Exploring the contribution of a leadership development program on the implementation of improvement projects at a South African central hospital.

Dr Bhavna Patel

B.Sc.; M.B.Ch.B.; M.Fam.Med; FCFP; FCPHM; M.Sc. Med (Bioethics and Health Law)

Student Number: PTLBHA001

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University of Cape Town

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University of Cape Town

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Supervisor

Professor Maylene Shung-King
Department of Health Policy and Systems Division
School of Public Health and Family Medicine
University of Cape Town

Co-Supervisor

Professor Lucy Gilson

Department of Health Policy and Systems Division
School of Public Health and Family Medicine
University of Cape Town

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Declaration

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KEYWORDS

Leadership

Leadership development

Self-awareness

Team development

Motivation

Innovation

Quality improvement

Improvement process

Improvement project

Central hospital

South Africa

Public hospital

ABBREVIATIONS

DOH	Department of Health
EXCO	Executive Committee
GSH	Groote Schuur Hospital
LDP	Leadership Development Program
NDOH	National Department of Health
RWOPS	Remuneration work outside the public service
WC	Western Cape

ABSTRACT

Background

It is recognized that healthcare leaders of today would need to not only be responsive to the rapid changes around them, but also plan for the future of healthcare by creating a climate that is sensitive to the context of the organization while responding to the service needs. In the South African public healthcare context, where the service demands outweigh the ability to satisfy these needs with limited resources, leadership and leadership development is required to create more adaptive and resilient leaders and leadership. This PhD therefore aimed to study the implementation of a strategy to improve the leadership of the executive team at the hospital through a leadership development program, specifically analysing whether and how the program facilitated their capacity as leaders and their continuing work, with their respective multidisciplinary teams to implement improvement processes across the hospital.

Methodology

Given the limited knowledge on implementing a leadership development program (LDP) at a large South African central hospital, this study was comprised of two phases. Phase one of the study used a qualitative exploratory design, to explore the experiences and perspectives of the thirteen executive leaders on the LDP and whether these learnings played any role in developing their capacity. This was done by reviewing 242 documents and 13 one on one interviews with the hospital executive leaders, using purposive sampling.

The second phase of this study used the insights of phase one to guide the analysis of four improvement processes initiated at the hospital. This phase explored which factors contributed to the success or failure of the implementation of the improvement processes in the executive leaders' respective areas and how their leadership of the process contributed to these factors. This was done by conducting in-depth case studies through focus group interviews with a total number of 36 participants in the respective teams and six one-on-one interviews with key informants (members of the team who had retired, but were integral to the process) that were involved in the improvement processes.

Results

The results of the study indicated the need for a context specific, practical LDP that provided benefit to the executive leaders, both as individuals and as team leaders. The executives reflected on their growth as leaders through building relationships, developing themselves through self-awareness and developing multidisciplinary teams. The analysis of the case studies in turn showed that leaders who engaged and supported their teams were more successful in their improvement processes.

Concluding remarks

This research summarized eight major conclusions drawn from the study as a contribution to what is possible in the public sector. Both the leadership development program and the case studies provided a broad conceptual framework of the Individual, the Team and the System as components that can be used to develop leaders, develop teams and improve overall leadership at a hospital. Based on the study learnings, the bottom-up approach and specific tools developed could serve as a basis for other hospitals to implement a leadership development program (LDP) and improvement processes in similar contexts. Further research on LDPs in a South African context could test the findings of this study and assist in enhancing the development of leaders at public sector hospitals.

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CHAPTER 1: INTRODUCTION

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This chapter presents the context within which healthcare services are delivered in South Africa and outlines the need for improved leadership in a public health setting. The chapter further explores some research on leadership and leadership development in South Africa and outlines the paucity of knowledge in this regard. The hospital environment and leadership structure are introduced, leading to the problem statement, rationale, aim and objectives of this research.

INTRODUCTION

Globally, the delivery of cost effective and equitable healthcare is becoming a challenge. In the South African context, balancing the needs of the patients within available resources, while still maintaining quality of care, is unsustainable. Our public health care services need to support more than three quarters of a growing population of unemployed, uninsured citizens and immigrants from elsewhere in Africa seeking care. This trend is compounded by an ageing population, a rising burden of infectious and chronic diseases and a global shortage of an adequately skilled workforce.

This context is not unique to healthcare. According to Statistics South Africa (Population estimates Stats SA 2021, p6), the mid-year population estimates for 2021 shows an annual population growth of 1.4% to 60.14 million, with 11.8% of these people residing in the Western Cape, one of nine provinces in South Africa (SA). Although the government is trying to improve on service delivery, the social status and standard of living as depicted in Table 1 show that the high unemployment rate and poor state of social determinants for health impact on the need for healthcare. Structural determinants such as access to electricity and piped clean water and sanitation pose a significant health threat as many people are forced to live in informal dwellings.

Educationally, up to 36% of learners are no longer in school by the age of 18 and of the ones who remain, they may be at varying grades of education, which contributes to the poor literacy rate in South Africa. Social grants provide some relief to many households and nationally, 28.8% of households rely solely on such grants (General Household Survey Stats SA 2021, p13). While these statistics are based on mid-year population estimates and the fact that South Africa only conducts a census every five years, these figures can only serve as a guide to the actual reality (Ndlovu et al. 2021, p309). Additionally, the health services in the country cannot be ignored (ibid, p307). Surveys conducted showed that 47% of households reported running out of money for food, having a further impact on health related factors and the increased reliance on the public health sector for care (ibid,

p319). Given this social context, it is not surprising that more that 85% rely on the public health sector services that are supported by limited government funding (ibid 2021, p32).

Table 1: Social status and standard of living

Indicator	Value	Social and healthcare impact
Unemployment rate (Quarterly Labour Force Survey Stats SA 2022:1)	35.3%	Ability to afford healthcare. Increased demand on public health services
Adults over the age of 18 living below the upper bound poverty line (Quarterly Labour Force Survey Stats SA 2022:1)	50%	Ability to afford healthcare. Increased demand on public health services
Access to Electricity (General Household Survey Stats SA 2021: 19; 24)	85%	Standard of living
Access to safe drinking water (General Household Survey Stats SA 2021: 19;24)	86%	Standard of living
Access to piped water (General Household Survey Stats SA 2021: 19;24)	46.6%	Standard of living
Access to water from rivers, streams, stagnant water pools, dams, wells and springs (General Household Survey Stats SA 2021: 19;24)	4%	Poses a health risk
Living in informal dwellings (General Household Survey Stats SA 2021: 19;24)	16%	Poses a health risk
Illiteracy rate (General Household Survey Stats SA 2019: 11; 31)	12%	Access to employment opportunities
Households receiving income grants (General Household Survey Stats SA 2021: 13)	34.9%	Social status
Households without adequate access to food (General Household Survey Stats SA 2021: 17)	20.6%	Social status
Population with medical insurance (General Household Survey Stats SA 2021: 32)	15.6%	85% of the population rely on public healthcare services

What are some of the challenges?

Building an organizational culture that focusses on quality improvement that can become sustainable is a leadership challenge for many senior leaders in all business spheres. This is more so in the public healthcare industry, where the challenge of delivering a cost effective and equitable quality-based service can become a daunting task, compared to services in the private sector where due to the smaller number of patients, there is a perceived better quality of timeous care. Having to deal with those who are ill; those who are vulnerable; the elderly and children who have to wait hours for care; who have to endure being one of hundreds of patients being seen on a particular day and then not being attended to by the healthcare worker in a compassionate one-on-one manner – can all lead to a sense of dissatisfaction and perceived poor quality of care. This perception of poor quality could be

addressed through quality improvement processes and improved leadership, but it is noted that these are not exclusively the cause of poor perception. Lee et al (2010, p516-519), in a study to review post discharge perceptions of patients admitted to hospital, found that in general, there were expectations of safety, treatment with respect and dignity, prompt efficient care, communication, environmental autonomy and better quality amenities. The non-provision of these resulted in patient dissatisfaction. These expectations have been shown in other studies in other countries as well (Bankauskaite et al. 2003; Coyle 2008). Xesfingi et al. (2016) has also shown that there is a strong positive association between patient satisfaction and public health expenditures, number of physicians, number of nurses and the age of the patient, while there is negative evidence for private health spending and number of hospital beds. These findings support the notion of perceived dissatisfaction given the public hospital environment and resource constraints.

Thriving in such an over-burdened system requires a re-think of the most basic assumptions on leading and managing in the public healthcare sector, and more specifically, in a public sector hospital, to meet the ever-changing demands.

The environmental complexity

The demands at the coalface of a hospital service environment are, at the best of times, complex, dynamic and turbulent. Meeting these demands requires resilience by being adaptive to change and responsive to the population needs. Plsek (2003, p3) defines a complex adaptive system as a collection of individual agents who have the freedom to act in ways that are not always totally predictable, and whose actions are interconnected such that one agent's actions change the context for other agents. Kernick (2006, p386) speaks of complexity science, which adopts a model that views systems as a network of elements that exchange information in such a way that change in the context of one element changes the context for all others. Complexity is also seen in the pattern of behavior through interaction of the elements that respond to the limited information that they are presented with. Kernick (2006, p387) further explores this complexity and defines them as simple complex systems, complex adaptive systems, complex social systems and complex responsive processes. Uhl-Bien et al. (2007, p306) elaborates further on complexity leadership and adaptive leadership, where the two roles are entangled across people and actions. Whether identifying with a complex adaptive system, complexity leadership or complex science, it can be said that in such a complex health environment, there is a need to be continuously adaptive to the change and resilient enough to sustain functions through the change. Such resilience comes through simultaneously striving for excellence while adapting through innovation (Robb 2000, p27). Resilience alone will not benefit population health unless it is coupled with the health services being responsive, both to the individual as well as the

population needs. In a public health service, such responsiveness requires giving attention to being inclusive, equitable and accountable to those seeking healthcare (Khan et al. 2021, p2). This can contribute to other health system goals such as improved access and acceptability of services, and improved health-seeking behavior, and therefore ultimately contribute to improved population health (Abbasi 1999 and Ughasoro 2017 (cited in Khan et al. 2021, p2)).

Both resilience and responsiveness are needed in the healthcare environment, where there are interactions at multiple levels, with multiple stakeholders, including patients, their families, providers, suppliers, higher educational institutions, governmental and non-governmental organizations, among others. Each of these brings its own elements of complexity for the leader to navigate. Additionally, there are time constraints on the various demands and pressures perceived as inaction if not addressed quickly enough and to the reasonable satisfaction of the receiver. The greatest demands come from the patients who are ill and in need of care within available resources. The staff are then overworked and pressured to deliver this care. These interactive elements all contribute to a complex system within which healthcare needs to be provided and must adapt to function efficiently and effectively. To survive in such a complex adaptive system, healthcare leaders of today need to show resilience by learning how to respond to the changes to avoid a collapse of the system. This can be effected through good leadership capacity, coupled with ongoing innovation towards continuous improvement, which together can enhance individual and system resilience. For widespread adoption of such a philosophy, one is required to share knowledge through social relationships and adapting ideas to fit local conditions and attractor patterns (Plsek 2003, p7). At the core of such a transformational strategy is the need to maximize the value for the patient.

To drive innovation, Keown et al. (2014, p1520) assessed the factors and behaviours that foster the adoption of healthcare innovation in eight countries and found that the three most popular dynamics pertain to people and their relative goodwill, engagement and rational skills, while creating time and space for learning. Delayering and adapting innovations to suit the local context were least prevalent. The eight countries studied included South Africa and there would be an interest in assessing which of these dynamics are prevalent in the context of this study being done in the same country.

Development of leadership development programs

Many healthcare executives, in the United States, have developed leadership development programs (LDP) (Whaley and Gillis 2018, p79) to support both the clinical and support service managers for the demands placed upon them. Despite the development of these LDPs, there is little theoretical and empirical research on how these programs are structured and what benefit they have for managers.

Similarly, in the South African context, it was noted that there is a dire need for strong leadership at all levels of the service delivery chain to ensure optimal and quality health care for the majority of patients (Govender et al. 2018, p164). Whilst the need for improved leadership is mentioned for the regional hospital level, the study does not clarify how this can be done, for whom and at what levels.

Mukwakungu et al. (2018, p431) in a review of health training, affirm that leadership training is increasingly needed in South Africa to improve the health system. Fryatt and Hunteri (2015) and Whaley and Gillis (2018) (cited in Mukwakungu et al. (2018, p431) reported that over 50% of managers in the health care system in South Africa have not had exposure to any training programs and those who have been exposed to in-hospital courses show little indication that it is effective. The study does not clarify how such effectiveness was tested. These findings support the statement that leadership in healthcare falls short in addressing critical challenges facing the sector and that there is a dire need for training leaders to shelter the future of healthcare in South Africa.

A smaller study on a collaborative learning project in the District services of the Eastern Cape, one of the provinces within South Africa, (Dovey 2002, p520) supports the finding that work-based learning as an educational methodology, builds capacity to implement policies, but the paper speaks to developing small teams of 12-20 people, in groups. A noted shortcoming in this project was also that the developed capacity would not be sustained unless there was concomitant development and support of other service leaders in that Province, hence the need for conceptualizing such training in a broader context.

The key message emanating from the few articles published on leadership in the South African environment, clearly points to a need for developing leaders to face the challenges they have to deal with on a daily basis. These papers however, do not clarify what form or content such leadership training could entail or who should be targeted. Additionally, there is no evidence on studies related to leadership development within a large public tertiary health facility such as Groote Schuur Hospital, one of ten central hospitals in SA, which present complex interactions, demands and needs.

In order to seek further clarity on what approach to leadership development can best influence the behaviour of leaders, this research could contribute to addressing the gap in knowledge in this context. The research questions in this PhD therefore aimed to study the implementation of a leadership development program as a strategy to improve leadership at the hospital, specifically analyzing whether the program facilitated their capacity as leaders and their continuing work to implement improvement processes.

The next section will describe the context within which Groote Schuur Hospital functions and outlines the problem statement leading to the rationale for the study.

1.1 Groote Schuur Hospital as part of the health service

1.1.1 At a National level

South Africa is geographically divided into nine provinces, each governed by local, provincial and municipal authorities, with central oversight from the national level. This is the case for all service departments, including the Health department. Health services are structured into primary, secondary and tertiary level care (Figure 1). Public sector hospitals operate at a district, secondary/regional and tertiary level, with the tertiary hospitals being a national resource, partially funded from the central government (Figure 2). Within South Africa, primary health care facilities offer basic health services at the community level. If hospitalization is needed, then depending on the differential diagnosis, a referral is done to either a district, regional or tertiary level facility. At the district hospitals, emergency care and family practitioners provide the services. Some larger district hospitals may also include specialist services. At the regional level, more specialized care is offered and the tertiary hospitals offer more specialized and sub-specialized care. The tertiary/quaternary hospitals are located throughout the country.

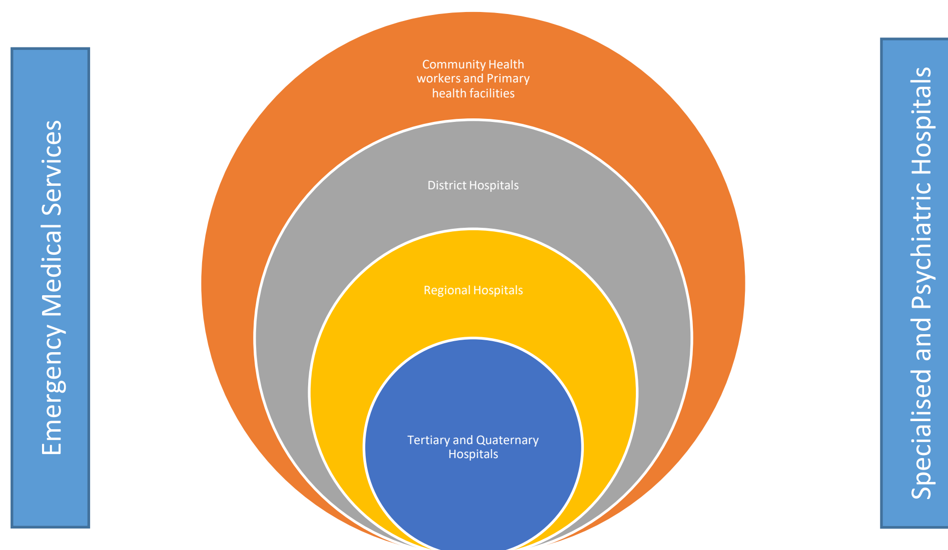


Figure 1: The Western Cape Department of Health service structure (Healthcare 2030)

Groote Schuur Hospital (GSH), situated in the Western Cape Province, is one of ten central (offering tertiary/quaternary healthcare) hospitals in the Department of Health of South Africa. The hospital provides specialist and sub-specialist care, and serves the population of the Western Cape as well as patients from other provinces where specialist services may not be available. Specialized services at

GSH include transplant services, as well as many other medical and surgical procedures where the expertise in the facilities and human resources only exists at this hospital. Apart from planned referrals for the services, many patients from other provinces and other countries in Africa self-refer to Groote Schuur Hospital in the hope of being attended to by the clinical experts in the respective fields.

As an integral component of the Department of Health, Groote Schuur Hospital has embraced the changes needed to transform the country's health system towards providing affordable, sustainable and efficient healthcare to all the populations it serves, by supporting the National strategies (2020, pp 9-10) as well as the Provincial healthcare services plan (2020, pp 33-35). These transformational changes are motivated by the changing demographics of the country, the socio-economic determinants of health and the rising quadruple burden of disease. Sustaining a level of expertise requires the hospital to keep up with advances in technology and building the capacity of the staff and managers, so that the hospital maintains its world-renowned status as a leader of innovative healthcare. More recent policy changes at a National level, specifically the move towards Universal Health Care through a National Health Insurance plan (2011) has necessitated a different way of thinking about how we currently do business.

As a National health resource, the funding of the hospital is generated from a National Tertiary Services Grant (NTSG) and a Health Professions Training and Development Grant (HPTDG). Both grants are 'conditional' grants tied to the specific purpose stated, and channeled from the National Treasury through the National Department of Health to the hospital. This funding source is to support the specialist and subspecialist services only available at certain central hospitals in the country. Hence the hospital serves the entire population of the country for certain conditions, for example, transplant services and other highly specialized services. These amounts are then supported by funding received from the provincial government allocation to the health department (the 'equitable share' allocation) to sustain functionality of the hospital services. Funds are allocated as an annual budget and the amount per year is determined by the National resource envelope and need, resulting in a year-on-year inflation linked reduction in real terms. With a decreasing budget received from the National Department, there is a need to increase the equitable share allocation from the provincial budget to maintain the standard of services offered (Figure 2). Non-clarity of a committed medium-term budget allocation hampers progressive planning to address the burden of disease and the needs of the hospital. Each of the funds cover the costs of certain aspects of clinical service, teaching, training and research, which form the core activities of the hospital. In turn, each of these activities need to be reported on separately to account for expenditure against the respective fund. Figure 2 below reflects a slight budget increase year-on-year in real terms, but this is not linked to inflation and more

specifically, medical inflation, which is about two to three times higher. The need to manage an increasing demand on the services against an annual reduction in funding remains the challenge for management.

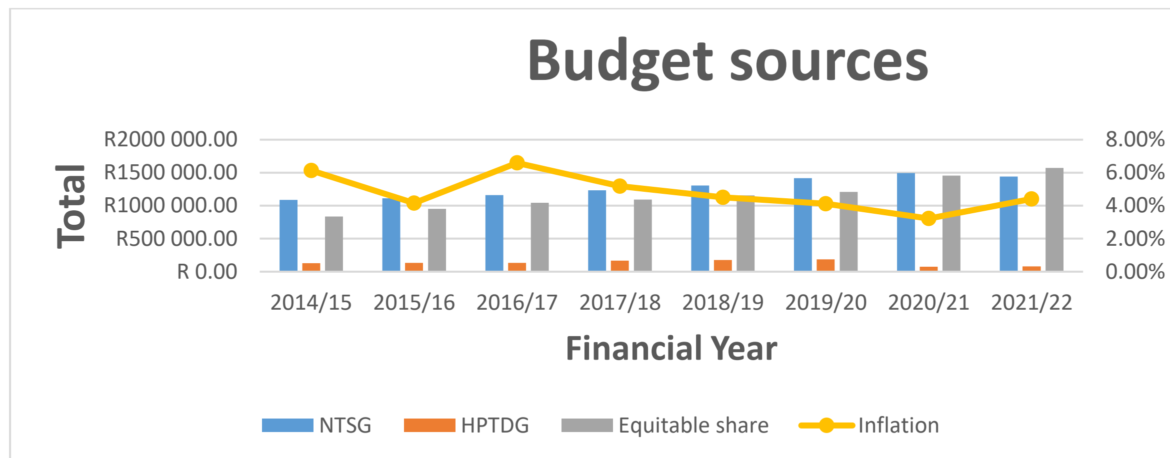


Figure 2: Allocation of funds (Ref: Groote Schuur Hospital Finance Accounting Department)

1.1.2 GSH functioning within the Western Cape Province

Groote Schuur Hospital is one of two central hospitals in the Western Cape Province. Theoretically, 90% of hospital care should be provided in the District Hospitals and the Primary healthcare facilities, 8% in the secondary level regional hospitals offering general specialist services and only 2% at the central hospitals where specialized and sub-specialist services are provided. In these central hospitals, apart from the specialist care, there is also the provision of a teaching platform as tertiary academic institutions for the country.

Groote Schuur Hospital, as a specialist and subspecialist healthcare provider, is a 1000 bedded, 3715 staffed hospital that provides primary and specialized health services and is also the main teaching facility for undergraduates and postgraduates of the Faculty of Health Sciences of the University of Cape Town, as well as other higher educational institutions. The patient pathway referral system functions from one small district hospital, two larger district hospitals, two secondary level hospitals (one located in the Metropole and the other in the rural region 400km away) and one maternity hospital. All the Metropole facilities are located within a 30km radius from GSH. All patients who require specialist or sub-specialist care are referred to GSH and the facilities are supported by outreach from the GSH staff. However, patients often vote with their feet and arrive at our emergency units for healthcare. The hospital therefore also serves a proportion of primary level patients.

The 3715 staff are distributed as outlined in Table 2, with the medical, nursing and allied health professionals, on an annual basis, attending to about 75 000 inpatient admissions, 500 000 outpatient

contacts, performing about 25 000 surgical procedures, treating 37 000 cancer patients and conducting 123 000 radiological investigations. In addition, the health staff attend to 30 000 medical and surgical emergencies and 10 000 trauma emergencies per year (GSH annual report 2020). The trauma services function to serve the most serious injuries, including gunshot wounds, blunt trauma injuries and accident victims, which all result in multiple life-threatening emergencies. These services are provided within the 39 disciplines functioning in the various broader departments. Activities within each department cover many aspects of care and these are best described in a book published for the 80th anniversary of the hospital (Patel 2018). The link of the hospital to the University of Cape Town Faculty of Health Sciences means that the hospital provides access to students and academics for teaching, training and research. There are many research articles that are published annually (UCT research overview). Whilst too broad to describe, the hospital services are far reaching and remain at the forefront of innovation and service improvement (Patel et al. 2015).

Functioning in this complexity means that staff and patients need to understand where the services are located and how to access large areas with ease.

The estate on which the hospital stands is like a city within itself and including staff, students, patients, visitors and others, about 10 000 people traverse the building on any given day. The hospital building and facilities need to be maintained not only to be aesthetically pleasing as a healing environment, but to also ensure the safety of all those who enter the facility. Apart from the health services, support staff assist with administrative needs and hotel services such as catering, cleaning, security and laundry services. These are required to be of a standard that supports the quality of care provided to the patients, staff, students and visitors accessing the clinical wards and common areas of the hospital. Porter and security services are needed to assist the staff given the patient load and security needs of the hospital. Clinical and mechanical engineering staff are needed to maintain the equipment and building respectively. Other corporate activities include managing the Finance and People Management sectors, including everything from purchasing consumables to collecting all the patient data to ensuring that staff are paid their salaries and earn a pension when they retire.

Leading within this complexity requires managers to interact at multiple levels simultaneously. Managing the service and teaching needs would not be possible without support services and how each of the leaders need to function in such a complex environment.

Table 2: Staffing at Groote Schuur Hospital (Groote Schuur Human Resource Department)

Category of staff	Number of staff
Medical staff	632
Nursing staff	1530
Allied Health practitioners	238
Pharmacists	37
Administrative and other support staff	1278
TOTAL	**3715**

Teaching, training and research activities

Linked to the clinical services, teaching, training and research also takes place at the hospital. As a central hospital, the clinical services cover every specialty in the medical field and for undergraduate and postgraduate training purposes, it has to be as comprehensive as possible. Managing the services and fulfilling the academic needs of the staff and the students requires building relationships with the various stakeholders involved. Groote Schuur Hospital not only serves the University Of Cape Town Faculty Of Health Sciences, but also provides a platform for students from the University of Stellenbosch, the University of the Western Cape and the Cape Peninsula University of Technology in the various disciplines of teaching and training. Staff employed by the hospital serve as a resource to these Higher Educational Institutions for bedside teaching and training, but only the medical staff are regarded as being jointly appointed by the hospital and the University. The imbalance between medical and other categories of staff (Nurses and other Allied Health staff) who are also involved in teaching students, will be addressed through a recently developed multilateral agreement between the Western Cape Government: Health and the four Higher Educational Institutions.

Apart from the service, teaching, training and research function, some medical and nursing staff perform Remunerative Work Outside of the Public Service (RWOPS), in order to earn additional income and to maintain certain standards of expertise in clinical practice due to limitations in the availability of, for example, theater time at the hospital. This has to be done outside of working hours and is approved annually, but the monitoring thereof is challenging. In a review done by Taylor and Kahn (2014, p476) of the RWOPS performed by the staff in the Department of Surgery at Groote Schuur Hospital, it was noted that staff fully complied with the specified less than eight hours of

private work per week. As a result of this audit, further monitoring systems were put in place to ensure that this was maintained. The hospital management is therefore dependent on the clinical leadership of the various departments and divisions to ensure that the service needs are met and that there is no abuse of the RWOPS system.

The effects of covid

Since January 2020, the functioning of the hospital was disrupted significantly due to the Covid-19 pandemic in both clinical and non-clinical spheres of activities. The sudden change required a re-think of how services are being rendered, with a realization that adaptability and resilience is needed to survive the Covid crisis. Apart from the short-term adaptability, there was also a realization that it cannot continue to be 'business as usual', but a longer-term strategy was needed to ensure the sustainability of health services moving forward. Such thinking challenged the leaders, clinical and support, to re-engineer and re-structure their work to suit the current and future environment.

Western Cape Health Department strategy

The Department of Health in the Western Cape has developed a vision of 'Access to person-centered quality care', which it aims to achieve by 2030 (WCGH 2014, p33). This vision, together with the values of Caring, Competence, Accountability, Integrity, Innovation, Respect and Responsiveness, form the foundation of the change that needs to happen if the Department wishes to realize this vision. Building this foundation requires a change in behavior of each staff member of the organization together with an attitude of aspiring to a common purpose or vision. Once such a foundation has been entrenched within the Department, enhanced healthcare to the patients and a sustained future will be created. As part of its transformation strategy, the Western Cape Department of Health developed a leadership behavior charter in 2016 (WCG, 2016, p9) and embarked on a leadership improvement journey. This strategy is focused on how to develop leadership within the department and how to change behaviours to enhance care. This strategy is still under development on a broader level but has dove-tailed into the initiatives being undertaken at Groote Schuur Hospital. Groote Schuur Hospital plays in vital role in the organizational structure of the Western Cape Department of Health and has purposely prioritized leadership development and innovation to realize the change that is needed.

