expert when an elevated MEWS is detected (thus displaying self-control). Their behaviour will make sense only when they themselves understand their purpose (Rogers, 2015), such as when, for example, the nurse measures a patient’s vital signs. Nurses need to acknowledge that they are responsible for the nursing care of their patients and ensure they have the necessary knowledge of their patients so that they are able to give correct medication, etc. Nurses are expected to be confident in the sharing of their knowledge with colleagues, and to display a positive attitude towards both patients and colleagues. They need to retain their passion and commitment to their profession. This will be evident in their enthusiasm to enhance their own knowledge and skills (their self-empowerment). Nurses should accept that the CCOS contributes to quality care and that calculating MEWS makes their duties easier (thus making it naturally rewarding). They should regard the availability of CCOS as a safety net in delivering quality care to their patients. The primary recipient feels safe in the knowledge that she can call the outreach expert (the agent) to assist in caring for the at-risk patient.
Self-affirmation

According to Steele (1988), self-affirmation theory states that people are naturally motivated to preserve a positive, moral and adaptive self-perception and to maintain self-integrity. Armitage and Rowe (2017:490) mention that self-affirmation increases motivation and changes behaviour. A nurse might change her behaviour to conform with professional standards when she is certain that her endeavours will result in positive outcomes. The power of self-affirmation is such that the practice promotes positive attitudes and behaviours in those around us, and in the nursing context this results in enhanced patient care (Chancellor & Lyubomirsky, 2013:825). For self-affirmation to be effective, self-observation and self-assessment is a prerequisite. By bringing these observations to the forefront of one’s consciousness, one can take steps to harness the power of self-affirmation and influence one’s own behaviour (Hoffman, 2015). This is evidenced when a nurse feels proud of her behaviour after saving a patient’s life. In other word, she experiences a self-reward. A patient who shows appreciation for the nursing care that he or she has received also contributes to the nurse’s self-rewarding. Self-affirmation creates a feeling of self-confidence, self-control, and competence (Howell, 2017:295). Nurses’ confidence increases when they deliver nursing care to a deteriorating patient in collaboration with the outreach nurse expert. These feelings lead to the general feeling that nursing is pleasant and rewarding.

5.2.4 What is the energy source for the activity (dynamics)?

The underlying dynamic in nurses’ self-leadership is mindfulness and the training of nurses.

5.2.4.1 Mindfulness

Mindfulness is an underlying energy source for self-leadership. Furtner, Tutzer and Sachse (2018:353) define mindfulness as the planned and non-judgmental self-observation of experiences in the present moment, involving self-regulation of perception and orientation towards experiences in the present moment. Mckenzie and Hassed (2012:20) state that mindfulness is about being aware of what is going on in our own body and mind, and paying attention to our own life. They also mention that mindfulness is the basis of learning to think in a different way, helping us become free of destructive thought processes, rather than striving to
change them. Arthur et al. (2017) state that mindful people tend to be more focussed and relaxed and are able to manage stress in a positive way.

The mindful self-leader is aware of all current thoughts and behaviours within him- or herself and uses goal setting, self-reward and self-talk effectively (Furtner et al., 2018:354). Mindful thinking is purposefully focused and steady, and not scattered (The South African College of Applied Psychology, 2018). For the nurse, mindfulness enables a steady, unstressed focus on the requirements of the moment and directs behaviour towards all the aspects of self-leadership mentioned in this study. Team members in the CCOS require mindfulness so that team members may form collective perceptions of their interactions and increase those which are beneficial for the team (Yu & Zellmer-Bruhn, 2018:340). Mindfulness helps team members to relate to others more skilfully, which leads to enhanced mutual understanding and respect (Halliwell, 2010). Mindfulness promotes key work outcomes since the way employees (nurses) focus their attention affects behaviours such as decision making (Kotze, 2018:282). Mindfulness has proven to be as effective as cognitive behavioural therapy (Kocovski, Fleming, Hawley, Huta & Antony, 2013).

Mindful listening is an important skill and can constitute a great group mindfulness exercise, which might be useful for members of a CCOT. In general, people thrive when they feel fully heard and seen. Mindful listening involves a form of self-regulation in which the focus on the self is set aside in order to focus solely on the other. This is the attitude needed when caring for the deteriorating patient. Mindful listening is a valuable tool for positive communication. It can create an inner stillness in members of the team, freeing them from preconceptions and prejudices, which will greatly assist the team leader or outreach expert (Ackerman, 2017). The goal of self-assessment in the nurse is to become aware of herself and to bring this awareness to the source of her professional actions, namely her management and care of the deteriorating patient. The most important part of mindfulness is to recognise that it is a training of the mind, and like any exercise, takes some time to manifest. The mind takes time to adapt to a new way of thinking. Nurses need to persevere, approach the process with self-compassion and allow for reflection, change and flexibility between different techniques and interventions.
5.2.4.2 Training

Training is underlying in self-leadership and it is directed towards building up knowledge, skills and attitudes which are directly relevant to work and are designed to improve the effectiveness of people at work (Warren, Portillo, Dawson-Rose, Monasterio, Fox, Freeborn, Morris & Stringari-Murray, 2018:117). Organisations can lend support to their employees (nurses) by implementing training programmes to increase their knowledge and competency. Nurses should attend in-service training programmes. Vats (2016) states that one of the best ways organisations can build employee confidence is by involving employees in well-designed training programmes.

It is challenging for the ward nurse to nurse and manage a patient at risk of deteriorating or a deteriorating patient. Mindfulness is needed, and for this, mindfulness training is a strong recommendation. The outreach expert empowers the nurse by lending support and advice to him or her. The nurse (primary recipient) gains knowledge and develops skills which increase his or her competency and self-confidence, so that such help may be considered a form informal training. Ross (2014:307) and Manz (1986:592) state that when persons overcome challenges, moving out of their comfort zones, self-perception of personal competence and efficacy increases and the person becomes self-confident. Mentoring is an essential component of training, preparing the recipient for dealing with challenging job demands (behaviour focused), and it also satisfies nurses’ career needs (Van Vianen, Rosenauer, Homan, Horstmeier & Voelpel, 2018:594). Wright (2018:1) states that mentoring is a crucial process, driving the quality of the CCOS. The mentor (agent) is at the heart of such training. Mentoring nurses is foundational for providing nurses with the opportunity to grow, creating job satisfaction and improving nurses’ competencies (Goodyear & Goodyear, 2018:50). Bang and Reio (2017:150) indicate that mentoring contributes to self-efficacy. Mentoring nurses in the CCOS promotes job satisfaction and increases their competency and self-efficacy.

These two underlying dynamics of mindfulness and training promote or hinder the implementation of the guiding procedures.
5.2.5 What are the guiding procedures for the self-leadership of nurses in an outreach service?

The guiding procedures form the blueprint for carrying out an activity (Dickoff et al., 1968:423). The promotion of health refers to nurses’ abilities to adjust to challenging, dynamic, interactive processes in the nurse-patient environment (University of Johannesburg, 2018:4). In a CCOS, the mobilisation of self-leadership strategies is needed to implement nursing care for a deteriorating patient. This requires that in an agent-recipient relationship, the self-leadership of the agent is role-modelled to the nurse and in the CCOT. The procedures that nurses should use in implementing self-leadership in a CCOS are (i) self-motivation, (ii) role-modelling (including guiding), (iii) teamwork as an essential outreach service, and (iv) self-affirmation. The nurse (primary recipient) uses these activities to lead and guide him- or herself in the CCOS towards implementing self-leadership strategies to manage the patient (secondary recipient).

5.2.5.1 Self-motivation

Self-determination theory suggests that the need for competence and for self-determination are primary mechanisms for enhancing self-motivation derived from a task or activity (Neck et al., 2017:16). A critical component of self-leadership is the ability to motivate oneself to do what is necessary for success. Self-motivation is the spontaneous experience of interest and enjoyment in the activity that supplies rewards (Deci, Olafsen, Ryan, 2017:21). Nurses can be intrinsically motivated for at least part of their job, if not all aspects of it. When self-motivated, the nurse tends to display high-quality performance and wellness (Deci, et al., 2017:21). Self-motivation enables one to make the needed effort to carry out a task or plan by finding the personal will to take action. If a person is self-motivated, he or she is capable of hard work and using his or her skills to make difficult decisions (Oxford Learners’ Dictionary, 2018). Autonomy, feedback and task significance enhance self-motivation (Ryan & Deci, 2017:542). Self-belief makes one think clearly and stimulates reasoning and seeking solutions, such as when a nurse assesses patients (Ezeanu, 2018). The nurse (primary recipient) should exercise self-observation (behaviour-focused action) to motivate him- or herself to take the most effective action when monitoring.
and caring for patients, and when following the MEWS guidelines. The nurse should use his or her clinical observation skills to identify a deteriorating patient (secondary recipient), even when the MEWS is normal.

Self-talk is a psychological strategy for developing a better mental state. Positive self-talk is designed to increase motivation, effort and positive attitude (Heggebo, 2015). Self-talk is considered self-regulatory, in that self-talk may be used intentionally to direct attention, enhance confidence and regulate cognitive reactions (Theodarakis, Hatzigeorgiadis & Chroni, 2008). Intentionally used self-talk may facilitate self-regulation via mental simulation, which leads to enhanced performance (Van Raalte, Vincent & Brewer, 2016). Competence contributes to self-motivation. The desire for competence is self-initiating and self-rewarding and yields a sense of motivation for further tasks. Self-determination theory suggests that people are motivated to grow and change by innate psychological needs, such as the need for competence (Cherry, 2017:1). Behaviour that increases feelings of competence is self-directed and actually does not need extrinsic or outside reinforcements to keep it going. Nurses motivate themselves through self-observation, which creates a basis for positive change in the sense that the nurse will take responsibility to look after patients (Manz, 2015:135). The self-motivated nurse, able to observe her own skills or lack of them, will call the outreach expert for advice regarding a patient at risk of deteriorating, or a deteriorating patient.

Self-control is the capacity to inhibit undesired behaviours and initiate desired behaviours that are vital to the achievement of goals (De Ridder, Langevelt-Mulders, Finkenauer, Stok & Baumeister, 2012). It is generally known that self-motivation supports self-control in one’s performance of a task (Vohs, Baumeister & Schmeichel, 2012). Nurses are self-motivated to exercise self-control when they measure the patient’s vital data and follow the MEWS guidelines. Schirle, McCabe and Mitrani (2018:3) state that those who take ownership of their work will proactively develop a sense of responsibility and a sense of stewardship for their work structures. Activities that are strongly associated with a person’s goals are naturally self-motivating (Woolley & Fishbach, 2018:877). The nurse’s self-motivation is demonstrated when he or she takes ownership of the nursing care of a patient and demonstrates this by responding to the patient’s needs (the goal). It is self-motivating to learn more and to pursue excellence, in order to become the best nurse one can be (LaFerney, 2018). Heathfield (2018) states that self-empowerment is the process of enabling or authorising a person to think, behave, take action and control work and decision-making about one’s work in an autonomous, independent, self-
directed way. The nurse demonstrates self-empowerment when measuring the patient’s vital data and using the MEWS guidelines to take action. Nurses’ self-motivation is shown by their need to empower themselves (Cherry, 2017).

Self-motivation is enhanced when the individual does what he loves and enjoys. Meehan (2015) indicates that authority encompasses the power, relative autonomy, intellectual influence and respect that nurses are accorded within healthcare systems. Nurses’ authority is contingent upon taking responsibility, delivering a quality service, and displaying professional self-confidence. Self-motivation enables nurses to use their authority as decision makers to call an outreach expert after monitoring a patient’s elevated MEWS.

5.2.5.2 Role-modelling
Acting as a role-model requires self-direction. Price-Mitchell (2017) states that a role-model serves as an example, inspiring people with integrity, determination and compassion. Morgenroth et al. (2015) mention that role-models are often seen as a factor in the motivation of other persons, getting them to perform to certain standards and set higher goals. In the hospital, the nurse (primary recipient) acts as a role-model in the sense that he or she is interested in patients’ wellbeing and takes responsibility to care for patients, changing her own behaviour where necessary, exercising self-control (mindfulness) and being proactive in the care of patients. The nurse as a role-model for other nurses (peers) increases the likelihood that others may meet task demands and face new challenges positively (behaviour focussed) (Kranabetter & Niessen, 2017:492). Nurses make use of constructive thought patterns by planning and visualising the successful completion of tasks with the purpose of addressing the needs of patients (Houghton & Jinkerson, 2007:46). The nurse is proactive when attending to patients with an elevated MEWS and visualising (using mental imagery) what to do to assist a patient with an elevated MEWS. The proactive nurse who serves as role-model to others needs to know her own limitations, have realistic expectations about her own capabilities and call for help when needed.

Silver (2017) indicates that role-models are expected to inspire others to make changes and to strive towards new goals. They project confidence, demonstrate their commitment to a desired goal and are willing to invest the necessary time and effort to achieve success. Role-modelling is important to motivate the nurse to behave to the best of her ability and training, and to make decisions that positively affect outcomes for patients (Thomas, 2018). Nurses express
themselves as role-models when they set high expectations and execute their duties diligently. Self-control has been defined as the needed behaviour response when competing goals demand an individual’s attention (Milyavskaya, Berkman & De Ridder, 2018). Anderson, LeFlore and Anderson (2013) mention that role-modelling is the observation of others modelling correct behaviours, absorbing information about their performance and then creating an image in one’s own mind for future action. The nurse is involved in this process when she assists and learns from the outreach expert how to behave while caring for a deteriorating patient.

It is important that the expert nurse, the role-model, involves others in the management of patients with an elevated MEWS, and sees herself as a team member. Nurses need to identify a deteriorating patient and be proactive in providing optimal care for that patient (Dalton, Harrison, Malin & Leavey, 2018:2013). A high standard of teamwork is critical for therapeutic and safe patient care and failure in teamwork may have adverse implications for patient safety (Carson, Laird, Reid, Deeny & McGarvey, 2018:20). The more senior nurse needs to communicate to other nurses what she expects of them, in a way that builds and does not destroy any sense of unity in the team. Han, Seo, Li and Yoon (2016:99) mention that (nurses’) behaviour changes as a result of changes in attitudes, skills and knowledge. When a more senior nurse shares knowledge with younger or less-experienced nurses, they become aware of what is expected of them (Bulchandani, 2015). As role-models, nurses empower colleagues by sharing their knowledge and involving them in the management of patients with an elevated MEWS. Research has indicated that nurses realise their need for more knowledge and are more likely to take steps to improve their competence when they engage in self-observation (Wangensteen et.al., 2018:105). Interactions with role-models who facilitate clinical learning and who reinforce appropriate behaviour enable nurses to consider their own behaviour and practise wisely (Hunter & Cook, 2018).

Leadership can be seen as creating a balance between power, authority and influence in certain situations (Jooste, 2017:83). This means that all nurses have the opportunity to exhibit nursing leadership qualities in their clinical work (Jooste, 2017:83) and to be role-models. Leaders’ positive role-modeling in many ways fulfills employees’ psychological needs (Hetland et.al., 2011: 508).
5.2.5.3 Assistance and support through teamwork in an outreach service

Heathfield (2018) states that to foster teamwork, one needs to create a work culture that values collaboration. In a teamwork environment, people understand and believe that thinking, planning, decision making and actions have better outcomes when done cooperatively. Jooste (2017:118) states that to be successful, team members should understand the overall purpose of the team and also the immediate goal of the team.

Goal setting concerns the establishment of goals that are aimed at the fulfillment of both personal goals and those that have been set by the team or the organisation (Shoaib & Kohli, 2017:878; Marques-Quinteiro & Curral, 2012:562). Epton, Currie and Armitage (2017:1182) state that goal setting is a key element in helping individuals to regulate their own behaviour. It therefore plays a part is establishing behaviour-focused action. Goals are an important part of successful self-leadership. These goals should be challenging but achievable and specific in order to have optimal effect (Epton et al., 2017:1183). The nurse sets goals, such as keeping a patient stable and transferring a deteriorating patient as quickly as possible to a higher level of nursing care. The nurse should strive to behave in the correct way. Self-reward may help team members to attain ‘small wins’ that lead to an increased sense of self-efficacy. Nurses need to find ways to focus on the positive aspects of the team’s task, which can lead to increased motivation to achieve and an increased sense that successful outcomes are possible and indeed probable within the team environment (Bligh, Pearce & Kohles, 2006:303).

Working well as a member of a team is an important aspect of the nurse’s job, helping to increase the effectiveness of nursing care (Peteva, 2017:122). It entails both giving support and empowerment to other members of the team, and receiving it. This creates feelings of competence and unity among team members – feelings which are natural rewards (Neck et al., 2017:n.p.). The nurse needs to derive pleasure from her tasks, so that motivation can remain high, and this pleasure from tasks is inevitably increased when the individual feels him- or herself fitting in well with a properly functioning, goal-achieving team. When challenges are experienced, teamwork ameliorates the hardship in those challenges.

While specific self-leadership strategies might be applied as part of a shared leadership process (e.g., collaborating with a mentor to set and refine personal self-development goals), shared leadership by nurses itself can be employed as a self-leadership strategy to obtain expanded capacity and synergies for one’s own performance. Self-leadership plays a critical role for
effective shared leadership, as group members must lead themselves to step forward and lead when their experience and capacities are needed. At times they need to lead themselves to step back, so that others can lead when and thus grow in competence (Manz, 2015:141).