Managing such a complex facility requires dependence on reliable teams and this requires leadership on all levels. The core team of the hospital providing such leadership is the executive team who have to interact with a complex network of distributed leaders throughout the hospital. These networks include clinicians, supervisors on the ground, middle managers and various other staff in positions of influence, but not necessarily part of a management structure. Apart from the management within

the hospital, the executive leaders must interact with other referral hospital leaders to ensure a smooth flow of patients across the service platform from primary to secondary to tertiary level. The support managers need to interact with managers and staff to ensure that they have the necessary tools to perform their duties. Functioning within such a complex context requires leaders who have a variety of attributes and skills. The leaders need to understand what their strengths and weaknesses are; what their responsibilities are as individuals and as part of the team; how their contribution can attribute to the overall functioning of the hospital and indirectly, the care that the patient receives.

1.1.3 Hospital leadership structure

Groote Schuur Hospital has a hierarchical structure in the management team, which is led by the CEO together with an executive team of sixteen members and then varied middle managers who oversee supervisors at the operational level. Within the executive team, the clinical managers cover specific portfolios linked to the clinical departments and they are supervised by the Senior Manager Medical services, who in turn reports to the CEO. All the other executives report directly to the CEO and manage different aspects of the support service activities, such as Financial management, People management, Nursing management, Facilities management, Engineering services, Quality Assurance, Improvement officer, Wellness unit manager, Public relations and other components at the hospital (Figure 3). Despite the different reporting structures, all the clinical and non-clinical managers are part of the executive team.

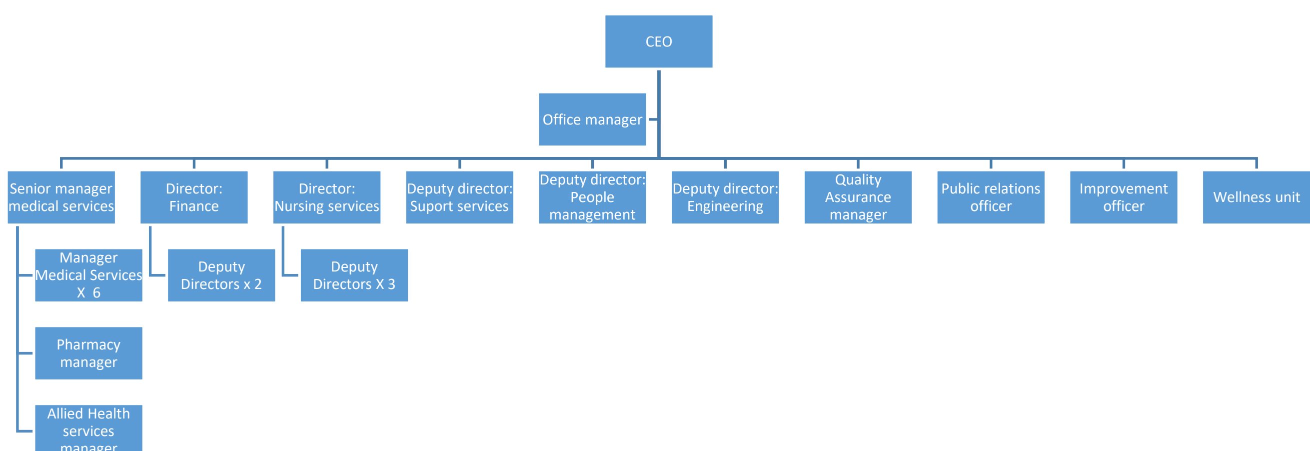


Figure 3: Executive management team at Groote Schuur Hospital

In this study, the principal investigator is the Chief Executive Officer (CEO) of Groote Schuur Hospital. Based on the personal experience of the CEO in her role as a hospital manager over the past 20 years,

the hospital's clinical executives are medically trained and have limited business knowledge or experience. The business executives on the other hand, such as the Finance manager, the People Management manager, the Support Services manager and the Engineering manager, have a qualification in their field of work, but most of their capacity is reliant on gaining work experience in order to function within the complex broader health system.

The multiple resource requirements, appropriate skills mix of professional staff, the need for the correct consumables and equipment required to make life and death decisions, the infrastructure system to support the services and the flow of patients and other support structures, like the hotel services, all impact on the efficient functioning of the hospital. The requirement to maintain such a system within a rigid accountability framework affects the executives' performance, since there is an expectation from the patients to be treated for their illness and recover; from the staff to have all the required resources available for them to perform their duties and from the supervisory structures to be able to manage their respective operational activities. As a hospital leader and manager, this expectation of good governance and management is not merely about how to manage financial and human resources, but it includes understanding the complex context within which executives have to function, how the executives motivate and enable those from whom they seek a desired action (the staff) as well as understanding the customers' (the patients) needs and how to satisfy these. The governance role of managers includes being accountable for the standard and quality of care, which they have to ensure in the face of many constraints, such as the pressures of sheer patient load and staff burnout. There are many reporting structures with multiple layers that contribute to an additional administrative burden.

Over the years, the executives of the hospital have attended various short courses, talks and conferences, but the theoretical knowledge gained was seldom put into practice. Reasons for this could be varied, but an opinion of the CEO links this to the courses being too theoretical, unrelated to the work at the hospital and without the support to initiate change. Some initiatives to improve the system quickly fizzled out due to a lack of cohesion and ownership from those who could not understand the purpose and context for implementing the change. Executives did not feel comfortable or supported enough to try new ideas and the unwillingness from the staff working at the coalface, to change an existing system, no matter how inefficient, kept the processes running in response to the daily challenges of a heavy and increasing workload. Thus, leaving systems and processes as they were, became a coping mechanism, but on the other hand, progress could not be driven in such an environment, despite its changing nature. This nature and the need for a change was

evident based on the increasing burden of disease, the diminishing resources and the impact of external stressors on both the staff and executives.

At the start of the CEO's tenure in 2013, her perception was that there was a need to capacitate the executive leaders at the hospital so that they could manage their areas of responsibility with greater confidence and as a team. She noted that the team members were not supporting one another, there was siloism in the management structure with a resultant effect of blaming one another for activities not performed and no joint responsibility being taken for these actions. As the ultimate accountability holder, the CEO felt that there was a need for stronger cohesion among the entire executive management team for her to feel assured that all the leaders at the hospital were working towards a common purpose, understood one another and their respective roles in whatever needed to be done. Examples of this would be the role of the non-clinical managers in ensuring quality patient care. The Support Service manager must ensure that there is sufficient clean linen in theatre to provide for the surgical operations. The Security staff at the entrance form part of the patient flow process into the Emergency unit or the Outpatients department. Staff must be appointed by the People Management sections to facilitate enough staff throughout the hospital. The Engineering staff must ensure that oxygen flow is adequate to the Intensive Care units and patient wards, etc. The leaders were performing these responsibilities, but they were not communicating with one another; they were not working together and understanding each other's constraints, leading to mistrust and blaming the next person when things were not done of if something went wrong.

The CEO realized that the question to be answered was whether this inaction on the part of the executives related to a lack of training, a lack of experience, a lack of leadership capacity or lack of will to initiate and sustain change. A further question was whether the executives had the necessary tools to perform their duties effectively. With these questions in mind, the CEO then conceptualized a Leadership Development Program (LDP) for the executive leaders at the hospital.

Given the complexity of delivering and managing in a hospital environment and the need for resilience in leadership, Groote Schuur Hospital, a public health facility and one of ten tertiary and quaternary service hospitals in South Africa, implemented a `home-grown' LDP for its executive leaders supporting the implementation of a contextualized improvement process system throughout the hospital. The context of the hospital shows that Groote Schuur Hospital is a large institution that requires leadership at both senior and middle executive level to cover the clinical services rendered as well as the support services activities.

1.2 The problem statement

To survive in a complex adaptive system as described by Plsek (2003, p3), healthcare leaders of today need to not only be responsive to the changes, but also plan for the future of healthcare by creating a climate that is sensitive to the context of the organization while responding to the service needs. Executive leaders at a hospital such as Groote Schuur are challenged to operate in such complexity. Developing leadership within the complex adaptive system of a hospital involves cultivating an environment of listening to people, enhancing relationships, and allowing creative ideas to emerge by creating small non-threatening changes that attract people (Holden 2005, p656). Such leadership could contribute to an environment where the staff feel safe to work and express themselves and where patients would prefer to be treated.

Leadership practices in health care systems commonly adopt a transactional leadership style, which is characterized by autocratic, standardized, controlled, and cost cutting behaviours as the means to achieving organizational outcomes (Weberg 2013, p1). Groote Schuur Hospital is no different in this regard. For the hospital executive leaders, the focus on meeting budgetary targets, being audit compliance driven and facing relentless patient pressures, results in excessive data collection and many reviews of information related to all aspects of the functioning of the hospital, including financial, people management and patient reviews, among others. Additionally, there are attempts to meet set budgetary targets within a context of the heightened fear of external auditors, constantly promoting a threat of harsh punishment for non-compliance. These factors create a rigid environment within which healthcare managers are expected to function and while such compliance driven activities are essential, they should be used to enhance improvement, rather than stifle it. The challenge of promoting a change in the leadership style of the executives amidst complexity can be overcome by being more adaptive, resilient and developing a learning culture, while still maintaining the standards of compliance.

1.3 Rationale for the study

This PhD will contribute to the knowledge of how to develop hospital leaders and leadership in the face of a healthcare environment of constant change, increasing patient load, growing financial instability and human resource challenges. Given the landscape of social complexity, such leadership should ideally be applicable and relevant to the context within which the leaders function and not simply adhere to management fads or management order showing a distinct link between cause and effect (Snowden and Stanbridge 2014, p142-143). The research literature offers little knowledge about how best to support leader and leadership development (Liang et al. 2013; Liang et al. 2020; Flaig et al. 2020). There is also limited knowledge linking leadership to the implementation of improvement

projects that ultimately contribute to a system of continuous improvement, specifically in the South African public sector environment (Mianda et al. 2018; Govender et al. 2018, p164; Mukwakungu et al. 2018, p431). Similarly, there is not much evidence to support the link between improved leadership capacity and hospital performance (Liang et al. 2013; Liang et al. 2020; Flaig et al. 2020). In a scoping review of the Sub-Saharan African literature, Johnson et al. (2021) noted a need for further research on the topic of health leadership for the South African context. Evidence was also presented to suggest that through building the capacity of leadership, there is a potential for improved resilience (Nzinga et al. 2021). There is a need to identify what form of leadership may be needed to improve hospital performance, develop a system of continuous improvement and enhanced resilience.

This PhD seeks to study, through action research and case study work, a LDP intended to strengthen the leadership capacity of the sixteen executives at Groote Schuur Hospital and how this may contribute to developing a culture of continuous learning and improvement. These executives included seven medical and nine non-medical managers, who are responsible for managing different functions in specified areas of the hospital. They have been exposed to a home-grown LDP, implemented since 2014, which supports the implementation and management of improvement processes that have been integrated into their daily activities, in the broader context of leading their area of responsibility at Groote Schuur Hospital. This PhD was based on the implementation of a practical and relevant leadership development program conceptualized and formulated by the Chief Executive Officer of the institution. This program, together with a focus on finding innovative ways of dealing with existing problems, hopes to contribute to the improvement of delivering quality healthcare to the patients through improved leadership, better team functioning and creating a culture of ongoing continuous improvements. Such improvements could be argued to support the programme's theory of change that through behavior change, there will be improved leadership of individuals and teams and by promoting innovation, the result will be an improvement in service delivery. The programme could, then serve as a model of organizational learning for other similar hospitals which seek ultimately to serve the needs of the population and become a resilient, sustainable, continuously learning, adaptive health facilities. The aspiration is to create a learning organization as described by Peter Senge (1990, p3) as "organizations where people continually expand their capacity to create results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together". Although leadership development has been implemented in various forms in hospital settings, none of the existing research reports a combination of leadership and innovation through improvement projects to enhance leader behaviour and team performance at large hospitals in the South African context.

1.4 Aim of this research

The aim of this PhD is to study the implementation of a strategy to improve leadership through a LDP, specifically analyzing whether and how the program facilitated their capacity development of participating leaders and their continuing work to implement improvement processes across the hospital. The study further reviews how the LDP may have influenced the success or failure of the improvement processes.

The results of this PhD will lead to a better understanding of how to strengthen leadership and management within a complex tertiary hospital environment, which has many uncontrollable variables, and thus contribute to the development of a resilient and continuously learning organization.

1.5 Outline of the thesis

This thesis is organized into eight further chapters as summarized below:

Chapter 2 presents a literature review on leadership, leadership development and some of the other collaborative features that emanated from this leadership journey, including the links between leadership and innovation, quality improvement, change management, continuous improvement, teams and organizational outcomes.

Chapter 3 addresses the methodology used in this research, describing the study design, data collection methods and ethical considerations taken into account.

Chapter 4 provides a description of the LDP as it was conceptualized as part of the vision statement of the hospital.

Chapter 5 presents an analysis of the views and experience of those hospital executive leaders who participated in the LDP.

Chapter 6 describes the four improvement case study processes examined and presents an analysis of the factors influencing these experiences.

Chapter 7 synthesizes and discusses the core themes of the study findings, linking them to the relevant literature, as well as considering study limitations. It also presents a conceptual framework of leadership development that could be applied in other hospital settings.

Chapter 8 offers some personal reflections of the researcher on the leadership journey itself and the contribution to this study.

CHAPTER 2: LEADERSHIP DEVELOPMENT LITERATURE REVIEW

This literature review sought to address key dimensions of the hospital's vision statement, Leading Innovative Healthcare, which drove the search terms as described in Table 3. This included a review of studies on leadership but also of leadership development activities, self-development, team functioning, quality improvement, innovation and other activities to understand their interrelationships and how they could link to leadership development. The literature review presents a synthesis of these different bodies of work structured around the core questions of relevance to this PhD.

LITERATURE REVIEW

2.1 Literature search strategy

The literature search evolved using keywords linked to the basis of leadership on multiple electronic databases. These searches often yielded many results. Articles of interest were scanned and then selected for further appraisal and relevant data extraction.

Key words used during the literature search included are outlined in Table 3 below.

Table 3: Key words used

Leadership in healthcare settings	**Leading for improvement**	**Broader impact of leadership**
Leadership	Leadership development	Leading for change management
Leadership in patient care settings	Leadership and continuous improvement	Leadership models
Leadership in hospital settings	Leading for quality improvement	Leadership and organizational culture
Leading teams	Leading through innovation	Leadership research methodologies

Although studies in other sectors outside of health were included, the search concentrated on leadership in health settings. Studies deemed not to add value to this research, because they were unrelated to the topic, were then excluded. The selected papers were read and re-read and then clustered together as being relevant to the specific topics as identified in Table 3. Information of interest was extracted and used as the literature review progressed through trying to answer specific questions related to the problem statement. Research on the applicable methodology was also reviewed.

2.2 Definition and dimensions of leadership.

What is leadership and what does the act of leadership mean?

In reviewing the history of the study of leadership, it is noted that up until the 1980's, research on the topic was largely unremarkable (Bryman 2004, p730). It was even suggested by some authors, including Miner (1975) and Cummings (1981) (cited in Bryman 2004, p730) that further work on the concept be abandoned due to the limited value it was providing to the broader knowledge on leadership. The concept of leadership was contested by Pfeffer (1977, p111), where he notes that leadership as a concept is ill defined and that leadership is actually about the phenomenological analysis of social causality, as perceived be others. He states that leadership is a set of myths reinforcing a social construction, that legitimize the role of the occupants and hence their performance, but that the concept of actual leadership does not influence their performance. However, since the 1980's, more qualitative designs and methodological diversity have contributed to a broader knowledge base on leadership.

Leadership is required to manage a country, to manage a business, to manage a family and to manage oneself. Stogdill (1974, p7 cited in Northouse 2013, p20) pointed out in a review of leadership research, that there are almost as many different definitions of leadership as there are people who have tried to define it.

Day (2014, p64) notes that the distinction between developing leaders and developing leadership is an important one, where leader development focusses on an individual, while leadership development focusses on a process that involved multiple individuals. This links the role of the leader in the team, but given the context of human development and behavior with varying personalities at play, leadership development needs to incorporate leader development as part of the process.

The literature quotes many definitions and theories on leadership leading to a confusing distillation of concepts and ideas incorporating inborn or learnt traits, style, behavior, characteristics, power, situational interactions, intelligence and the charismatic ability to inspire change. The definition of

leadership also differentiates between the leader as the person and the act of leadership. Kruse (2013) defines leadership as a process of social influence, which maximizes the efforts of others, towards that achievement of a goal. This definition is a compilation of views from Peter Drucker who simply defined a leader as someone with followers, while Warren Bennis felt that leaders can translate vision into reality. Kruse (2013) further clarifies that leadership is not about position, seniority, titles or personal attributes and that leadership is not the same as management. Other authors have used the term 'influence' (Sornapudi 2012) and 'social influence' Chemers (1997) to describe leadership. Implicit in their definitions is that it is not just the effects of a single person, but rather a team effort, involving interpersonal factors such as thoughts and emotions that interact with interpersonal processes such as communication and influence in order to have an effect on the external environment. By enlisting the aid of others, the leader can motivate, inspire and guide others through assigning tasks and managing the achievement of the goal. The leader is also sensitive and adaptable to both the internal and external environmental factors. While many such definitions are available, the common threads include the following:

- Leadership is a process to effect change or to achieve a common goal
- It involves teams or a group of people
- The leader is able to influence and motivate this group of people

An important consideration is to view the leader as a person with certain characteristics and traits. These have also been widely described (Lee 2011, pp 1-2; Javitch 2009; Rohn 2014 and Ruiz 2013) with many words and definitions, but assimilating all of the above, a more concise definition of a leader was proposed at the IAAP (2009) that: 'A good leader is a person with integrity, who is committed to the organization and the people who work together to accomplish the organization's mission; this person leads by example, communicates without ceasing, and shows care, concern, and consistency in all dealings.' For the purposes of this PhD, this definition formed the basis of the personal leadership development component of the program. Of all the leadership traits and attributes, the need for transformational leadership was identified to be important. James MacGregor Burns (Born 1918 – Died 2014) wrote about leadership and leadership concepts for over forty years and introduced the transactional and transformational leadership theories in 1978. His work has influenced other theorists such as Bernard Bass and Bruce Avolio (1993) who later expanded on these theories.

Burn's book on Leadership (1978, p20) describes transformational leadership as having a moral dimension, where "one or more persons engage with each other in such a way that leaders and followers raise one another to higher levels of motivation and morality." His theory appears to be

influenced by Maslow's hierarchy of needs where the element of self-actualization and self-esteem are important factors in transformational leadership. One of the aspects of transformational leadership was its hypothesized relationship with employee performance (Bass 1985 (cited in Sandell 2012, p6)), but more recent research and several more meta-analyses have suggested that followers of transformational leaders display high levels of performance (DeGroot et al. 2000; Judge and Piccolo 2004; Wang et al. 2011 (cited in Sandell 2012, p6). This increased performance is elicited through increasing motivation and transforming followers. The theory is based on the assumption that a greater awareness of the importance of the task motivates people and a focus on the team, rather than their own interests, produces better work. Transformational leaders create a strategic vision, communicate that vision and model it by walking the walk and talking the talk consistently, thereby building commitment. This means that there will be greater cohesion, commitment, trust, motivation, and performance in these new organizational environments.

Bass (1991, p21) expanded on this theory, but contested the moral value and explained transformational leadership in terms of how leaders affect their followers, through trust, respect and being admired. Incorporating Bass and Burns readings, transformational leadership begins with self-awareness about ones' feelings and thoughts and then using this knowledge to impact on behaviour and thereby affect others. It asks for leaders to act with integrity, respect and truthfulness that will inspire others. It thus means that, unlike the other leadership theories, this form of leadership can be learnt and a leader is able to choose a specific behaviour depending on the people around him/her.

Bolden (2003) suggests that both forms of leadership are necessary depending on the where the organization see themselves. Transformational leadership evolves as people and organizations move to change with the changing times. Zhu et al. (2005, p40) contextualized this change by noting that previous leadership practices focused on command, coordination, delegation and resource acquisition, with the relationship between the leader and the subordinate being impersonal. He indicates that more recent theory of transformational leadership focuses on changing the status quo where the leader establishes a relationship with other organizational members, thereby impacting on influence, inspiration and a sharing of the vision.

In a lower middle income country setting, Nzinga et al (2018, pii33) studied leadership in front line staff at Kenyan hospitals and noted the importance of using a distributed leadership lens rather than 'individual leader' perspectives, because of the professional power, politics and parallel leadership between doctors and nurses. She noted further that there was a dominance of the medical professionals in leadership, and this undermined the development of a more distributed form of leadership. This was based on a framework of distributive leadership defined as a constellation in

which individuals play distinct roles and all members work together with a more holistic sense of leadership (ibid, pii28).

With multiple actors each with their own leadership styles, finding a way for them to complement one another is a form of distributive leadership, which is defined as sharing of generic leadership tasks to influence resource availability, decision making and goal setting within an organizational perspective (Gu¨nzel-Jensen et al. 2016). It is further noted that research on distributive leadership is conceptual or descriptive, with most applied in the educational sector (ibid). It is said that the hierarchical nature of the health sector makes it difficult to consider distributive leadership in this sphere. Gu¨nzel-Jensen et al (2016) identify that distributive leadership has a strong parallel to concepts such as shared leadership or participatory leadership. While there may be overlap between the various concepts, it is noted that each has some scholarly literature attached to it.

Harris (2003) offers a definition of distributed leadership as a change in the way formal leaders understand their practice and the way they view their leadership role, where there is active brokering, facilitating and supporting of others.

Hargraves and Fink (2006, p8), in a discussion paper on distributive leadership in schools indicated that sustainable leadership os distributed leadership, but not all distributed leadership is sustainable leadership. They state that developing teachers as leaders is not enough as it transcends individuals, communities, networks and moves up and down its organizational layers. This can be inferred onto the health environment with its multiple role players, but the depth and breadth of such a discussion cannot easily be related to this study and the many leadership traits and behaviours involved.

However, Yukl (1999, p288) feels that the theoretical rationale for differentiating among the behaviours is not clearly explained, since the behaviours have diverse components, which raises ambiguity about their construct validity. He further questions whether transformational leadership, based on the construct of a leader-follower interaction actually has an effect on motivation and performance. The use of terms such as motivate and inspire do not offer a clear description of what the leader actually says or does in order to influence process and behaviour.

Taking this into account, the Groote Schuur Leadership Development program looked at the differentiation between a leader and the act of leadership in a complex environment and worked towards a more holistic approach of an interactive, transactional and transformational process between a leader and a group of people who influence one another towards achieving a common goal, in the form of innovative improvements that can provide benefit for the future in the longer term. It is therefore a process of continuous change and adaptation to change for sustainability.

2.3 Literature on leadership development

Research can be regarded as relevant if it adds value to the existing knowledge base on the topic as well as the extent to which the information can be generalized and replicated outside of the setting in which the research was conducted.

The Business Dictionary (2014) describes leadership development as the ‘teaching of leadership qualities, including communication, ability to motivate others, and management, to an individual who may or may not use the learned skills in a leadership position.’ This must be differentiated from leader development, which according to McCauley et al. (2010, p2) is the “expansion of a person’s capacity to be effective in leadership roles and processes”. These aid in setting direction, creating alignment and maintaining commitment in groups of people sharing common work. Leader development therefore results by investing in human capital and is one aspect within leadership development with the former focusing on the individual and the latter on a team developmental process. Both are needed to encourage a change process, which will be effected through motivation, teaching and coaching.

Are we developing leaders or managers?

Many large organizations rely on emphasizing effective management rather than leadership. It has already been stated that allowing individuals to develop their personal power and influence can result in better leadership of organizations. As organizations evolve to adapt to the complex challenges facing them, the need for leaders to be good coaches, mentors and teachers can lead to additional competencies required by the leadership of the organization. Hill (2003, p639) felt that developing leadership competencies as a team and developing key leaders on a personal and organizational level, would allow for the leaders being able to respond to change. In her initial assessment of 32 participants, the establishment of a baseline for learning needs identified stress and life balance as the number one developmental need. The more senior executives on the other hand identified financial skills and business management as a need for development. However, over the course of the year, it was noted that through leadership development, relationships were developed among the participants as well as a better understanding of each person’s role in the workplace, leading later to better cohesion and support of one another and improved coping skills. The need for support from a resource person or champion during and after the process was an important determinant for success.

McAlearney (2008, p324) in her study on 200 hospital managers across the United States, executives and academics, from 2003 to 2007, showed that leadership development programs do provide four important opportunities to improve quality of care and efficiencies at healthcare institutions.

- Increasing the caliber of the workforce through focusing on specific priority training needs
- Enhancing the organization’s education and development activities by reducing duplication and cross communication from different sources
- Reducing turnover and related expenses by improving employee satisfaction and reducing employee frustration
- Allows a focus on the organization’s strategic priorities so that the entire organization understands and supports the goals.

In a review of leadership development, Day (2001, pp 582-583) re-iterates the need for knowing and understanding the self as a person through active mentoring and coaching during the developmental process. While executive coaching was shown to increase productivity by 88% in public sector managers (Olivero et al. 1997 cited in Day 2001, p592), there are no research studies evaluating the combination of leadership development and coaching and how this impacts behavior change.

There is a need to move away from the traditional classroom, lecture-based training to an action learning process, where continuous learning and reflection happens with the support of colleagues while dealing with real-time organizational problems. However, there is little published research to support action learning as a form of leader development, but it is assumed that facilitating action learning using work-related projects results in a sense of pride and gives meaning to the organization’s purpose (Day (2001, p601); Humphris et al.(2004, pp 14-16); Sirianni and Frey 2001; Mabey 2000 and 2002 cited in Humphris et al. 2004, p15).

Some hospitals have demonstrated success with change management through leadership development, for example, the Beth Israel Deaconess Hospital (2010) in Boston restored patient satisfaction and improved financial performance through sound leadership values that prioritized transparency and accountability. Denis et al. (2010), presented data from three case studies of leadership experiences in Canada, where there was success in the context of complex and uncontrolled systems. He states (2010, p72) that seeing leadership as dynamic, collective, situated and dialectical results in the creation of a functional group of leaders who must humbly accept that there will be success and there will be failure but adapting to the ever-changing environment through development leaves room for constant improvement and further research.

Recognizing that leadership is a broad concept, its evaluation requires enquiry into the social, financial, technological, process, organizational and behavioural, among other factors and variables. Concern for leadership in health care also requires consideration of whether and how leadership can impact on the entire health system and its multitude of components, ultimately leading to a health outcome

for the patient and the broader society as a whole. Assessing the positive and negative effects of a program cannot be done without the recognition of the many factors that add to the complexity, which include a multitude of groups with different values, relationships, interests and expertise aptly called a 'messy' world (Mitzenberg 1997 cited in Denis et al. 2010, p68).

To offer some clarity to this 'messy' world, Day (2000) provides a distinction between training a leader as a person's capacity to fulfil a leadership role; training a manager to have the skills to be able to perform the tasks in a management role and then training on leadership, which is the process of developing groups, teams, networks or entire organizations as a collective capacity. Despite this distinction, the common theme is one of building capacity, hence creating the requirement of leadership training focusing on effectiveness. Another concept widely spoken about is that of being a leader or a follower (Kellerman 2007). The researcher's view is that these definitions all complement one another and therefore, leadership development encompasses all the above aspects, among others that contribute to practicing leadership.

Is there a need for health manager training?

In a systematic review of publications from 1990 to 2019, including only 9 articles, Ravaghi et al. (2021) noted that the training of hospital managers was identified to have a positive effect on the skills, knowledge and competencies of the managers. While these programs focussed on technical, interpersonal and conceptual skills, training was found to be more effective in the improvement of technical over the other skills (ibid. 2021).

Other reviews and papers have included evidence for the need of training to be evolving and contemporary (Figueroa et al. 2010). Sonnino (2016) and Stoller (2013) suggested that programs must be implemented early in the career of the manager and cover interdisciplinary and comprehensive content. The literature supports a need for leadership training for hospital managers.

Lower middle income countries in Africa offer little support for health leadership development in the literature. MacKechnie et al. (2022), in a systematic review, noted that most of the leadership development programs are aimed at clinical staff, are short term interventions and cover themes of communication, organizational structure and leadership and personal development. Edmonstone (2018, p5) proposed that development methods which are grounded in leadership and management practice should take account of the local cultural and organizational contexts using an approach of action learning. None of the studies reflected on the leadership development of hospital managers in lower middle income settings such as South Africa.

In an early post 1994 review of health management training in South Africa (Schaay et al. 1998, p93), the strengthening of health service management was seen as a priority in the South African National Health Plan. Management was one of the principal areas highlighted for training health workers, but at the same time, a concern was expressed that many of the ideas still needed to be implemented. The effectiveness of training would depend on the organizational context in which they are applied, and the desired learning outcomes and they suggested that one of the key challenges facing the health service in relation to organizational and management development was the shift that had to be made in "…moving from bureaucratic to enterprising, responsive and accountable service delivery…".

External funders of for example, the Global Fund to fight AIDS, Tuberculosis and Malaria, the United States HIV/AIDS initiative and the World Bank funding, among others note that many developing countries do not have the infrastructure to use the funds and that the fundamental barrier is the lack of competent management at all levels, thereby impacting on the entire health system (Filerman 2003, p1).

In another initiative between the South African National Department of Health (NDOH), the Universities of Kwazulu Natal and Witwatersrand and the government of France, a Masters course was implemented, but failed to achieve its desired goal of making this course a perquisite for all hospital managers. The reason for this was not clearly defined (Naidoo et al. 2017). Two other known programmes offered by Higher Educational Institutions (Doherty et al. 2018 and Goldstone et al. 2016), include the Oliver Tambo fellowship and the Albertina Sisulu leadership training programs. In their evaluations, both have noted that the content and impact on those entering the program is good, but that post-training, there is no support being offered to the managers, hence the challenge about whether the managers can initiate and sustain change in the workplace after training. The question is therefore whether formal programs are needed or whether programs need to be more contextual and 'home-grown'? This realization, while relevant in the broader context, is very similar to that being experienced at Groote Schuur Hospital.

Creating a Leadership Development program.

Leadership development and leadership capacity in the public and private sector has been noted to be a constraint, especially at the operational level, in low and middle-income countries (World Health Organization (WHO) 2007, p7; Curry et al. 2012). This is despite a fair amount of time and money being spent on strengthening such capacity. The WHO further recommend that attention be given to the competencies, roles and responsibilities and performance changes that need to be clearly defined and measured (ibid). Facilitating such leadership development is important for a healthcare organization

as it promotes skills and competency development needed to effectively manage and lead the staff toward goal achievement. The benefits of LDPs has not been clearly articulated in the literature due to limited research on the topic, but reviews on the topic have reflected some benefits to skills, knowledge and confidence of the managers (Flaig et al. 2020, p69). Johnson et al. (2021, p128) in a scoping review of LDPs implemented in sub-Saharan countries however reflect that there has been an increase in the number of leadership development programs, but due to the varying formats, time frames and content, it is difficult to report on any beneficial impact of LDPs. Contributing to this challenge is a lack of clear evidence of exactly what leadership capabilities are most important for health professionals in Sub-Saharan Africa and what models or approaches to LDPs can be used (ibid).

Experience at this hospital being studied is that many managers have attended numerous courses and workshops, but the effect on the health system has not been realized, due possibly to the fact that the courses are incorrectly targeting managerial skills instead of effectively using leadership and management in the right context. It would seem that a combination of needs has to be strengthened at the same time, which includes not only the development of the leader, but also the development of the teams within which they work and lead. Leaders need a combination of leadership and management skills, which can only be realized if an infrastructure as a system of learning exists at the facility to capacitate, support and mentor the leaders.

Capacitating a leader who ascribes to some of the traits and personalities described requires a different approach to a leadership development program. This program must then be nested in the context of its use for team development. In most organizations, team leadership style will contribute towards greater team effectiveness. The findings on team effectiveness by Lemieux-Charles et al. (2006, p267) show that the type and diversity of clinical expertise involved in decision making accounts for improvement in patient care. While this focus was more relevant to clinical teams, the findings could be interpreted to support the importance of team functioning. However, the team must be aligned around a clear strategy or vision and the training program must include dealing with any change involved in the process with adequate coaching and feedback (Beer et al. 2016).

What type of environment needs to be created for management learning?

Creating the learning environment is dependent on several factors.

The health system is complex in nature, and to be resilient to the multiple challenges requires adaptive leadership (Belrhiti et al. 2018:1073) It is an environment, where there are interactions occurring at multiple levels, with multiple stakeholders, including patients, their families, providers, suppliers, higher educational institutions, governmental and non-governmental organizations, among others.

These interactive elements all contribute to a complex system within which a service must be delivered to patients and at the same time, be adaptable to changing environmental circumstances such as evolving technology, climate change, rising burden of disease and more recently, the covid pandemic. Building such a system of leadership resilience relies on an interaction between the hardware (technology, infrastructure, funding and human resources) and software (skills, knowledge, decision making processes, values, norms, relationships and communication practices) elements, with all these aspects being important (Barasa et al. 2017 and Arag'on et al. 2010 (cited in Nzinga et al. 2021, p1)).

Hardcre et al. (2011, p9) found that the climate within a team accounts for 30% of its performance and that up to 70% of this climate is due to team leadership. Leggat and Dwyer 2003 (cited in Hardcre et al. 2011, p9) similarly showed that the results of a review of the literature was consistent with the finding that leadership and specifically leaders had an influence on setting the tone for the rest of the team or organization.

The role of senior managers and the team efforts in the success of quality improvement projects is reiterated by Francois et al. (2005, p239), where through a process of educating providers, creating multidisciplinary teams and focusing on problem solving methods, quality improvements can be implemented. This is supported by Firth-Cozens and Mowbray (2001, p3) where quality improvements were dependent on leadership behaviours and personality, providing training and a transformational style of leading.

The use of the word 'innovation' in this context means something different that can result in improvement. Paulus et al. (2008, p1235) used innovation in the context of adding value and if viewed in this way, then continuous improvement can also add value to patient care. However, personal experience in GSH suggests that innovation is more of an impetus for staff to feel supported an encouraged to come up with new ideas, since these may not have been forthcoming previously simply because of the environment that was not supportive to them (Own experience). Therefore, the role of the leader to be motivating, supportive and able to assist, either through coaching or otherwise, is an essential element that can facilitate innovation. The view being expressed reflects that a public health facility does not need to constantly focus on bureaucratic processes, rules and financial targets to achieve success, but can also be supported through innovation.

2.4 Literature on leadership development and continuous improvement

What may be needed to develop leaders?

In this research, the objective is to evaluate how a leadership development program may have contributed to the implementation and evolution of the improvement projects in a complex environment where there is rapid change. This requires a detailed understanding of how the leadership development of the executives, through the training program has contributed to the performance or lack of performance of the improvement projects. The research will also review what factors may have enabled or disabled the process.

McCauley (2008), in a review on researching leader development, recognizes that much research has been done on developing leaders, but that there is still a gap in addressing why certain interventions work and how to combine them to gain improved effectiveness of organizations. In asking the question of why this works or not, further information can be gained on how to overcome the challenges in building an effective leadership development program.

Interest in improving the capacity of leaders has resulted in increased investment in leadership development. Hence, leadership and team development could enhance resilience and provide a competitive advantage in today's challenging environment. However, although many forms and contexts for leadership development have been proposed, there is not much in the literature about the evaluation thereof, specifically showing a link between development and increased organizational performance.

Mabey (2002) suggests that the fragmented picture stems from a mix of surveys on training activity that is country specific, to analyses of developmental methods and occasionally an evaluation of an investment. This gives an incomplete insight into why certain processes succeed and some fail. Clarke 2002 (cited in Humphris et al. 2004, p14) suggests that the transfer of knowledge beyond training is highly contestable. Unfortunately, much of the research in the United States has concentrated on private services. These findings cannot be easily translated to the public sector, where there are different demands and challenges on the services compared to the private sector.

Many studies mentioned a positive impact on health managers and in some instances, on health outcomes. Kosgei (2015) quoted specific efficiencies and improvements made in healthcare customer satisfaction (increased to 70%) and an overall service rating of 'good' at 50%. Unfortunately, no baseline measures were available to see the actual improvements. Other studies noted a positive impact on the managers in terms of what they had learnt but not necessarily on how this was implemented in the workplace. Along with the positive impacts, researchers have indicated the need to ensure that LDPs are locally owned, tailored to be contextually relevant, the provision of coaching and mentoring and a program based on a competency framework (Agyepong et al. 2018; Dixon-

Woods et al. 2011; Kakeman et al. 2020; Grider et al. 2014; Pillay 2008; Liang et al. 2013; McAlearney 2008 and 2010; Cocowitch et al. 2013; Johnson et al. 2021; Liang et al. 2013; Kelly 2014; Sonnino 2016; Ross 2007). Many confirmed the need for additional research to gain further insights into the benefits of LDPs (Nzinga et al. 2021; Flaig et al. 2020; Mianda et al. 2018; Gilson et al. 2018; Johnson et al. 2021; Ardestani et al. 2016). Overall, studies recommended having a context of training related to the Individual, the Team and the System. Individual development included prioritizing the training on self and people management (Cummings et al. 2013; Pillay 2010). Team based learning and team functioning was specifically regarded as important for collective leadership, collective ownership and providing support to one another (de Bron 2020; Curry et al. 2020; Singer et al. 2011). A common thread reflected in the studies was to contextualizing the program and making it more relevant to those functioning within it.

The literature also describes negative effects of the programs. Edmunstone (2009) evaluated a LDP as a case study and indicated that because the contractor who provided the training changed every two years, there was no consistency in the program material, hence the difficulty in assessing any benefits of the program. Cummings et al. (2013) in a study assessing the effects of a leadership development initiative on the work-life of leaders and staff, noted that the learning contributed to leading the self, but not necessarily impacting on behavior change. Others noted that correlations between the intervention and the outcome could not be made, due to a small sample size and hence the inability to generalize the results and the need for more work-based training rather than classroom lectures (Frich et al. 2015; Ardestani et al. 2016; Goldstone et al. 2016; Liang et al. 2020; Steinhilber et al. 2015). The studies also noted that due to the benefits being so varied, a LDP could benefit more if it were developed as a formalized program (Ross 2007; Pillay 2008; Liang et al. 2013; Ardestani et al. 2016; Johnson et al. 2021; Flaig et al. 2020) and further research on the topic was invited (Edmunstone 2009; Mianda et al. 2018; Gilson et al. 2018; Cunningham et al. 2018;Nzinga et al. 2021; Streeton et al. 2021).

Studies emanating from South Africa mostly included surveys and literature reviews. Doherty et al. (2018) does highlight the importance of taking the context into account. Others (Gilson et al. 2018) have argued for the need of workplace based LDP's, but none of the articles tested leadership development for health managers as an implementation strategy to review outcomes. Thus, most of the literature concentrates on reviews and LDP implementation experiences in the northern hemisphere. While learnings can be gained from these studies, there is very little in the literature to support contextualizing leadership development for healthcare managers in the South African context.

Given the knowledge gaps in the literature on how and why leadership development may contribute to organizational improvements, the context provided by this research is conducive to evaluating this link.

2.5 Literature on leadership development and teams

In any organization, effective team functioning requires effective team leadership. In the healthcare environment, multidisciplinary team cohesion, within and outside of the facility, is needed to enhance the patient's experience along an integrated care pathway.

Why is it important to share leadership?

Recent leadership scholars have proposed that the pathway to improving organizational outcomes may be found in a different leadership model (Uhl-Bien and Marion 2008; Lord 2008; Delia 2010 (cited in Weberg 2013, p1). A model, in which the leadership is shared among employees, uncertainty is normative, mutual goals are facilitated, and innovations are foundational characteristics, would be more congruent with the increasing technology and complexity (Uhl-Bien and Marion 2008 (cited in Weberg 2013, p1)). One such model is proposed by Wallace (2012), where he describes transformational leadership to be closely intertwined to servant leadership, the principles of which begin with self-knowledge, listening, developing your colleagues and coaching, resulting in a pyramid change. Transformational and servant leaders develop their agendas for the good of the team or organization. Communicating with the employees, listening and sharing the vision, build on the adaptability and flexibility of both the individual and the organization to overcome obstacles, seizing opportunities and innovating.

A survey by Martin and Bal 2006 (cited in Morgeson et al. 2010, p6) showed that 91% of high-level managers agreed that teams are integral to organizational success. Thus, increased attention has been focused on team leadership through coaching, promoting team learning and adaptation, managing team events, using transformational leadership to motivate teams, sharing leadership within teams, and many more, but they feel that more work is needed to understand how leadership manifests itself in team functioning and effectiveness. Morgeson (ibid) describes the main function of team leadership to be to satisfy the team needs with the goal of enhancing team effectiveness. These needs are satisfied by addressing what needs to be done in the specific functions that the team exercise and how leaders can influence these, for example, the different actions required to successfully manage a project, which requires planning, implementation, monitoring and re-planning. This was taken into account when developing the program for real leadership development.

In emphasizing the importance of developing teams, paired learning (Kelly 2014) was noted to improve relationships through understanding one another's roles and creating shared values. This lesson is relevant to the health environment where clinicians often see themselves in a different category to the managers of the organization. Through such paired learning, common goals could be understood better. Cunningham et al. (2018) suggests that through team development there could be a flattened hierarchy, effective communication, leadership support and alignment of team goals with organizational goals through a shared responsibility. Through such a learned shared responsibility, collaborative and participatory leadership results in improved outcomes (Dovey 2002; Dixon-Woods et al. 2011; Singer et al. 2011; Kelly 2014).

Why is it important to understand each member of the team?

Another complexity within teams would be the different personalities and strengths each person brings to the team. Belbin 1993 (cited in Bolden et al. 2003, p13) studied factors that separate successful from unsuccessful teams and found that balancing and complementing different individual styles and roles resulted in greater team strength. Each team member could perform roles they felt comfortable with, but the strength they brought to the team outweighed the weaknesses in their abilities. Belbin found no 'ideal' team member who was able to perform all the roles required, thereby noting that leaders themselves have weaknesses and unless they are able to acknowledge these weaknesses, they would impact on how the team is led as differentiated by either a 'solo' leader or a 'team' leader. Therefore, the ability to understand the self and the self as part of the team became the foundation of the Groote Schuur leadership development program.

Working as a team requires some adaptation and change towards joint learning for improvement. Such learning can either come from the leader or be shared with the leader as the team develops and grows, creating a sense of jointly working towards a common goal. This was clearly the case in a study at the Ohio State University, where strong leadership and teamwork resulted in substantial and measurable improvements in staff satisfaction and clinical and financial performance at the hospital (Sanfilippo et al. 2008). By employing a service value chain process, they developed a seven-step process to drive behaviour and culture change at the hospital through appropriately selecting and developing a team of leaders.

Motivating and building teams in this context and in a transformational environment can also be regarded as 'empowering leadership', which involves the transfer of power from top management to the workers who are able to take initiative and make decisions about daily activities (Ford and Fottler 1995 cited in Amundsen et al. 2014, p488). The notion of team leadership extends far beyond just the individual as a leader and his/her behaviour, bringing a new dimension to the definition of leadership.

For a LDP, the importance of the individual leadership development is noted, but as an integral part of the team that is managed is noted, hence the need for team leadership development as well.

2.6 Literature on leadership development and quality improvement

There are varying definitions of quality of care depending on the stakeholder's viewpoint and context. However, certain characteristics (within healthcare) of quality such as efficiency, effectiveness, accessibility, equitable, comprehensive, appropriate, timely, among others, are regarded as core considerations.

Why is quality such a vital link to improvement and does it require leadership?

Quality improvement is a paradigm shift away from the inspection of activities, meeting standards, etc., to placing an emphasis on continuous positive change in performance. The underlying philosophy is that no matter how good the care is; it can always be improved. Various business models including systems thinking, lean management, total quality management, etc. can be used to effect this change.

The literature linking leadership and quality improvement often starts by indicating that the understanding between the two is very limited. Ovretveit (2005, p419) conducted literature reviews on the topic and quoted the following:

> "There are many publications stressing the importance of leadership, but only a few studies provide the observational evidence to support this view, and no studies have rigorously tested this proposition in healthcare."

Ovretveit (2005, p491) further notes that senior leaders do play an important role in quality and safety improvement, but the evidence for this is not strong. Of significance, is that most of the studies in his review reflected concern over the engagement of senior clinicians, mostly doctors, which he felt were a necessary factor for improvement success. However, physician involvement was higher when the initiative was led by the CEO or the board of the hospital, implying that senior leadership gives credibility to the program and that it is seen to be linked to the organization's strategic vision and mission (ibid, p420). In a large complex hospital setting, this consideration could not be ignored. This finding is reiterated in a study on organizational change built around nurse practitioner roles, where effective change is driven by effective leadership and linking strategy, human resource management, governance management and organizational cultures in the change management (Lowe et al. 2018).

One of the methods used for quality improvement is the implementation of the 'Kaizen' philosophy, which stems from the Japanese meaning of the word for 'improvement' or 'change for better' and focuses on a process of continuous improvement in all aspects of the workflow within an organization

so that employees can perform their tasks better each day. Its successful implementation requires the participation of workers in the improvement at all levels and it is through this process that the term kaizen teams / quality teams emanate. These teams are formal and informal groups of employees who voluntarily meet regularly to identify, define, analyze and solve work related problems (Bhuiyan and Baghel 2005, pp761-771). Of significance is that the solutions arise from the workers themselves, resulting in greater work satisfaction and a sense of appreciation, thereby improving morale. An important example of the impact of leadership on health care was seen in the example provided from Theda Care, which is a group of hospitals in Wisconsin, North America. They used Lean business principles and the 'Kaizen' method of the Toyota Production Systems, to its five hospitals and through a process of culture change, have managed to convert quality management from being reactive to crises to one in which there are strategies to improve patient care and quality and avert crises. The involvement of staff at every level buying into the vision of the project was integral to its success. This is outlined in a book by Kim Barnas (2014), where over a period of 10-12 years, there has been a turnaround in the way that the hospitals function and there is a culture of continuous improvement.

Thus, the common thread supporting any improvements appears to be the need for leadership, teamwork, providing a vision and enabling staff to make meaningful change.

2.7 Literature on leadership development and innovation

Facilitating innovation in healthcare organizations requires leadership to allow the space for creativity, to engage service providers and to listen to new ideas, which can result in streamlining work-flow processes, reduce costs and improve quality.

Innovation, continuous improvement and quality improvement – Is there any difference between these concepts?

By definition, innovation means: intentionally 'bringing into existence' something new that can be sustained and repeated and which has some value or utility (Selman nd, p2). By stimulating new ideas, value and utility can be added to activities in order to improve the quality of care.

Selman (nd, p1) further notes that innovation and leadership are closely related in that leadership constantly aims to bring about a better future, thereby implying that leaders are innovators. Such innovations could be modest improvements or significant change and Selman (ibid, p8) identified ways in which circumstances are interpreted to either allow for innovation or not. These include:

- resisting or coping – where no innovation happens, since this is merely a response to the circumstance;

- Responding or choosing – where innovation happens naturally because the change is based on how improvement is perceived;
- Bringing forth or creating – where there is a predisposition to change through being innovative and bringing new realities into existence.

These circumstances can be related to any organization that feels the need for change and the need to introduce or allow innovation.

Various studies (Howell and Avolio 1993; Ogbonna 2000; Jung et al. 2003) have shown a link between transformational leadership and an enhancement of innovation to effect improved organizational outcomes. These transformational leadership factors included:

- Engaging employees value system to heighten the level of motivation
- Encouraging creative thinking

Important motivational factors were also noted in a study of 270 managers' influence on innovation in twelve European countries, where it was found that the sociocultural context had a link to leadership and innovation (Manev 2005; Henry 2001; Howell and Higgins 19990; West et al. 2003; Jung et al. 2003 (cited in Sarros et al. 2008, p147)). The studies all showed a freedom to discuss and try out innovative ideas and approaches through constantly challenging workers and stimulating creative thinking. Vaccaro (2010) also quoted studies on how leadership could influence innovation. In particular, he mentioned the role of leaders in reducing uncertainty and complexity, as supported by Birkinshaw et al. (2008 cited in Vaccaro 2010), where a shared vision and supporting change were integral factors required from leadership to encourage innovation. Uhl-Bien et al. (2007, p18) suggested that by shifting leadership into the knowledge era, leaders can help subordinates make sense of change by simplifying complex dynamics.

Leadership behavior, both from the most senior leadership of the organization, specifically the CEO, as well as that of the senior managers, has an impact on the development and implementation of innovation.

Healthcare innovation is defined by Omachonu (2010, p5) as:

> "The introduction of a new concept, idea, service, process or product aimed at improving treatment, diagnosis, outreach, prevention and research, and with the long term goals of improving quality, safety, outcomes, efficiency and costs."

This definition translates to healthcare innovation dealing with process, products and structure (Varkey et al. 2008 cited in Omachonu 2010), where the product could be a clinical innovation, the

process could be a new delivery method and the structural innovations allow for the creation of new business models. Most innovations have been in technological advancements and other methods of improvements have not necessarily been identified as innovations. Hartley (2005) noted that these technological innovations have been recorded in the private sector, where less is shared to protect the competitive advantage. However, public health care facilities have shown innovations in processes and outcomes that have benefitted the broader public service and provided public value but has not been recognized as innovative.

The above begs for a definition of innovation to be crafted for health care changes that are taking place and having significant impacts on quality, care and services. For the purposes of this PhD, innovation is regarded as anything new or different to the organization that promotes an improvement.

2.8 Literature on leadership, organizational culture and performance through continuous improvement

The literature identifies a clear link between leadership, organizational culture and change. Kotter (1998, p161) states that, 'Only through leadership can one develop and nurture a culture that is adaptive to change.'

Will we be able to ultimately change the institutional culture of the organization?

Schein (2004, pp10-11) suggests that culture and leadership are two sides of the same coin, with neither being understood by itself. His theory is that on the one hand, cultural norms dictate how a given organisation will define leadership in terms of who will get promoted, and who will get the attention of the followers, while on the other hand, leaders have the ability through their talents to influence culture, since people follow a person in authority and it is the behaviour of this person that can guide the behaviour of others. Leaders can thus also create culture.

This message is reiterated by Bass et al. (1993, p113), stating that there is a constant interplay between culture and leadership. Leaders are responsible for cultural development and the reinforcement of norms and behaviors. Cultural norms arise and change because of how leaders behave and indirectly, whom they attract to their organizations. The characteristics and qualities of an organizational culture are intertwined through leadership and what is adopted by its followers; hence culture affects leadership as much as leadership affects culture.

Leadership in a cultural context can also be about the people. If people feel that they are making a valuable contribution and feel motivated that they are making meaningful change, then this leads to

fulfillment for that individual or team (Covey 1999, p37). The real test of the culture according to Covey (ibid, p42) is when there is a crisis, and the organization either copes or crashes. The leader, through his or her behaviour, creates a culture that allows the team to be motivated and cope through working together in reaching consensus to solve problems or alternately, the leader could cause the team spirit to be disrupted, leading to more conflict within groups.

Some authors have further suggested that organizational culture and leadership are independently linked to organizational performance. For example, researchers have examined the links between leadership styles and performance (Bycio et al. 1995; Howell and Avolio 1993 (cited in Ogbonna et al. 2000)), and also between organizational culture and performance (Deal and Kennedy 1982; Denison 1990; Ouchi 1981; Pascale and Athos 1981; Peters and Waterman 1982; Kotter and Heskett 1992 (cited in Ogbonna et al. 2000)). Integrating a culture of high performance as part of a strategic plan requires leadership commitment extending throughout all leadership levels. This, according to Cochrane (2017) will bring about successful culture transformation. In a South African context, leadership style focused on communicating and building relationships was found to improve cultural entropy (the amount of energy consumed by unproductive work) at a Community health center in the Western Cape. The key drivers for the improvement were noted to be a change in the leadership style and functioning through feedback mechanisms, personal coaching and engagement with the broader groups (Mash et al. 2016).

An understanding of culture is an important requirement for leadership and this requires an understanding of the complex context within which Groote Schuur functions, with both external and internal influences. The external influences relate to Provincial, National and International directives, systems, policies and requirements, while the internal influences relate to the culture of many departments that have historically functioned in silo's but need to interact on a transversal level in order to effect the transformational change to enhance individual, team and system capabilities.

Researching an effect on culture as an outcome will be too broad for the limited time frame of this study. It is therefore proposed as a longer-term question that can be asked.

2.9 Theory of change for a Leadership development program

Hannum et al. (2007, p8) note that Leadership Development Programs (LDP) seed changes and connections among individuals, groups or teams, organizations and communities that continue to emerge over time. Reasons to evaluate such a program include:

- To demonstrate more fully how participants, their organization, and communities do or might benefit from their leadership development program experiences

- To fine-tune a proposed or existing leadership development intervention so that it has farther reach and might better meet its goals
- To show how participation in leadership development experiences connects to such visions as improving organizational performance or changing society for the better
- To promote use of learning-centered reflection as a central evaluation activity
- To pinpoint what leadership competencies are most appropriate in particular settings
- To encourage more comprehensive discussion about what works and why.

In complex environments, quasi-experimental study designs may be able to assess the effectiveness of a program, but fail to provide valid information on how and why interactions occur to produce an outcome (Marchal et al. 2012, p193). This is largely due to the difficulty of using traditional quantitative study designs and methods to research complex phenomena.

An alternative proposed by Chen (2012, p17), is one of theory driven evaluation, which can be used to assess not only whether an intervention works or does not work, but also how and why it does. The theory of change approach (Connell et al. 1995; Fulbright-Anderson et al. 1998 cited in Marchal et al. 2012, pp 193-4) and realist evaluation (Pawson and Tilley 1997 cited in Marchal et al. 2012, p194) are considered specific schools within theory driven evaluation. The Theory-driven evaluation focuses not only on the implementation of the intervention and its effectiveness, but also on the causes and contextual factors.

Chen (ibid) further distinguishes normative theory from causal theory, where normative theory describes the design and implementation procedure and distinguishes between program theory failure and implementation failure, while the causal theory outlines the causes in terms of the relationships between the intervention and the outcome as well as the effect of the contextual environment.

As noted above, there is no single explanation offered for how things might work in leadership development and the link of cause and effect to theory of change.

Many definitions have been put forward, but a clear explanation of a theory of change explains how an intervention, through a sequence of events produces results that can be divided into immediate, intermediate and ultimate outcomes (Treasury Board of Canada 2012, p11). Furthermore, the theory of change also outlines the mechanisms, assumptions, risks and context that enable or disable the ability to produce the required outcomes. The assumptions of how these linkages interact with one another are required to formulate such a theory of change. The risks are disablers that may impede

this link and the mechanisms enable the results. The document also speaks of other factors that would be beyond the control of the program and could indirectly affect the outcome. Thus, the theory of change could be the intervention theory, which is thought to be the underlying mechanisms behind the intervention that cause it to make a difference, or the implementation theory, outlining the expected operational system, or alternately, a combination of both. It furthermore identifies the strengths and weaknesses that may either support or argue against a claim that an intervention is successful or not.