5.2.5.4 Self-affirmation

Nurses’ positive attitudes are important in harnessing the qualities of self-leadership in the outreach service. They feel proud when they have behaved in the correct manner and a positive outcome for the patient is the result, which is an opportunity for self-affirmation. The same applies when a patient appreciates them. Their confidence (a natural reward) increases when they have nursed a deteriorating patient in collaboration with the outreach expert. Gruber (2015:n.p.) notes that a self-confident person has a general sense of control over his or her own life, and believes that he is capable of doing whatever he wishes, plans or expects. Self-confidence means that even if things don’t go the way an individual might prefer, the person still believes that eventually, somehow, they will achieve what they set out to achieve. White (2015:108) states that to feel appreciated at work is critical, because all of us want to know that what we are doing matters. Such appreciation increases opportunities for self-affirmation and greatly enriches the working experience for nurses.

5.2.6 What is the endpoint of the activity (terminus)?

The last aspect of the framework for self-leadership is the terminus. The ‘terminus’ is the accomplishment of the activity or end result. In this research, the terminus refers to the strategies (activities and procedures) that nurses engage in to mobilise their self-leadership in the CCOS, which is the core outcome. The CCOS offers intensive care skills to patients at risk of critical illness or already critically ill patients, enabling them to receive care in locations outside the intensive care unit – in the general wards. The key role of the CCOS is to identify and institute

http://etd.uwc.ac.za/
treatment in patients who are deteriorating (National Institute for Health and Care Excellence, 2007). Pedersen et al. (2014:234) state that the CCOS is associated with reduced rates of cardio-respiratory arrest outside of intensive care units and reduced hospital mortality. Therefore, it could be said that the CCOS promotes the health and wellness of patients in general wards.

5.3 SUMMARY

In this chapter, the findings of Phase 1, based on the focus group discussions described in Chapter 4, were incorporated into a conceptual framework. This formed part of the second objective of this study. The conceptual framework was derived from the self-leadership framework by Neck and Milliman (1994:11), drawing also from the meta-theoretical assumptions of the Theory for Health Promotion in Nursing (University of Johannesburg, 2018:4). The framework was discussed according to the concepts as identified in the reasoning map (Figure 5.1). The survey list of Dickoff et al. (1968:421) was utilised in the reasoning map for describing the conceptual framework for self-leadership of nurses in the CCOS. The survey list provided answers to six key questions on the self-leadership of nurses. The context of this activity was the CCOS. The agent in the CCOS is the nurse expert who liaises with the medical practitioner when support is needed. The recipient of self-leadership is the nurse working in the general ward and the secondary recipient is the patient at risk of deteriorating or the already-deteriorating patient that benefits from the service. The nurse demonstrates his or her competencies through these four processes: self-motivation, role-modelling, teamwork and self-affirmation. The underlying dynamic in nurses' self-leadership in the CCOS is mindfulness and the training of nurses. The endpoint refers to the activities (strategies) that the nurse engages in to mobilise his or her self-leadership in the CCOS. The CCOS in the private hospital is mainly composed of nurses working in general wards (primary recipients) and the outreach nurse expert (agent). Nurses in the CCOS perform self-leadership activities within their professional, ethical and legal contexts. The agent influences the primary recipient to perform self-leadership activities to enable the primary recipient to implement self-leadership in the CCOS. These activities are self-motivation, self-direction through role-modelling, teamwork and self-affirmation. The underlying dynamic of this framework is mindfulness, where the self-leader is aware of current thoughts and behaviours, and the training of nurses. Nurses need training to empower themselves to care for patients in the CCOS in order to promote the health and wellness of the patient. This conceptual framework served as a point of departure from which the questionnaire was created, covering strategies that nurses apply to lead themselves in implementing the CCOS. The CCOS is yet to be initiated in other hospitals in a private hospital.
group in Gauteng. In Chapter 6 the quantitative data analysis is discussed – the third objective of this research (Phase 3).
CHAPTER 6: QUANTITATIVE DATA ANALYSIS, FINDINGS AND DISCUSSION

6.1 INTRODUCTION

Chapter 6 addresses the quantitative phase that followed after the development of the conceptual framework (Chapter 5). This chapter provides the empirical findings and an analysis of the data collected by the research instrument, based on the conceptual framework. The third objective of this research was to explore and describe the views of nurses on their self-leadership in an outreach service to be initiated at a private hospital group in Gauteng (Phase 3). The qualitative phase of the research was conducted in one hospital with focus groups. In the quantitative phase a questionnaire was distributed to twelve private hospitals in a hospital group in Gauteng. The questionnaire consisted of two sections:

Section 1 was related to biographical information of participants; their age, years of experience as nurse managers, management qualifications and the types of patient in their units. The participants were also asked if the critical care outreach service (CCOS) was available at their hospital, if there were any plans to implement the CCOS in their hospital and whether a MEWS (modified early warning system) was used when measuring the patients’ vital data.

Section 2 was related to the main concepts identified in the focus group data analysis. These aspects addressed:

- self-motivation (Items 1-12);
- leading by example/role-modelling (Items 13-26);
- acknowledgement of outreach as an important service in nursing (Items 27-33);
- assistance and guidance from CCOS (Items 34-47); and
- a sense of being affirmed (Items 48-51).

The accessible population consisted of 123 participants (nurse managers) from twelve (n = 12) hospitals in the private hospital group in Gauteng. Questionnaires were handed out to all 123 participants and 83 questionnaires were received back; thus a 67.8% response rate. Nine questionnaires were incomplete and were not included in the data analysis. The findings are thus
discussed for a sample of 74 (100.0%) participants from twelve hospitals in a healthcare group in Gauteng. Data analysis was conducted through descriptive and inferential statistics using SPPS. Where calculations do not add up to 100.0% (due to statistical presentation), they are indicated with an asterisk (*).

6.2 SECTION 1: BIOGRAPHICAL DESCRIPTIVE ANALYSIS
In this section the distribution with regard to the variables of age, work experience, education, department, critical care outreach and MEWS are presented.

6.2.1 Age of the participants (Item 1)
The ages of participants (n = 74) were between 30 and 63 years of age ($\bar{x} = 45.51; SD = 8.574$), giving an age range of 33 years. Figure 6.1 illustrates the age distribution of the participants, with the majority being between 40 and 44 years old.

![Figure 6.1: Age of participants](http://etd.uwc.ac.za/)

6.2.2 Years of experience as a nurse manager (Item 2)
The histogram in Figure 6.2 indicates the participants’ years of experience as nurse managers. According to the responses, just over half (52.7%) of the 74 (100.0%) participants had been nurse managers for longer than six years.

http://etd.uwc.ac.za/
6.2.3 Academic qualifications of the participants (Item 3)
Half of the participants (n = 37; 50.0%) had a qualification in nursing management, as seen in Table 6.1.

Table 6.1: Academic qualifications of nurse managers

<table>
<thead>
<tr>
<th>Nursing management qualification</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>37</td>
<td>50.0</td>
</tr>
<tr>
<td>Yes</td>
<td>37</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In a research study, Wilton (2008:78) states that the benefit of having a qualification in management is that it imparts to managers a sense of confidence at work, enabling them to lead and motivate their teams, and giving managers a good understanding of the theoretical underpinnings of management.

6.2.4 Type of patients in the units of the hospitals (Item 4)
The participants (n = 74) were asked to indicate the types of patients in their wards or units (Table 6.2). Some participants chose more than one option. The participants most frequently indicated that they had surgical and medical patients in their units.
Table 6.2: Participants’ involvement with different types of patients

<table>
<thead>
<tr>
<th>Type of patients</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopaedic</td>
<td>14</td>
</tr>
<tr>
<td>Medical</td>
<td>24</td>
</tr>
<tr>
<td>Surgical</td>
<td>27</td>
</tr>
<tr>
<td>Gynaecological</td>
<td>13</td>
</tr>
<tr>
<td>Paediatric</td>
<td>12</td>
</tr>
<tr>
<td>Neurological</td>
<td>11</td>
</tr>
<tr>
<td>Oncology</td>
<td>9</td>
</tr>
<tr>
<td>Maternity and anti-natal</td>
<td>7</td>
</tr>
<tr>
<td>Day ward</td>
<td>2</td>
</tr>
<tr>
<td>Cardiology</td>
<td>4</td>
</tr>
</tbody>
</table>

These hospitals thus provided a comprehensive service reflecting the holistic nature of healthcare.

6.2.5 Outreach available at healthcare facility (Item 5.1)

More than half of the 74 participants namely 40 (54.1%), responded that CCOS was available in their hospital (Table 6.3).

Table 6.3: Availability of CCOS at hospital

<table>
<thead>
<tr>
<th>Availability of CCOS</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40</td>
<td>54.1</td>
</tr>
<tr>
<td>No</td>
<td>34</td>
<td>45.9</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Manchester (2015:12) states that critical care outreach is a service that provides early recognition and intervention of ward patients’ physiological deterioration. It focuses on optimising ward patient management before the patient becomes critically unwell.

6.2.6 Planned implementation of outreach patient care (Item 5.2)

Nearly a third (n = 25; 33.8%) of 74 indicated that there were no plans to implement a CCOS in their hospital. A third (n = 23; 31.1%) indicated that there were plans to implement such a programme, while just over a third (n = 26; 35.1%) indicated that they were unaware of a planned outreach patient care programme (Table 6.4). It is important that an outreach service is planned according to the requirements of a specific setting (Peters, Aslakson & Wilson, 2018:124).
Table 6.4: Plans to implement a CCOS at the hospital

<table>
<thead>
<tr>
<th>Planning the implementation of CCOS</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23</td>
<td>31.1</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>33.8</td>
</tr>
<tr>
<td>Not applicable</td>
<td>26</td>
<td>35.1</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

6.2.7 Applying MEWS when measuring vital signs of patients (Item 6)
The majority (n = 69; 93.2%) of the participants indicated that their unit made use of MEWS when the nurses measured patients’ vital data (Table 6.5). Britian’s Department of Health has recommended the use of early warning systems as the best practice for clinical observations (National Institute for Health and Care Excellence, 2007.).

Table 6.5: Application of MEWS

<table>
<thead>
<tr>
<th>Applying MEWS</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>69</td>
<td>93.2</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>6.8</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

6.3 SECTION 2: SELF-LEADERSHIP IN PATIENT OUTREACH SERVICE
The factor analysis extracted eight factors (Table 6.6), that are presented under the headings as they appeared in the questionnaire.

Table 6.6: Heads of the questionnaire and factors

<table>
<thead>
<tr>
<th>Questionnaire heading</th>
<th>Factor</th>
<th>Description of factor</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-motivation</td>
<td>1</td>
<td>Self-motivation</td>
<td>4, 5, 6, 7, 8</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Authority</td>
<td>9, 11, 12</td>
</tr>
<tr>
<td>Leading by example/role-modelling</td>
<td>3</td>
<td>Role-modelling</td>
<td>13, 14, 19, 20, 21</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Knowledge</td>
<td>15, 16, 18, 23, 24</td>
</tr>
<tr>
<td>Patient outcomes/quality of patient care/patient satisfaction</td>
<td>5</td>
<td>Patient outcome</td>
<td>30, 31, 32, 33</td>
</tr>
<tr>
<td>Assistance and guidance from the patient outreach service team</td>
<td>6</td>
<td>Assistance and guidance</td>
<td>34, 35, 36, 41, 43</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Responsibility</td>
<td>37, 38, 39, 40</td>
</tr>
</tbody>
</table>
Items will be presented from the highest to lowest mean values in Tables 6.7 to 6.13. Responses to items in Section 2 of the questionnaire will be discussed as follows (colouring will be used for the criteria as indicated):

- The factor analysis of the items that corresponded with the specific headings of the questionnaire:
  - the two items with the highest loads in each of the factors.
- Responses (n = 74), mean values (\(\bar{x}\)) and standard deviations (SD) of all the items under each heading:
  - Items on which participants agreed to totally agreed — 80.0% and more;
  - Items with mean values of (\(\bar{x}\)) 3.8 and higher; and
  - Items with a SD of 1.0 and higher.

### 6.3.1 Self-motivation (Items 1 to 12) (n = 74)

Self-motivation is the quality or practice of being able find the motivation within oneself to establish goals and use strategies to keep oneself on track to pursue these goals (Pramilaa, 2016:82). Through self-motivation, people are motivated to perform tasks that meet and satisfy specific needs (Manz, 2015:135). A factor analysis of the section on self-motivation extracted two factors, namely, Factor 1: Self-motivation (Items 4, 5, 6, 7, 8) and Factor 2: Authority (Items 9, 11, 12). (Table 6.6).

Items with a loading of less than 0.600 are normally excluded from the factor analysis. Items with a weak loading (<0.600) are factors that have less than 20.0% shared variance with the construct they represent (Matsunaga, 2010:101; Pett et.al., 2003: 208). Item, 10 did not obtain a value of 0.600 or above and was excluded from the factor analysis.

In Factor 1 on self-motivation, a high loading (interrelationship of items) of 0.803 was found on Item 8 regarding nurses’ ownership of their tasks, which is demonstrated when nurses act when patients are in pain but are unable to verbalise their pain. The second highest loading was 0.799 on Item 6 (Table 6.7). It related to nurses’ exercise of self-control when they monitor the vital signs of patients while following the MEWS guidelines. Their self-control is demonstrated when they plan what to do after observing that blood pressure is too high. Nurses should be motivated to act when a patient is in pain or when the MEWS indicates the need for action. Jooste (2017:168) mentions that nurses need to be self-motivated to deliver quality work.
Almost all the participants (n = 67; 90.5%) indicated that they agreed to totally agree that nurses have to have a sense of responsibility to look after patients. In other words, when they are at a loss regarding what to do, a responsible nurse picks up the phone and asks for advice (Item 5) (\(\bar{x} = 4.20; SD = 0.758\)). The nurse’s sense of responsibility is shown through self-observation; when a nurse realises he or she lacks the knowledge to nurse a deteriorating patient and to take appropriate action, he or she immediately calls the correct person to render help. Manz (2015:135) states that nurses need to motivate themselves to take responsibility for the nursing care of their patients.

The majority of participants (n = 62; 83.8%) indicated that they agreed to totally agree that nurses use their clinical observation skills to identify a deteriorating patient, even when the MEWS is normal (Item 4) (\(\bar{x} = 3.95; SD = .874\)). Nurses are competent enough to identify a deteriorating patient. Competent nurses fulfil certain roles and possess many additional attributes, like knowledge, skills and the ability to think critically, and act safely and effectively (Nursing and Midwifery Board of Ireland, 2018).

The participants (n = 60; 81.1%) indicated that nurses need to exercise self-control (behaving in an effective way) when they monitor the vital signs of patients while following the MEWS guidelines. Their self-control is demonstrated when they plan actions after observing, for instance, that a patient’s blood pressure is too high (\(\bar{x} = 3.84; SD = .828\)) (Item 6). Individuals (nurses) may be motivated to perform behaviours for the intrinsic value of the behaviour and to attain goals (Chung, Zhang, Liu, Chan, Si & Hagger, 2018).

For Factor 1, self-motivation, Item 5, had the highest mean value (\(\bar{x} = 4.20\)) with a narrow distribution of responses, around the mean value (SD = .758 ). Nurses take ownership when they monitor the vital data of patients while following the MEWS guidelines (\(\bar{x} = 3.69; SD = .964\)) (Item 7). Item 4, related to nurses’ using their clinical observation skills to identify a deteriorating patient even when the MEWS is normal, had a mean value of 3.95 with a narrow response around the mean (SD = .874). More than three quarters of the participants (n = 60; 81.1%) had a narrow response around the mean value, indicating that nurses exercise self-control when they monitor the vital signs of patients while following the MEWS guidelines (\(\bar{x} = 3.84; SD = .828\)) (Item 6). All the items related to Factor 1 had a narrow distribution around the mean value, and all the items had an SD of less than 1.
Table 6.7: Responses on items for Factor 1: Self-motivation

<table>
<thead>
<tr>
<th>Factor 1: Self-motivation</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>$\bar{x}$</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses display a sense of responsibility in looking after patients, e.g. when they do not know what to do, they pick up the phone and ask for advice (Item 5).</td>
<td>0.729</td>
<td>n 0</td>
<td>4</td>
<td>3</td>
<td>41</td>
<td>26</td>
<td>74</td>
<td>4.20</td>
<td>.758</td>
</tr>
<tr>
<td>Nurses use their clinical observation skills to identify a deteriorating patient, even when the MEWS is normal, e.g. when they see a patient's condition is changing, and that something wrong (Item 4).</td>
<td>0.794</td>
<td>n 0</td>
<td>9</td>
<td>3</td>
<td>45</td>
<td>17</td>
<td>74</td>
<td>3.95</td>
<td>.874</td>
</tr>
<tr>
<td>Nurses exercise self-control (behave in an effective way) when they monitor the vital signs of patients while following the MEWS guidelines. Their self-control is demonstrated by planning after observing, for example, that blood pressure is too high (Item 6).</td>
<td>0.799</td>
<td>n 0</td>
<td>9</td>
<td>5</td>
<td>49</td>
<td>11</td>
<td>74</td>
<td>3.84</td>
<td>.828</td>
</tr>
<tr>
<td>Nurses’ ownership is demonstrated by acting when patients are in pain but are unable to verbalise their pain status (Item 8).</td>
<td>0.803</td>
<td>n 0</td>
<td>15</td>
<td>5</td>
<td>41</td>
<td>13</td>
<td>74</td>
<td>3.70</td>
<td>.989</td>
</tr>
<tr>
<td>Nurses take ownership when they monitor the vital data of patients while following the MEWS guidelines (Item 7).</td>
<td>0.787</td>
<td>n 0</td>
<td>14</td>
<td>7</td>
<td>41</td>
<td>12</td>
<td>74</td>
<td>3.69</td>
<td>.964</td>
</tr>
</tbody>
</table>
In Factor 2 on authority, higher loadings than in Factor 1 were found. Loadings were viewed for nurses appreciating their own authority as decision makers. They called the outreach service when early warning criteria indicate this is necessary, and they assess patients, making necessary decisions’ (Item 11). The loading for this factor was 0.864. The question was also asked whether nurses use their authority while monitoring elevated MEWS. For example, a patient’s condition may change and there is clearly something wrong with the patient; does the nurse call the outreach service for bedside assistance at this point? (Item 9), which had a factor loading of 0.844 (Table 6.8). The nurse who has the authority as a decision maker should be competent enough to call the outreach expert and demonstrate her self-efficacy when doing so (Ayub et al., 2017:634). Out of the items for Factor 2, only Item 11 had a response rate of agree or totally agree of over 80.0% (n = 64; 86.5%). Nurses appreciate their own authority as decision makers and advocates for patients; they call the outreach service when the early warning criteria indicate this is necessary, and they assess patients, making necessary decisions (Item 11). This item also had the highest mean value and the narrowest distribution of responses around the mean value ($\bar{x} = 4.00; SD = .907$).

Just over three quarters of the participants (n = 57; 77.0%) had a narrow response around the mean value for ‘Nurses use their authority while monitoring elevated MEWS’ ($\bar{x} = 3.82; SD = .984$) (Item 9). Item 12, ‘Nurses initiate taking positive steps during interventions’ ($\bar{x} = 3.62; SD = 1.119$) had the highest SD among the items related to Factor 2 (Authority)(Table 6.8).

6.3.2 Leading by example/role-modeling (Items 13 to 29) (n = 74)
Furtner et al. (2015:n.p.) are of the opinion that self-leadership strategies can be a helpful tool for managers and leaders, enabling them to enjoy their work more, show higher job performance and show proactive forms of leading others while being good role-models. Role-modeling by nurses in leadership conveys expected norms and helps build capacity in nursing practice (Christenbery, 2018:300). The factor analysis on the section ‘leading by example/role-modelling’ extracted two factors (Table 6.9). These factors are:

- Factor 3: Role-modeling (Items 19, 14, 13, 21, 20)
- Factor 4: Knowledge (Items 16, 18, 24, 23, 15)

Items, 17, 22, 25, 26, 27, 28 and 29 did not obtain a value of 0.600 or above to be included in the factor analysis.
Table 6.8: Responses on items for Factor 2: Authority

<table>
<thead>
<tr>
<th>Factor 2: Authority</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>( \bar{x} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses appreciate their own authority as decision makers and as advocates for patients. They call the outreach service when the early warning criteria indicate this is necessary, and assess patients, making necessary decisions because they are present at the time (Item 11).</td>
<td>0.864</td>
<td>n</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>45</td>
<td>19</td>
<td>74</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>2.7</td>
<td>6.8</td>
<td>4.1</td>
<td>60.8</td>
<td>25.7</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses use their authority while monitoring elevated MEWS, e.g. a patient’s condition is changing, and there is something wrong with the patient; at that point, they call the outreach service for bedside assistance (Item 9).</td>
<td>0.844</td>
<td>n</td>
<td>2</td>
<td>8</td>
<td>7</td>
<td>41</td>
<td>16</td>
<td>74</td>
<td>3.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>2.7</td>
<td>10.8</td>
<td>9.5</td>
<td>55.4</td>
<td>21.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses initiate taking positive steps during interventions, e.g. when a patient has returned from theatre and they notice that blood pressure is dropping, they know they have to conduct an Hb test; when the outreach sister arrives, she has a baseline from which to provide assistance (Item 12).</td>
<td>0.707</td>
<td>n</td>
<td>4</td>
<td>12</td>
<td>5</td>
<td>40</td>
<td>13</td>
<td>74</td>
<td>3.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>5.4</td>
<td>16.2</td>
<td>6.8</td>
<td>54.1</td>
<td>17.6</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
In role-modeling (Factor 3) the factor loading for Item 21 (0.857), on nurses empowering their colleagues was higher than for Item 20 (0.809). Nurses share their knowledge to empower their colleagues (Item 21) by applying their communication skills to tell subordinates what their expectations are (Item 20). This could increase nurses’ sense of self-control, competence, and purposefulness, all of which form natural rewards. Natural reward strategies foster a positive mindset. The strategy involves building natural motivation into the task itself (Manz, 2015:135). Self-leaders rely on this strategy to redesign their tasks and how they think about them, so that the tasks themselves contribute to their feelings of self-control, competence and purposefulness (Manz, 2015:136). The responses from participants are illustrated from the highest mean value to the lowest mean value in Table 6.9. As seen in Table 6.9, a vast majority 90.0% (n = 66; 89.2%) of the 74 (100.0%) participants agreed to totally agreed that nurses are proactive when attending to patients with elevated MEWS (Item 19) (\(\bar{x} = 4.14; SD = .746\)). Nurses need to be competent when attending to a patient with an elevated MEWS. As a role-model, the nurse exercises self-control and is proactive in caring for patients, which is naturally rewarding (Ricketts, Carter, Place & McCoy, 2012).

Self-determination involves the belief that one has control, choice or autonomy over one’s work behaviours and processes (Deci & Ryan, 2013:38). The participants agreed to totally agreed (n = 66; 89.2%) that nurses visualise what they are obliged to do when assisting with an urgent case, since they have gained experience; for example, when a patient needs to be transferred very quickly (Item 14) (\(\bar{x} = 4.03; SD = .793\)). Pearson, Naselaris, Holmes and Kosslyn (2015:590) state that mental imagery (visualising) refers to representations and the accompanying experience of information, recalled from memory and causing one to re-experience a version of the original stimulus.

Sixty-eight (91.9%) of the participants agreed to totally agreed that nurses plan the successful completion of tasks with the purpose of addressing the needs of patients (Item 13) (\(\bar{x} = 4.01; SD = .712\)). To visualise what to do and to plan the successful completion of tasks, the nurses implement mental imaginary, which forms part of constructive thought patterns (Dizaho, Salleh & Abdullah, 2017:442). The participants rated the SD higher in Item 14 higher than Item 13 of the mean value around the response (Table 6.9).
Table 6.9: Responses on items for Factor 3: Role-modelling

<table>
<thead>
<tr>
<th>Factor 3: Role-modelling</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>$\bar{x}$</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses are proactive when attending to patients with an elevated MEWS, e.g. when patients need to be transferred to a higher level of care, the nurses do it urgently and do not to delay transferal (Item 19).</td>
<td>0.800</td>
<td>n</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>44</td>
<td>22</td>
<td>74</td>
<td>4.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>5.4</td>
<td>5.4</td>
<td>59.5</td>
<td>29.7</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses visualise what they are obliged to do when assisting with an urgent case, since they have gained experience, e.g. when a patient needs to be transferred quickly (Item 14).</td>
<td>0.760</td>
<td>n</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>49</td>
<td>17</td>
<td>74</td>
<td>4.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>9.5</td>
<td>1.4</td>
<td>66.2</td>
<td>23.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses plan the successful completion of tasks with the purpose of addressing the needs of patients. They ensure that patients are treated correctly to improve their health and limit deterioration (Item 13).</td>
<td>0.770</td>
<td>n</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>55</td>
<td>13</td>
<td>74</td>
<td>4.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>8.1</td>
<td>0.0</td>
<td>74.3</td>
<td>17.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses share their knowledge, since they empower their colleagues by involving them in the management/care of patients with an elevated MEWS (Item 21).</td>
<td>0.857</td>
<td>n</td>
<td>0</td>
<td>9</td>
<td>3</td>
<td>49</td>
<td>13</td>
<td>74</td>
<td>3.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>12.2</td>
<td>4.1</td>
<td>66.2</td>
<td>17.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses apply their communication skills when telling subordinates what their expectations are in respect of patients with an elevated MEWS (Item 20).</td>
<td>0.809</td>
<td>n</td>
<td>0</td>
<td>14</td>
<td>3</td>
<td>45</td>
<td>12</td>
<td>74</td>
<td>3.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>18.9</td>
<td>4.1</td>
<td>60.8</td>
<td>16.2</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

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More than 80.0% (n = 62; 83.8%) of the participants agreed to totally agreed that nurses share their knowledge (Item 21), since they empower their colleagues by involving them in the management/nursing of patients with an elevated MEWS ($\bar{x} = 3.89; \text{SD} = .837$). Nurses enhance their abilities to nurse patients by sharing their knowledge with one another. The feeling of being competent and perhaps the best at something can be powerfully rewarding, even if no praise or material reward is given. People tend to like tasks in which they perform well. Natural reward strategies are designed to help create feelings of competence and self-determination, which in turn energises performance-enhancing, task-related behaviours (Neck et al., 2017; Neck & Houghton, 2006:272).

In Factor 3, Item 19 on role-modelling, had the highest mean value ($\bar{x} = 4.14$), with a narrow distribution of responses around the mean value (SD = .746). Nearly 90.0% (n = 66; 89.2%) had a narrow response around the mean value for Item 14, indicating that nurses agree that they visualise what they are obliged to do when assisting with an urgent case ($\bar{x} = 4.03; \text{SD} = .793$). Nurses plan the successful completion of tasks with the purpose of addressing the needs of patients ($\bar{x} = 4.01; \text{SD} = .712$) (Item 13).

Nurses should share their knowledge, since they empowered their colleagues by involving them in the management/care of patients with an elevated MEWS, according to Item 21, which had a mean value of 3.89 and a narrow response around the mean (SD = .837). All the items related to Factor 3 had a narrow distribution around the mean value, and all the items had an SD of less than 1.

In Factor 4 (knowledge), the highest two loadings were for Item 16 and 24. Item 16 was regarding senior nurses that exercise self-control when the condition of patients is reported and they should assess the patient personally. ‘They should not simply remain sitting behind their desks while delegating their responsibilities to the reporting nurse.’ This item had a loading of 0.809. Item 24 indicated: ‘Nurses develop their abilities to care for patients by attending skills development training interventions.’ It had a loading of 0.804. Nurses who attend workshops to enhance their knowledge empower themselves to be competent at nursing patients. Nurses demonstrate their competence and self-determination when they personally assess a deteriorating patient and act appropriately. The participants agreed to totally agreed (n = 64; 89.5%) in Item 16, that senior nurses exercise self-control when the deteriorating condition of patients is reported ($\bar{x} = 4.12; \text{SD} = .875$). Item 16 had the highest mean value ($\bar{x} = 4.12$) of
Table 6.10: Responses on items for Factor 4: Knowledge

<table>
<thead>
<tr>
<th>Factor 4: Knowledge</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>$\bar{x}$</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior nurses exercise self-control when the deteriorating condition of patients is reported, personally assessing the patients. They do not simply remain sitting behind their desks while delegating their responsibilities to the reporting nurse (Item 16).</td>
<td>n 0.809</td>
<td>0 0</td>
<td>7 9.5</td>
<td>3 4.1</td>
<td>38 54.4</td>
<td>26 35.1</td>
<td>74 100.0</td>
<td>4.12</td>
<td>.875</td>
</tr>
<tr>
<td>Nurses act as role-models during teamwork, e.g. they involve the reporting nurse in the management/care of the patient with an elevated MEWS (Item 18).</td>
<td>n 0.793</td>
<td>0 0</td>
<td>9 12.2</td>
<td>3 4.1</td>
<td>47 63.5</td>
<td>15 20.3</td>
<td>74 100.0</td>
<td>3.92</td>
<td>.856</td>
</tr>
<tr>
<td>Nurses develop their abilities to care for patients by attending skills development training interventions. (Item 24).</td>
<td>n 0.805</td>
<td>0 0</td>
<td>11 14.9</td>
<td>0 0.0</td>
<td>48 64.9</td>
<td>15 20.3</td>
<td>74 100.0</td>
<td>3.91</td>
<td>.894</td>
</tr>
<tr>
<td>Nurses are sufficiently knowledgeable to answer questions about the MEWS that outreach service sisters or patients may ask (Item 23).</td>
<td>n 0.782</td>
<td>0 0</td>
<td>16 21.6</td>
<td>6 8.1</td>
<td>40 54.1</td>
<td>12 16.2</td>
<td>74 100.0</td>
<td>3.65</td>
<td>.999</td>
</tr>
<tr>
<td>Nurses set high expectations for their practice by setting goals to execute their duties excellently and diligently. They expect more from themselves before they expect anything from other nurses (Item 15).</td>
<td>n 0.692</td>
<td>0 0</td>
<td>21 28.4</td>
<td>1 1.4</td>
<td>46 62.2</td>
<td>6 8.1</td>
<td>74 100.0</td>
<td>3.50</td>
<td>.997</td>
</tr>
</tbody>
</table>

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items in Factor 4, with a narrow distribution of responses around the mean value (SD = .875) (Table 6.10). More than 80.0% (n = 62; 83.5%) of the participants agreed to totally agreed that nurses act as role-models during teamwork. They involve the reporting nurse in the mananagement/care of the patient with an elevated MEWS (Item 18) ($\bar{x} = 3.92; SD = .856$).

Jooste (2017:117) states that team members take ownership of the management/care of the patient with an elevated MEWS which encourages them to feel proud of their contribution. It could be seen that natural reward strategies help nurses to find pleasure in the management/care of a patient with an elevated MEWS, leading to an enhanced sense of competence (Neck et al., 2017). In Item 24, ‘Nurses develop their abilities to care for patients by attending skills development training interventions’. Two thirds, 63 (85.2%) of the participants agreed to totally agreed ($\bar{x} = 3.91; SD = .894$) on the item. The South African government has realised the importance of enhancing employees’ skills and in 1998 the Skills Development Act was rolled out. A nurse should attend skills development training in order to become empowered in the management of a patient with an elevated MEWS, an empowerment which in itself yields a natural reward (Amundsen & Martinsen, 2015:307). Nurses act as role-models during teamwork, involving the reporting nurse in the management/care of the patient with an elevated MEWS ($\bar{x} = 3.69; SD = .964$) (Item 18). Item 24, ‘Nurses develop their abilities to care for patients by attending skills development training interventions’ had a mean value of 3.91 with a narrow response around the mean value (SD = .894). Item 23 had a mean value of 3.65 and a SD of .999 and Item 15 had a lower mean value of 3.50 and SD of .997. All the items related to Factor 4 had narrow distributions around the mean value, and all the items had an SD of less than 1.

6.3.3 Patient outcomes/quality of patient care/patient satisfaction (Items 27 to 33) (n = 74)

Nurses are the largest professional healthcare workforce; maximising their contributions to health is essential to achieve health coverage for a globally ageing population. Nurses play an essential part in increasing patient access to safe care (Coster, Watkins & Norman, 2018:77). The education of nurses has been associated with the safety and quality of care in acute care. Educated nurses make a substantial, positive impact on patient outcomes and experiences (Coster et al., 2018:77).
The factor analysis on the section ‘Patient outcomes/quality of patient care/patient satisfaction,’ extracted only one factor (Table 6.11). This factor is Factor 5, ‘Patient outcomes’ (Items 32, 31, 30, 33). The items in Factor 5 related to patient outcome/quality of patient care/patient satisfaction, were grouped together (Items 30, 32, 33, 31). The two highest loadings were 0.871 for Item 32 (‘Nurses portray confidence in their knowledge; the patients feel comfortable when they know there is someone who is capable of assisting them’) and 0.802 on Item 31 (‘Nurses are knowledgeable about their patients in terms of their diagnosis, medication and laboratory results’). The data in Table 6.11 illustrates participants’ responses to items on patient outcomes/quality of patient care/patient satisfaction. More than 90.0% (n = 68; 91.9%) of the participants agreed to totally agreed that nurses use their experience to deliver quality care to patients, as seen in Item 30. The nurse gains competence through experience (Fukada, 2018:1) to deliver timely, quality care to patients. Most participants agreed to totally agreed (n = 63.0; 85.1%) that nurses portray confidence in their knowledge; patients feel comfortable when they know there is someone who is capable of assisting them (Item 32) (\(\bar{x} = 3.91; \ SD = .863\)).

Ayub et al. (2017:634) state that self-efficacy is the belief that one has the necessary resources (knowledge and skills) to meet the demands for reaching one’s specific goals, such as assisting patients. The participants agreed to totally agreed (n = 50; 67.6%) that nurses share the vision that the outreach service improves the lives of their patients (Item 33) (\(\bar{x} = 3.73; \ SD = .880\)). Three quarters (n = 56; 75.7%) agreed to totally agreed that nurses are knowledgeable about their patients (Item 31) (\(\bar{x} = 3.68; \ SD = .995\)). The participants also rated Item 30 (‘Nurses use their experience to deliver quality care to patients’) with the highest mean value. This item had the narrowest distribution in relation to the mean value (\(\bar{x} = 4.18; \ SD = .800\)). Item 32 had a narrow distribution in relation to the mean (\(\bar{x} = 3.91; \ SD = .863\)). Responses to Factor 5, ‘Patient Outcomes,’ all had an SD of below 1 (Table 6.11).