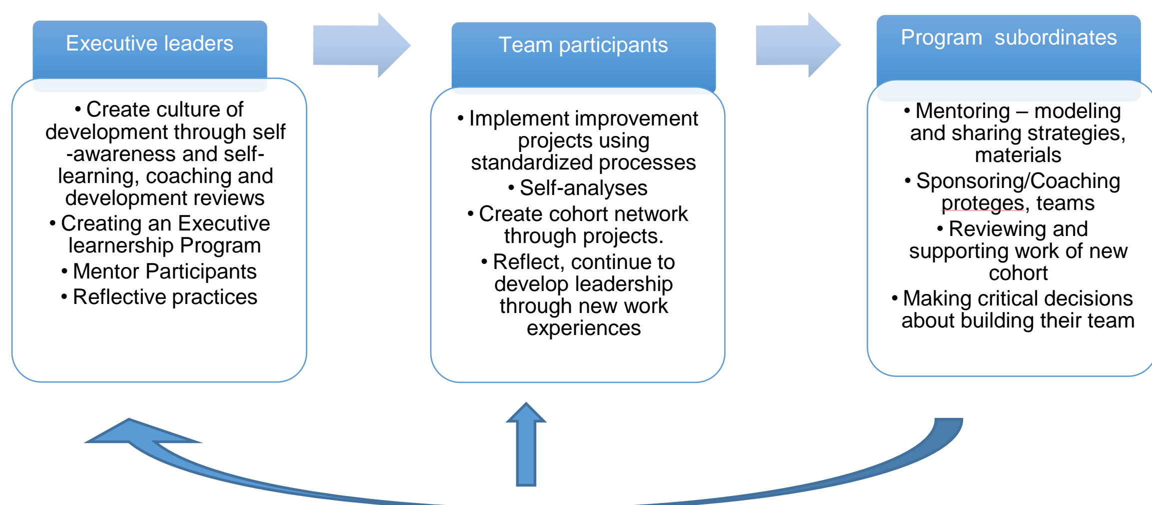
According to Watkins and Marsick (1993 cited in Watkins et al. 2011), the consistent features for a health organization include:

a. Openness across boundaries, including an emphasis on environmental scanning, collaboration, and competitor benchmarking;
b. Resilience or the adaptability of people and systems to respond to change;
c. Knowledge / expertise creation and sharing; and
d. A culture, systems and structures that capture learning and reward innovation.

Watkins et al. (2011), describe the process of knowledge and skill transfer that results in change as a unidirectional flow from senior managers to program participants to program subordinates.

Their model has been adapted for the purposes of understanding the health care context relevant to this study and reflects that all the processes and activities offer feedback to the Executive leaders to develop a loop of continuous improvement. The model (Figure 4) can be described as follows:

Figure 4: Process of knowledge and skills transfer model (Watkins et al. (2011)



The envisaged change depicted in Figure 4 is by no means a linear process of cause and effect, since the process is influenced by many other factors. Using theory driven evaluation for a LDP requires those activities to link into intended outcomes with the specific changes expected in the short, medium and long term for the individual, the organization and the system. Based on this, leaders can make the necessary adjustments to create a culture of ongoing learning.

A Theory of Change allows for an articulation of an assumption that is an important contributor for change or improvement and establishes a link between who is being served, what strategies were used for implementation and what the outcome was (Anheier et al. 2005, p6). Theory of change has two broad outcomes, with the first defining:

- The population being served
- The strategies being used to accomplish the outcome and
- What outcomes are expected.

In the second outcome, the theory of change builds an understanding of the relationship between these three core elements.

2.10 Building a framework

Hrivnak et al. (2009, p463), states that there is no 'one size fits all' type of framework applicable to leadership development. The process is so contextually dependent that answering the basic questions of Who, What, Why and How would be different for every organization (ibid). Some studies have presented long lists of possible leadership competencies needed for training purposes or for the development of health leaders (Van Tuong et al. 2017, p423; Czabanowsha et al. 2013, p853: Harthy 2018, p489), while others provided elements depicted as values, pillars, processes and outcomes, each with further lists of competencies (Menear et al. 2019, p4). A systematic review (Kakeman et al. 2020, p62) conducted on literature published between 2000 and 2020 and mapped against the validated management Competency Assessment Program (MCAP) identified seven core competencies for leadership and management. Very few of the studies have framed these competencies into overarching themes of learning as per the groupings of the Individual, the Team and the System.

Figure 5: The Leadership Framework

The three over-arching themes were identified by the Leadership Framework company, where the principles were originally developed by Dr Elliot Jaques and Lord Wilfred Brown in their body of work known as 'requisite organization'. Their work has been further simplified, complemented and condensed by PeopleFit Australasia, but the basis is one of Leading people; Leading yourself and Leading the organization (The Leadership Framework).

Another model is one quoted by Keijser et al. (2019, p13) as a Dutch medical leadership competency framework. Similar to the Australian model, it depicts a long list of leadership competencies that can be framed around Me (the Individual), Others (the Team) and Society (the System). In their definition of medical leadership, they state that it entails facilitating change in healthcare, by means of yourself, others and society.

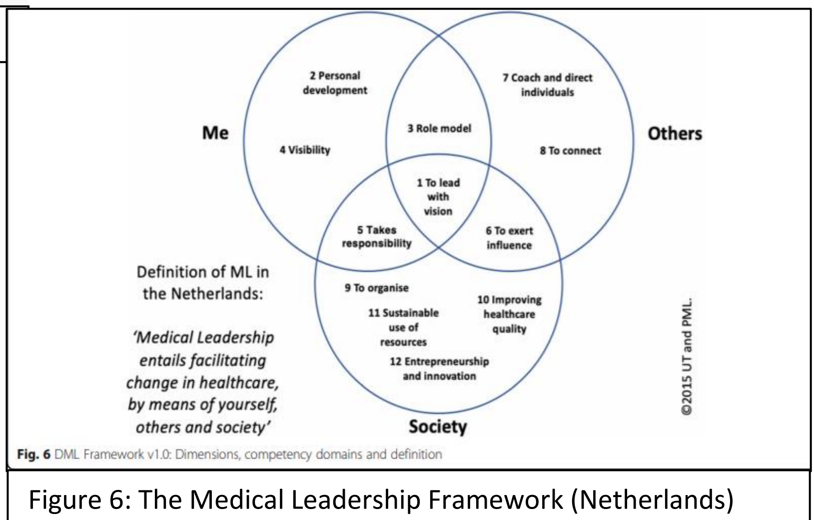


Figure 6: The Medical Leadership Framework (Netherlands)

2.11 Consolidating the literature

The literature offers significant support to the implementation of a leadership development program. Most of the literature focused on higher income countries and not lower/middle income countries such as South Africa. There is limited knowledge relevant to the context within which GSH functions as a public health facility together with the limited literature on whether or not LDPs impact on quality of care improvement in the South African context. Therefore, this study aims to fill a gap in the literature.

The literature reviewed has shown the need for individual and team leadership development and that LDPs need to be contextualized to the local environment. The program must speak to a vision statement that binds all the activities.

Therefore, the literature supports the GSH LDP vision that was developed before the start of this research and presented in Chapter 4. In assessing the LDP in this study, it is important to first describe the context and program and then review how the program was received by the participants as individuals and as members of a team. The assessment of the LDP can then be translated into how it may or may not have influenced the implementation and success of improvements in the workplace. The following chapter presents the methodology of this research.

CHAPTER 3: RESEARCH METHODOLOGY

This chapter commences with the overall study approach, research objectives and questions and then outlines its two main phases of data collection and analysis. It adds justification for using qualitative action research and a case study design, and considers the role of the researcher as an insider researcher. Finally, the chapter ends with some ethical considerations and a discussion on the study limitations posed during the study.

3.1 Overall study approach

The leadership development programme (LDP) examined in this study was initiated and structured by the Groote Schuur Hospital CEO with the executive management team before the study was conceptualized. However, the CEO was also the lead researcher in this PhD study and so the study design and study process had acknowledged her role as an insider researcher (as discussed further in section 3.3 below). The research participants included the executive managers who are all supervised, either directly or indirectly by the CEO.

The LDP itself was initiated at the start of the CEO's tenure in 2013 and was thought to be needed based on her experience with the managers in her previous role as the Chief of Operations at the hospital. The development over time of this LDP is discussed further in chapter 4 and became the basis of this PhD study.

Using the action research approach

The LDP was implemented by the executive management team as an iterative process of learning, engaging and developing over time. The philosophical assumptions were that with each engagement, the members constructed their individual learnings through their team experiences and personal interpretations. This approach linked well to the action research approach adopted as the overall study design.

Coghlan and Brannick (2014, p65) state that action research focusses on research in action, rather than research about action. Green and Thorogood (2004, p38), meanwhile, have defined action research as involving a change in knowledge and practice while studying it. This requires a more open and equal relationship between the researcher and research participants, since the research happens alongside the action of focus, generating new understandings. Action research, thus, requires all participants to work as equals in contributing to the actions of focus and the linked research (Meyer 2000, p178). The learnings benefit the individual as well as the team (Glassman et al. 2013; Gustavsen

2008; Genat 2009; Khan and Chovanec 2010 (cited in Coghlan and Brannick 2014). Meyer (2000, p180) further notes that in action research the researcher is both a facilitator and a multidisciplinary team member, as is the case in this study.

In this study, along the leadership journey, the action research principles were used as the LDP evolved through learning and regular reflection. At the same time, along the research journey, the action research principles were applied in the steps of data collection and analysis. The reflections from these research processes contributed to additional learning and reflection and assisted in informing some of the next steps.

Reason and Bradbury (2008, p6) speak of three practices that assist in contributing to knowledge:

i. First person action research requires the researcher to foster an inquiring approach to his or her own life, to act with awareness, and to assess effects in the outside world while acting. This could include the review stage and aligning this with the available literature. Conducting the document review could also be considered as part of this first-person action research as it was part of the fact finding and creating awareness phase. Additionally, an interview was conducted by the supervisor with the researcher to reflect on the research.

ii. Second-person action research requires the researcher to converse with the participants on the issues of concern. This could be equated to the first phase of the study, which starts with individual dialogue and includes the development of communities of inquiry and collaborative learning conversations. In this study, this includes the interviews with each of the executive managers who were part of the LDP as well as a community of inquiry session for feedback and further exploration of what was said.

iii. Third person action research aims to create a wider impact. In this study, this could be linked to the second phase, where the first phase helped to inform the type of inquiry and hence the impact this phase would have. This phase explored the impact of the leadership learning on the wider community.

A key framework underpinning the study is summarized in Figure 7 and drawn from Reason and Bradbury (2008).

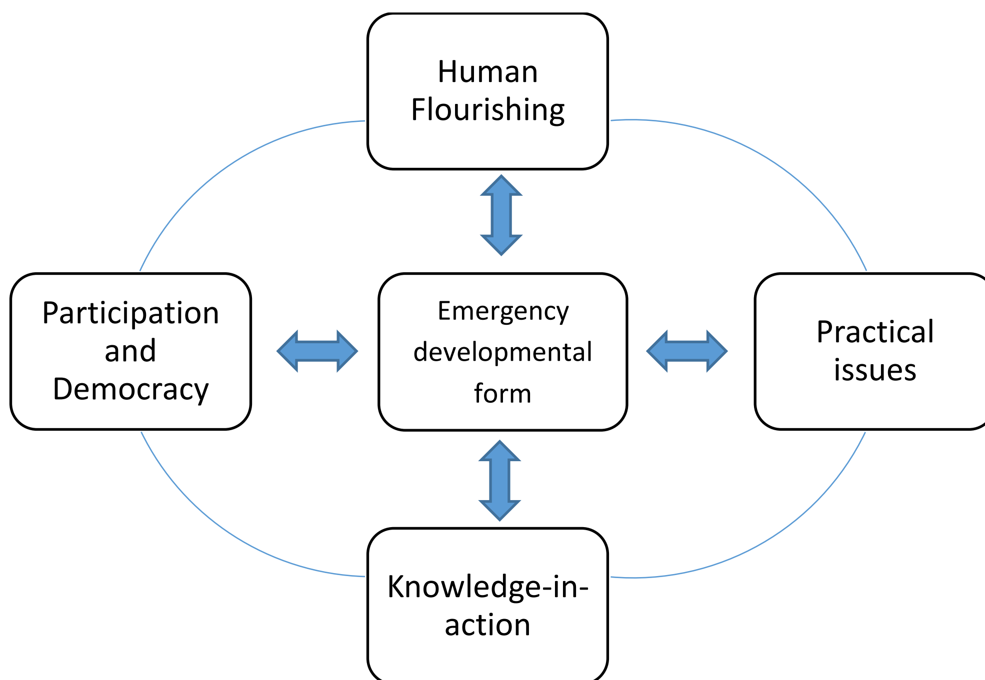


Figure 7: Five dimensions of shared learning practices.

This framework suggests that action research can be described as participative (Participation and Democracy), and that its participants act in the world on the basis of their own sense-making (Practical issues), in their communities through mutual sense-making (Knowledge in action) and support collective action through learning (Human flourishing). The process involves all stakeholders in the questioning and sense-making aspects which then inform the research and further action. It suggests that action research involves the study of everyday evolutionary experiences and the living knowledge, which through a process of inquiry can lead to new practical outcomes or a further level of inquiry. There is thus a participative turn and then an action turn resulting in a process of a cyclical research design of planning, observing and reflecting feed back into the next planning cycle. Such reflections generate new ideas, and a new process ensues. Similarly, Bradbury and Reason (2003) describe action research as being a partnership of a lived experience in order to address problems and developing new ways of seeing or theorizing the world.

The theory of action research linked to this study is that it is based in a complex context and can also be referred to as Action Learning or Contextual Action Research. Revans (1998) describes learning as having two components. One part consists of instruction, and the other component consists of the understanding that arises when learners use questioning to help each other explore the situations they face; this second component can be referred to as action learning. In this research, the learnings from the initial phase of the research informed how the next phase was structured and implemented.

As discussed further below, two sets of action learning practices were applied across the course of this study.

First, the three phase practices identified by Reason and Bradbury (2008, p6) as assisting in contributing to knowledge: first person action research requires the researcher to foster an inquiring approach to his or her own life, to act with awareness, and to assess effects in the outside world while acting; second-person action research requires the researcher to converse with the participants on the issues of concern; third-person action research aims to create a wider impact.

Second, the Plan-Do-Study-Act (PDCA_ cycle was applied across all research stages. (Figure 8). 'O Leary (cited in Koshy et al. 2010, p6) notes, the PDCA cycle allows for a continuous process of experiential learning, that refines the methods, data and the interpretation thereof as part of the research.

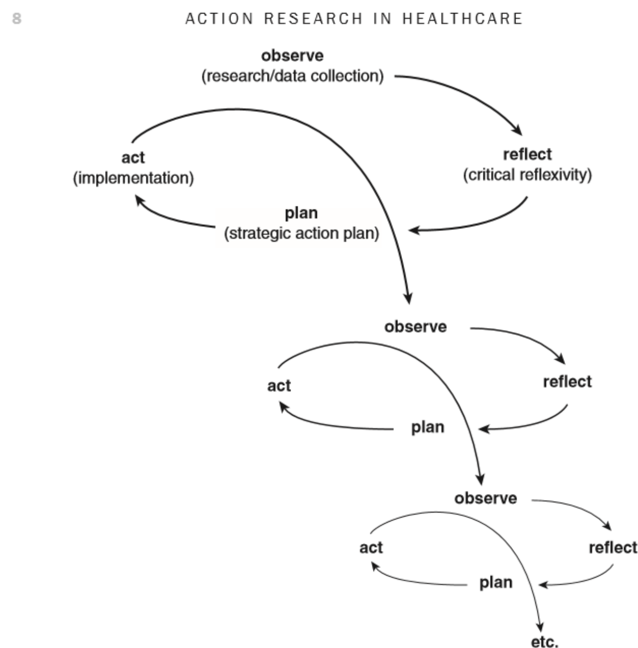


Figure 8: Action research and the Plan-Do-Study-Act system of learning

3.2 Research objectives and questions

The objectives of the study were:

1. To describe the role of the LDP within the overarching Groote Schuur Performance System (GPS).
2. To examine how the LDP facilitated capacity development in the leaders
3. To explore what other perspectives, variables or inter-relationships had contributed to individual and team development.

4. To analyze which factors made such an LDP sustainable and to develop learnings from these experiences that can be translatable to other areas.
5. To describe the different types of improvement processes (cases) that were implemented as part of the Groote Schuur Performance System (GPS).
6. To examine the role of the leader in the implementation process
7. To explore what other perspectives, variables or inter-relationships had contributed to the success or failure of the initiative.
8. To analyze which factors made such initiatives sustainable and to develop learnings from these experiences that can be translatable to other areas in creating an organization wide improvement capability.

The study sought to achieve these objectives by answering the following three research questions:

Research question 1

How was the LDP developed and evolved since its inception?

Sub-questions:

a. How was the LDP conceptualized by the CEO?
b. How did the executives understand the theory of change and how did this change over time?
c. What was the leadership journey of the executive leaders?

Research question 2

Did the LDP create leader capacity on an individual and team level?

Sub-questions:

- How did the LDP contribute to the journey of the executive leaders and the team as a whole?
- What was the theory of change for each person at the start of the program and how did this change for the executive leader and the team during this process?
- How did the executive leader and the team experience the leadership development journey?
- What other personal or social factors contributed to the growth and development of the executive leaders?

In the second phase, using a qualitative evaluation design, this study explored the 'how' and 'why' certain improvement processes succeeded and those that did not. Among these contributing factors, the role of the leader and learnings from the LDP was also explored.

Research question 3

What were the factors that contributed to how and why the innovation projects succeeded or failed and what was the role of the executive leader in its implementation?

Sub-questions:

- What improvement process were initiated in the selected case studies?
- What was the theory of change for each process and why/how did this evolved over time?
- How did the team involved in each process perceive the role of the executive leader in its implementation?
- What other factors contributed to success/failure of the improvement process?
- How can the overall improvement process and the GPS be strengthened?

3.3 Study phases

The study comprised of two phases. Phase 1 was about looking backwards on the experience since 2013. It helped inform phase 2, where case studies of improvement processes were tracked to assess whether the lessons learnt from the LDP helped contribute to the success of the improvement process.

Phase 1:

Phase one of the study used a qualitative exploratory design, to explore the experiences and perspectives of the executive leaders on the LDP and whether these learnings played any role in developing the executive leaders' capacity and how this capacity had enabled their functioning as individuals and as part of their respective teams, amidst other factors. Phase one was conducted in two parts, namely a document analysis and one on one interviews with the executive leaders.

Since the LDP was already planned and implemented, this phase of the research was located in the 'Study' or 'Check' phase of the PDCA cycle (Figure 6), involving studying what exists and what had transpired through the eyes of the participants or managers in that system. It addressed research questions 1 and 2.

Because the LDP had started before the research was initiated, the researcher was partly reliant on the participants sharing their views and perceptions of their experiences and therefore, to gain some perspectives on how the program was developed and perceived, a qualitative, exploratory design was selected. (Creswell 2014, p32). This phase considered the role that the LDP had played in supporting the learnings of the managers, whether these learnings had played any role in developing the

executive leaders' capacity and how this capacity enabled their functioning amidst other external factors.

Phase 2:

The second phase of this study used the insights of the exploration in phase 1 to guide the specific analysis of selected improvement processes initiated at the hospital. Phase 2 sought to explore which factors, given the context of the leadership development program, contributed to the success or failure of the implementation of the improvement processes in the executive leaders' respective areas and how their leadership of the process contributed to these factors. This phase of work involved detailed inquiry around four case studies of selected improvement processes.

In this second phase, the study explored 'how' and 'why' certain improvements processes succeeded and others did not, including specific consideration of the role of the leader and learnings from the LDP. It addresses research question 3.

Phase 2 of the study is specifically informed by Adler (2009, pp20-21) who states that any improvement trajectory is the fruit of a series of improvement projects and that any variation between these lies in the ways these projects are managed. The success of such projects depends, however, not only the goals and the efforts of the team, but also on the context within which they are undertaken.

While Adler (ibid) speaks to an overall organizational culture, he mentions that it is the organization's performance improvement capability (PIC) that initiates differences in the rates of improvements across an organization. Factors that influence such a PIC include the type of improvement, the characteristics of the innovators and the environmental context. He notes further that we should speak of improvement capability rather than improvement projects, since one project's success could be as a result of the heroic efforts of one individual, but the sustainability of such projects is dependent on the capability of the organization and in this context on the team functioning in such a complex organizational context. It has been noted that healthcare organizations are complex adaptive systems and that a project success is usually not attributed to a single person, but rather to the team os individuals that contributed to the system. Adler's statement on the heroic efforts of a single individual are therefore incongruent to performance in complex organizations.

Finally, Adler (ibid) suggests that in examining improvement processes it is useful to consider the five components identified as supporting the capability for performance improvements: skills, systems, structure, strategy, and culture.

Using the Case study methodology

A case study design was, therefore, selected for this phase of research because it allows for in-depth, multi-faceted explorations of complex issues in their real-life settings (Crowe et al. 2011). Yin (2003, p13) describes a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. Case studies therefore offer the ability to review one's perspective through observation or hearing the narrative from the viewpoint of the participant and understand the activities at play. Baxter (2008, p545) quotes Yin (2003) in identifying the following as key issues justifying the use of a case study approach:

a). The focus of the study is to answer "how" and "why" questions

b). You cannot manipulate the behavior of the study participants

c) You want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or

d) The boundaries are not clear between the phenomenon and context.

In phase 2, this study design supported the inquiry and comparison of selected, different improvement processes, all of which were implemented in complex environments and with multiple role-players and personalities, within the framework of the initial LDP.

Case study designs, although low on statistical generalizability, is a well-known research method for exploratory, theory-building research (Eisenhardt 1989; Yin 1989 cited in Akkerman et al. 2002, p37). As both Mitchell (1983) and Yin (1984) (cited in Bryman 1989, p142) have argued, case studies should be evaluated in terms of the adequacy of the theoretical inferences that are generated. The aim is not to infer the findings from a sample to a population, but to identify patterns and linkages of theoretical importance. This design is therefore suited to exploring the cases of improvement processes, and application of inductive analysis methods allowed for the emergence of new knowledge about enabling and disabling factors (Yin 2003 and Studer 2007 (cited in Schuller et al. 2013, pp 91-92)).

3.4 Data collection and analysis steps.

The overall action research process was implemented in an 8-step approach across the two phases of the study as outlined in Table 4. The first 7 steps integrated Reason and Bradbury's five dimensions of shared practice, as principles of action research and a PDCA process was also used to determine the

8th step of the study. The details of data collection and analysis are discussed below in relation to these eight steps.

Table 4: Action research process used in this study.

		Research steps	Reason and Bradbury (2008, p4)		`O Leary PDCA model
Phase 1	1	Preparatory phase - review of literature			8 ACTION RESEARCH IN HEALTHCARE observe (research/data collection) act (implementation) reflect (critical reflexivity) plan (strategic action plan) observe act reflect plan observe act reflect plan etc.
	2	Document review		Knowledge in action	
	3	Analysis of review process		All dimensions	
	4	Individual interviews			
	5	Analysis of interviews		Practical issues	
	6	Sharing findings and further exploration with the group	Participation and Democracy	Knowledge in action	
	7	Evaluation of information		All dimensions	
Phase 2	8	Further exploration		Human flourishing	

Phase 1:

A document review and reflective process was implemented to develop the understanding of the executive leaders and how they used the learnings as part of their own development and the development of the team. Using this participatory approach, the main researcher was herself able to participate in some of the thinking and discussions that collectively addressed the research questions.

Stage 1 - 3: First person action research:

As Reason and Bradbury (2008) note, first person action research requires the researcher to foster an inquiring approach to his or her own life, to act with awareness, and to assess the effects on the outside world while acting. For the researcher in this study, this included the literature review stage, allowing reflection of relevance to this study, and conducting the document review, which supported fact-finding and creating awareness. Additionally, the researcher was herself interviewed by her supervisor to allow reflection on her own role and thinking in developing the LDP.

Stage 1:

The study commenced with an academic review of the relevant literature which informed the type of study that was needed and the methodology to be used. In this fact-finding stage, it was noted that due to the activities being researched having happened prior to the commencement of the research, a document review of all recorded discussions and activities at the hospital could assist in depicting how the executive managers engaged with the LDP process and what possible impact this had on their contributions to the meetings as time progressed.

Stage 2:

A document analysis allows for the consolidation of existing information from different resources, which could be internal and external to the program under study (Evaluation Brief CDC 2009). These resources may include policies, minutes of meetings, proposals and any other materials of relevance. The purpose of using this qualitative method is to gather background information; to assess or evaluate the implementation of a program and to develop further data collection tools. This method further requires the researcher to be systematic in the review and data collection process, while maintaining confidentiality. There are advantages to using such a methodology for research purposes - that it is inexpensive and is a good source of background information for something that may not be directly observable. The disadvantages on the other hand relate to the information being disorganized, inappropriate or not available, with the possibility of bias because the writer of the documents may not have captured the information as it was said and overall, it could be time consuming.

In this study, the first phase reviewed all available documentation about the LDP since 2014-2019, when it was initiated. These included minutes and notes of meetings, learning session slides/notes and other discussion notes (Annexure 7).

These together provided information about how the LDP came about and evolved over time as well as about the impact of the LDP as perceived by the participants themselves.

The minutes of meetings were recorded notes against specific agenda items. The meeting notes reflected more open discussions held with the team and recorded as a summary or precis of the discussions, excluding individual names. Learning session slides or notes were also included, as the material that was presented as part of the LDP learning sessions. Other discussion notes included points of interest that were discussed arising out of review of articles of relevance to leadership.

A total of 242 separate items were included, reflecting the regular and wide-ranging discussions that considered the LDP and improvement processes. They included, as shown in Annexure 7, discussions at the Executive management meetings (attended by the sixteen executives) and the general management meetings (attended by the middle management teams). Strategic discussions and feedback on specific matters were reported on in these meetings. The development of the Groote Schuur Performance system and the linked implementation of improvement processes required regular monitoring, which took place at the GPS steering committee meeting attended by the sixteen-member executive team. At this meeting, the focus was the development of the GPS, including a review of the progress of the improvement processes as they were implemented. Finally, once the strategic direction was agreed upon, the discussions on improvement processes were drawn into the Functional Business Unit (later changed to Business Management) meetings as quick reports from the executives on progress being made. The meeting minutes and meeting notes reflect, overall, that whilst some discussions were strategic, most were detailed and operational.

Stage 3:

The documents were coded according to the name of the meeting, for example, Executive Management meeting, General Management meeting, Leadership lesson notes, etc. These documents were also backed-up onto a hard drive that was password protected.

All the documents were entered into NVivo12 and data were coded using the themes emerging from the data, also allowing further codes to be developed during the process (Annexure 3). After coding, the documents were re-read to ensure that relevant data were not missed, and coding practice was reviewed to ensure data were categorized appropriately in the relevant themes. Annotations were then added to note critical reflections. The process was similar to inductive, thematic content analysis, as suggested by Green and Thorogood (2004:p194).

Findings from the document review were then presented to the PhD supervisor, who then guided the use of the themes to determine the questions to be asked during the interview process (Annexure 2) as defined in Stage 4 below. The coded texts were later revised as three broad themes of the individual, the team and the system, following the analysis process and generation of the findings as presented in Chapters 5 and 6.

Stage 4 - 7: Second person action research

Second person action research involves an inquiry through face-to-face dialogue on issues of common interest or concern and applying PDCA cycles to the process (Reason and Bradbury. 2008).