6.3.4 Assistance and guidance from the patient outreach service team (Items 34 to 47) (n = 74)

The factor analysis of the section on assistance and guidance from the patient outreach service extracted two factors. These are Factor 6 (Assistance and guidance) (Items 35, 43, 36, 41, 34)(Table6.12), and Factor 7 (Responsibility) (Items 37, 38, 39,40) (Table 6.13). Items 45, 46 and 47 did not obtain a value of 0.550 or above to be included in the factor analysis. Identifying acutely ill patients early and initiating a timely response with appropriate clinical expertise is crucial to optimising patient outcomes (Smith, Prytherch, Meredith, Schmidt & Featherstone,
Table 6.11: Responses to Factor 5: Patient Outcomes

<table>
<thead>
<tr>
<th>Factor 5: Patient Outcomes</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>( \bar{x} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses use their experience to deliver timely quality care to patients, ensuring that</td>
<td>0.779</td>
<td>n</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>43</td>
<td>25</td>
<td>74</td>
<td>4.18</td>
</tr>
<tr>
<td>patients are transferred to an appropriate unit of care as quickly as possible (Item 30).</td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>8.1</td>
<td>0.0</td>
<td>58.1</td>
<td>33.8</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses portray confidence in their knowledge; patients feel comfortable when they know</td>
<td>0.871</td>
<td>n</td>
<td>0</td>
<td>10</td>
<td>1</td>
<td>49</td>
<td>14</td>
<td>74</td>
<td>3.91</td>
</tr>
<tr>
<td>there is someone who is capable of assisting them (Item 32).</td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>13.5</td>
<td>1.4</td>
<td>66.2</td>
<td>18.9</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses share the vision that the outreach service improves the lives of their patients</td>
<td>0.671</td>
<td>n</td>
<td>1</td>
<td>6</td>
<td>17</td>
<td>38</td>
<td>12</td>
<td>74</td>
<td>3.73</td>
</tr>
<tr>
<td>(Item 33).</td>
<td></td>
<td>%</td>
<td>1.4</td>
<td>8.1</td>
<td>23.0</td>
<td>51.4</td>
<td>16.2</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses are knowledgeable about their patients in terms of their diagnosis, medication</td>
<td>0.802</td>
<td>n</td>
<td>0</td>
<td>17</td>
<td>1</td>
<td>45</td>
<td>11</td>
<td>74</td>
<td>3.68</td>
</tr>
<tr>
<td>and laboratory results (Item 31).</td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>23.0</td>
<td>1.4</td>
<td>60.8</td>
<td>14.9</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
The CCOS assists and guides nurses with the caring of their acutely ill patients, enabling a sharing of skills with the nurses in general wards (Jeddian, Lindenmeyer, Marshall, Howard, Sayadi, Rashidian & Jafari, 2017). Self-leadership strategies are likely to facilitate empowerment by enhancing perceptions of meaningfulness, purpose, self-determination, competence and self-efficacy (Amundsen & Martinsen, 2015: 306; Lee & Koh, 2001: 685). Items relating to assistance and guidance were grouped together (Factor 6). The responses from participants are illustrated from the highest mean value to the lowest mean value in Table 6.12. The highest loading obtained for Factor 6 was 0.836 on Item 36: ‘Nurses exercise self-control when activating the outreach service and are concerned with taking care of their patients. They ensure that the patient’s condition remains stable, and report to the sister when the outreach service needs to be activated.’

The second highest rating was 0.822 on Item 34: ‘Nurses create a safe environment that affirms subordinates’ expertise to call the outreach service in case of an elevated MEWS. The outreach expert guides the nurses by telling them what to do or what to look out for. (Table 6.12). As can be seen, almost 84.0% (n = 62; 83.8%) of the participants agreed to totally agreed that nurses’ behaviour indicates that they understand the purpose of measuring patients’ vital signs (Item 35) ($\bar{x} = 3.99; SD = .836$). The nurses express their self-leadership as naturally rewarding and find it meaningful to measure patients’ vital signs; it may be that this enhances their sense of competence, since measuring vital signs is closely related to keeping a patient stable. Neck et al. (2017:n.p.) state that natural reward strategies are intended to foster feelings of competence, self-control and purpose. Just over 80.0% (n = 60; 81.1%) of the participants agreed to totally agreed that nurses are guided by the patients’ MEWS and the MEWS chart when the caring for and managing patients (Item 43) ($\bar{x} = 3.91; SD = .863$). The MEWS is used as a cue to indicate to nurses what behaviour is expected from them. According to Ross (2015:65) and Marques-Quinteiro and Curral (2012: 562), behavioural strategies are intended to regulate personal behaviour, with the goal of increasing individual performance. To improve individual performance, behavioural strategies like self-observation, self-goal setting, self-reward administration and self-cueing are essential aspects of nurses’ behaviour (Neck et al., 2017; Neck & Houghton, 2006:271). Most participants agreed to totally agreed (n = 50; 67.6%) with Item 41, that nurses are aware that the outreach service contributes to the quality of care delivered to patients. They receive patients from a high care unit who have undergone major procedures and are in a critical condition; the outreach service is there to support staff.’
Table 6.12: Responses for Factor 6: Assistance and guidance

<table>
<thead>
<tr>
<th>Factor 6: Assistance and guidance</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>( \bar{x} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses’ behaviour indicates that they understand the purpose of measuring patients’ vital signs, i.e. the goal of the outreach service is to ensure that patients are stable; that is the reason why nurses monitor all observations (Item 35).</td>
<td>0.779</td>
<td>n</td>
<td>0</td>
<td>7</td>
<td>5</td>
<td>44</td>
<td>18</td>
<td>74</td>
<td>3.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>0.0</td>
<td>9.5</td>
<td>6.8</td>
<td>59.5</td>
<td>24.3</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses are guided by patients’ MEWS and the MEWS chart. The MEWS chart tells the nurses what to do and when it is necessary to call upon the outreach service (Item 43).</td>
<td>.774</td>
<td>n</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>41</td>
<td>19</td>
<td>74</td>
<td>3.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>2.7</td>
<td>9.5</td>
<td>6.8</td>
<td>55.4</td>
<td>25.7</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses exercise self-control when activating the outreach service, and are concerned with taking care of their patients. They ensure that the patient’s condition remains stable, and report to the sister when the outreach service needs to be activated (Item 36).</td>
<td>0.836</td>
<td>n</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td>43</td>
<td>13</td>
<td>74</td>
<td>3.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>1.4</td>
<td>10.8</td>
<td>12.2</td>
<td>58.1</td>
<td>17.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses are aware that the outreach service contributes to the quality care delivered to patients. They receive patients from a high care unit who have undergone major procedures; these patients are in a critical condition, and the outreach service is there to support staff (Item 41).</td>
<td>0.791</td>
<td>n</td>
<td>1</td>
<td>5</td>
<td>18</td>
<td>38</td>
<td>12</td>
<td>74</td>
<td>3.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>1.4</td>
<td>6.8</td>
<td>24.3</td>
<td>51.4</td>
<td>16.2</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Nurses create a safe environment that affirms subordinates’ expertise to call the outreach service in case of an elevated MEWS. The outreach sister guides the nurses by telling them what to do or what to look out for (Item 34).</td>
<td>0.822</td>
<td>n</td>
<td>1</td>
<td>8</td>
<td>14</td>
<td>37</td>
<td>14</td>
<td>74</td>
<td>3.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>1.4</td>
<td>10.8</td>
<td>18.9</td>
<td>50.0</td>
<td>18.9</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

http://etd.uwc.ac.za/
Item 35 had a slightly higher mean value than Item 35 on items related to assistance and guidance from the outreach service. ($\bar{x} = 3.99; SD = .836$ and $\bar{x} = 3.91; SD = .863$).

For Factor 7 (Responsibility), all items related to responsibility were grouped together (Items 37, 38, 39, 40). As can be seen in Table 6.13, a high loading of 0.921 was found for Item 39 that nurse’s take responsibility when caring for their patients by ensuring that they have a thorough knowledge of the medication their patients need to take. The second-highest loading was 0.917 for Item 38 regarding nurses taking responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients’ conditions. The nurse’s sense of responsibility is demonstrated when she ensures that she is knowledgeable about her patients’ and their needs (Manz, 2015:135). There were no items under Factor 7 that had an 80.0% or higher response of agree to totally agree and slightly under 80% of participants agreed or totally agreed (n = 58; 78.4%) with Item 37. It stated that nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients. Nearly 70.0% (n = 50; 67.6%) of the participants agreed to totally agreed that nurses are enthusiastic about enhancing their knowledge and skills; they know about their patients, blood tests, and what blood test results mean (Item 40). Item 38 had a mean value of 3.64 with a wide distribution of responses around the mean value (SD = 1.044) and Item 39 had a mean value of 3.64 with a wide distribution of responses (SD = 1.105) around the mean value. Item 38, that nurses take responsibility for ensuring that they are knowledgeable about their patients’ conditions, had a wider distribution around the mean value ($\bar{x} = 3.64; SD = 1.105$) than Item 39 (Nurses take responsibility to ensure that they are knowledgeable about their patients’ medication) ($\bar{x} = 3.61; SD = 1.044$).

6.3.5 Power of self-affirmation (Items 48-51) (n = 74)

Natural reward strategies focus on the positive experience associated with a task and the process through which it may be achieved (Neck et al., 2017:n.p.; Carmeli et al., 2006:77). Nurses experience self-affirmation as pleasing, enjoyable and fulfilling and this boosts a sense of capability and competence that may increase the quality of care that patients receive. When nurses view work practices as pleasant, rewarding and enjoyable, and experience a heightened sense of competence and self-control, overall performance is enhanced (Manz, 1986:592). Item 48 did not obtain a value of 0.600 or above to be included in the factor analysis. The factor analysis on ‘Power of self-affirmation’ yielded only one factor, Factor 8: ‘Power of self-affirmation’ (Items 51, 50, 49).
### Table 6.13: Responses on Factor 7: Responsibility

<table>
<thead>
<tr>
<th>Factor 7: Responsibility</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>( \bar{x} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients (Item 37).</td>
<td>0.865</td>
<td>n 0</td>
<td>16</td>
<td>0</td>
<td>45</td>
<td>13</td>
<td>74</td>
<td>3.74</td>
<td>.994</td>
</tr>
<tr>
<td></td>
<td>% 0.0</td>
<td>21.6</td>
<td>0.0</td>
<td>60.8</td>
<td>17.6</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients’ condition (Item 38).</td>
<td>0.917</td>
<td>n 0</td>
<td>21</td>
<td>0</td>
<td>38</td>
<td>15</td>
<td>74</td>
<td>3.64</td>
<td>1.105</td>
</tr>
<tr>
<td></td>
<td>% 0.0</td>
<td>28.4</td>
<td>0.0</td>
<td>51.4</td>
<td>20.3</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of the medication their patients need to take (Item 39).</td>
<td>0.921</td>
<td>n 0</td>
<td>20</td>
<td>0</td>
<td>43</td>
<td>11</td>
<td>74</td>
<td>3.61</td>
<td>1.044</td>
</tr>
<tr>
<td></td>
<td>% 0.0</td>
<td>27.0</td>
<td>0.0</td>
<td>58.1</td>
<td>14.9</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses are enthusiastic about enhancing their knowledge and skills; they know about their patients, blood tests, and what blood test results mean (Item 40).</td>
<td>0.851</td>
<td>n 0</td>
<td>24</td>
<td>0</td>
<td>37</td>
<td>13</td>
<td>74</td>
<td>3.50</td>
<td>.977</td>
</tr>
<tr>
<td></td>
<td>% 0.0</td>
<td>32.4</td>
<td>0.0</td>
<td>50.0</td>
<td>17.6</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The highest loading found was 0.905 for Item 50 on nurses are pleased when patients are grateful to them for saving their lives, The second highest loading was 0.835 for nurses being inclined to behave in a proper manner when they are certain that their endeavours will result in positive outcomes (Item 51). When nurses do the right thing, the lives of patients are saved.’ White (2015:108) states that feeling appreciated at work is critical because all of us want to know that what we are doing matters. To be appreciated and to behave in a proper manner to ensure positive outcomes is naturally rewarding to the nurse (Neck et al., 2017:n.p.). Table 6.14 illustrates the responses of the participants regarding Factor 8: Power of self-affirmation. Nearly all (73; 98.6%) of the participants agreed to totally agreed that nurses are inclined to behave in a proper manner when they are certain that their endeavours will result in positive outcomes ($\bar{x} = 4.43; \text{SD} = .575$) (Item 51). The positive outcomes as a result of nurses’ proper behaviour creates a feeling of competence, which is naturally rewarding for nurses (Neck et al., 2017:n.p.). The majority of the participants 72 (97.3%) agreed to totally agreed that nurses are pleased when patients are grateful to them for saving their lives ($\bar{x} = 4.41; \text{SD} = .701$) (Item 50). Nurses make use of natural reward strategies in the sense that it is pleasurable when they are appreciated for doing their work well. This creates a feeling of competence and activates performance-enhancing, task-related actions (Furtner et al., 2015:107; D’Intino et al., 2007:107).

More than 90.0% (n = 71; 95.9%) of the participants agreed to totally agreed with Item 49, that ‘nurses are proud when they have done something that has saved a patient’s life’ ($\bar{x} = 4.38; \text{SD} = .716$). Natural reward strategies focus on the positive experience associated with a task and the process by which it is achieved. When nurses view work practices as pleasant, rewarding and enjoyable, their sense of competence and self-control in enhanced, which enhances overall performance (Furtner et al., 2015:107; Carmeli et al., 2006:77).

The participants rated Item 51 ($\bar{x} = 4.43; \text{SD} = .575$) slightly higher than Item 50 ($\bar{x} = 4.41; \text{SD} = .701$), and Item 51 also had a narrower distribution around the mean than Items 50 and 49.
Table 6.14: Responses on Factor 8: Power of self-affirmation

<table>
<thead>
<tr>
<th>Factor 8: Power of self-affirmation</th>
<th>Factor</th>
<th>Total disagree</th>
<th>Disagree</th>
<th>Do not know</th>
<th>Agree</th>
<th>Total agree</th>
<th>Total</th>
<th>( \bar{x} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses are inclined to behave in a proper manner when they are certain that their endeavors will result in positive outcomes. When nurses do the right thing, the lives of patients are saved (Item 51).</td>
<td>0.835</td>
<td>n 0 1 0 39 34 74</td>
<td>4.43</td>
<td>.575</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses are pleased when patients are grateful to them for saving their lives, e.g. a patient thanks the nurse, or a patient proudly tells his or her family that the nurse is taking good care of him or her (Item 50).</td>
<td>0.905</td>
<td>n 1 1 0 37 35 74</td>
<td>4.41</td>
<td>.701</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses are proud when they have done something that saves patients’ lives, such as when a nurse reports an elevated MEWS without delay (Item 49).</td>
<td>0.827</td>
<td>n 1 1 1 37 34 74</td>
<td>4.38</td>
<td>.716</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.4 SUMMARY

The participants’ ages were between 30 and 63 years, with an average age of 45.51. The majority fell in the age group 40 to 44 years (Figure 6.1). Just over half the participants had been nurse managers for over six years and half had a nursing management qualification. Just over half (54.1%) of them said that the CCOS was available in their hospitals, while nearly a third of the nurse managers indicated that there were no plans to implement the CCOS in their hospital. More than 90.0% of the participants indicated that their unit applied MEWS when measuring patients’ vital data.

The factor analysis extracted eight factors. The findings were focussed on:

- the two items with the highest loads for each factor;
- agreement and total agreement of 80.0% or more on the items in a factor;
- mean values of 3.8 and higher on items in a factor;
- Items with an SD of 1.0 or more.

Those items which met the above criteria were viewed as important in the strategy.

- three of the above criteria were viewed as essential in the strategy;
- two of the above criteria were viewed as very important in the strategy;
- one of the above criteria was viewed as important in the strategy.

Self-motivation (Items 4-12)

Factor 1: Self-motivation

The items with the two highest load for the factor were:

- Nurses exercise self-control (behave in an effective way) when they monitor the vital signs of patients while following the MEWS guidelines; their self-control is demonstrated by planning after observing that blood pressure is too high (Item 6).
- Nurses’ ownership is demonstrated when they act appropriately when patients are in pain but are unable to verbalise their pain (Item 8).

The findings indicate that participants agreed to totally agreed 80.0% and more on:

- Nurses have a sense of responsibility to look after patients; when they do not know what to do, they pick up the phone and ask for advice (Item 5).
• Nurses use their clinical observation skills to identify a deteriorating patient, even when the MEWS is normal, e.g., when they see a patient’s condition is changing, and there is something wrong (Item 4).

• Nurses exercise self-control (behave in an effective way) when they monitor the vital signs of patients while following the MEWS guidelines. Their self-control is demonstrated by planning after they observe that blood pressure is too high (Item 6).

Mean values on self-motivation were 3.8 and higher on:

• Nurses have a sense of responsibility to look after patients; when they do not know what to do, they pick up the phone and ask for advice (Item 5).

• Nurses use their clinical observation skills to identify a deteriorating patient, even when the MEWS is normal, e.g. when they see a patient’s condition is changing, and there is something wrong (Item 4).

• Nurses exercise self-control (behave in an effective way) when they monitor the vital signs of patients while following the MEWS guidelines. Their self-control is demonstrated by planning after they observe that blood pressure is too high (Item 6).

**Factor 2: Authority**

The items with the two highest load for the factor were:

• Nurses appreciate their own authority as decision makers and as advocates for patients, calling the outreach service when the early warning criteria indicate this is necessary, or by assessing patients and taking action; they have to make decisions because they are present at the time (Item 11).

• Nurses use their authority while monitoring elevated MEWS. When a patient’s condition is changing, and there is something wrong with the patient, they call the outreach service for bedside assistance (Item 9).

The findings indicate that participants *agreed to totally agreed* 80.0% and more on:

• Nurses appreciate their own authority as decision makers and as advocates for patients, by calling the outreach service when the early warning criteria indicates this is necessary, or by assessing patients and taking appropriate action; they have to make decisions because they are present at the time (Item 11).

Mean values on self-motivation were 3.8 and higher on:

• Nurses appreciate their own authority as decision makers and as advocates for patients, by calling the outreach service when the early warning criteria indicates this is necessary,
or by assessing patients and taking appropriate action; they have to make decisions because they are present at the time (Item 11).

- Nurses use their authority while monitoring elevated MEWS, e.g. a patient’s condition is changing, and there is something wrong with the patient; at that point, they call the outreach service for bedside assistance (Item 9).

The item with a SD of 1.0 or over was:

- Nurses initiate taking positive steps during interventions, e.g. when a patient has returned from theatre and they notice that blood pressure is dropping, they know they have to conduct an Hb test; when the outreach sister arrives, she has a baseline from which to provide assistance (Item 12).

**Leading by example/role-modelling** (Items 13-26)

**Factor 3: Role-modelling**

The two items with the highest loads for the factor were:

- Nurses share their knowledge, since they empower their colleagues by involving them in the management/care of patients with an elevated MEWS (Item 21).
- Nurses apply their communication skills when telling subordinates what their expectations are in respect of patients with an elevated MEWS (Item 20).

The findings indicated that participants agreed to totally agreed 80.0% and more on:

- Nurses are proactive when attending to patients with an elevated MEWS; when patients need to be transferred to a higher level of care, the nurses do it urgently and do not delay transferral (Item 19).
- Nurses visualise what they are obliged to do when assisting with an urgent case, since they have gained experience, e.g., when a patient needs to be transferred, the patient is transferred timeously (Item 14).
- Nurses plan the successful completion of tasks with the purpose of addressing the needs of patients. They ensure that patients are treated correctly to improve patient health and limit deterioration (Item 13).
- Nurses share their knowledge, since they empower their colleagues by involving them in the management/care of patients with an elevated MEWS (Item 21).

Mean values on leading by example/role-modelling were 3.8 or higher on:
• Nurses are proactive when attending to patients with an elevated MEWS; when patients need to be transferred to a higher level of care, the nurses do it urgently and do not delay transferral (Item 19).

• Nurses visualise what they are obliged to do when assisting with an urgent case, since they have gained experience, e.g., when a patient needs to be transferred, the patient is transferred timeously (Item 14).

• Nurses plan the successful completion of tasks with the purpose of addressing the needs of patients. They ensure that patients are treated correctly to improve patient health and limit deterioration (Item 13).

• Nurses share their knowledge, since they empower their colleagues by involving them in the management/care of patients with an elevated MEWS (Item 21).

Factor 4: Knowledge

The two items with the highest loads for the factor were:

• Senior nurses exercise self-control when the deteriorating condition of patients is reported to them. The senior nurse assesses the patient personally and does not simply remain sitting behind her desk while delegating responsibilities to the reporting nurse (Item 16).

• Nurses develop their abilities to care for patients by attending skills development training interventions (Item 24).

The findings indicated that participants agreed to totally agreed 80.0% and more on:

• Senior nurses exercise self-control when the deteriorating condition of patients is reported. The senior nurses personally assess the patient, and does not simply remain sitting while delegating responsibilities to the reporting nurse (Item 16).

• Nurses act as role-models during teamwork; they involve the reporting nurse in the management/care of the patient with an elevated MEWS (Item 18).

• Nurses develop their abilities to care for patient by attending skills development training interventions (Item 24).

Mean values on leading by example/role-modelling were 3.8 or higher on:

• Senior nurses exercise self-control when the deteriorating condition of patients is reported. The senior nurses personally assess the patient, and does not simply remain sitting while delegating responsibilities to the reporting nurse (Item 16).

• Nurses act as role-models during teamwork; they involve the reporting nurse in the management/care of the patient with an elevated MEWS role-model (Item 18).
• Nurses develop their abilities to care for patient by attending skills development training interventions (Item 24).

Patient outcomes/quality of patient care/patient satisfaction (Items 27-33)

Factor 5: Patient outcome

The two Items with the highest loads for the factor were:

• Nurses portray confidence in their knowledge; patients feel comfortable when they know there is someone who is capable of assisting them (Item 32).

• Nurses are knowledgeable about their patients in terms of their diagnosis, medication, and laboratory results (Item 31).

The findings indicated that participants agreed to totally agreed 80.0% and more on:

• Nurses use their experience to deliver timeous, quality care to patients. They ensure that patients are transferred to an appropriate unit of care as quickly as possible (Item 30).

• Nurses portray confidence in their knowledge; patients feel comfortable when they know there is someone who is capable of assisting them (Item 32).

Mean values on acknowledging outreach as an important service in nursing were 3.8 and higher on:

• Nurses use their experience to deliver timeous quality care to patients. They ensure that patients are transferred to an appropriate unit of care as quickly as possible (Item 30).

• Nurses portray confidence in their knowledge; patients feel comfortable when they know there is someone who is capable of assisting them (Item 32).

Assistance and guidance from CCOS (Items 34-47)

Factor 6: Assistance and guidance

The two items with the highest loads for the factor were:

• Nurses exercise self-control when activating the outreach service and are concerned with taking care of their patients. They ensure that the patient’s condition remains stable, and report to the sister when the outreach service needs to be activated (Item 36).

• Nurses create a safe environment that affirms subordinates’ expertise to call the outreach service in case of an elevated MEWS. The outreach expert guides the nurses by telling them what to do or what to look out for (Item 34).

The findings indicated that participants agreed to totally agreed 80.0% and more on:
Nurses’ behaviour indicates that they understand the purpose of measuring patients’ vital signs, i.e. the goal of the outreach service is to ensure patients are stable; that is the reason why nurses monitor all observations (Item 35).

Nurses are guided by the patients’ MEWS and the MEWS chart, e.g., the MEWS chart tells the nurses what to do and when it becomes necessary to call upon the outreach service. (Item 43)

Mean values on assistance and guidance from CCOS were 3.8 and higher on:

- Nurses’ behaviour indicates that they understand the purpose of measuring patients’ vital signs, e.g. the goals of the outreach service is to ensure patients are stable; that is the reason why nurses monitor all observations. (Item 35)
- Nurses are guided by the patients’ MEWS and the MEWS chart. The MEWS chart tells the nurses what to do and when it becomes necessary to call upon the outreach service (Item 43).

**Factor 7: Responsibility:**

The two items with the highest loads for the factor were:

- Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients’ condition (Item 38).
- Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of the medication their patients need to take (Item 39).

Items with a SD of 1.0 or over were:

- Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients’ condition (Item 38).
- Nurses take responsibility when caring for their patient by ensuring that they have a thorough knowledge of the medication their patients need to take (Item 39).

**Power of self-affirmation** (Items 48-51).

**Factor 8: Power of self-affirmation**

The two items with the highest loads for each factor were:

- Nurses are inclined to behave in a proper manner when they are certain that their endeavours will result in positive outcomes. When nurses do the right thing, the lives of patients are saved (Item 51).
- Nurses are pleased when patients are grateful to them for saving their lives, e.g. a patient thanks the nurse, or a patient proudly tells his or her family that the nurse is taking good care of him or her (Item 50).
The findings indicated that participants agreed to totally agreed 80.0% and more on:

- Nurses are inclined to behave in a proper manner when they are certain that their 
duevours will result in positive outcomes. When nurses do the right thing, the lives of 
patients are saved (Item 51).
- Nurses are pleased when patients are grateful to them for saving their lives, e.g. a patient 
thanks the nurse, or proudly tells his or her family that the nurse is taking good care of 
him or her (Item 50).
- Nurses are proud when they have done something that saves patients’ lives, e.g. a 
patient’s life is saved because the nurses reported an elevated MEWS without delay. 
(Item 49).

Mean values on a sense of being affirmed were 3.8 and higher on:

- Nurses are inclined to behave in a proper manner when they are certain that their 
duevours will result in positive outcomes. When nurses do the right thing, the lives of 
patients are saved (Item 51).
- Nurses are pleased when patients are grateful to them for saving their lives, e.g. a patient 
thanks the nurse, or proudly tells his or her family that the nurse is taking good care of 
him or her (Item 50).
- Nurses are proud when they have done something that saves patients’ lives, e.g. a 
patient’s life is saved because the nurses reported an elevated MEWS without delay. 
(Item 49).

From the above, the items essential very important and important items were determined Table 
6.15.

Table 6.15: Items important for strategy

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Identifier</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential to the strategy</td>
<td>Met 3 criteria</td>
<td>16, 21, 24, 30, 50, 51</td>
</tr>
<tr>
<td>Very important to the strategy</td>
<td>Met 2 criteria</td>
<td>5, 6, 9, 11, 13, 14, 18, 19, 32, 35, 38, 39, 43, 49</td>
</tr>
<tr>
<td>Important to the strategy</td>
<td>Met 1 criterion</td>
<td>4, 8, 12, 20, 31, 34, 36</td>
</tr>
</tbody>
</table>

Chapter 6 provided the empirical findings on the third objective, namely to explore and describe 
the views of nurses on their self-leadership in an outreach service to be initiated at a private 
hospital group in Gauteng (Phase 3). In Chapter 7, self-leadership strategies for nurses in an 
outreach service will be discussed in greater detail.
CHAPTER 7: CONCLUSIONS, STRATEGIES, LIMITATIONS AND RECOMMENDATIONS

7.1 INTRODUCTION
In this chapter, the researcher provides a description of the strategy and its sub-strategies to address Objective 4 of this research. The aim was to develop self-leadership strategies for nurses in an outreach service at a private hospital group in Gauteng (Phase 4). Muller and Bester (2016) define a strategy as a plan of action that prescribes resource allocation and other activities for dealing with the environment and helping the organisation to attain its goal. The researcher formulated clear strategies for the facilitation of self-leadership in agents. The phases of the study formed the steps followed in developing the strategies, namely:

- Phase 1: Observe and record the phenomenon (self-leadership) and analyse the phenomenon.
- Phase 2: Develop and implement a new framework for the phenomenon.
- Phase 3: Enhance constructive thoughts and perceptions of the phenomenon.
- Phase 4: Establish a greater sense of self-leadership in the work.

7.2 OVERVIEW OF THE RESEARCH AND CONCLUSIONS
The purpose of this mixed method research was to: 1) gain insight into nurses’ experience of their self-leadership in the critical care outreach service (CCOS) at a private hospital in Pretoria; and 2) use this information to develop self-leadership strategies that could contribute to the implementation of a CCOS in a private hospital group in Gauteng. An adapted version of Neck and Milliman’s (1994) self-leadership strategic framework was used and inform the methodological steps of this study. Four objectives were set, namely:

1) Explore and describe nurses’ experience regarding their self-leadership in a current CCOS at a private hospital in Pretoria (Phase 1).
2) Develop a conceptual framework on self-leadership of nurses in a current CCOS at a private hospital in Pretoria (Phase 2).
3) Explore and describe nurses’ views on their self-leadership in a CCOS to be initiated at a private hospital group in Gauteng (Phase 3).
4) Develop self-leadership strategies for nurses to be implemented in a CCOS at a private hospital group in Gauteng (Phase 4).

The first step, according to Neck and Milliman’s (1994) self-leadership strategic framework, was to observe, record and analyse the phenomenon ‘self-leadership’ (Phase 1 of this study). The first objective was achieved through eight focus group discussions with nurses from all three nurse categories who were employed at the private hospital. After data was collected and analysed, three themes and seven categories emerged.

Self-motivation in a CCOS by the team’ and ‘Leading (directing) by example/role-modelling to peers and training in self-leadership’ emerged. They focussed on mindfulness during self-leadership through developing self-motivation and self-direction in the patient outreach service. Quality care came to the fore through an outreach service as an essential service in delivering care to at-risk patients. Assistance/support and guidance from the patient outreach service team and challenges in calling the patient outreach experts emerged from the theme Acknowledgement of a patient outreach service in a team to obtain quality patient care is needed. Power of self-affirmation while having a desire to deliver nursing care to a patient can be obtained by staff having a sense of being affirmed for their contributions towards the wellness of patients.

The second step, according to Neck and Milliman’s (1994) self-leadership strategic framework, was to develop a new framework for self-leadership and to replace the old one with it (Phase 2). The survey list of Dickoff et al. (1968) provided answers to six key questions on self-leadership of nurses and provided the reasoning map for the conceptual framework. (Table 7.1)

The context of this activity was CCOS, while the agent in the CCOS was the nurse expert who liaised with the medical practitioner when support was needed. The recipient of self-leadership (activity) is the nurse working in general wards, and the secondary recipient refers to the patient at risk of deteriorating or the already deteriorating patient who benefits from the service. The nurse demonstrates his or her competencies in four processes, namely: 1) self-motivation; 2) self-direction through acting as a role-model; 3) acknowledgement of own role in CCOS; and 4) self-affirmation. The guiding procedures in self-leadership of nurses in CCOS are self-motivation, role-modelling, teamwork and self-affirmation. The endpoint refers to the activities (strategies) the nurse engages in to mobilise his or her self-leadership in the CCOS. The conclusions made were organised according to the survey list of Dickoff et al (1968) which
provided the overall conceptual framework for the study. served as the foundation for the creation of the questionnaire. The conceptual framework served as a point of departure from which a questionnaire was created converging strategies that nurses apply to lead themselves in implementing the CCOS.

The findings of this study also indicated the underlying assumptions for the phenomenon as two aspects of self-leadership, one personal and one professional; namely being mindful of oneself in implementing nursing care for a deteriorating patient, and secondly the importance for high-quality training of nurses when implementing a high standard of care in a Critical Care Outreach Services.

The third step in Neck and Milliman’s (1994) self-leadership strategic framework was to explore the perceptions of the phenomenon based on the framework (Phase 3). The participants’ ages were between 30 and 63 years, with an average age of 45.51. The majority fell in the age group 40 to 44 years (Figure 6.1). Just over half the participants had been nurse managers for over six years and half had a nursing management qualification. Just over half (54.1%) of them said that the CCOS was available in their hospitals, while nearly a third of the nurse managers indicated that there were no plans to implement the CCOS in their hospital.

More than 90.0% of the participants indicated that their unit applied MEWS when measuring patients’ vital data. The factor analysis extracted eight factors, and it was deemed important to describe the items and select items that met specified criteria in the phase of developing strategies on self-leadership among nurses in CCOS.

The fourth step, according to Neck and Milliman (1994), was to create a work environment with a greater sense of self-leadership (Phase 4). Self-leadership strategies for nurses in a CCOS were developed from the results of Phase 3. The objectives and actions in the strategies were based on the findings of items analysed (Point 7.3).
7.3 SELF-LEADERSHIP STRATEGIES FOR NURSES IN AN OUTREACH SERVICE

7.3.1 Context and role-players of the strategies
The context of the strategies is to facilitate self-leadership among the CCOS nurses in a private healthcare group. CCOS is delivered by a team with a number of roles, such as: identifying and responding to deteriorating ward patients; supporting ward staff and patients after discharge from ICU; and training and educating ward staff (Pirret et al., 2015:135). The critical care outreach team (CCOT) members are comprised of a medical practitioner and nurses. It is predominantly nurse-led (by a nurse expert) and nurse members included nurses from all categories who work in general wards in the private hospital group in Gauteng, serving a patient at risk of deteriorating or a deteriorating patient. Work environments that are supportive of professional practice are associated with better nursing and patient outcomes (Stein-Parbury, 2017:288). Appu et al. (2015:177) are of the opinion that the support of the supervisor (nurse expert) influences the employee’s (nurses) creative behaviour in the workplace, which in turn influences/impacts on the employee self-motivation and self-leadership in providing nursing care to deteriorating patients. The CCOS has set MEWS (cue) calling criteria to be used for activation of a critical care outreach (CCO) nurse expert. The CCO nurse expert (agent) with the required skills and knowledge (competence) guides the nurses in the wards to nurse the patients at risk of deteriorating, while being directed by the ethical framework of their code of practice and ethics.

7.3.2 Purpose of the strategies
Five strategies were developed that related to (i) self-motivation, (ii) leading by example/role-modelling, (iii) patient outcome/quality of patient care/patient satisfaction, (iv) assistance and guidance from the patient outreach service team and (v) power of self-affirmation. The purpose of the strategies was to each outline objectives towards self-leadership, each with a proposed action plan. Each of the plans was aimed at facilitating self-leadership strategies among nurses in a CCOS to improve the health outcomes of the deteriorating patient in a private healthcare organisation in Gauteng.
7.3.3 Overview of the components of the strategies

The presented strategies provide answers to the fourth research question: What self-leadership strategies can be implemented in a patient outreach service at a private hospital group in Gauteng?