Stage 4:

For the purposes of this study, thirteen (13) members of the senior management team, who were part of the leadership development program either from the start or had joined early in the program, participated in the research. Through action learning discussions, common themes for leadership development and improvement were generated.

During this stage, the researcher is meant to converse with the participants. However, due to the fact that the study researcher was also the supervisor of the participants (executive team members), it was decided that an external non-biased person (the supervisor of the PhD candidate) would conduct these interviews. This process intended to minimize insider researcher bias.

Sampling:

All executive leaders who had been in post since the inception of the LDP were included (n=13) out of the total of 16 executive team members. Three of the executives had left the institution and new members had been appointed. All 13 invited (100%) accepted the invitation to be interviewed, 8 of whom (62%) were clinical managers and 5 (38%), non-clinical managers. The gender distribution of the participants was fairly equal with 7 (53%) males and 6 (46%) females. The number of years worked at the hospital varied from 5 years to 30 years.

The strength of qualitative research lies in its potential to explore a topic in depth to yield rich information (Carlsen & Glenton 2011 cited in Cleary et al. 2014, p473). Cleary (ibid) further links this to having participants who are knowledgeable and have personal experience of the topic under study, but says that the selection requires the following:

- Small numbers are studied intensively
- Participants are chosen purposefully
- Selection is driven by the theoretical framework
- Sampling is sequential rather than predetermined
- A rationale is necessary

The inclusion of the 13 executive managers fulfills all these criteria.

It was decided to pause and reflect after these interviews, to determine whether the point of saturation had been reached in data collection, or whether more interviews (with those who had joined after the program had begun) would be useful. As Mason (2010, p2) notes, the point of saturation is linked to appropriate sample size. It is determined by reflection on the emerging data

(Green and Thorogood. 2001, p181), but saturation is a 'matter of degree' (Strauss and Corbin 1998, p136 cited in Mason 2010, p2). In qualitative research, there is always potential for new insights to emerge from data review, but a point is reached where it becomes counter-productive to continue data gathering and any 'new' information does not add further value – this is the point of saturation. In this study, rather than conducting more interviews, a second process of member checking (reflecting on) the initial findings with nine of the original respondents was undertaken – again led by an independent researcher.

The independent researcher conducted the interviews with the 13 participants, lasting approximately 60-90 minutes each. Individual consent was taken prior to conducting and recording the interview. (Annexure 1). Interviews were conducted using the semi-structured guideline questions in Annexure 2, with the interviewer then following up on questions depending on the responses. As noted, the interviewer was an independent person to ensure that the participants felt free to offer their honest opinions and reflections of their experience during the LDP. At the start of the interview, the interviewer had to explain in detail what the purpose of the interview was and how the process would be managed, so that there was sufficient trust in the confidentiality of the information being provided.

The main question themes concentrated on how the leaders viewed the LDP and how it had impacted on their leadership at the hospital; what the LDP meant to them; what benefit they derived from the LDP and whether they would change anything. Further exploration was based on how the participants responded to allow for engagement at a deeper level, collecting rich and more honest participant interaction. These further questions allowed for some reflection on the part of the interviewees to their explanations of their experiences and how they perceived these. Further explorations also considered broadly what other participants had said, allowing some reflection from the interviewee on whether they had also perceived the experience in the same way or differently. This reflective process is in keeping with a PDCA approach during the interviews.

Stage 5:

The interview recordings were then transcribed verbatim by an independent person. These transcriptions were then further anonymized by the independent interviewer before they were handed to the researcher for analysis as anonymized data.

The thirteen interview transcripts were coded as LDP001 to LDP013, in the same order in which the interviews were conducted. All the recordings were kept by the interviewer and to ensure the anonymity of the participants, only the anonymized transcripts were provided to the researcher. Both

the recordings and the transcripts were stored in a file that was password protected and the transcripts were also backed-up onto a hard drive that was password protected.

The transcripts were, first, entered into NVivo by the researcher. Each interview transcript was read several times to gain an understanding of how the responses were formulated to the questions asked. This allowed the researcher to consider why the participant interpreted the LDP in a certain way and whether what they said could be interpreted to mean that they had embraced the change or that they had felt benefit from the program or if not, why not. Apart from the ability to question the responses to better understand what was being said, certain commonalities of interpretation emerged from the data provided from all the participants. These interpretive notes were also recorded in NVivo as answers to a question. Some of these answers were collated into sub-themes and themes and then based on their meaning, categorized. The analysis of the data was therefore inductive.

All text was then re-read and if found to be noteworthy, text was highlighted and coded. Some themes raised further questions and were then further coded as sub-themes. This process assisted to answer questions that arose while reading the interview transcripts, but also presented a system of collating similar comments from the different participants. (Figure 9).

The overall process is similar to inductive, thematic content analysis, as suggested by Green and Thorogood (2004:p194).

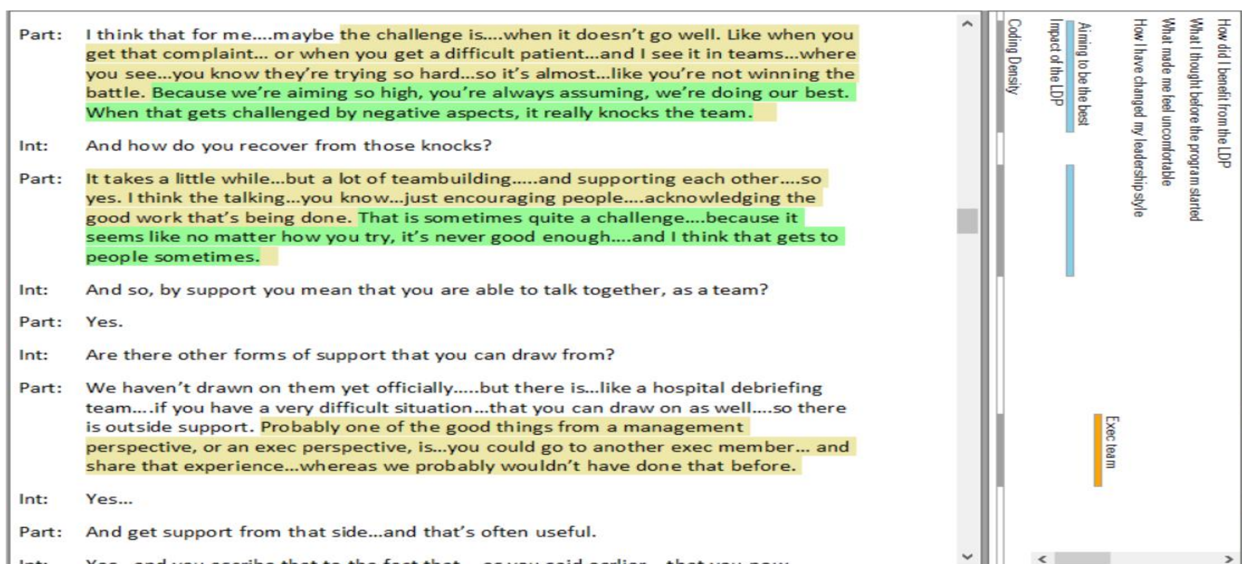


Figure 9: Colour coding of transcribed text showing two emerging themes.

Initial findings from the interview analysis were then presented to the PhD supervisor, who further guided the creating of the themes and the coded texts.

Of note in the text are the missing words. These were removed by the interviewer after transcription, to anonymize the data for the researcher, who was an insider-researcher.

Stage 6:

The external facilitator (supervisor) then shared the overall themes of analysis from the individual interviews in a reflective session of member checking with a group of those interviewed (nine members participated, due to their availability on the day of the focus group session). This discussion was then transcribed by an independent person and further anonymized by the interviewer before handing them to the researcher for analysis.

Stage 7:

Document and interview codes were then reviewed again and compared. Perhaps not surprisingly, similar themes were identified as the 13 participants were also members of the meetings recorded in the documents used in the review, along with other executive leaders.

The following table shows the different themes that were identified during the analysis of documents and interview transcripts.

Table 5: Themes in NVivo.

Nodes

Name	Files	References
Leadership	0	0
Aiming to be the best	3	5
Impact of the LDP	10	20
Creating sustainability	3	8
Leadership development	0	0
What I thought before the program started	8	13
Progression of the program	4	6
My own development as a leader	11	25
How did I benefit from the LDP	10	40
What made me feel uncomfortable	5	9
Change management	2	2
Staff ownership	2	6
How I have changed my leadership style	7	14
How my staff perceive me	5	5
Being more accountable	3	4
Self-awareness	6	7
Improvement processes	0	0
How have the improvement process changed my thi	8	11
Type of improvements	6	10
Relationships	0	0
Exec team	9	18
Own teams	3	4
Team development	6	11
Vision	1	2
What does the vision mean to me	5	8
New team members	4	6
Prior management training	5	8

The following section describes the content analysis technique for the document review and the individual interviews.

As the documents and interview transcripts were read and re-read, commonalities in the discussions started to emerge and using an inductive approach, free themes were developed. Comments from the

team members that were thought to be linked to these themes were recorded in N Vivo and sub-themes were also generated to identify and group specific details in the documents. These themes and sub-themes were then used as the basis for the analysis presented as three overarching themes: Leadership of the self; Leadership of the team; Growth as leaders and then reviewing the overall benefits and challenges of the program.

The themes leading the self through of self-awareness, leading the team through building relationships and motivating the team and the executive's growth as leaders were identified as the core themes contributing to leadership, with the other themes and sub-themes offering additional insights. Discussions that took place linked self-awareness to the conversations about themselves on a personal level. At a team level, the relationship within the executive team and their relationships with their respective team members together with being a visible leader, enhanced the cohesion of the team. With leadership growth and development, discussions focused on innovation and change management in the many aspects of the role as leaders and the implementation of the improvement processes to improve communication and build sustainability.

This is reflected in Figure 10 below.

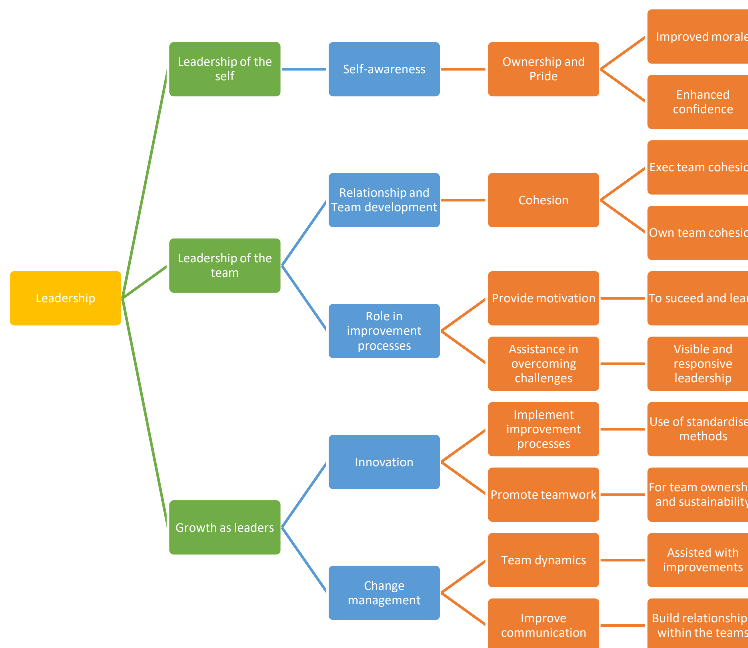


Figure 10: Themes from document review and participant interviews

Phase 2: Third person action research

Third person action research aims to look beyond the individual inputs towards reviewing how the various interconnected processes, involving a wider audience, can make a bigger impact (Reason and Bradbury. 2008).

Stage 8:

The findings of this research up to stage 7 helped to inform the second phase of the study. In this phase, the broader impact of the LDP process on the teams supervised by the executive leaders was reviewed by conducting an in-depth analysis of four case studies, each of which was an improvement process implemented at the hospital. The analysis included focus group discussions with the members of each team as well as one-on-one interviews with key informants, Since the researcher did not participate in the activities of the improvement processes, there was sufficient objectivity in conducting the interviews and facilitating the focus groups, using standardized guiding questions and probing if necessary in order to understand the context better.

For each case included in the study, the researcher concentrated on:

1. Understanding and describing the types of improvement processes initiated. This provided the researcher with the ability to assess the role of the leader; how decisions were made; how and why certain actions were carried forward and who was made accountable for this and how these decisions were being tracked in the process. Relationships and interactions were also assessed.
2. Understanding the leader’s role in the process and what his/her views were on why and how the project succeeded/not – through a one-on-one interview with the leader of the team. This provided the researcher with an opportunity to clarify certain understandings gauged from the observations and to also explore with the leader what his/her perceptions were about the project progress.
3. Reviewing what factors contributed to how and why the project succeeded or failed, concentrating on what learnings could be derived – through focus group discussions.

In this stage, the proposed theory of change for the LDP, related to learning and the ability to impart those learnings as inferred from the discussions with the team, was tested. The team’s perception of the role of the leader was also explored. The researcher conducted focus group discussions with the respective teams as a reflective process to be framed around the improvement process and the theory of change. In addition, an external person interviewed the researcher, as an insider researcher, on the

perceptions of the process and lessons learnt during the leadership journey as well as during the research.

Selection of cases

Of the 150+ cases, this phase of the study included four (4) selected improvement processes (cases), two of which were perceived to have succeeded and two, to have failed.

- Success was determined by the following:
    - Projects that were implemented at least three years ago
    - Multidisciplinary team involvement
    - Improvements gained had been sustained over this time.
    - The projects evolved through the PDCA process to generate additional improvements and sustainability.
- Failure was determined by:
    - Projects that were implemented at least three years ago
    - Multidisciplinary team involvement
    - Improvements gained had not been sustained
    - Improvements processes had not managed to make progress during this time.

The selection was based on information gained over the years from the managers' feedback at the monthly Business Management meetings on their respective projects. To date, more than 150 projects have been implemented of which some have succeeded and some failed. To assist with the selection process, the improvement officer at the hospital who had a greater knowledge of the specific improvement processes was asked to identify four projects that were implemented of which two would be clinical (one success and one failure) and two would be from the Support Services (one success and one failure). The case selection by the improvement officer minimized any bias in this process.

For each case, research participants included:

- The improvement process team leader, who was also the executive leader
- The improvement process multidisciplinary team members, who worked on the improvement process
- Other key stakeholders involved in the process, such as members who had since retired or left the service, but were integral to the initiation process.

Data adequacy:

There are no clear answers to the adequacy of 'how many' cases are needed in a qualitative study (Vasileiou et al. 2018). Sandelowski 1995 (cited in Vasileiou et al. 2018) recommends that sample sizes should be large enough to allow the unfolding of a 'new and richly textured understanding' of the phenomenon under study, but not small enough so that the analysis is precluded. Lincoln and Guba 1985 (cited in Vasileiou et al. 2018) indicate that sampling can be guided by informational redundancy or saturation. In this way, data analysis is governed by emergent iterative theory building and that the sample size does not necessarily limit generalizability or validity. There are however conflicting views on what is considered adequate and in the systematic review assessing sample size justification, Vasileiou (2018) suggests exercising nuanced and contextualized judgements in deciding on the sample size. He further reports that a 'small' sample does not necessarily imply a limitation of the study. Similarly, Gilson et al. (2011), note that while efforts to ensure validity and reliability are the hallmarks of rigorous research, especially within health, qualitative research is premised on the understanding that there are multiple realities, reflecting actors' different understandings of common experiences. Researchers conducting such studies aim not just to identify and report such understandings, but instead, through analysis and engagement, to produce their own interpretations of them, explaining why and how actors behave and think as they do. It is more about the depth of the exploration and representation of a range of opinions and issues rather than about numbers. Hence, with such research, the "trustworthiness of researchers'" interpretations is the hallmark of research rigour, implying that the interpretation is widely recognized to have value.

In this study, using purposive sampling, we chose to review four information-rich cases as improvement processes in order to determine the enabling and disabling factors of whether the improvements were successful or not.

Interview process:

Once the four cases were identified, each of the executives responsible for the improvement process, used purposive sampling to identify which staff members would join the focus group to be interviewed by the researcher. Purposive sampling of the key informants/interviewees is often used in qualitative research by explicitly selecting interviewees who it is intended will generate appropriate data (Green and Thoroughgood 2004, p102). Within the four cases, one-on-one interviews were conducted with the relevant executive leader and then focus groups were held with the purposively selected sample of individuals who were all part of the team that implemented the improvement process at some time or the other. The interviews were dependent on the availability of the staff and the identified key stakeholders (participants who may have left or retired), who were invited to participate.

The case study research was conducted in three steps:

Step 1: Understanding of the improvement process discussions through observing daily 10-15 minute huddles[1] on two to three occasions). This was only applicable to the cases that were sustained since the selected cases that were not sustained no longer had daily huddles. At the daily huddles, the team would review their progress and outline further actions to be taken, with assigned responsibilities to team members.

Step 2: Interview with the respective leader of the process to clarify any questions from the observation and to guide the researcher on what may be important to focus on during the interview with the team (At the convenience of the leader – about 30 minutes).

- The four leaders of the cases were included in these interviews
- Interviews were done either at the office of the researcher or the participants, depending on which was more convenient for the participant.
- All interviews were conducted face to face and recorded on both the recorder and cellular phone after permission was received from the participant.
- Each interview started by explaining the purpose of the study and sketched a brief outline of the process.
- A consent form was presented to the participant to read through and sign (Annexure 4)
- All interviews were conducted by the researcher using a facilitation guide (Annexure 5), but open-ended follow up questions were asked based on the responses.

Step 3: Focus group discussions with the respective teams involved. (At the convenience of the team – about 60 minutes).

- The executive leader or the respective team was asked to select the attendees (who were present on the day of the session) for the focus groups.
- The executive leader also participated in the session.
- Interviews were done either at the office of the researcher or the participants, depending on which was more convenient for the participants.
- All interviews were conducted face to face and recorded on both the recorder and cel phone after permission was received from the participants.
- Each interview started by explaining the purpose of the study and sketched a brief outline of the process.
- A consent form (Annexure 4) was presented to the participants to read through and sign

[1] Huddles occurred in the work environment and involved all the team members working in that area. These are 10-15 minute stand-up meetings done as the first task of the day. Issues that arise can then be addressed or escalated to the manager of the area

- Participants were guided to speak freely and contributions were ad hoc.
- All interviews were conducted by the researcher using a facilitation guide (Annexure 5), but open-ended follow up questions were asked based on the responses.

Case study data management

The leader interview and focus group discussions were recorded and transcribed verbatim without any names being recorded. The data was stored on a password protected computer. Using N-Vivo 12, these transcriptions were captured using thematic analyses, with cross comparisons made between cases following which analytic generalizations were made in themes emanating from the data that assisted in answering the research questions.

The text was read several times to gain an understanding of how the responses were formulated to the questions asked. This allowed for both inductive and deductive questioning why the participants interpreted the GPS in a certain way and how what they said could be interpreted to mean, specifically understanding what they felt was successful or if not, why not.

Each of the four cases were analyzed individually and an initial report was formulated on the description of the case and the identified factors that influenced it. Where available, written reports, team meeting minutes, graphs, etcetera for the case, that offered additional insights into how the project progressed, were also reviewed. All four case experiences were then compared around the factors influencing them, proactively comparing and contrasting the successes and failures in the clinical and support cases. From these comparisons, commonalities and differences were identified. Additionally, potential key informant interviews were also used. These included staff members who were part of the initial team at its conception, but later retired, resigned or moved to another department. The same principles were applied as for the individual interviews or they joined the focus groups.

Using N vivo for the case studies

All these transcripts and written notes were analyzed using the NVivo software. Leech et al. (2011, p71 and pp 75-76) in a study on analysis tools for qualitative data identified seven types of analyses, namely, constant comparison analysis, classical content analysis, keyword-in-context, word count, domain analysis, taxonomic analysis, and componential analysis. Each of these could be conducted manually, but in the decade preceding the study, they noted that certain software packages were able to conduct qualitative analyses, among them NVivo. These programs assist, among other features, in

managing large data sets, retrieve and connect data from talks, observations, documents, videos, etc. and provide the ability to conduct constant comparison analyses (ibid 2011, p72). In this study, the techniques of constant comparison analysis and classical content analysis were used with NVivo to develop themes as a means of understanding what concepts were predominantly discussed and how patterns emerged. The goal of qualitative inquiry is to understand a phenomenon, rather than make generalizations from the study sample to the population (Forman et al. 2008, p42). With content analysis, categories or themes are created through an iterative process of inductive and deductive reading of the data (ibid 2008, p48).

Apart from the ability to question the responses to better understand what was said, certain commonalities in interpretation were noted to emerge from the data provided from all the participants. These questions were recorded in NVivo as sub-themes and then grouped into themes depending on their meaning. The text was re-read and if found to be noteworthy, was highlighted and copied into themes that were labelled. This process required various iterations of going back and forth with the various transcripts to refine the themes as they emerged. Duplications in the meaning of certain phrases had to be condensed into fewer themes and sub-themes had to be clarified in terms of the value they offer to the theme itself. Emerging themes were then pulled together as presented in the findings in Chapter 6. An attempt was also made to ensure that the generated themes were answering the questions posed under the study objectives.
A total of 10 transcript documents were reviewed, including the interview with the executive leader, the focus group interview and two other interviews with members of the team who had since retired from their position at the hospital, but played a crucial role in the improvement process. The review identified 8 themes and 10 sub-themes from the data during the interviews related to the case studies. These are best summarized as depicted in the Figure 11 with the data organized to reflect the findings related to the leadership provided to the implementation of the improvement process. The two themes of who provided leadership to the teams appeared to link the themes and sub-themes.

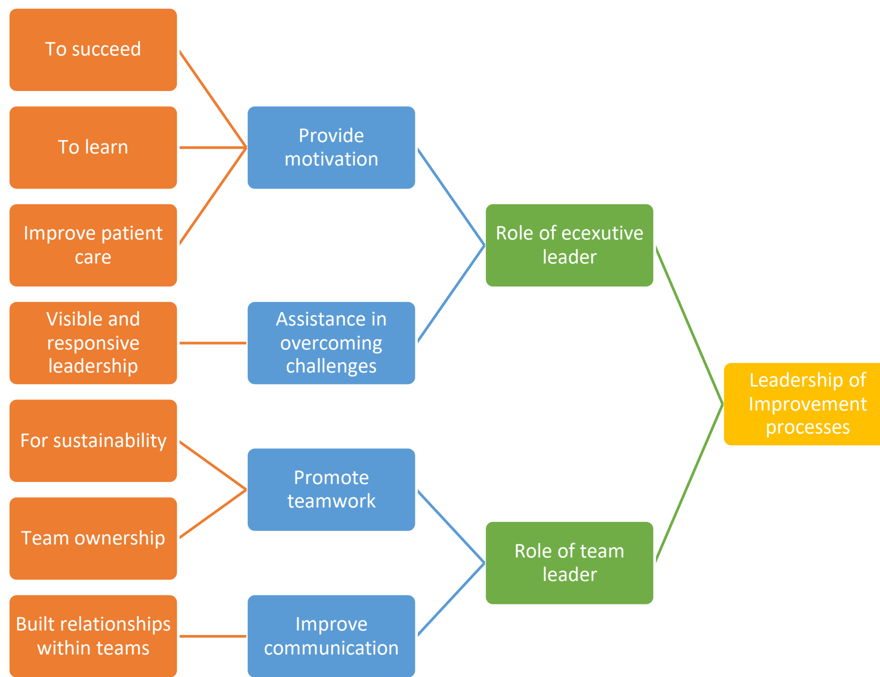


Figure 11: Themes and sub-themes

This process assisted in answering some of the questions that arose while reading the interview transcripts but could also be presented as a system of collating similar comments from the different participants. From this process, interpretations were made that contributed to the overall impression of this exploration of the LDP and the implementation of the improvement processes at this hospital.

Following the outcome of the analysis, a final round was held with all members of the four teams as part of member checking, to share the information and elicit further comments to deepen the insights of the process and continue the PDCA learning process.

3.5 Being an insider researcher

Within the context of the CEO as the researcher, consideration had to be given to the notion of the concept of an insider researcher and hence the impact, using action research and a case study design.

How could the researcher, being an insider researcher, minimize the bias in this study?

The Groote Schuur LDP and improvement cases studied were internally developed to make the material relevant, appropriate and practical to the GSH context. These processes were led by the CEO, who also undertook this PhD study. It was therefore critical to think through the role of an 'insider researcher' and develop research steps that would protect the credibility of the research conducted.

Generally speaking, the term 'insider researcher' refers to the person who chooses to study the group to which they belong (Breen 2007, p163). Breen also noted that this clarification is important not only for the purpose of the research, but also for the researcher to understand their personal motivation for the research. There are obvious advantages (Bonner and Tolhurst 2002 cited in Unluer 2012) to being an insider researcher, such as:

- Understanding the context and culture of the environment and the activity being studied
- Allowing for a more honest interaction from the role-players through keeping the natural flow of social interaction and having an established intimacy, allowing for both the telling and judging of truth.
- Reducing the need for an outsider to first acquaint themselves.
- Easier access to whatever is needed

However, the disadvantages include losing objectivity and unconsciously making the wrong assumptions (de Lyser 2001; Hewitt-Taylor 2002 (cited in Unluer 2012, p1)). Within organizational research, the subject of the insider academic researcher has received some, but relatively little, consideration (Coghlan & Brannick 2005 cited in Brannick and Coghlan 2007, p59). In this article, Brannick and Coghlan (2007) critique the notion that an investigator is unable to do research on the organization within which he/she is employed. They state further that the insider-researcher concept is similar to self-ethnography, where the researcher has natural access or is an active participant to the environment being studied. Yet there is the possibility that participants feel that they are being 'tested' and the duality of the role might make the researcher cut corners to make findings fit into the research, or alternately, ignore issues that are raised. This risk was also noted by Watson (1999 cited in Dwyer and Buckle 2009, p59) who said, "I still remain unclear whether this is my interpretation of an actual phenomenon, or if I am projecting my own need…onto my participants." The complex nature of interactions may also be teased out better by having someone review it from a fresh perspective. Yet this may pose concerns of objectivity and a lack of rigor or credibility in the study process (Unler 2012, p2). However, when examining what works and what does not, involving various perspectives allows for a process triangulation across perspectives, testing (and either validating or revising) the insider-researcher's judgements. The insider researcher must also work ethically and have constant awareness of ethical issues. Dwyer and Buckle (2009, p59), having weighed up the advantages and disadvantages, suggest that while being an insider might raise issues about the undue influence of the researcher's perspective, being an outsider does not create immunity from the influence of personal perspective. The risk exists whatever role the researcher plays. The question is whether such a risk leads to the information being non-credible.

However, Brannick and Coghlan (2007, p60) argue that through a process of reflexive awareness, tacit knowledge that has become deeply segmented because of socialization in an organizational system could be articulated and reframed as theoretical knowledge, allowing it to be researched. They state further that such research can be undertaken using any of the three major research paradigms, or worldviews as suggested by Creswell (2000, p35 cited in McDonald 2012) —positivism (more of a scientific method), hermeneutics (giving meaning to action), and action research (using social constructs).

Researchers have also stated that the goal of qualitative research is to interpret and document an entire phenomenon from an individual's viewpoint or frame of reference ((Creswell 1998; Leininger 1985; Mason 2006) cited in MacDonald (2012, p35)). Greenhalgh and Taylor (1997, p740 cited in MacDonald (2012, p35)) have further contended that action research as a form of qualitative research seeks "to study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings that people bring to them".

In this study, the insider researcher played different roles in different phases of the research to avoid any sense of influence by the researcher on the participant. In phase 1 of the research, the document review was conducted by the PhD candidate, but an independent researcher (the PhD supervisor) conducted the one-on-one interviews with the participants. In phase 2 of the research, however, the PhD candidate conducted the case study research, recognizing that this approach allowed for reflection, sharing and learning between the researcher and the participants.

3.6 Other ethical considerations

Both phases of the study were separately submitted and approved by the Research Ethics Committee of the Faculty of Health Sciences, University of Cape Town, in accordance with the principles of the Declaration of Helsinki (World Medical Association 2018). An additional approval from the Groote Schuur Hospital ethics committee was also obtained before commencing the research project.

All participants signed written informed consent for the study. (Annexure 1 and 4). Confidentiality and anonymity was maintained at all times and all participants were assured that the information would only be used for the research purposes. All participants were required to give consent for the data they provided to be included in the study. This consent was voluntary in nature and participants had the opportunity to withdraw at any point. For the one-on-one interviews with the executive leaders, confidentiality was maintained by assigning a number to each participant; during the focus group any reference to a participant was made via the assigned number.

All questionnaires, recordings, printed correspondence or other paperwork was securely locked in the researcher's office and will be destroyed after the research is completed. All data was stored on a password protected hard drive. Only the primary researcher and her supervisors had access to this file. Furthermore, every precaution was taken to respect the privacy of the subject and to minimize the impact of the study on the subject's physical and mental integrity and on his or her personality. Being an insider researcher, the researcher took every precaution to ensure that her position at the hospital would not influence the data collection process. This supports the non-maleficence and objectivity needed to ensure the rigour and validity of this research. Finally, there were no financial biases which the researcher needed to declare and all efforts were made to ensure that personal biases did not influence the process or results of the study.

3.7 Dissemination of findings

The findings of this research will be published in peer-reviewed journals and shared with the participants through feedback from the researcher. The paper will also be sent to the University of Cape Town Research Ethics committee as well as the Groote Schuur Hospital ethics committee for their records of completion of the study. It will be shared with other relevant stakeholders such as the Provincial Department of Health as a contribution towards learning about leadership in the public health sector.

3.8 Limitations of the study

The primary limitation of this study is the perceived bias of the researcher as an insider researcher. Additionally, the researcher is also the CEO of the hospital and hence the supervisor of the study participants. Every effort therefore had to be made to ensure that the research process was not influenced by this. As an insider researcher and the initiator of the leadership program, it was necessary to constantly reflect on what was being said in meetings or to the participants without compromising the credibility of the study. Numerous conversations were held with the research supervisor to identify potential biases and measures taken to overcome this, for example, an external person was asked to conduct the one-on-one interviews with the participants; the services of a transcriber was purchased by the researcher and then screened by the interviewer to remove any identifying information in order to anonymize the data. Only the transcripts and not the recordings were made available to the researcher. This reduced the possible bias during the data analysis phase. Focus group interviews were however conducted and transcribed by the researcher. While there may have been some effect of the insider researcher phenomenon here, the researcher was not familiar with the specific details of the improvement processes and used a semi-structured interview questionnaire together with conducting interviews with multiple members of the team outside of the

focus group, ensured consistency in what was being said. The summarized information of the detailed transcripts from the focus group discussions were sent to the respective executive leader to ensure that what was reflected was discussed in the focus group and checked that the understanding of the researcher was correct.

A second limitation is the generalizability of the study, which according to Green and Thorogood (2013) refers to the degree to which findings can be transferable to other similar hospitals in the public sector or other lower middle-income countries. It has been noted in the literature that leadership programs have to be customized to suit the local context and be made adaptable to that reality. While the study had initially set out to test the LDP in the hope that lessons learnt could be used in other similar settings, the research findings may not support this. However, the principles applied and methodology used could still be replicated and used as a basis for developing a locally relevant program for leaders.

A third limitation was that the actual leadership program commenced in 2013, but the research was only conceptualized by 2016. The initial part of the research relied upon a document review, which in itself did not capture the discussions on the progress of the program as they happened, since the notes were a precis of the meetings. The participants in both the individual interviews as well as the focus groups had to rely on prior knowledge from their recollections of who was involved, how processes came about and evolved, how people acted and felt and what obstacles were posed and overcome. Much of this rich nuanced detail could have been lost in the recall process and the interpretation of the experience at the time. This aspect of recall bias could unfortunately not be overcome.

Lastly, a perceived limitation is that the participants may not have felt the relevance of the study to themselves or their work. Conducting the research while building a leadership team may have brought about perceptions of the leadership work being done solely for the benefit of the researcher's academic commitment. Scheduling interviews was not seen as a priority for the participants, but they may have obliged because their supervisor was involved. Again, this perception is linked to the insider researcher and every possible measure was taken to ensure the credibility of the data collection process through the rigour applied to the methodology and data analysis process through ensuring data credibility and objectivity.

The findings of this study will be presented in the following 3 chapters.

CHAPTER 4: The development of a LDP journey of leadership capacity at a South African central hospital

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This chapter describes the development of the LDP at Groote Schuur Hospital and the journey from the perspective of the executive management team and the chief executive officer as the leader of the team and the initiator and driver of the LDP. The chapter responds to the first objective of this research by answering research question 1 and its sub-questions by describing the LDP and how it evolved.

The chapter provides a descriptive account of the genesis, evolution and progress of the LDP and how this led to developing the vision statement and the implementation of improvement processes, later called the Groote Schuur Performance system or GPS.

The chapter introduces the participants of the program, who are all members of the executive team, and draws on an analysis of a large body of internal institutional documents that kept account of discussions held by the executive team since the inception of the program, over a four-to-five-year journey to date. The chapter further draws on the key informant interviews held with the executive team members, and here the chapter illuminates aspects pertaining to the development of the LDP itself. In-depth experiences and perspectives of the executive team members of the LDP are presented in chapter 5.

A total of 242 documents were included in the analysis as the discussions around the LDP and improvement processes were held at every opportunity. The documents included minutes of meetings and meeting notes and other discussion notes. (Annexure 7). Other discussion notes included interesting articles of relevance to leadership that were discussed. All documents available during the 5-year period from 2014 up to 2019 were analyzed. In addition, notes and slides from the learning sessions were also analyzed.

4.1 The executive leader participants in the LDP

The executive leadership team included the 16 executives who were part of the senior management team and hence became the research participants.

In the executive team, at the time of the individual interviews, three of the members had left the service, hence interviews with 13 members were included in the analysis. Of the 13 participants, at the start of the research in 2014, 9 were over the age of 50 and there were 5 females and 8 males. The stability and consistency in the management structure is evident in that only 3 of the members

had worked at GSH for fewer than 10 years, with the rest of the team having worked at GSH from 10 to 30 years. Of these, all the executives entered leadership roles, either at the time of appointment or soon after their appointment, except for one executive, who worked for 24 years before entering management. Only one member had been in the current role for fewer than five years.

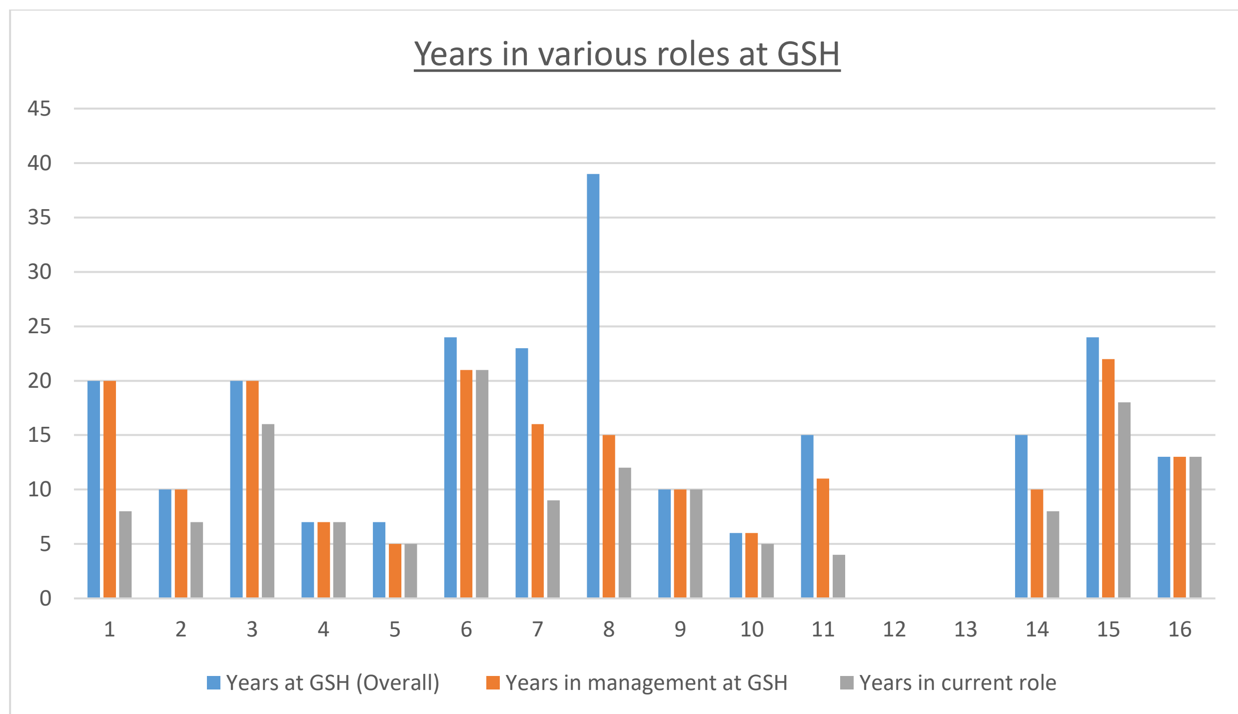


Figure 12: Participants in various roles at GSH

The concern noted in 2018, at the time of the interviews, was that within the next 5-10 years, there would be a new team of leaders at the hospital, hence the need to ensure that the program was designed around continuity and good succession planning as well. Most of the participants had occupied a management position since joining GSH and some progressed up the ranks to reach their current positions. All had participated in the LDP and were involved in, or led, their respective improvement processes with their middle managers and staff. It is also noted in the problem statement that the executives were all qualified with additional post-graduation qualification in their professional field and did other additional courses.

4.2 The leadership development programme

At the time of the CEO's appointment in 2013, there was a realization that large complex organizations, such as Groote Schuur Hospital, demands a certain degree of policy, structure, process and measurement of outcomes to monitor efficiency and effectiveness. This relates to the transactional nature of the work. However, a different model of a more transformational leadership was needed to respond to the rapidly changing health care environment. This model is one in which

the leadership is shared amongst the employees, all working as a team towards a common vision, which is what Groote Schuur Hospital hoped to embrace into the organizational culture. This culture is one of enhanced team functioning towards a cycle of continuous improvements in the work environment, to improve the quality of the patient experience and patient care; to improve the student experience at the hospital; to improve the partnership with the Higher Educational institutions and to improve the environment for all the staff who work at the hospital.

4.2.1 LDP rationale

For such a change in thinking, the assumption of the CEO was that the executives needed to have, and build on their capacity to learn about themselves, their own limitations and how to respond to others. A simple business training model was not sufficient by itself, but together with some added insights on why and how people behave in a certain way was needed. Through this process, the CEO hoped to realize the theory of change where the development of the leaders would cascade into the development and capacity building of their respective teams and as a result of such behaviours filtering through the hospital, it would contribute to the overall improvement of patient services.

Was such leadership possible in a public sector organization such as GSH? The need for change was clear, but at the same time, the organization needed to remain focused on service delivery, be accountable to a hierarchy of stakeholders, function in a complex environment and ensure that the culture of compliance was given attention. Additionally, as public servants, there was a need to ensure that the budget received provided value for money. The complexity of leading in this context challenged the executives on a daily basis. This contributed to the reasoning of the CEO in wanting to strengthen the leadership at the hospital.

4.2.2 The evolution of the LDP and the Groote Schuur Performance system (GPS)

This section begins by outlining the eventual conceptual framework that was developed, which encompassed all the aspects of the LDP and the GPS, and how these then contributed to the achievement of the vision statement. Following this overview, a chronology of the events leading up to the development of the framework is provided by firstly, describing how the LDP came about and secondly, how the improvement processes were initiated and integrated into the LDP and overall framework.

Development of the conceptual framework

A conceptual framework is a system of hypotheses, assumptions, expectations and theories that provides a theoretical context and explains graphically or in narrative form the key factors, concepts

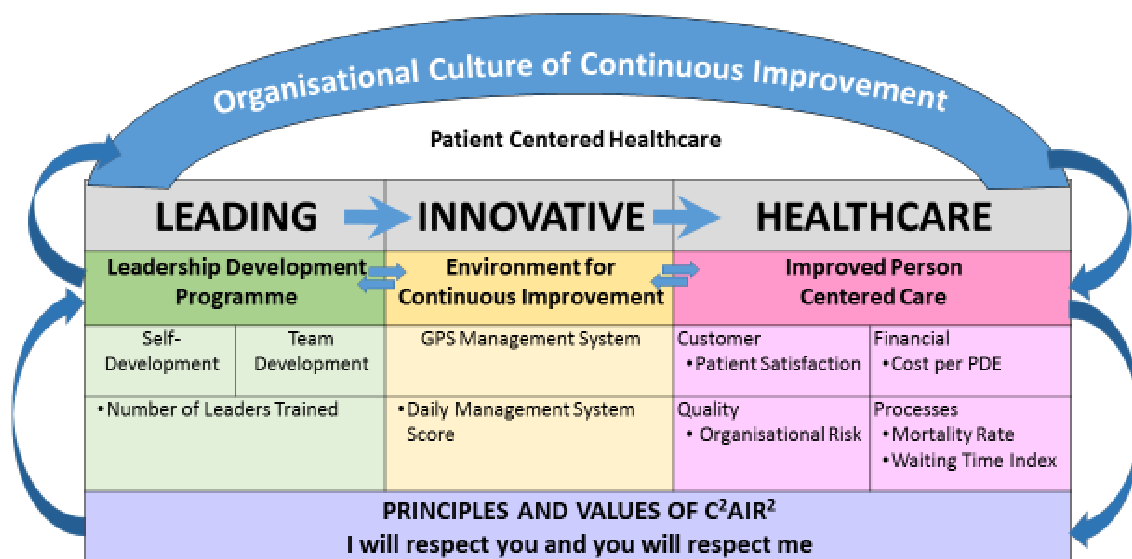
or variables to be studied and the presumed relationships between them (Miles and Huberman 1994, p440 cited in Jabareen 2009, p51).

The personal experience and reflection of the CEO has shown that leaders in the public sector need to have a holistic approach towards the way they lead, with a move away from siloism towards one of working as a whole system, both within the hospital and across the level of care who refer patients to the hospital, in order to achieve a better experience for the patient. Siloism within management and departmental structures have resulted in a lack of cohesion when treating the patient, with little to no communication between the different caregivers, leaving the patient more confused. This lack of cohesion is noted by the CEO from the many patient and staff complaints received over the years. Swanson et al. (2012, p56) proposes that using systems thinking, the entire health system can be strengthened at all levels, from policy making to basic service delivery. They note three overarching themes in systems thinking:

- Collaboration across disciplines, sectors and organizations
- Ongoing, iterative learning – recognizing that the context is continuously changing and there is a need to continuously adapt, learn and apply new knowledge to current challenges and
- Transformational leadership: Health workers at all levels of the system can be transformational leaders by challenging basic assumptions about how health is delivered.

The togetherness or team effort is at the core of such a philosophy with a goal directed vision as the driving force, which through stimulated learning processes, can build more sustainable futures.

These principles were considered when developing the conceptual model (Figure 13) described below, which became the culmination of all the activities as they evolved over the five year period since 2013. During the journey, there were many adaptations to the content and strategic direction, leading up to finalizing the framework in line with the hospital's vision statement of 'Leading Innovative Healthcare'.



(The acronym C^2AIR^2 are the values of the Western Cape Government depicting: Caring, Competence, Accountability, Integrity, Responsiveness and Respect).

Figure 13: Conceptual model of the vision statement

To work towards achieving the hospital vision, two broad strategies emerged. The first strategy was the set of capacity development activities as part of the LDP and at a later stage, this led to the implementation of improvement processes as the second strategy.

Contextualizing the LDP within the GSH environmental reality of the executive leaders was pivotal. First, a vision statement was developed, out of which flowed the different components of the LDP. The CEO had many discussions with the executive team in crafting the vision statement of 'Leading Innovative healthcare' and what the leaders felt they needed capacity development on. Each aspect of the vision statement contributed towards an activity that became part of the LDP suite of activities. The leadership training courses were thus structured to be relevant, applicable, practically implemented and suited to the daily tasks of the executives.

A structured system for the implementation of improvement processes was developed. Over the years, the entire program has evolved and grown in the hope of impacting on the healthcare of all those served by the hospital.

The model moves beyond leadership itself and embraces leadership for improvement that can be measured as actual improvement. It brought together the thinking and approach used until 2015-2016 of leadership learning and the learning on how to implement the improvement processes. This model

has become the basis of functioning and improvement in all areas in the hospital and is displayed as the vision statement, which every activity feeds into to improve person centered care and create a culture of continuous improvement.

4.2.3 How the content of the LDP evolved

The program evolved over a 5-year period (2014-2018), and the process involved six components (Table 6). Components overlapped with one another and the evolution of the LDP was by no means a linear progression of events.

An overview of the timeline of events over the five years since the initial discussions took place is presented in Figure 14.

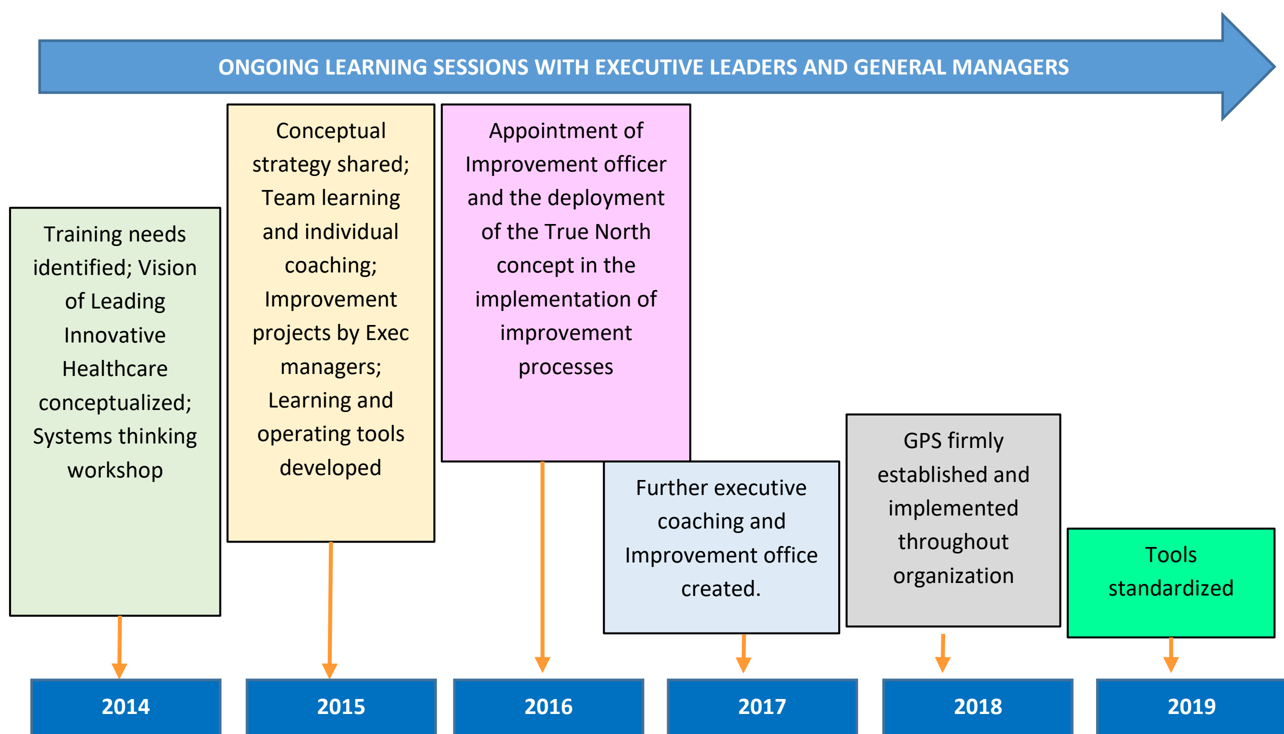


Figure 14: Timeline of events contributing to the development of the Leadership Program

Components of the LDP

The six components listed below are summarized as overarching processes that took place, but were not isolated to one event over this time. Learning programs were spread out over the years and remain ongoing either as refresher courses or to introduce the concepts to the other levels of management. The events are described in greater detail below.

Table 6: Components of Leadership Development Program

The Leadership Development Program (LDP)
1. Identify capacity development needs
2. Systems thinking workshops
3. Leadership learnings and capacity development programme
4. Development of a conceptual strategy
5. Improvement process development
6. Implementation and monitoring through the Groote Schuur Performance System

Identifying the capacity development needs

The program started out in 2014, by identifying the needs of the leaders in terms of their development and developing the tools to satisfy this need. This was an open-ended questionnaire, assessing what the leaders felt their shortcomings were in terms of the skills required to do their work and what additional tools they might need to satisfy their ability to interact with others, resolve difficult conflict situations, address problems in the work area and attend to their business responsibilities (Annexure 6 – Needs analysis). The needs analysis revealed that most of the executives had over the years participated in some form of training, whether formal or informal, but almost all had identified a need for further learning on the identified topics (Figure 15). Prior to the commencement of the program, most of the executive leaders were exposed to courses covering leadership, strategy, financial, lean quality and change management. However, very few of the executives had any exposure to people management, conflict management, mentoring and coaching and innovation. This reflected a shortfall in their confidence to interact with others and manage difficult conversations and was evident in the subsequent requests for such training.

The executives identified a need for training on all the aspects depicted in the graph below (Figure 15), with a stronger focus on people management, conflict management, change management and mentoring and coaching.

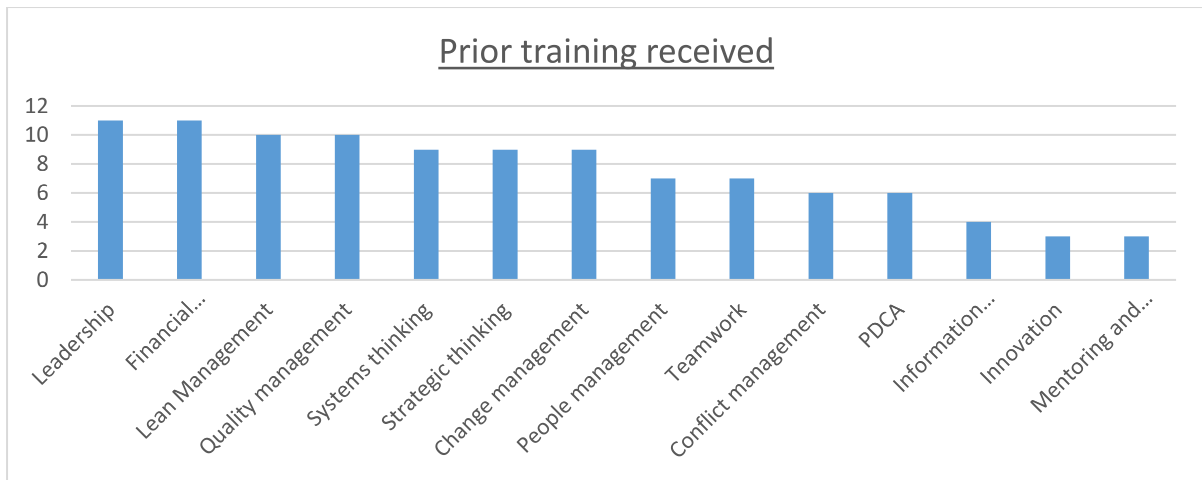


Figure 15: Prior executive training received, and training needed

The findings from the above identified training needs led the CEO to conceptualize a leadership learning program depicted in Figure 16 and this resulted in the commencement of various learning sessions with the team.

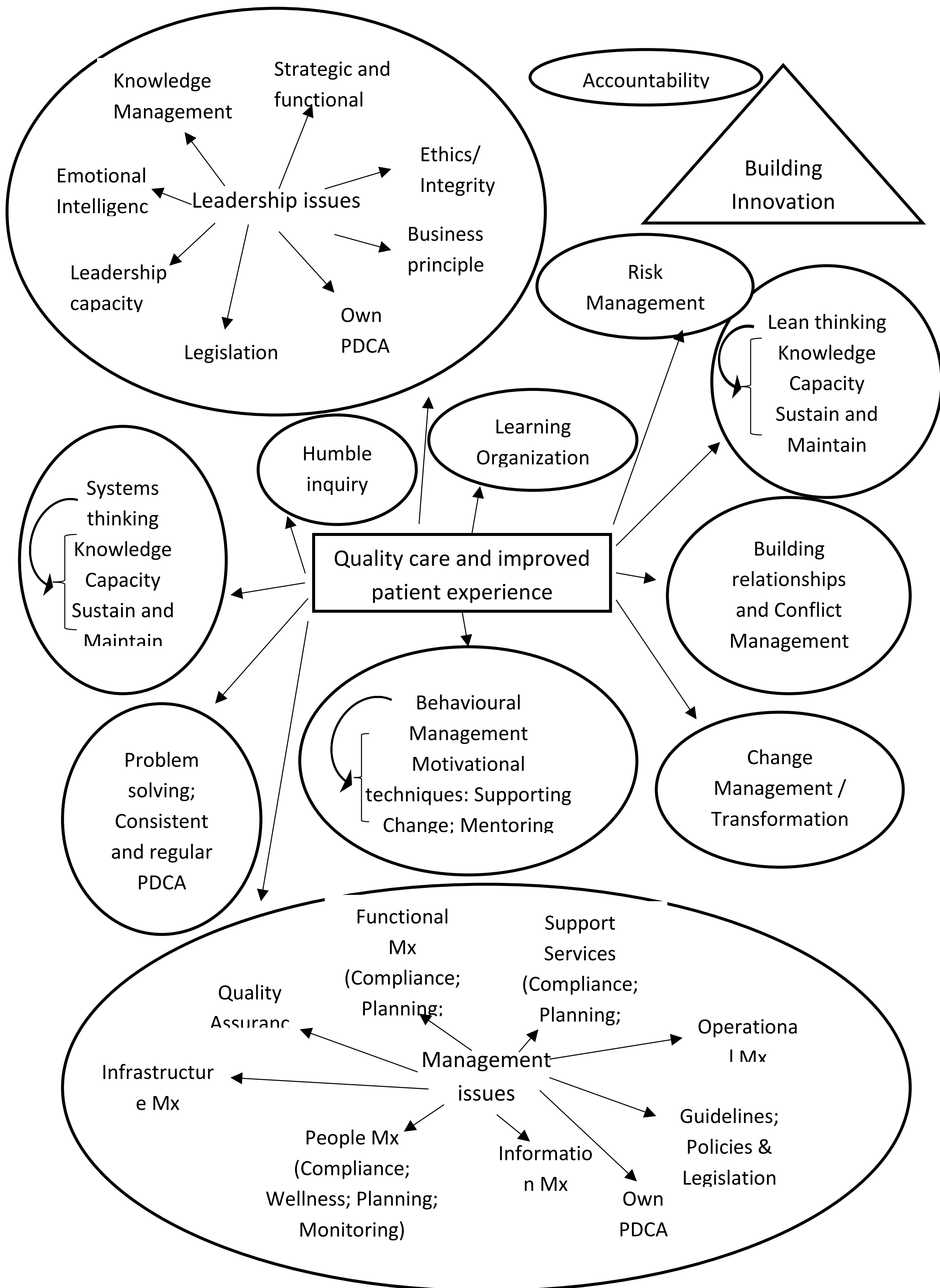


Figure 16: The learning needs of the executives

The Systems thinking workshops

The LDP commenced with a systems thinking workshop to identify the challenges, opportunities and the enabling actions that needed to be taken in order to make improvements on what was raised. To gain a broader view of the work challenges being experienced on the ground, the session was chaired by an external facilitator and attended by the executive leaders, middle management colleagues as well as some clinicians. The workshop ended with the facilitators sharing some tools with the leaders so that they could implement similar sessions in their own areas. Many of the leaders used this to gain insight into the sections they manage. Following this workshop, an action plan was developed by the executive team to address all the issues raised. These included implementing the suggestions to improve morale among the staff and creating a positive environment for patients, for example, a standardized message for every person picking up a telephone; developing badges for each staff member with the question, 'How can I help you?' displayed on it; encouraging cleanliness and pride in the institution among other things. It was later noted in feedback at the executive meetings that all these initiatives created an improved atmosphere and sense of belonging at the hospital.