From the qualitative data analysis, certain categories and sub-categories emerged (Phase 1) from which a questionnaire was developed. The factor analysis (Table 7.1) that was conducted was used as the departure point for the development of self-leadership strategies for the nurses in the CCOS. The main strategies relate to the procedures of (i) self-motivation, (ii) leading by example/role-modelling, (iii) patient outcomes/quality of patient care/patient satisfaction, (iv) assistance and guidance from the patient outreach service team, and (v) power of self-affirmation.

The strategies were seen in the theoretical framework of constructive thought pattern, natural reward and behavioural focused approaches.

Table 7.1: Strategies

<table>
<thead>
<tr>
<th>Findings</th>
<th>Naming of strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-motivation</td>
<td>Self-motivation</td>
</tr>
<tr>
<td></td>
<td>Authority</td>
</tr>
<tr>
<td>Leading by example/role-modelling</td>
<td>Role-modelling</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
</tr>
<tr>
<td>Patient outcomes/quality of patient care/patient satisfaction</td>
<td>Patient outcome</td>
</tr>
<tr>
<td>Assistance and guidance from the patient outreach service team</td>
<td>Assistance and guidance</td>
</tr>
<tr>
<td></td>
<td>Responsibility</td>
</tr>
<tr>
<td>Power of self-affirmation</td>
<td>Power of self-affirmation</td>
</tr>
</tbody>
</table>

Each of the strategies has an action plan. The action plan aimed to set out objectives according to principles adapted from Quirk and Fandt (2000:89):

1. Create SMART objectives identified from the data gathered and articulate them with the purpose of the strategy. Penner (2013:152) explains the acronym SMART as follows:
   - **Specific**: A clear statement of what to achieve.
   - **Measurable**: Objectives should be quantifiable.
   - **Achievable**: It must be possible for the nurse to attain these goals.
   - **Realistic**: The objectives should be realistic, and results focused.
- **Time-orientated**: A time interval should be specified when a goal is to be achieved.

2. Prioritise the goals and explain or rank their importance for promoting health.

3. Leverage actions for each goal. Identify and be clear about actions to address these gaps.

4. Compile a schedule for activities and plan the steps by answering “how” to clarify the way in which the actions should be addressed.

5. Establish objective, quantifiable standards (measures for the actions).

6. Establish realistic timelines for accomplishing the goals and sustaining them.

In the quantitative phase, the researcher identified important variables regarding self-leadership among nurses in a CCOS, which should be included in a strategy. The items were set in sequence of importance for the strategy (Point 6.4) as:

- **essential**
- **very important**
- **important**

### 7.3.4 Strategic plans of strategies

Van der Horst and McDonald (2003:121) define strategy as a plan that outlines the approach you intend to take in order to achieve the desired outcome or result, and each plan sets out the objectives, related items, actions, role-players and timeframe.

#### 7.3.4.1 Self-motivation

Self-motivation originates from within one-self. A nurse needs to be self-motivated to nurse a patient at risk of deteriorating or deteriorating patient. Self-motivation reflects the individual’s own self-driven efforts, which are internally based (Ross, 2015:64). Kokemuller (2018) mentions that self-leadership provides employees with more responsibility, autonomy and control over the work process and still allows for external influences from the management (like empowering actions from the leader) to create intrinsic rewards. As founded by this study nurses felt that they needed self-motivation in order to acquire their self-leadership in the CCOS. The self-motivation strategy is focused on increasing self-motivation among nurses to acquire self-leadership in the outreach service (Table 7.2). The two factors (i) self-motivation and (ii) authority extracted from the factor analysis were used to develop objectives.

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7.3.4.2 Leading by example/role-modelling
Mackay (2015:3) states that one of the most successful ways of influencing staff (nurses) and improving performance in the workplace is to adopt the mind-set of a role-model. Role-models influence how people think, feel and perform and actively work to control the perceptions others have of them (Mackay, 2015:4). Nurses as role-models lead by example and could motivate other nurses. As role-models, nurses share their knowledge and involve their colleagues in the nursing care of their patients. The aim of this strategy is to empower nurses to become role-models in the CCOS and to lead by example in order to acquire their self-leadership in the outreach service (Table 7.3). The two factors (i) role-modelling and (ii) knowledge extracted from the factor analysis were used to develop objectives.

7.3.4.3 Patient outcomes, quality of patient care and patient satisfaction
CCOS has been associated with a reduction in hospital mortality and cardiopulmonary arrest (Maharaj, Raffaele & Wendon, 2015). Research has shown that CCOS improves nurses’ knowledge and patient care as well as patient satisfaction (Jeddian, et al., 2017:360). This strategy on patient outcomes, quality of patient care and patient satisfaction aims to improve patients’ outcomes by improving the quality of patient care and patient satisfaction through the creation of a feeling of competence and self-determination among the nurses, which in turn will energise performance-enhancing task-related behaviour (Table 7.4).

7.3.4.4 Assistance and guidance from the CCOT
The outreach expert empowers nurses by providing assistance and guidance to nurses who are nursing their patient at risk of deteriorating or deteriorating patient. The outreach expert provides support to the nurses when needed. The strategy on assistance and guidance from the CCOT aims to assist nurses in the outreach service and to empower them to engage in self-leading behaviours. The two factors (i) assistance and guidance and (ii) responsibility extracted from the factor analysis were used to develop objectives (Table 7.5).

7.3.4.5 Power of self-affirmation
The self-affirmation theory (Steele, 1988) proposes that individuals who affirm values central to their self-concept can control the negative effects of psychological threats. Showing appreciation to nurses make them proud. The positive experience associated with self-affirmation is a natural reward to the nurse and facilitates a feeling of being competent. The self-
affirmation strategy will create a feeling of appreciation among the nurses, which will in turn be associated with a positive experience (a natural reward) for the nurses (Table 7.6).
### Table 7.2: Self-motivation strategy

<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
</table>
| To increase self-motivation in nurses to nurse a patient at risk of deteriorating or deteriorating patient | 5 | A nurse should be aware and have a sense of responsibility to deliver care to patients at risk of deteriorating or deteriorating patient.  
- Utilise your (nurses) self-efficacy for example asking for help.  
- Be specific and clear about what is expected from nurses when nursing patients.  
- Be involved nurses in daily planning of nursing interventions for patient.  
- Use available support and resources to nurses for nursing their patient.  
- Accept their responsibility towards the caring and nursing of patients. | Outside experts  
Nurse managers  
Outreach expert  
Nurses | Daily |
| Role modelling is essential for nurses to exercise self-control when nursing a deteriorating patient | 6 | Role modelling is essential for nurses to exercise self-control when nursing a deteriorating patient.  
- Visualise yourself (nurses) acting with self-control and self-restraint for example when following the MEWS guidelines.  
- Visualise that you (nurses) are acting calmly and nursing a deteriorating patient with self-mastery.  
- Develop clear goals and have an execution plan for a patient.  
- Encourage nurses to take positive steps during interventions.  
- Focus on the positive feeling when a deteriorating patient’s condition improve (self-reward) for example by following the MEWS guidelines.  
- Encourage nurses to call outreach team when a patient’s MEWS is elevated. | Outside experts  
Outreach experts  
Nurse managers  
Nurses | 3 Monthly |
<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
</table>
| To increase self-motivation in nurses to nurse a patient at risk of deteriorating or deteriorating patient | 4           | Nurses should stay current in clinical observation skills to identify a patient at risk of deteriorating or deteriorating patient.  
  - Services should support a learning environment for nurses when identifying a deteriorating patient.  
  - Seniors to guide nurses in the right direction when they use their clinical observation skills to identify a deteriorating patient.  
  - Partaking in a team and being assured of the value of each member can increase self-motivation of nurses when they are identifying a deteriorating patient.  
  - Provide latest training and trends to nurses when they are identifying a deteriorating patient.  
  - Peers to recognise the efforts of nurses – thank them for a job done well. | Outreach experts  
Clinical facilitator  
CNS  
Nurses  
Senior management  
Skill development officer | Daily  
Continuous |
| Encourage nurses to take ownership of nursing care of a patient at risk of deteriorating.  
  - Nurses to take initiative in performing tasks.  
  - Nurses to focus one’s attention on own responsibility to act when a patient is at risk of deteriorating.  
  - Buy in the healthcare organisation/ward vision with peers.  
  - Be involve with others in goal-setting and planning activities.  
  - Delegate authority to the junior nurses in nursing care of the patient. | 8           | Outside experts  
Nurse managers  
Outreach experts  
Nurses | Monthly |
| To grant the nurse authority to nurse a patient at risk of deteriorating or deteriorating | 9           | Use nurses authority to monitor patients with an elevated MEWS.  
  - Be self-confident and aware of your (nurses) knowledge and clinical observation skills to monitor a patient vital data.  
  - Plan the nursing interventions you (nurse) need to do to address a patient needs with an elevated MEWS. | Nurse managers  
Outreach expert  
Nurses | Daily |
<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
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</thead>
</table>
| deteriorating patient      | 11         | Nurses must cultivate their awareness about their authority as decision makers to advocate for patients in calling an outreach expert if needed.  
- Ensure that nurses know their authority to call the outreach expert when needed.  
- Take ownership for your (nurses) decisions to advocate for patients | Outside experts Outreach experts Nurses | Monthly  |
|                            |            |                                                                                                                                                                                                                                                                                                                                                                                                             |                                   |           |
|                            | 12         | Nurses should take positive steps during interventions.  
- Encourage nurses to be pro-active during interventions (competent).  
- Focus (self-talk) taking positive steps during interventions for example what you need to do after measuring a patient’s vital data  
- Be confident in the positive steps taken during interventions for example to have baseline vital data available. | Nurse managers Outreach experts Nurses | Daily     |
Table 7.3: Role-modelling/leading-by-example strategy

<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
</table>
| To empower nurses to act as role-models when nursing a deteriorating patient | 21         | Nurses need to share their knowledge to empower their colleagues.  
- Involve colleagues in the nursing care of patients with an elevated MEWS.  
- Ask colleagues for feedback and questions regarding elevated MEWS for personal development.  
- Encourage colleagues to ask questions. | Outreach expert  
Clinical nurse specialist  
Clinical facilitator  
Nurses | Daily      |
| Nurses need to plan the successful completion of tasks with the purpose of addressing the needs of patients.  
- Have the competencies to assess an at-risk or deteriorating patient and to plan tasks that need to be executed.  
- Nurses should visualise the actions needed to address the patient’s needs.  
- Nurses should change their behaviour to ensure patients are treated correctly to limit deterioration for example calling outreach experts without delay | Outreach expert  
Clinical nurse specialist  
Clinical facilitator  
Nurses | Monthly    |
| Nurses need to assist and empower other nurses with urgent cases (e.g. the timely transfer of a patient to a higher level of nursing care).  
- Be inspiring nurses to involve others in the nursing care of patients.  
- Be aware of your (nurses) knowledge and skills to assist nurses with urgent cases  
- Be confident in your (nurses) experience to assist and empower other nurses | Outreach experts  
Nurses | Daily      |
<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
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</thead>
</table>
| To increase the nurses’ knowledge about nursing a patient at risk of deteriorating or a deteriorating patient | 16   | The senior nurse needs to exercise self-control by personally assessing a deteriorating patient when reported to him/her.  
- The senior nurse needs to take self-ownership of assessing the patient.  
- The nurse needs to attend training regarding assessing a deteriorating patient.  
- The nurse take ownership to enhance skills and knowledge regarding assessing a deteriorating patient. | Outside experts Outreach experts Clinical nurse specialist Clinical facilitator Nurses | Daily |
| | 20 | Nurse need to clearly communicate to other nurses what is expected of them.  
- Nurses need to be aware of their skills in communication, to ensure that the other nurses understood them.  
- Nurses need to understand their role in the use of appropriate language when communicating with other nurses. | Outside experts Nurse managers Nurses | 6 Monthly |
| | 19 | Encourage nurses to be pro-active when attending to patients with an elevated MEWS.  
- Nurses to take the lead in the nursing care of patients at risk of deteriorating or the deteriorating patient.  
- Senior to inspire nurses to take control and to act without delay in the nursing of patients at risk of deteriorating or deteriorating patients. | Nurse managers Outreach experts Nurses | Daily |
<p>| | 24 | Nurses need to attend skills development training in order to develop their skills in nursing a deteriorating patient. | Outside experts Outreach experts Clinical nurse specialist | Monthly |</p>
<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
</table>
|           |            | • Develop in-service training programmes to empower the nurses’ knowledge and competence.  
|           |            | • Create a climate of knowledge-sharing among nurses.  
|           |            | • Provide opportunities for the nurse to gain access to information to broaden their knowledge.  
|           |            | • Re-enforce the nurses’ knowledge by putting posters on walls and creating certain health-awareness days.  
|           |            | • Implement discussion forums regarding the nursing care of patients in the CCOS. | Clinical facilitator  
|           |            |       | Nurses | |
| 18        |            | Nurses need to involve the reporting nurse in the nursing care of the patient with an elevated MEWS.  
|           |            | • Nurses should ask the reporting nurse to help with the nursing care of the patient with an elevated MEWS. | Unit manager  
|           |            |       | Outreach experts  
|           |            |       | Nurses | Daily |
### Table 7.4: Patient outcomes, quality of patient care and patient satisfaction strategy

<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
</table>
| To improve patient outcomes, quality of patient care and patient satisfaction | 30 | Encourage nurses to use their experience to deliver timely quality care.  
- Nurses need to focus on the experience they have in nursing patients.  
- Nurses need insight (self-perception) into the MEWS to ensure patients receive appropriate care.  
- Expose nurses to learning opportunities to improve their experience in the nursing care of a patient at risk of deteriorating or the deteriorating patient.  
- Be confident in your (nurses) experience to deliver timely care for example to ensure patient transferred to appropriate unit of care as quickly as possible  
- Be aware of your (nurse) authority and accountability to deliver timely quality care. | Nurse managers  
Outreach expert  
Clinical nurse specialist  
Clinical facilitator  
Nurses | Daily |
| Improve nurses’ confidence through enhancing their knowledge.  
- Nurses to assesses their own knowledge and skills to recognise a patient at risk of deteriorating or deteriorating  
- Build the nurses’ confidence by providing opportunities for training.  
- Encourage nurses to set goals to increase their knowledge about the nursing care of patients at risk of deteriorating or the deteriorating patient.  
- Encourage nurses to focus on the positive feelings they experience when patients are satisfied. | Clinical facilitator  
External experts  
Nurses | Monthly |

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<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td></td>
<td>Ensure that nurses are knowledgeable about their patients in terms of their diagnosis, medication and results (blood results, x-ray results).&lt;br&gt;- Provide nurses access to information about patients’ diagnosis, medication and results.&lt;br&gt;- Provide training regarding diagnosis, medication, blood results and x-ray.&lt;br&gt;- Be enthusiastic about gaining knowledge about your patient.&lt;br&gt;- Utilise your (nurses) autonomy to gain knowledge on your patients diagnosis, conditions, medication and results</td>
<td>Clinical facilitator&lt;br&gt;Outreach experts&lt;br&gt;Nurses</td>
<td>Daily</td>
</tr>
</tbody>
</table>
Table 7.5: Assistance and guidance from CCOT strategy

<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide assistance and guidance to nurses in CCOS</td>
<td>35, 43</td>
<td>Self-ownership of nurses for education on the purpose of CCOS is needed.</td>
<td>Nurse managers</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Nurses need to be educated on the importance of monitoring patients’ vital data.</td>
<td>Outreach expert</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Attend training to calculate a patient’s MEWS.</td>
<td>Outside experts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide nurses with MEWS charts to enable them to be knowledgeable around calculating a patient’s MEWS.</td>
<td>Nurses</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Management to encourage empower of nurses to interpret a patient’s MEWS.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>Empower nurses to call on outreach experts to assistance with the nursing care of a patient at risk of deteriorating or deteriorating patient.</td>
<td>Outreach experts</td>
<td>Daily</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide MEWS/CCOS algorithm chart in wards as cues on when to call the outreach expert.</td>
<td>Clinical facilitator</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide feedback to ward nurses on patients who have been transferred to a higher level of nursing care.</td>
<td>Nurses</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Share the vision that CCOS will assist you (nurses) in the management of deteriorating patient.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses should be aware of their responsibility to call the outreach expert</td>
<td>38, 39</td>
<td>Nurses should be aware of their responsibilities to have a thorough knowledge about their patient’s condition.</td>
<td>Nurse managers</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Acknowledge specific about tasks and responsibilities.</td>
<td>Outreach experts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Use support and resources to serve the patient.</td>
<td>Nurses</td>
<td></td>
</tr>
</tbody>
</table>
Table 7.6: Power of self-affirmation strategy

<table>
<thead>
<tr>
<th>Objective</th>
<th>Importance</th>
<th>Actions</th>
<th>Role-players</th>
<th>Timeframe</th>
</tr>
</thead>
</table>
| To empower nurses to focus on self-affirmation | 50 | Enhance nurses’ self-affirmation.  
- Provide feedback to nurses on accomplishments e.g. when patients express their gratitude.  
- Focus on the positive experiences among nurses and patients.  
- Nurses to be part and create pleasant and enjoyable work practices for the nurses | Nurse managers  
Outreach expert  
Nurses nursing patients  
Nurses | Weekly |
| | 51 | Emphasise that correct behaviour would result in positive outcomes for patients.  
- Provide feedback on positive outcomes for patients  
- Formal discussion on correct behaviour and positive patient outcomes (case study) | Nurse managers  
Outreach expert  
Nurses | Daily |
| | 49 | Focus on positive feelings that the nurse experience when he or she has acted in the correct way.  
- Acknowledge correct behaviour that has resulted in saving a patient’s life. | Nurse managers  
Outreach expert  
Nurses | Daily |
7.4 **RECOMMENDATIONS FOR NURSING PRACTICE, EDUCATION AND RESEARCH**

Based on the findings of this study, the recommended strategies can be implemented in nursing practice and research.

### 7.4.1 Dissemination of the strategy

This strategy is the first of its kind to be used in the CCOS. The researcher will **disseminate the strategy** in the following ways:

- The strategy to be communicated in writing to the head office of the private hospital group for endorsement. This will be done to create support and to encourage successful implementation.
- The strategy will be communicated to the target group at the different hospitals of the private hospital group.
- The strategy can be used in facilitating training programmes for CCOSs.
- The strategy will be presented at seminars and workshops arranged by organisations in leadership development.
- The strategy will be shared with managers and academic peers through presentations at scientific research conferences.
- The findings will be published in a peer reviewed journal (available online) to increase accessibility.

### 7.4.2 Recommendations for nursing practice and education

The findings of this study have highlighted the nurses’ experiences of their self-leadership in an outreach service. There is a need for self-leadership among nurses, and nurses should be empowered to influence their own behaviour in an outreach service. The implementation of self-leadership strategies could benefit the nursing practice in the following ways:

- The nurses in the outreach programme could be empowered to lead themselves by obtaining the strategy.
- The quality of nursing care and patient outcome could be protected with knowledgeable and competent nursing workforce in the outreach service. The improvement of quality patient care and patient outcomes are possibilities, since nurses could have the knowledge to recognise a deteriorating patient and not overlook the significance of ward-based observations.
• The nurses could become confident in caring for and managing their patients if trained in the strategy.

• Self-leadership among nurses can empower nurses to feel responsible for their patients and to be role-models for other nurses, for e.g. by using the MEWS correctly.

• Self-leadership among the nurses in the outreach service could create self-motivated nurses who are pro-active in the nursing care and management of their patients who are at risk of deteriorating or who are deteriorating.

7.4.3 **Recommendations for nursing research**

• The implementation of self-leadership strategies among nurses in the outreach service of private hospitals could be evaluated, when complete. The objectives of the strategy could be used to measure if it was met. Audits could be done for example improvement of quality nursing care, patient outcomes.

• Research can be done on how nurses experience their self-leadership when caring for patients in other hospitals for example in the public sector.

7.5 **LIMITATIONS OF THE STUDY**

The following limitations to this study should be taken into consideration:

• The study was conducted using participants from one private hospital care group, thus the strategies cannot be generalised to the other three private hospital groups.

• It was a challenge to obtain feedback in the quantitative phase as various hospitals had to be visited in busy environments.

7.6 **CONTRIBUTION OF THE STUDY**

CCOS is a fairly new service in South Africa, consequently no studies on CCOSs in South Africa have been conducted. The researcher developed a conceptual framework and strategies for self-leadership among nurses in an outreach service, thereby enhancing the nursing science in the field of nursing management and leadership. This is the first study globally on self-leadership strategies among nurses, specific in the context of this study.

The study provides insight into the concept of self-leadership in the context of critical care nursing in a private hospital setting. The conceptual framework and formulated strategies contribute towards the professional development of nurses, and consequently improves the
healthcare environment of a CCOS. The outcome of these strategies could enhance members of a multi-disciplinary team’s awareness of their self-leadership when treating a deteriorating patient.

7.7 SUMMARY
This chapter presented the final phase (Phase 4) of a mixed method design in developing self-leadership strategies for members in an outreach service. The researcher made recommendations for the dissemination of the strategy and for nursing education, management and research. The researcher followed ethical principles throughout the study and outlined the limitations that were encountered while conducting the research as clearly as possible. Lastly, the contribution of knowledge to the nursing science was described.
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ANNEXURE A: Request letter to the private hospital group

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-9592274, Fax: 27 21-9592271
E-mail: cprinsloo6x21@gmail.com

The Hospital Manager
Netcare Hospital Group
REQUESTING PERMISSION TO CONDUCT A RESEARCH STUDY IN YOUR HOSPITAL

I hereby request to conduct a research study in your hospital. The study is entitled: Self-leadership strategies for nurses in a critical care outreach service at a private hospital Group in Gauteng. This study is part of the requirements for acquiring a PhD Degree in Nursing Management. The study will be done under the supervision and guidance of Professor K. Jooste of the School of Nursing, University of The Western Cape.

The research aims to develop self-leadership strategies for nurses in an outreach service in a private hospital group. The researcher has been working for the past 6 years as part of the outreach service and has noted that there is frequently a lack in activating the outreach service or a delay in activating the outreach service as indicated by the MEWS.

To improve the quality of service to deteriorating patient, I decided to develop strategies of self-leadership for nurses in a critical care outreach service.

Data collection will be obtained in two phases:
Focus groups will be held at Unitas hospital in Pretoria with the nurses who form part of the outreach service. Focus groups will be held in a private room as arranged, and it will take about 60 minutes to conduct an interview.

Questionnaires will be handed out to the ward nurse managers of all the private hospitals in the Netcare Hospital Group in Gauteng and online questionnaire will be emailed. Participants will complete one of these questionnaires in their own time that will take about 30 minutes.

The researcher will adhere to the rights of participants to privacy and confidentiality. The identity of all respondents will be protected; pseudonyms (fictitious names) will be used during focus groups and field notes instead of their real name. The questionnaires will be allocated code...
numbers. The name of the hospital or hospital group will not appear on the research report. All records will be kept for 5 years after publication of the results after which it will be destroyed. Only the supervisor, researcher, independent coder and statistician will have access to the data. The participants will not be coerced into participation and should they wish to withdraw at any time during the study, their wish will be respected. The researcher will ensure adherence to the highest standards of research planning, implementation and reporting.

If you have any questions about the research study itself, please contact:
Carine Prinsloo
P.O. Box 4317
The Reeds
0158
Cell Phone: 0726176020
Email: cprinsloo6x21@gmail.com

Should you have any questions with regard to this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:
Head of Department
Prof Yinka Adejumo 021 9593024
Email :- oadejumo@uwc.ac.za

Dean of the Faculty of Community and Health Sciences
Prof Hester Klopper 021 9592631 Email: hklopper@uwc.ac.za
University of the Western Cape
Private Bag X17
Bellville 7535
Head of Department
Dean of the Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535

This research has been approved by the Senate Research Committee and Ethics Committee of the University of the Western Cape.
ANNEXURE B: Ethical clearance

OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH DEVELOPMENT

UNIVERSITY OF THE WESTERN CAPE

21 August 2012

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape has approved the methodology and ethics of the following research project by:
Mrs C Filmaneo (School of Nursing)

Research Project: Self-leadership strategies of nurses in an outreach service at a private hospital group in Gauteng.

Registration no: 127/6

Any amendments, extensions or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

http://etd.uwc.ac.za/
ANNEXURE C: Approval letter from private hospital group

Netcare Management (Pty) Limited

Ms C Prinsloo
E-mail: cornelloc5x21@gmail.com
Ms Priestan

RE: SELF-LEADERSHIP STRATEGIES FOR NURSES IN A CRITICAL CARE OUTREACH SERVICE AT A PRIVATE HOSPITAL GROUP IN GAUTENG

The above-mentioned research was reviewed by the Research Operational Committee's delegated members and it is with pleasure that we inform you that your application to conduct this research at Netcare Kornbraak, Park Lane, Olivedale, Most, Milnerton, Johannesburg Hospitals, has been approved subject to the following:

i) Research may now commence with the FINAL APPROVAL from the Sustainability Committee of Netcare (Research Operational Committee).
ii) All information with regards to Netcare will be treated as confidential.
iii) Netcare's name will not be mentioned without written consent from the Sustainability Committee of Netcare (Research Operational Committee).
iv) All legal requirements with regards to patient rights and confidentiality will be complied with.
v) Insurance will be provided and maintained for the duration of the research. This cover provided in the data sheet must also protect both the staff and the hospital facility from potential liability.
vi) In accordance with MCC approval, that medication will be administered by or under direction of the authorized TGA.
vii) The research will be conducted in compliance with the GUIDELINES FOR GOOD PRACTICE IN THE CONDUCT OF CLINICAL TRIALS IN HUMAN PARTICIPANTS IN SOUTH AFRICA (2000).
viii) Netcare must be furnished with a STATUS REPORT on the progress of the study at least annually on 30th September irrespective of the date of approval from

http://etd.uwc.ac.za/
Sustainability Committee of Netcare (Research Operational Committee) as well as a FINAL REPORT with reference to intention to publish and probable journals for publication, on completion of the study.

ix) A copy of the research report will be provided to Netcare (Research Operational Committee) once it is finally approved by the tertiary institution, or once complete.

x) Netcare has the right to implement any Best Practice recommendations from the research.

xi) Netcare reserves the right to withdraw the approval for research at any time during the process, should the research prove to be detrimental to the subjects/Netcare or should the researcher not comply with the conditions of approval.

xii) APPROVAL IS VALID FOR A PERIOD OF 36 MONTHS FROM DATE OF THIS LETTER.

We wish you success in your research.

Yours faithfully

Dr CW Folscher
Full member: Research Operational Committee evaluating research applications as per Management and Governance Policy

Shannon Nell
Chairperson: Research Operational Committee
Network Healthcare Holdings Limited (Netcare)

Date: 19/08/2019

http://etd.uwc.ac.za/
ANNEXURE D: Information sheet focus groups

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-9592274, Fax: 27 21-9592271
E-mail: cprinsloo6x21@gmail.com

INFORMATION SHEET
Project Title: Self-leadership strategies for nurses in an outreach service at a private hospital Group in Gauteng

What is this study about?
I am Carine Prinsloo, registered for a PhD in Nursing Management at the University of the Western Cape with Prof K Jooste as my supervisor. I invite you to participate in this research project because you work in the private hospital in Pretoria, which forms part from the Outreach service of the hospital. The purpose of this study is to understand the experiences of nurses on how self-leadership of nurses contribute to the patient critical care outreach service in general wards in a private hospital in Pretoria, in order to develop self-leadership strategies to contribute to the critical care outreach service in a Private hospital Group in Gauteng.

What will I be asked to do if I agree to participate?
Focus groups will be conducted at the private hospital in Pretoria, in a suitable room, that ensures privacy and comfort for participants. Each focus group will consist of 10 (ten) participants that will be nurses from the same category as yourself (professional nurses, staff nurses or auxiliary nurses).
The focus groups will each last around 60 minutes. The questions that would be asked are “How do you use influence to obtain the goals of the outreach service? What role does your authority play in obtaining the desired goals of the service? What power sources do you use in the service?”. Written consent for the interviews to be voice recorded will also be needed. Voice recordings of the interviews will be stored under lock and key for five years after the results of the project has been published before it will be destroyed. Only my supervisors, an independent coder and the researcher (me) will have access to these recordings. The researcher will take

http://etd.uwc.ac.za/
written field notes during the interviews. However, the participants’ names will not be recorded in these notes.

**Would my participation in this study be kept confidential?**

We will do everything within our power to keep your personal information confidential. Participants in the focus group will be encouraged to keep information obtained confidential. To help protect your confidentiality, pseudonyms (fictitious names) will be used in field notes instead of your real name. It would prevent any other person from linking specific data to you. All information obtained by means of voice recording will be stored under lock and key for five years after publication of the results. As the researcher cannot ensure confidentiality, you **should undertake to keep all discussions in the group confidential and not to divulge the content of the focus group to anyone outside of this group.** The publication of the results of the project, will not mention any names of participants.

**What are the risks of this research?**

There are no known risks associated with participating in this research project.

**What are the benefits of this research?**

The results may assist the researcher to explore and describe the experiences of nurses on self-leadership in an outreach service at a private hospital in Pretoria. Information acquired during this research project will be shared with all participants prior to public dissemination. Results of the study will be published in an accredited journal. Other people might benefit from this study by obtaining self-leadership strategies for an outreach service.

**Am I obliged to take part in this research project and can I stop participating at any time?**

Your participation in this research project is completely free and voluntary. You may choose not to take part at all. If you decide to participate in this research, you may withdraw at any time during the study. If you decide to withdraw from the study, you will not be penalised in any way, neither will you forfeit any benefits to which you otherwise qualify.

**How do I get my questions answered?**

This research is being conducted by Carine Prinsloo, registered at the College of Nursing, at the University of the Western Cape. If you have any questions about the research study itself, please contact:
Carine Prinsloo
P.O. Box 4317
The Reeds
0158
Cell Phone: 0726176020
Email: cprinsloo6x21@gmail.com

Should you have any questions with regard to this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:
Head of Department Prof Yinka Adejumo 021 9593024
Email: oadejumo@uwc.ac.za

Dean of the Faculty of Community and Health Sciences
Prof Hester Klopper 021 9592631Email: hsklopper@uwc.ac.za
University of the Western Cape
Private Bag X17
Bellville 7535
Head of Department
Dean of the Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535

This research has been approved by the Senate Research Committee and Ethics Committee of the University of the Western Cape.
ANNEXURE E: Written consent focus groups

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-9592274, Fax: 27 21-9592271
E-mail: cprinsloo6x21@gmail.com

WRITTEN INFORMED CONSENT
Letter of request to participate in the study

Title of Research Project: the development of self-leadership strategies for nurses in a critical care outreach service at a private hospital Group in Gauteng

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way. I undertake to keep all discussions in the focus group confidential and not to divulge the content of the focus group to anyone outside of this group.

Participant’s name………………………..
Participant’s signature…………………………..
I further agree that the interview be voice recorded.
Participant’s signature…………………………..
I further agree that the researcher takes field notes.
Participant’s signature…………………………..
Witness……………………………………
Date…………………………

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator’s Name: Prof Karien Jooste
University of the Western Cape
Private Bag X17, Bellville 7535
ANNEXURE F: Focus group discussion guide

Consent Process
Consent forms for focus group participants are completed in advance by all those seeking to participate.

Thank you for agreeing to participate. We are very interested to understand how you experience your self-leadership in the current outreach service.

The purpose of this research is to understand your experience of your self-leadership in the current outreach service to develop self-leadership strategies that could contribute to the implementation of an outreach service (for the broader population of nurses).

- The information you give us is completely confidential, and we will not associate your name with anything you say in the focus group.
- We would like to record the focus groups so that we can make sure to capture the thoughts, opinions, and ideas we hear from the group. No names will be attached to the focus groups and the recordings will be destroyed as soon as they are transcribed.
- You may refuse to answer any question or withdraw from the research study at any time.
- We understand how important it is that this information is kept private and confidential. We ask participants to respect each other’s confidentiality.
- If you have any questions now or after the focus group discussion, you can always contact a study team member like me, or you can call the project team leaders whose names and phone numbers are on this form.

Introduction:

1. Welcome
   Introduce yourself and the field worker who will be taking notes.
   Review the following:
   - Who we are and what we’re trying to do
   - What will be done with this information
   - Reason for asking you to participate

2. Explanation of the process
   Ask the group if anyone has participated in a focus group before. Explain that focus groups are being used more and more often in health and human services research.
   About focus groups
• We learn from you (positive and negative)
• Not trying to achieve consensus, we’re gathering information
• No virtue in long lists: we’re looking for priority

Logistics
• Focus group will last about one hour
• Feel free to move around

3. Ground Rules
Ask the group to suggest some ground rules. After they brainstorm some, make sure the following are on the list.
• Everyone should participate.
• Information provided in the focus group must be kept confidential
• Stay with the group and please don’t have side conversations
• Turn off cell phones if possible
• Have fun

4. Turn on digital Recorder

5. Ask the group if there are any questions before we get started and address those questions.

6. Introductions
• Go around table: job here, which unit/ward you are working in

When discussion begins, make sure to give people time to think before answering the questions and don’t move too quickly. Use the probes to make sure that all issues are addressed but move on when you feel you are starting to hear repetitive information (https://www.wcasa.org/file_open.php?id=1039 adapted).

Probing questions:
• Tell me about the outreach service
• What do you understand around the goals of the outreach service or desired goals of the service?”.
ANNEXURE G: Independent coder certificate

Qualitative Data Analysis

PhD in Nursing Management

Carine Prinsloo

THIS IS TO CERTIFY THAT
Dr. Annie Temane has co-coded the following qualitative data:

8 Focus Group Interviews

For the study:

SELF-LEADERSHIP STRATEGIES OF NURSES IN A CRITICAL CARE OUTREACH SERVICE AT A PRIVATE HOSPITAL GROUP IN GAUTENG

I declare that the candidate and I have reached consensus on the major themes, categories and codes reflected by the data during a consensus discussion. I further declare that adequate data saturation was achieved as evidenced by repeating themes.