Subsequent to the workshop, a conceptual picture emerged through further discussions in the executive management meetings related to their learning needs, both as individuals and as part of the team. These were then used as a guide to formulating learning sessions that would be practical, relevant and applicable to the work being done by the executive leader, together with the tools to accomplish them. All sixteen executive leaders were engaged and exposed to the leadership learning sessions, which were conducted as team engagements with either external or internal facilitators.

How the capacity development through the different components evolved

a) Understanding the self and the team

The tools included developing an understanding of the self and the self as part of the team and providing the necessary guidance and skills on becoming more effective leaders and managers of both themselves and their teams. This was done through a personality assessment tool called the enneagram, where each leader had to complete the assessment and then received an individual result, which was discussed with each person, by a qualified psychologist, to help them understand their own personalities. All of the assessments were combined to develop a team enneagram, the results of which was presented to the team, so that each person could understand their role as individuals and their role as part of the team, while at the same time, understanding other's personalities. These sessions were facilitated by a company that was contracted by the Provincial Department of Health to provide counselling services to all Health Department staff and one of these services included individual and team assessments using the enneagram tool.

b) Personal mastery programs:

The leaders were also exposed to a range of talks, seminars and personal mastery programs focusing on the self and the self as part of the team over the two-year period from 2014 to 2016. These included sessions on conflict management, emotional resilience, stress management, mentoring and coaching, motivating staff and other aspects that the leaders had identified they were struggling with. These sessions were facilitated by a private psychologist, mentor and coach - over the two-year period and she continues to offer the team updates and other talks. Her methods were very interactive, allowing for the leaders to freely express themselves and learn at the same time.

Another external facilitator who is a personal leadership facilitator and coach, offered what many of the leaders called a 'life-changing program'. He presented a 6-day program over 3 sessions, filled with lessons on emotional well-being and challenged the leaders to the core. Not only were the leaders challenged to look within themselves, but to also understand the emotional drivers of other members of the team. The leaders had to confront their fears, their aspirations and their self-esteem, through speaking, reflection writing, dialogue, dancing and other activities. No-one was spared in having to address these issues, but his methods, although not standard classroom style, included his ability to hold, contain and address any issues that arose during the sessions. Included in the program was a visit to a horse farm, where the leaders were required to stroke the horses and then lead them along a specific course, overcoming fears of what and how to do things as part of a team that may be outside of the usual comfort zone. A visit to a simulation station was also arranged, where the situation was manipulated by the organizers and the team was required to find a way out of the dilemma. This experience aimed to teach the team about leadership, responsibility, teamwork, effective communication and how to rely on one another. His interesting methods of teaching most certainly became the most talked about experiences within the team to date.

c) Business process learning

In addition to these learning sessions, since 2014, the leaders received talks and practical exercises on the business aspects of their role, which was presented by members of the internal team or other hospital staff and the material was developed from real time hospital examples. This has allowed for the leaders to understand and respect the other team members' roles and responsibilities as well as their role in relation to the other person.

The CEO researched relevant topics, such as Time Management, Humility, Lessons from leadership books, etc., and led discussions at the regular executive meetings on these topics. Others in the team were also asked to prepare topics of interest that were presented at the learning sessions.

How the learning activities led to a strategic vision statement

Throughout the journey, reflections were shared during the executive meetings and further discussions led to the development of a strategic vision of 'Leading Innovative Healthcare', which incorporated all these activities and in support of being a holistic leader that could lead, innovate by doing things differently and ultimately contribute towards improved healthcare for the patient and the organization as a whole. The strategy was developed through discussions that took place in the executive meetings during 2015 to 2016 and was shared with the broader hospital community as the vision statement of the hospital.

In the various discussions and engagements, it was noted that the vision statement also sparked new ideas from both the clinicians and the managers with a focus on what quality improvements could be made in support of the vision. Midway through the 2015-2016 period, the CEO started to develop a way forward in terms of deepening and spreading leadership development and a workshop was proposed, where the vision of 'Leading Innovative Healthcare' was defined under the following binding mission statement: 'At Groote Schuur Hospital, we strive towards improving the well-being of our patients and communities by redefining excellence in integrated healthcare through leadership, innovation and change.'

The future steps towards this vision were also identified at that workshop, with the need for broader management coaching of the self and the team dominating the discussions. A gap assessment of training needs was to be done and following the implementation of a training program, such an analysis was to be repeated to see if there was any change in the learning needs and capacity of the middle managers. Besides the training program, other concepts were also put forward on how leadership and the use of lean principles could be integrated as part of one system.

4.2.4 Improvement process development

During 2015, the executive team members were asked to focus their attention on implementing improvement projects in their respective areas, which included process or patient flow issues. Examples of these included teams addressing long waiting times in outpatient clinics; in the Pharmacy; waiting time for new staff to receive their identity cards; reducing the time wasted in-between operations in theater; among other initiatives. Guidance on this was offered by an expert in Lean management, who was contracted to assist Groote Schuur Hospital in this regard. Together with this lean consultant and using the lean methodology principles, selected members of general managers and line supervisors were taken through a training program during which they developed a mechanism to implement the improvements. The improvement process system was designed as standardized tools that could be used to address any problem faced at the frontline. This included a seven-question

problem solving tool, a Plan-Do-Check-Act (PDCA) tool for evaluation and redress, a double loop Plan-Do-Check-Act tool to ensure that the improvements were institutionalized and sustained and a target setting method that was displayed graphically. All of these tools were used as visual aids during daily huddles held in the area implementing the improvement, e.g. a clinical ward, emergency unit, pharmacy, outpatient clinic, folder records unit, etc. The daily huddles were attended by the multidisciplinary team working in the area and not necessarily led by the executive manager. At the huddle, the teams discussed daily progress as displayed on their monitoring graphs and daily activities/challenges that needed to be escalated to a more senior manager for troubleshooting or for information. The idea was to create ownership by all staff of both the problem and the solution. The standardized tools allowed all sections in the hospital to assist one another and at a glance, understand what other teams were doing by simply viewing their displayed sheets and graphs.

Six months later, a proposed step wise journey towards the vision statement was mapped out and called the Groote Schuur Hospital Performance System or GPS described later in this chapter. In most of these improvement processes, the executive leader either led or assisted the team at implementation level. The learnings related to the GPS were then linked to the leadership learnings started in 2014 and it was hoped that this would facilitate the development of capacitated leaders. The CEO was also a participant in the program as a member of the team and through this was able to further develop and enhance the program as the needs arose.

4.2.5 Implementation and monitoring through the Groote Schuur Performance System

Documented progress meetings on the projects showed a shift in the manner in which the executive leaders behaved as noted by the CEO through conversations with senior clinical colleagues with whom they interacted. They appeared a lot more confident, owned their respective projects and were empowering the more junior staff to take the lead. The terms 'project owner' and 'project coach' were used to identify who was responsible at the frontline for the project and who was coaching or assisting the person through the process. Of note, was that most of the managers started out as project owners, but later switched to coaches as the capacity and degree of comfort increased among the staff in the respective groups. Ultimately, they remained responsible for the activities contributing to the improvement. Any successes seen within a few weeks of implementation were celebrated as teams. The project feedback sessions became the event for showing off the teams' work and gaining a sense of accomplishment.

The conceptual picture of the journey towards a guiding statement or 'true north' was emerging and appeared to be integrating all the different activities of leadership development and the implementation of the improvement processes in working towards the vision of 'Leading Innovative

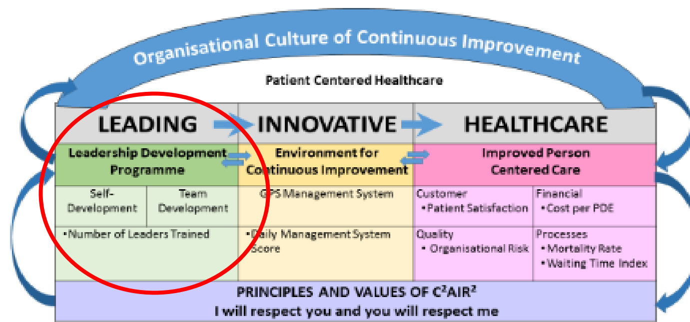
Healthcare'. This vision statement was then further analyzed with indicators allocated to specific objectives and the concept was explained in writing by the CEO, so that the same message could be shared and displayed throughout the hospital. This made the executives feel more confident in taking the explanation of the hospital's vision to their teams.

4.3 The development of the Groote Schuur Performance System (GPS)

The training needs and the vision statement that guides this study is presented in figures 15, 16 and 13 respectively. A vision of 'Leading Innovative Healthcare' was adopted by the executive team and as its components were being teased out into the various activities that could support the vision, it started to emerge that the LDP and improvement processes were integral components of the vision. In this framework, there is a theme of multiple interactions at multiple levels that shift from an activity to an outcome and then reinforcing the initial activity, leading the researcher to reflect on the benefit of the program being embedded in the experience itself with lessons learnt being taken back to their work and impacting on others they work with. The perception was that each executive leader would experience learning through self-awareness, direct and indirect learning, interaction, observation, mentorship and practice. These lessons would be used in their daily activities and would build confidence, motivation and behaviour change. The impact of this change would to lead to further transformation at the operational level of the organization. The benefits of these processes would result in a change in behavior of the employees to improve patient care and the staff experience, through the implementation of specific projects using standardized tools, which would become institutionalized and ultimately growing an organizational culture of continuous improvement. By improving the healthcare through leadership and innovation, there would be an improvement in the quality of care with a person-centered approach. In this instance, being person-centered, means that the improvement would benefit not only the patient, but all other role-players, including the staff, other colleagues, families, suppliers, etc. However, since they function in an ever-changing environment and context with many social interactions, the program had to be adaptable with the understanding that it could change and emerge differently as it builds a reflexive picture over time.

The next section describes in further detail the conceptual framework (Figure 13) which integrates all of the above initiatives and activities into developing the Groote Schuur Performance System or GPS.

This model as depicted in Figure 13 can be explained as follows:



The leadership learning at the hospital evolved from the CEO's perception and own ideas of what the managers needed in order to function in the complex environment often having to deal with one crisis after the next. Leading included the development of the self and the self as part of the team by enhancing the knowledge of the self and how one interacts with and is perceived by others. This knowledge improves team cohesion and functioning. The executives' needs analysis framework (Figure 15) and various executive meeting discussions resulted in the identification of the following areas of knowledge summarized in Figure 17. Another determining factor to continue with the LDP was the availability of funds for the program since this depended on the generosity of the hospital board and had to be motivated for annually. Learning in such an environment could be structured easily and while some funds were used for external facilitators, most of the teaching was done by the executive leaders themselves. This enabled the use of relevant and practical examples that matched a particular theoretical framework, built capacity through self-learning and created sustainability for the program.

Figure 17: The components of the leadership aspect of the program

These components of leadership learning entailed developing the leader through self-awareness and self-development, while at the same time also enhancing the business management skills. This self-awareness of one's behavior allows for an understanding of the impact one has on others and to help understand how one responds to certain circumstances. The learning occurred in the following manner:

1a. Each individual member of the executive leadership was exposed to the LDP (Figure 18)

They each learnt through the program courses offered as well as through their exposure to external factors and motivated self-learning. Each individual had an enneagram analysis (a personality assessment tool) with one-on-one feedback from a trained psychologist. The executive leadership team was engaged on a team enneagram report to allow for understanding the personalities of each other and what each person contributes to the team. Each received coaching and mentoring on an individual level and as a team, for the learning about the self, the self as part of a team.

For the improvement processes, they received standardized tools for the implementation of the improvement processes that formed part of the Groote Schuur Performance System (GPS). These included modified lean process tools on problem solving (asking the 7C questions) and how to monitor progress on initiatives through graphs and the implementation of the Plan-Do-Check-Act (PDCA). They interacted with one another on an individual level and with the improvement processes. They mentored each other as process coaches and owners for different teams.

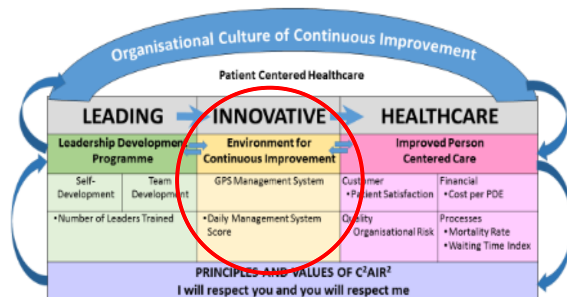
Other learnings happened through self-reflection and team reflective sessions at each executive management meeting. Members of the teams therefore interacted at both the executive level as well as in their respective teams as a leader or coach for the improvement process. These teams were introduced to learning about themselves through the enneagram process and together with their executive leader, had team sessions. The teams received talks on leadership, conflict management, resilience and other leadership aspects as for the executive leaders, but this training was tailored for the larger group of about 45 managers, hence there was not as much one on one interaction. The improvement processes included patient and process flow initiatives as well as clinical and non-clinical innovations to improve patient care.

1b. The executive leaders led their own teams of managers and their own improvement processes (Figure 18)

The team members formed part of the multidisciplinary staff engaged in the various activities. These teams included members of other teams, for example, the pharmacists were led by the Pharmacy

Manager who is part of the executive team, but may have been part of the ward team on the ground involved in an improvement process, which may have been led by another of the executive leaders.

4.3.2 Innovation through improvement processes



This required the leaders to create an enabling environment for innovation where innovation simply means a different way of working in order to improve activities. For Groote Schuur Hospital, this was envisaged to happen through the various improvement processes.

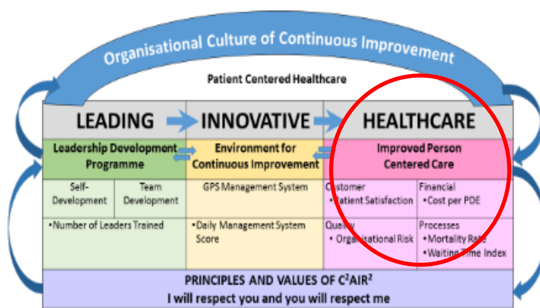
2a. Since 2015 until 2019, about 150+ improvement processes (depicted as cases in Figure 18) have been initiated

Examples of these improvement processes included addressing waiting times or process flow improvements to address waiting times. For example, the waiting time for a patient attending the eye clinic, from the entry point to the exit point; The starting time for the surgeon to cut in theater; The time taken to deliver a staff identity card from the time of application to receipt of the access card, among others. Over time the various improvement processes become institutionalized and new ones were generated. With the executive leader’s role in each new process, and the sustained improvements of previous processes, ongoing learning resulted in continuous improvement.

2b. The executive leaders and the general management team have continued to receive ongoing learning as part of the LDP, individualized coaching and mentoring and reflective practices through community of practice at all interactions of the teams.

The coaching and mentoring and talks were provided by qualified coaches as well as the CEO. This coaching was in the form of guidance and feedback on performance, for example, when the CEO attended the daily huddles, feedback was provided one-on-one after the session. The learning included ongoing reflective sessions with the entire executive team and content lectures delivered by invited experts and the CEO.

4.3.3 Improving health care:



Providing quality healthcare includes:

- Caring for the patient and their families
- Caring for the staff
- Caring for the environment and
- Caring for the community

These have been consolidated as health outcomes where specific indicators have been developed for each of the outcomes as a measure of the 'caring' objective described above. Over the past five years, all the activities linked to the Leadership Development Program and the Groote Schuur Performance System have been integrated into a common understanding of outcome measures and every activity is thought through using this framework and monitoring these outcomes.

4.3.4 Institutionalizing the strategic framework

The description of the program as it was implemented at GSH had evolved over time. To achieve the outcome of improved healthcare, the program and its processes had to become institutionalized as part of the day to day functioning of the hospital in all its activities. This started to take place over the study period as presented in Figure 18, representing the vision statement as follows:

3a. Includes the activities related to <u>Leading</u>

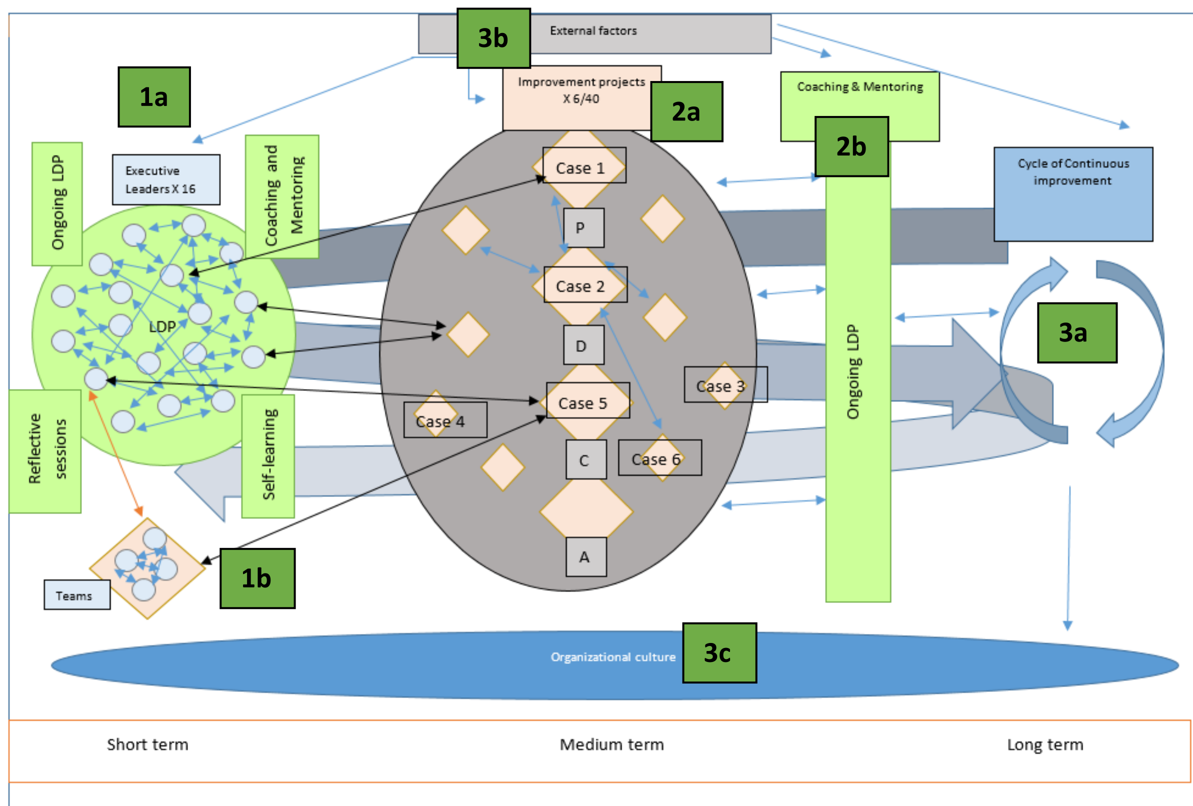
The process of continuous learning is depicted by all the bi-directional arrows (Figure 18). While some learning happened through content lectures, most of the learnings took place through work-based experience. Some of those experiences were shared during the reflective sessions with the executive team. The emphasis on continuous learning provided a platform for innovation, self-learning and hence became a motivating factor in the entire process.

3b. Includes the activities related to <u>Innovation</u>

All the executive leaders functioned within a complex environment of interaction and learning at various levels through the implementation of the improvement processes. They were not only learning but also mentoring and teaching their respective teams. They also interacted across teams as the process flow of activities dictated. Many external factors therefore impacted on the learning of the leaders and their teams.

3c. Includes the activities related to the outcomes of health care

The long-term outcome is hoped to be an improved organizational culture by creating a culture of continuous improvement, a culture of ongoing learning and a culture of improved care to our patients.



Executive leader

Teams involved in the improvement processes, some of which were studied as cases.

Various learning opportunities

Bi-directional arrows showing the iterative learning process along the journey and developing a cycle of continuous improvement, eventually changing and impacting on the organizational culture.

<u>Figure 18: Existing Leadership development program (numbers in the figure represent explanations above from 4.5.1 to 4.5.3</u>

These interactions could result in an overarching improved organizational culture, which would be a longer-term outcome and all of this is underpinned by a simple behavioural principle of mutual respect.

The next chapter integrates the findings of the document analysis and the individual/focus group interviews, to explore the participation of the team in the development of the LDP, the experiences of the executive leaders of the LDP and the implementation of improvement processes.

CHAPTER 5: The LDP as experienced by the executive leaders

The aim of this PhD was to study the implementation of the leadership development program described in chapter 4, specifically analyzing whether and how the program facilitated the executive leaders' capacity and their continuing work to implement improvement processes across the hospital. This chapter responds to objectives 2 to 4 by answering research question 2 and its sub-questions. It draws on the findings of the document analysis and the 13 one-on-one interviews with the executive leaders.

These findings contribute to understanding how the executives individually experienced and felt about the evolution of the LDP. The interviews further explore whether they felt that the LDP had impacted on them as individuals and as team leaders and how this changed the way that they responded to leadership and making improvements by supporting their teams through their leadership learnings, leading possibly to a better service delivery to the patient. This chapter presents an analysis of findings from both phases (Steps 1-8) of the study.

The chapter starts by identifying how the executive leaders made contributions towards the development and evolution of the LDP. The analysis also concentrates on the perceptions and experiences of the executive leaders and how this influenced their role in implementing the improvement processes under three thematic headings, leadership of the self, leadership of the team, growth as leaders and then presents the overall benefits and challenges of the program. The analysis also reviews how the executive leaders' capacity was enhanced/or not by the LDP and what factors resulted in sustainable learnings from the experience.

5.1 How the executives contributed to the LDP development

Developing the LDP

From the documents that recorded the evolution of the LDP, it was noted that the executive leaders' views were often sought, and the executive management meeting notes show that all participants' views were welcomed and respected in the meetings and that suggested changes were discussed and implemented in response to the feedback received from the attendees. A reflective cycle of learning was clearly discernible in the follow up discussions, as these followed through on matters raised in previous meetings.

The documents show how the CEO sought consistently to motivate the leaders and reinforced essential aspects of caring for themselves and for the teams they work with, including how to be more resilient and be more accountable in terms of their responsibilities.

> *"We at Groote Schuur Hospital (GSH) have embarked on a journey of transformation. The hospital has a proud history of providing excellence in health care since 1938 and we need to build on that foundation in order to create our future in the 21st century" (Elevator speech).*
>
> *"I think every little thing that we do contributes; but we are never going to achieve 100 %. We are probably only contributing 15 % to what people need. It is a balancing act. What little that we do is contributing" (Accountability Framework…2019-07-15).*
>
> *"As leaders you must display leadership in the way you behave. You must treat them the way you want to be treated" (*Accountability *framework 2019-07-15).*
>
> *"Learn, adjust and perfect afterwards" (Notes of Leadership Learning session roles of owners and coaches).*

When the process was initiated, the kick-starting and holding of the process was heavily dependent on the CEO as project initiator, but the wider executive leadership team then started taking ownership as the journey continued. Initially the CEO needed to guide the discussions and get buy in from the executive leaders as the vision was being crafted by the team. Motivation was also used to build team cohesion and to reiterate the leadership learnings that were taking place, such as the need to listen, to allow all the voices to be heard and to ensure that there was a common understanding of what was being proposed. Spending this time on reflective input was seen to be valuable to the team as it allowed for a 'safe' space for the members to engage to express their views and this practice became a standard for all the executive meetings.

At the same time, the LDP and improvement processes were being developed, implemented and adapted following discussions at the meetings. Some of the documents offered some insights into how the entire team engaged and reflected on what was to be done and on how they were experiencing the program, leading on to identifying where to make improvements in the program. The leaders' used their learnings to guide them in implementing the improvements and shared these experiences with the team during the meetings, thereby encouraging others and further developing the program.

During the reflective sessions, their feelings about the LDP and their experiences in general were shared and this helped inform how additional learning sessions could be included in the LDP. The team members offered their perspectives on the development of the vision statement and its components, together with discussions on how this could be disseminated and communicated to the staff throughout the hospital. In analyzing the documents over the 5-year period, it was evident how team

discussions contributed to crafting the initial LDP and how the lessons learnt by the team members along the journey continued to shape and change the program as new needs arose or changes were required based on their experiences.

> *"It would be important to continue building capacity within the organization for the time being and coaching individuals in conducting improvement projects"* (*GPS steering committee meeting 2015-12-17).*

> *"We need to function as a team at ward level. Nurses, doctors, clerk, Allied Health staff, porters and cleaners must see themselves as part of the team. The team must develop what they want and need to see" (Accountability framework 2019-07-15).*

These quotes reflect the home-grown nature of the program as it was developed and contextualized by the team for themselves to function within their specific contexts.

While the document review showed an emerging picture of the progression of the LDP, further insights were gained from the analysis of the one-on-one interviews with the executive leaders and focus group discussions with the improvement process teams. For the purposes of this study, all the one-on-one interviews with the executives were held during 2018.

Experience before participating in the LDP

As part of understanding the context and evolution of the program, it was important to explore some of the background of the participants, their experiences and what they felt about the LDP before it was implemented and how their perceptions changed over time.

Each of the participants spoke excitedly about their career trajectories and named people who may have played a role in their development together with other experiences along the journey. Some described starting in a junior position and then being promoted to more senior positions, while others entered their role as executive leaders.

> *"I've been at the hospital for thirty five years, and I started as a ….. incidentally, in 1983. I worked myself up through my ranks and so forth….in fact all the ranks…you know" (LDP002).*

> *"When I started with the Department of Health I started off and that was in 2002. I started off at the bottom of the hill…cleaning XXX……cleaning XXXX …..carrying things around….and that allowed me to create bonds with people…to learn from others……and to coin the term….to steal with one's eyes. I watched people. I learnt characteristics" (LDP007).*

> *"I think when I started XXXI knew I wanted to be a XX. I didn't think anything further than becoming a Manager….to be honest with you. The minute I stepped into YYY I loved what I was doing. I knew this is exactly where I wanted to be" (LDP012).*

Of interest was the passionate manner in which they spoke of this history of their personal development and in some instances, what challenges they had to face, especially for those affected during the apartheid years[2], working in the health services.

> *"And there was a gentleman….a white gentleman, an old gentleman…and no one wanted to work with him…..because of his ways that he had…and so forth. Then he asked me…you know I'm new…..coloured outjie [mixed race young man] coming in…and so forth. I said "No problem, let me go and learn". A year after that, that gentleman retired, and they asked me, to take over…. I think that grounded me….and also what he taught me….in terms of ethics and principles……and all of that…I think my foundation was laid there" (LDP002).*

> *"I can safely say that the development that I had was…..for me to gain as much knowledge and experience….because if a white counterpart came in……I had to train the person…and then two or three months later, he's my boss. I mean…..but during that time I also studied part time…because the university wouldn't take me back…..so I had to go the Technikon" (LDP009).*

It was noted that each executive leader felt proud of the journey they had followed and what they had achieved. It became clear from their reflections that multiple experiences and circumstances shaped their leadership traits/behaviours and experiences, including through their previous work, family role models, work role models and religious beliefs among others. Each individual contributed to a colorful picture of the team that make up the executive leadership of the hospital. They each brought unique experiences and perceptions into their roles as leaders, but they also commented specifically on how their personal and workplace lives had changed as a result of the LDP. This was noted to be a positive change to the benefit of the hospital.