Annie Temane

M.A. Temane (D.Cur; Research Methodology)

annie.temane@gmail.com
ANNEXURE H: Independent coder confidentiality certificate

CONFIDENTIALITY AGREEMENT

CONFIDENTIALITY AGREEMENT WITH RESPECT TO INDEPENDENT CODING OF DATA FOR THE STUDY

SELF-LEADERSHIP STRATEGIES OF NURSES IN A CRITICAL CARE OUTREACH SERVICE AT A PRIVATE HOSPITAL GROUP IN GAUTENG

I understand that identities of all participants are personal and confidential and may not be revealed to any person.

I understand that the research design and method of this study are intellectual property of the researcher(s).

I understand that all material received for coding is personal and confidential.

I understand that all material received will be destroyed on completion on consensual discussion with researcher(s).

I undertake henceforth to treat the following information with utmost professional confidentiality:

a) The name of each participant whenever a name is indicated;

b) Material received;

c) Content of the information made known to me at each person;

d) Content of the research design and method of the study.

Independent Coder Name: Dr. Anne Jordan

Signature:

Date: 08 August 2014

Researcher's name: __________________________

Researcher's signature: __________________________

Date: __________________________
ANNEXURE I: Information sheet questionnaire

UNIVERSITY OF THE WESTERN CAPE
Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-9592274, Fax: 27 21-9592271
E-mail: cprinsloo6x21@gmail.com

INFORMATION SHEET
Project Title: Self-leadership strategies for nurses in an outreach service at a private hospital Group in Gauteng

What is this study about?
I am Carine Prinsloo, registered for a PhD in Nursing Management at the University of the Western Cape with Prof K Jooste as my supervisor. I invite you to participate in this research project because you work in the private hospital in Pretoria, which forms part from the Outreach service of the hospital. The purpose of this study is to understand the experiences of nurses on how self-leadership of nurses contribute to the patient critical care outreach service in general wards in a private hospital in Pretoria, in order to develop self-leadership strategies to contribute to the critical care outreach service in a Private hospital Group in Gauteng.

What will I be asked to do if I agree to participate?
You are kindly requested to assist in providing your sincere opinion or response to the questions contained in this questionnaire. It will take about 10 minutes to complete the questionnaire.

Would my participation in this study be kept confidential?
We will do everything within our power to keep your personal information confidential. Participants in the focus group will be encouraged to keep information obtained confidential. To help protect your confidentiality, pseudonyms (fictitious names) will be used in field notes instead of your real name. It would prevent any other person from linking specific data to you. All information obtained by means of voice recording will be stored under lock and key for five years after publication of the results. As the researcher cannot ensure confidentiality, you should undertake to keep all discussions in the group confidential and not to divulge the content of the focus group to anyone outside of this group. The publication of the results of the project, will not mention any names of participants.

http://etd.uwc.ac.za/
What are the risks of this research?
There are no known risks associated with participating in this research project.

What are the benefits of this research?
The results may assist the researcher to explore and describe the experiences of nurses on self-
leadership in an outreach service at a private hospital in Pretoria. Information acquired during this research project will be shared with all participants prior to public dissemination. Results of the study will be published in an accredited journal. Other people might benefit from this study by obtaining self-leadership strategies for an outreach service.

Am I obliged to take part in this research project and can I stop participating at any time?
Your participation in this research project is completely free and voluntary. You may choose not to take part at all. If you decide to participate in this research, you may withdraw at any time during the study. If you decide to withdraw from the study, you will not be penalised in any way, neither will you forfeit any benefits to which you otherwise qualify.

How do I get my questions answered?
This research is being conducted by Carine Prinsloo, registered at the College of Nursing, at the University of the Western Cape. If you have any questions about the research study itself, please contact:

Carine Prinsloo
P.O. Box 4317
The Reeds
0158
Cell Phone: 0726176020
Email: cprinsloo6x21@gmail.com

Should you have any questions with regard to this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Head of Department
Prof Yinka Adejumo 021 9593024
Email: oadejumo@uwc.ac.za

http://etd.uwc.ac.za/
Dean of the Faculty of Community and Health Sciences
Prof Hester Klopper  021 9592631Email:  hklopper@uwc.ac.za
University of the Western Cape
Private Bag X17
Bellville 7535
Head of Department
Dean of the Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535

This research has been approved by the Senate Research Committee and Ethics Committee of the University of the Western Cape.
ANNEXURE J: Written consent questionnaire

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-9592274, Fax: 27 21-9592271

E-mail: cprinsloo6x21@gmail.com

WRITTEN INFORMED CONSENT

Letter of request to participate in the study

Title of Research Project: the development of self-leadership strategies for nurses in a critical care outreach service at a private hospital Group in Gauteng

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.

Participant’s name………………………..
Participant’s signature……………………………….
Witness……………………………….
Date…………………………

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator’s Name: Prof Karien Jooste
University of the Western Cape
Private Bag X17, Bellville 7535
Telephone: (021)959-2274
Cell: 0828972228
Fax: (021)959-2271
Email: kjooste@uwc.ac.za

http://etd.uwc.ac.za/
ANNEXURE K: Editing confirmation letter

LINGUAFIX
EDITING AND TRANSLATION/REDIGERING EN VERTALING
■ 082 681 6232 / vnheleene@gmail.com
www.linguafix.net

31/10/2018

To whom it may concern

Confirmation of language editing

This letter is to record that I have completed a language edit of SELF-LEADERSHIP STRATEGIES OF NURSES IN AN OUTREACH SERVICE AT A PRIVATE HOSPITAL GROUP IN GAUTENG by Carine Prinsloo.

The edit that I carried out included the following:
• Correct grammar, punctuation, spelling and usage
• Attend to the consistency of style, tone and voice
• Point out confusing sentence structures, wrong word choices and ambiguous passages
• Point out incomplete sentences or phrases
• Query or eliminate redundancies and verbosity
• Identify any problems in matters of substance or structure

I did not:
• Rewrite content to better convey the meaning
• Add, remove or reorder content
• Check bibliographical information for accuracy
• Rearrange sentences, paragraphs or sections to ensure that the argument is logically constructed
• Verify the accuracy of citations
• Verify the accuracy of mathematical or statistical calculations, or specific formulae or symbols, or illustrations
• Verify the correctness or truth of information (unless obvious)
ANNEXURE L: Questionnaire: Critical Care Outreach Services

Please complete the questionnaire according to the following instructions:

1. This questionnaire should be completed by nurse managers.
2. Nurse manager refers to a manager who is appointed as a unit manager where clinical nursing is provided and who is responsible for the general management of a unit or general ward.
3. Answer all the items as honestly as possible.
4. If an item is not applicable to your working situation and you do not know about the content stated in the item, please mark do not know or not applicable (N / A).
5. When categories do not include an option that applies to you, please write your category next to the “other” option and provide particulars when asked to do so.
6. Indicate your answer to each item with a cross (X) in the appropriate block of your choice.

Concepts:

The critical care outreach service is a systems approach for identifying patients in general wards who are at risk of deteriorating, recognising the onset of deteriorating health, and providing individualised interventions and education to the needs of the patients.

Nurse refers to any category of nurse involved in caring for patients in general wards.

Abbreviation: Modified early warning score (MEWS).

SECTION 1: BIOGRAPHICAL INFORMATION

This section of the questionnaire refers to background information. Although some items may appear of a sensitive nature, the responses will provide the researcher with unique information about the different groups of respondents.

1. **Age in years:**

2. **How many full years of experience do you have as a nurse manager:**

<table>
<thead>
<tr>
<th>Less than 1 year</th>
<th>1 – 2 years</th>
</tr>
</thead>
</table>

http://etd.uwc.ac.za/
3. Do you have a qualification in nursing management?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

4. What type / discipline of patients do you have in your ward / unit? (If more than one type / discipline, please indicate all of them with a cross in the applicable blocks):

- Orthopaedic ward / unit
- Medical ward / unit
- Surgical ward / unit
- Gynaecologic ward / unit
- Paediatric ward / unit
- Neurological ward / unit
- Oncology
- Other

If you have marked “Other”, please state what type / discipline of patients do you attend to:

_______________________________________________

5.1 Is outreach patient care available at your health care facility?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>
5.2. Is outreach patient care planned to be implemented at your health care facility?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

6. Do your nursing staff members make use of a Modified early warning score (MEWS) when measuring the vital signs of patients?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 2: OUTREACH PROGRAMME

Indicate your response to each item with a cross (X) in the appropriate block best represents your choice.

Example
<table>
<thead>
<tr>
<th>Self-leadership in patient outreach service</th>
<th>Totally disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Totally agree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>The nurse is enthusiastic about calculating the MEWS.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-leadership in patient outreach service</th>
<th>Totally disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Totally agree</th>
<th>Do not know</th>
</tr>
</thead>
</table>

**Self-motivation**

1. Nurses believe in using the MEWS to assess patients.

2. Nurses debate (self-talk) amongst themselves about the next step in a regime, e.g. “they make observations, they monitor those observations, establish whether they are normal or abnormal, and what is the next step they should take”?

3. Nurses are competent to act on an elevated MEWS, e.g. they used a dinamap monitor to measure blood pressure. *When the blood pressure is elevated; i.e. 200 over x, y, or z, they reassess the blood pressure by taking the blood pressure manually.*

4. Nurses use their clinical observation skills to identify a deteriorating patient, even when the MEWS is normal, e.g. *when they see a patient's condition is changing, and there is something wrong.*

5. Nurses have a sense of responsibility to look after patients, e.g. *when they do not know what to do anymore, they pick up the phone and ask for advice.*

6. Nurses exercise self-control (behaving in an effective way) when they monitor the vital signs of patients while following the MEWS guidelines. *Their self-control is demonstrated by planning after observations when blood pressure is too high.*

7. Nurses take ownership when they monitor the vital data of patients while following the MEWS guidelines.

8. Nurses’ ownership is demonstrated by acting when patients are in pain but unable to verbalise their pain status.
<table>
<thead>
<tr>
<th>Self-leadership in patient outreach service</th>
<th>Totally disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Totally agree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Nurses use their authority while monitoring elevated MEWSs, e.g. a patient's condition is changing, and there is something wrong with the patient; at that point, they call the outreach service for bedside assistance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Nurses talk amongst themselves with the purposes of assisting one another with difficult situations, e.g. it is that little voice in their heads that tells them that something is wrong.</td>
<td></td>
<td></td>
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<td>11 Nurses appreciate the authority as decision makers to advocate for patients, call the outreach service when the early warning criteria indicate that it is necessary, or assess patients, e.g. they have to make decisions because they are present at the time.</td>
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<td>12 Nurses initiate taking positive steps during interventions, e.g. when patients has returned from theatre and they notice that the patient's blood pressure is lowering, then they know they have to conduct an Hb test; by the time the outreach sister arrives, she has a baseline from which to provide assistance.</td>
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<tr>
<td><strong>Leading by example / role modelling</strong></td>
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<td>13 Nurses plan the successful completion of tasks with the purpose of addressing the needs of patients, e.g. they ensure that patients are treated correctly to enable their health to improve and limit it to deteriorate.</td>
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<td>14 Nurses visualise what they are obliged to do when assisting with an urgent case, since they have gained experience, e.g. when a patient needs to be transferred, the patient must be transferred timely.</td>
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<td>15 Nurses set high expectations for their practice by setting goals to execute their duties excellently and diligently, e.g. they start by expecting more from themselves before they expect anything from other nurses.</td>
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<td><strong>Self-leadership in patient outreach service</strong></td>
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<td><strong>16</strong> Nurses exercise self-control when the deteriorating condition of patients is reported to the senior nurse. The senior nurses are obliged to personally assess the patients. They do not simply remain sitting behind their desks while delegating their responsibilities towards the patients to the reporting nurses.</td>
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<td><strong>17</strong> Nurses have realistic expectations about their own capabilities while managing a deteriorating patient.</td>
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<td><strong>18</strong> Nurses act as role models during teamwork, e.g. they involve the reporting nurse in the management / care of the patient with an elevated MEWS.</td>
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<td><strong>19</strong> Nurses are proactive when attending to patients with an elevated MEWS, e.g. when patients need to be transferred to a higher level of care, the nurses do it urgently and do not delay transferring of patients.</td>
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<td><strong>20</strong> Nurses apply their communication skills when telling subordinates what their expectations are in respect of patients with an elevated MEWS.</td>
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<td><strong>21</strong> Nurses share their knowledge, since they empower their colleagues by involving them in the management / care of patients with an elevated MEWS.</td>
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<td><strong>22</strong> Nurses use self-observation to determine their need for more knowledge about managing / caring for deteriorating patients.</td>
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<td><strong>23</strong> Nurses are sufficiently knowledgeable to answer questions about the MEWS that either outreach service sisters or patients may ask.</td>
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<td><strong>24</strong> Nurse develop their abilities to care for patient by, e.g. attending skills development training interventions.</td>
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<td><strong>25</strong> Nurses are committed to their patients by placing them first, e.g. they are doing everything possible while they are waiting for senior nursing staff to arrive.</td>
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<td><strong>26</strong> Nurses show an interested in their patients’ wellbeing, e.g. checking the doctor’s scripts.</td>
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<td><strong>Acknowledge outreach as an important service in nursing</strong></td>
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<td><strong>Patient outcomes / quality of patient care / patient satisfaction</strong></td>
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<td>27 Nurses are motivated to care for their patients, e.g. <em>they do everything possible to ensure that patients remain stable.</em></td>
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<td>28 Nurses use their insight into the MEWS to ensure patients receive the appropriate care on time, e.g. <em>when the patients are unstable, the nurses have to report the patients’ condition; they focus on the stability of patients’ condition.</em></td>
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<td>29 Nurses strive to behave in the correct manner when dealing with a deteriorating patient who needs team work; e.g. <em>when a patient is deteriorating, they will seek as much assistance as possible.</em></td>
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<td>30 Nurses use their experience to deliver timely quality care to patients, e.g. <em>they ensure that patients are transferred to an appropriate unit of care as quickly as possible.</em></td>
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<td>31 Nurses are knowledgeable about their patients, e.g. in terms of their diagnosis, medication, and laboratory results.</td>
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<td>32 Nurses portray confidence in their knowledge, e.g. <em>the patients feel comfortable when they know there is someone who is capable of assisting them.</em></td>
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<td>33 Nurses share the vision that the outreach service improves the lives of their patients.</td>
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<td><strong>Assistance and guidance from the patient outreach service team</strong></td>
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<td>34 Nurses create a safe environment that affirms subordinates’ expertise to call the outreach service in case of an elevated MEWS, e.g. <em>the outreach sister guides the nurses by telling them what to do or what to look out for.</em></td>
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<td>35 Nurses’ behaviour indicates that they understand the purpose of measuring patients’ vital signs, e.g. <em>the goals of the outreach service is to ensure patients are stable; that is the reason why nurses monitor all observations.</em></td>
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<td>36 Nurses exercise self-control when activating the outreach service, e.g. they are concerned with taking care of their patients, ensuring that the patients’ condition remains stable, and reporting to the sister that the outreach service needs to be activated, since patients’ condition indicates complications.</td>
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<td>37 Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients.</td>
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<td>38 Nurses take responsibility when caring for their patients by ensuring that they have a thorough knowledge of their patients’ condition.</td>
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<td>39 Nurses take responsibility when caring for their patient by ensuring that they have a thorough knowledge of the medication their patients need to take.</td>
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<td>40 Nurses are enthusiastic to enhance their knowledge and skills, e.g. nurses need to know about their patients, blood tests, and what blood test results mean.</td>
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<td>41 Nurses are aware that the outreach service contributes to the quality care delivered to patients, e.g. they receive patients from a high care unit who have undergone major procedures, these patients are in a very critical condition, and the outreach service is there to support staff.</td>
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<td>42 Nurses are convinced that calculating the MEWS makes their professional duties easier, e.g. they timely observe when the condition of patients is deteriorating.</td>
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<td>43 Nurses are guided by the patients’ MEWS and the MEWS chart, e.g. the MEWS chart tells the nurses what to do and when it becomes necessary to call upon the outreach service.</td>
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<td>44 Nurses are confident in the support they give to peers to perform their duties, e.g. they assist their colleagues and remain approachable; when there is a crisis, the colleagues do not hesitate to ask them for support.</td>
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<td>45 Nurses have a passion for the nursing profession.</td>
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<td><strong>Challenges with regard to the activation of the patient outreach service</strong></td>
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<td>46 Nurses’ attitude plays a role in activating the outreach service.</td>
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<td>47 Nurses regard the availability of an outreach service as a safety net, e.g. <em>there are at least two professional nurses on duty</em>.</td>
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<td><strong>Power of self-affirmation</strong></td>
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<td><strong>A sense of being affirmed</strong></td>
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<td>48 Nurses’ confidence increases when they managed a deteriorating patient in collaboration with the outreach service.</td>
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<td>49 Nurses are proud when they have done something that saves patients’ lives, e.g. <em>a patient’s life is saved because the nurses reported an elevated MEWS without delay</em>.</td>
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<td>50 Nurses are pleased when patients are grateful to them for saving their lives, e.g. <em>a patient thanks the nurse, or a patient proudly tells his or her family that the nurse is taking care of him or her</em>.</td>
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<td>51 Nurses are inclined to behave in a proper manner when they are certain that their endeavours are going to result in positive outcomes e.g. <em>when nurses do the right thing, the lives of patients are saved</em>.</td>
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Thank you for taking part in the survey!