Overall and initial impressions of the participant's experience of the LDP

The leaders reflected on how the LDP learnings assisted them in their work environment.

> *"We knew it was something that needed to be done, and it was going to give us more skills, and just broaden our toolkit as managers. I think it helped us to make that transition from managers to leaders….but there was a lot of learning as we were going" (LDP001).*

> *"We are going to go on this journey……in terms of. Her[referring to the CEO] words "Business cannot be the same. It cannot be the usual business". So for me, it's been quite a good journey. I've learnt a lot, in terms of what the CEO have put in place for us…..also to upskill us…and you know…just take us to another level. So for me, I would say, it's fantastic. It's awesome" (LDP002).*

This expression of value gained was noted by all the participants as an improvement in their leadership ability, which assisted them not only in their work environments, but in their personal lives as well. This reinforces the notion that any person can be a leader and leadership behaviours and skills can be

[2] 'Apartheid years' – this was a time pre-1994, when due to the apartheid rules of the South African government, the hospital system was segregated for both services and staff. Patients were separated according to their racial classification and staff who were people of colour, were not allowed to work in certain wards. For staff, promotion opportunities and salaries were also different between the various races.

learnt and developed. It further illustrates that self-awareness and awareness of their roles within a team is important.

Upon the introduction of the program, initial perceptions were skeptical, but the participants describe how the conversations leading up to the program eventually made sense to them and how only once they were part of the learning did they reflect on the importance of building relationships with others.

> *"What do you want to do differently? What do you want to do better? How do we make small changes in our systems? Once you actually have those conversations….and then slowly bring you know these tools in……people react with it very differently. What I found with a lot of staff that leadership….that you first got to do….that work with them…humanize yourself with them…..to understand that where you are….you've also came from somewhere" (LDP013).*

> *"She [referring to the CEO} came up with this leadership development idea. She started talking to us…so we were a bit…first and before by then we understood actually that she wanted to improve the leadership of the first senior management and obviously the rest of the management team…and down to the ground" (LDP011).*

As the program progressed, the team members noted benefits from the facilitated sessions as they got to understand themselves and their teams better. Lessons such as the ability to identify their fears and vulnerabilities and then being taught how to deal with this provided the confidence and awareness on how to relate to others, change their behavioural and technical competencies and thereby do their work better. Benefit was also noted from the courses being tailored to the needs of the leaders at GSH.

> *"I think it's been an eye opening journey, and it certainly taught me a lot about myself, and learning how to use my strengths…and learning what the weaknesses in the systems are….what my trigger points are…and how to work around that …or work with it sometimes" (LDP001).*

> *"Lot of teamwork….lot of vulnerability issues you know….bringing up issues of years ago. I mean for you as a.……for me as a person it was great, and the team…a lot of fun…..a lot of exposing yourself…..you know…..a lot of kind of….this fear of failure issues… addressing that….you know… when you go into the circle and say what you failed at….and celebrate it. That was good you know…..so a lot of the deep things. I think that was good….and staying grounded….been aware of yourself" (LDP004).*

> *"The experience of the Groote Schuur process has been a bit more tailored to our needs. I think that that….you automatically at least for me…..I automatically then become a lot more interested…..because I then start to see what is the self….for me what is the self-improvement that I can get out of it….. because it felt like it was a lot more home-grown……and it was geared specific to your needs…and into our contexts." (LDP008).*

The quotes above show that personal benefit was noted during the sessions when the self-awareness came to the fore and the executive team started to build relationships with one another as a team.

5.2. Key experiences of the LDP

The interviews revealed four key themes of participant experience with the LDP - Leadership of the self; Leadership of the team; Growth as leaders and the Overall benefits and challenges of the program.

5.2.1 Leadership of the self

Self-development through self-awareness formed a significant part of the LDP journey. It was part of the initial introduction to the LDP and formed part of the leadership aspect in the hospital's vision statement. Many discussions around self-awareness took place at the start of the meetings during the touch-base reflective sessions, but were not recorded by the secretariat, so that the participants could feel free to speak during this time. The meeting notes show some discussions which addressed how self-awareness contributed to the development as leaders.

> *"Leadership is about knowing self and what you mean to others in your role" (Executive Management AOP Midyear review 2016-11-07).*

> *"Everything that we are learning, we are learning about ourselves; it is the level of self-awareness. All the things that we are going through is to become more aware of what we are doing; and how it impacts on others" (GSH learning session – Time Management 2018).*

The two quotes below from the executive leaders during an open discussion reflect how they felt that creating self-awareness enabled a shift in the way they responded to and dealt with difficult situations, instead of getting "irritated or getting onto the hamster wheel". This 'change' through self-awareness was noted to be positive on a personal level, inferring that the executive leaders felt they could apply this reflective learning to their work situations and feel more comfortable with how they 'handled' challenges.

> *"The big thing was the self-awareness and consciously thinking about where you are at emotionally at the beginning of the day. You can easily get irritated or get on the hamster wheel. Being disciplined with regard to practicing what we have been taught. For me the big thing has certainly been self-awareness to know where I am at emotionally to deal with difficult situations. Enabled me to reflect on what has been happening over the past two months where I could have handled situations better. It has been a huge thing for me and consistently applying what has come through. I see the change in myself. A team member said that there is a distinct change in the manner in which I handle things in the unit" (Open discussion regarding LDP 2016-08-29).*

> *"For me it has been more about self-awareness. Learning my behaviour and how they respond. It helped me interact better. It is about time, taking the time to engage and more time that you import into the team. It helped me to prepare for sessions, especially difficult issues. Now you can respond differently, even personally" (Open discussion regarding LDP 2016-08-29).*

Self-development was further recognized as a reflection of the amount of internalisation that the executive leaders undertook to keep improving themselves. The executive leaders found this so

helpful, that they specifically requested this aspect of the programme to be expanded to other management levels. Such expansion of the LDP is still in progress.

> *"It's not necessarily that you have changed, but you became more mindful and self-reflective, of your own actions and reactions. The bigger staff complement hasn't really had the opportunity for that" (LDP003).*

> *"I think the technical part of getting the job done, is not the problem. It's how do you bring your people on board, to get to where you want to go. We needed to develop our staff, to move from the state sector production kind of mentality, to business mentality…that we offer a service…that we offer a value for our service. It was how was those kind of tools…I was looking for….how to engage staff…..how to motivate them…how to develop them…to become leaders themselves" (LDP 001).*

The cohesion of the executive leaders' own teams improved, as well as the understanding of the need to work across teams and the willingness to do this. They acknowledged that this was enabled by the journey they had travelled first as the executive team first and the bonds that this had created for them as they engaged on matters of mutual interest and learning.

> *"By having this strong executive team, and the general management team, we see ourselves as the leadership. I rely on my exec colleagues and my general management colleagues, to open the door, so that I don't encounter those things…..even in spite of not having line functionality. We see ourselves as a team….and pride for the board…for the area….for your service" (LDP004).*

5.2.2 Development of the executive team and leadership of their respective teams

Developing the team overlapped with discussions on change management that was needed between the executive leaders and their teams. It was noted that the CEO first concentrated on building cohesion within the executive team before promoting team functioning at other levels. The executive leadership team was reminded that this would be a slow process and that progress would fluctuate within the team.

> *"apart from just the leadership journey itself….what I found as a team, we tend to work a lot better. The executive team. I think there's a lot better…collaboration. There are still some silos, but by large it has improved a lot….compared to from where we started. I think that through this leadership journey, that has changed for us" (LDP 005).*

> *"I think we're a good team. There has been an improvement at…you know…at exec level. I know I can call on my colleagues, and when you work down in the organisation….because we kind of span all levels ….the MMS's (Manager Medical Services), you at exec, but you're also in the trenches…..and we kind of go up and down all the time. And enabled you to effect your work much better…..much more efficiently" (LDP 004).*

This slow cascading process was evidenced by comments made about how there was increased buy-in and enthusiasm as the GPS learnings were being implemented by the executive leaders. However, it was recognised that in order to enable them to buy-in, time had to be dedicated to assisting the team to understand what they were proposing and that they each spoke the same language.

"When you started, where did you think you would be right now? I thought we would be further. However, there was a process of integrating tools and agreement with ops managers and could then start to generate. Momentum started to grow and there has been buy-in and increased enthusiasm. A slow process to get there" (GPS Review session 20170814).

Together with the executive team development, relationships were emphasized so that the members could identify their role in relation to others and that a proposed matrix structure of managing challenges in a multidisciplinary system could be more beneficial. In order to achieve this, the CEO used examples to identify each role in relation to the challenges experienced and hence the need for the executives to work together and take joint responsibility.

"There is a general sense that it makes sense conceptually. We need to function as a team and promote team functioning within areas of responsibility. How to go about that we get stuck because of the reporting lines. The proposal for a matrix management structure links to everything else that we do."

"From Finance: each has their respective budget."

"People Management: there are certain things that managers need to do."

"Support Services: should be easy too"

"You need that person that you can speak to."

"Moving away from a silo approach to a more integrated approach at the coal face."

"It is a change management approach for each manager."

"Your go-to person should be the people in the room. You are not alone. There are another 10 like you"

(Accountability framework 19-08-2019).

The common thread on the relationship building aspect of the program was positive, with a focus on the improved cohesion in the executive management team. The comments suggest a strengthening of the relationships that were previously non-existent and silo'ed between the clinical and support managers.

"so it's building that relationship….so I spend a lot of time building relationships…..and once I've gotten the relationship….it's so much more easier for me to get things done" (LDP013).

"Overall there's been a lot more camaraderieship between the team members….because we kind of getting to know each other a little bit better….and I think on a personal level" (LDP008).

"Probably one of the good things from a management perspective, or an exec perspective, is…you could go to another exec member… and share that experience…whereas we probably wouldn't have done that before" (LDP001).

Building these relationships was not an event in itself, but an ongoing journey of understanding themselves, and each other's personalities that helped them to engage and interact better as a team. This, together with working towards a common goal, contributed to the improved team dynamics.

5.2.3 The executives' growth as leaders

The leaders saw themselves as part of a team and felt proud of leading their teams to service the patients. This resulted in setting very high expectations on themselves for fear of letting the team down. These expectations sometimes also resulted in the team being challenged by any negative criticism or when things did not work out and then pushing themselves harder to achieve excellence and success.

Pin-pointing a cause for this level of drive and ambition was not easy to do, except that through the enneagram process, almost 80% of the executive team displayed a personality profile of perfectionists. A huge part of the growth of the leaders was recognizing their quest for perfection and how a better balance can be attained.

> *"Because we are aiming so high. You're always assuming, we're doing our best. When that gets challenged by negative aspects, it really knocks the team" (LDP001).*
>
> *"Our executive team…we're a bunch of perfectionists. We want things done in a certain way. We strive for excellence and we push consistently" (LDP005).*

The leaders saw their role as being for the organization and for the patient, pointing to a culture of altruism where whatever they did was not for personal growth, but for the utilitarian benefit of the greater good. This shows a level of humility as leaders, a topic that formed an essential part of the learning program.

> *It's not about the person, it's about the goal of the institution…and the patient…and I think that for me, has been the good part of Leadership…learning to get people up a level…and kind of keep the level…the constant learnings" (LDP004).*

Team strengthening

The participants further spoke about having contributed to the promotion of distributed and collective leadership.

> *"…now "Ok here's a collective ownership, rather than an individual ownership"….and I don't think we realise the importance of that..."(LDP008).*
>
> *"…the environment is there to say "You as the most junior person at the institution have an opportunity…which was definitely not there two decades ago when I started…"(LDP008).*
>
> *"I think that for a public government institution, to do something like this was actually quite breaking the norm" (LDP005).*

According to the participants, the LDP with all its integrated components not only had a positive effect on them as individuals and as the executive team, but also had a positive effect on the institution, with a perceived enhanced service to the patient and they felt a sense of ownership for this success.

Further evolution of the program to expand the learning from the executive level to the general management level took place in 2018. The suggestions were for this to expose newer members of the executive team to the leadership learnings and to improve cohesion with their respective teams.

Working with their respective teams

The executives were each coached through peer support and later adopted the role of coaching their own teams as a way of disseminating the executive discussions throughout the hospital and at the same time, bringing feedback to the strategic discussions for further adaptation of the program.

> *"It would be important to continue building capacity within the organisation for the time being and coaching individuals in conducting improvement projects. Learning by doing" (GPS steering committee meeting 2015-12-17).*

> *"A foundation; must work on how to infuse with qualitative thinking side. Do not have a tool to measure; it takes place through coaching. Coaches can work with people in real time and get to know the thinking. A coach asks questions with a purpose to understand what they are thinking; and assess whether the thinking is systematic PDCA thinking. The coach coaches project owner in that way of thinking. Get people to stand with the owner in front of the page, baby steps. When redesigning the system, think about deepening coaching and develop PDCA thinking" (100515 GPS Steering committee minutes).*

The improvement processes allowed for the implementation of all the learnings gained in a practical way. As team leaders they were expected to develop their teams consisting of a multidisciplinary group of people; to use a commonly developed, home-grown methodology of problem solving. Their learnings were shared within the executive team, thereby improving the relationships and how all their activities collectively became a system of working together on a daily basis.

> *"but when I saw the difference…..when I saw the outcome with improvement in time in the clinic……..and organising my office you know…..then I said " I'm actually happy….more positive. There's a positive output"…and I think it's important to spend time…..so that's changed me…" (LDP003).*

During the implementation of the improvement processes and further integration as part of the LDP, the executive leaders felt that the system was "starting to fall in place".

> *"I think that when we implemented that...things for me....kind of started falling into place because.....if I wanted something on this journey.....the managers knew exactly what we're all talking about. So, that gap was filled basically......before I went down to the ground....and expecting certain stuff from the staff on the ground" (LDP001).*

The improvement processes were considered to be both innovative and part of how the executive leaders could through a change in their leadership, improve the hospital services. Of significance in this theme is that the managers spoke of innovation being a part of everything that has been introduced at the hospital. This is aptly captured in the comment:

"..so any small challenge that allows us to steer this monster in a slightly more goal directed …where we want to be…is for me innovative" (LDP013).

Innovation

The word innovation was presented to the executive team as a different way of doing things and with the evolution of the discussions leading up to the development of the vision, innovation and improvement processes were used interchangeably. For the executive team, they were innovative by improving their behaviours as individuals and by changing and improving how they work with teams – both the executive team and then their core teams. Innovation was further reflected in how they had enhanced their skills to lead improvement and innovation in the hospital system.

"The way in which we practice and provide care to our patients (clinical and non-clinical services) needs to be more patient centred with a focus on quality improvement, whether this is from a patient flow; process flow; policy or systems flow perspective. Innovation in this context is not about something new, but merely looking at a different way of doing things" (GPS roadmap).

"Innovation is merely providing staff with the space to find new solutions to problems and facilitating these" (GPS roadmap).

Discussions initially focussed on the innovations being used to encourage staff to think differently and the input from the Graduate School of Business assisted in setting up an innovation drive for specific innovation projects. Further assistance was sought from experts in the United Kingdom. The program was managed internally at the hospital, but some of the projects were presented for other external awards and this was acknowledged as being positive for the hospital.

"Purpose of the visit by the Innovation Unit is to commence scoping to determine issues prior to the Grand Challenges Project. One on one and group sessions would take place with members from an Innovation organisation in the United Kingdom, who had spent a week interacting with members of staff at GSH. It was reported that interactions were enjoyable" (Executive management committee minutes 2014-07-07).

"Of five innovation projects submitted, GSH received three awards. Head of Health would be hosting an acknowledgement function at the next TEXCO meeting in December 2016. Congratulations were extended and efforts and good work were acknowledged to the three teams that represented the hospital" (Executive Management AOP Midyear review 2016-11-07).

After the projects concluded, the discussions changed focus towards making the innovation ideas sustainable by integrating them into the 'normal' work of the hospital. Models of how this would be facilitated were developed and standardized tools, such as the Value stream mapping, 7C and PDCA, as lean methodology principles, were introduced to the executive leaders and teams on the ground. Many processes were taking place at the same time, with facilitators, mentors, coaches and building

a culture of multidisciplinary teams for continuous improvement processes was being strengthened. Coaching sessions were organised, so that each project had a champion that they could rely on for advice. Mentors were trained to ensure that the coaches had the necessary skills to perform their tasks. The whole system approach took shape and spread throughout the institution.

> *"These improvement processes will use the principles and lessons from the 'Lean' methodology to introduce various improvement projects throughout the hospital and the teams will be led by the relevant leaders, thereby growing the culture of working as multidisciplinary teams to enhance patient care and developing a culture of continuous improvement" (GPS roadmap).*

> *"The project-based system should become part of normal work, commencing with facilitators to assist with improvement projects to take them forward into the cycle of normal work" (Minutes GPS Business Management meeting 2017-06-01).*

> *"Used Lean Principles; Must not be dogmatic; must not refer to the concept of Lean. GPS as a continuous improvement system. Live the vision by using the language of continuous improvement. Sell to the staff as part of institutionalisation of projects. It is about not having too many SOPs, paperwork, rules and guidelines. We must be flexible; Results to talk to the GPS principle" (Notes on introduction to GPS for frontline teams).*

> *"You can make use of 7C for any problem; but only through team work and respect for each other" (Minutes General Management Committee 2019-04-08).*

> *"Senior Management must provide leadership; Clinical and Support functions need to drive the system together – teamwork; People development is essential to the success – training and empowerment; Finance must become a partner to the operations – link operations to budget; Information Management is essential - create a Business Intelligence Network; Working in unison – this will unleash the creativity of our staff" (GPS roadmap).*

As the improvement processes grew, the monitoring processes were done in the Functional Business unit and GPS meetings. These minutes offer operational details on the specific improvement processes. The strategic direction and reflection of progress discussions took place at the GPS steering committee meetings. Reflection on the needs of the staff were also taken into account, for example, the development of standard operating procedures, checklists and one-page lessons following and leadership learning sessions.

> *"It would be important to continue building capacity within the organisation for the time being and coaching individuals in conducting improvement projects" (GPS steering committee meeting 2015-12-17).*

> *"It would be helpful to use actual examples from GSH to explain about particular parts. Comment about tying training more closely to the checklist. One page lessons on a particular issue that are available to people on the shop floor; so at any time, I can go and get the one point lesson and self-train myself as needed" (170515 GPS Steering committee minutes).*

The above shows how the leaders valued having standardized tools that they could use with their respective teams and build capacity throughout the institution. The importance of the coaching and

how this training enabled them to assist their teams is also reflected. A reflection on these activities point to the evolving nature of the program and how activities were adapted to suit the needs, with these suggestions emanating from the staff on the ground. Developing mentors and champions became part of the manner in which to program was institutionalized and standardized across the hospital.

Change management

As the LDP was part of an ongoing change management process, and it stretched over several years, concern was expressed about the pace and scale at which the activities were taking place. The executives felt overwhelmed at times with too many elements to work with all at once. The executive team reflected on this often in the different meetings.

> *"Concern expressed that we are taking on too much, with the danger that people start feeling overwhelmed; Concentrate just on Leadership at the next workshop : available tools to help; break aims into 5-year chunks; Use Lean as a model; how does one coach staff into accepting Lean? Take plans from System Thinking; Develop a standard approach to problem-solving. Need to have an M&E discussion at every management meeting" (Executive Management Committee minutes 2014-08-04).*

> *"The GPS consultant had joined a clinical directorate meeting and it was reported that there is a perception of anxiety regarding changes taking place. Management needs to decide what works for them as an individual in terms of possible changes to the current FBU reporting format" (Executive Management 2018-08-06).*

Change was also not always experienced as easy and the leaders themselves struggled with alterations in their routine. The quote above is an example of discontent at having the business reporting systems changed. This was explained in the same meeting to have been done to incorporate the improvement work as part of the daily work and hence daily reporting. The need for resilience and calm was expressed a few times in difference documents. As the program progressed, repeat learning sessions on resilience were held to deal with this discontent and included both the executive and general management teams.

> *"Move away from thinking about everything as a project. It is part of work. How to incorporate into daily function. It is anticipated that the changed structure would evolve over time" (Executive Management 2018-08-06).*

> *"The focus for leadership development in the current year has been on business process, with presentations related to management. There is a further need to draw new members of the Executive Management team into the leadership learning that has taken place thus far." (Executive Management 2018-08-20)*

> *"At the end of the day we want patients come out of here with the best care we can physically give them and I feel responsible for that. They will say the same thing about us. The perception … everyone feels they are doing the most and best that they can. Its not about us…….a calm*

manner in which we deal with it. In the head you have to fight those fights. Outward display should be calm, show that resilience." (Executive Management discussion 3 July 2017)

A reflection on this anxiety was that it was anticipated given the context within which the executive leaders needed to function and this needed to be dealt with in a non-threatening manner. Any change would be perceived as a disruption of activity and required consistent re-assurance.

"We need to modulate responsiveness, not in a stressful way. React and respond in a calm way. Building resilience. People take the lead from us" (Executive management discussion 3 July 2017).

"Leadership all excellent. Things are becoming more appealing after the learning sessions. I can go back to five or six managers where I can apply things at work, home and myself. It really works for me. I am waiting for the way forward, what can I lean next" (Open discussion regarding LDP 2016-08-29).

The complexity of the LDP process became evident in how leaders reflected on it in the documented meetings and in the interviews. While there were noted changes at an individual level with the observed transfer of skills, job changes leading to continued growth and integration of feedback, the subtle changes were not observable. The subtleties were thought to be more cognitive, such as developing a broader vision; being more confident; listening more carefully and mentoring and coaching the subordinates.

5.2.4 Benefits and challenges of the LDP

When speaking of their role in leadership and how they had experienced the LDP, each was complimentary of the initiative and how much they had learnt about themselves. Comments were made about the value and uniqueness of the program and how proud they felt to be a part of it.

Benefit to themselves

The executives felt that they gained benefit from having a deeper understanding of themselves. This was through the enneagram process and the many reflective practice sessions that took place either with some of the facilitators or in the hospital meetings. This understanding contributed to changing the way that they practiced leadership.

"I think it's because I have become more open, and willing to listen more maybe, and engage. I spend a lot of time with the team now…. whereas I think, when I started. I spent more time in my office….and that…because then staff are willing to have the conversations….have the discussions….come up with ideas because they know that I will listen to the idea….and give it serious thought….not disregard it…because it's someone else's idea, and not my idea" (LDP001).

"I think the old way of how one thought about leadership styles….and you know, and moving forward. It's actually about being adaptable and agile. So I think the richness for me was to get all these different tools, and then be able to draw on, those different things" (LDP003).

"I definitely…from an emotional point of view….maybe emotional intelligence is a lot better…" (LDP005).

Many mentioned that their leadership style had changed, while in fact, it was merely an awareness of that leadership style that enabled the executives to understand their strengths and weaknesses and then be more adaptable and agile in their responses.

Being part of a team was valued as they felt more comfortable expressing their own views and they recognized the inputs of others through listening in the context of the participatory and distributive leadership that was being practiced, both in the executive team as well as within their own teams.

Benefit to the individual executives and their respective teams

The participants' comments indicate that learning about themselves helped them to manage and interact with their teams better. They reflected a change in their style of speaking to their teams; in their ability to listen and in the manner in which they allowed, through facilitation, the staff on the ground to come up with ideas and solutions. This could be interpreted as a change in their style of leadership.

"My assistant directors will tell you, I use to run the place with an iron fist…..and whatever I say goes, right? They would probably tell you that listen; the way he is now leading is completely different" (LDP009).

"I try to make more time for the softer things, and use that to also gain…a relationship. When I have to….and they know where I'm coming from….when I say " Look we have to do things this way, and that way etc. "……. not kind of be the boss…but be more kind of……a herding leader….leading" (LDP004).

Some felt uncomfortable to share their feelings with the team and everyone was not at the same level of progress all the time. However, as time progressed, this discomfort became less and they expressed value in being able to open up to others when they needed to or to seek advice on challenges being experienced.

"For me the first thing was….just being more comfortable, and understanding myself…and that I think helped me understand also, the personalities in the team" (LDP001).

This sense of comfort could be attributed to the level of professional trust they placed in one another due to improved relationships, both at an individual and team level. They were able to share experiences and jointly address challenges.

"I definitely feel that we are more closer to each other now. Originally also... …we trust ….i think there's more trust now in between the team" (LDP011).

"There has been an improvement at…you know…at exec level. I know I can call on my colleagues" (LDP004).

It can also be attributed to them understanding their own emotional intelligence and how this impacted on their change in behaviours. They functioned as a team with a collective vision or goal that needed to be achieved.

Benefit to the broader hospital community

The CEO was a member of the team learning with them and the internal team of the executive leaders together with the middle managers were viewed as the leadership of the hospital, with a strong sense of ownership of this role.

"By having this strong executive team, and the general management team, we see ourselves as the leadership. I rely on my exec colleagues and my general management colleagues, to open the door, so that I don't encounter those things…..even in spite of not having line functionality" (LDP004).

The comments reflect that the learnings have had an impact on the broader functioning of the hospital. While the study concentrated on the executive team and it's functioning, it was noted that the executives themselves attributed the improved results to what they learnt on this leadership journey.

"I also think that in our core group we have established a community. I don't know if you call it a community…..but that we do interact with one another better…..and I think our learnings throughout the three years….or however long it has been…..actually… dit het afgesmeer op ons (It rubbed off on us)" (LDP006).

"The impact has been positive. I think I can see it, in what's happening in the team. I can see it in the results that we have….in the conversations that we have….so I think it would have been different….and I'm not sure we would have progressed to the same extent…..if we hadn't gone through this journey" (LDP001).

"One of the people said to me, that they have found joy again in their work, because these opportunities have been opened up…..and this different vision has been opened up" (LDP003).

"But you know what, we're able to do it as a team, and really we've been innovative, in terms of how we do things…… how we stretch the limited finances that we have. You know I'm extremely proud of our team. So yeah, I think our leadership journey has certainly helped us" (LDP005).

"Some of it is a little bit too fluffy for me, where there's no right or wrong answer. I need an answer. It must either be right or wrong, so in that sense some of it is a little bit fuzzy for me. Overall if I think about all of it, I must that I personally also….ek het baat gevind daarby. (I benefited from it tremendously)" (LDP006).

Useful insights from this data helped to show how the program, as it was conceptualized, assisted to enhance the executives' leadership abilities. The language used by the participants reflect the importance of some of the aspects of the program, such as it being innovatively different; how it assisted them with their management responsibilities through self-awareness, leadership and development and that this development process enabled learning.

> *"I think initially when I first heard the word innovation…you were thinking it needs to be something completely novel….and I think that was a mis….my misunderstanding of it. I think that for me now it is….I think just having the platform to look at things differently and say- You know how we can do this thing differently…" (LDP008).*

The content of the program and facilitators of some of the talks were not pre-planned as part of a formal program but adapted in line with what was thought to be needed by the team. The benefit of reflecting and then adapting was an important lesson emanating from what the participants expressed about the learning, with the needs being satisfied at the time and over the years, contributing to the journey of becoming a leader.

> *"It really was extremely beneficial….and the people who were gotten, were also very good. They were very varied. I think that when you go to…..like a one paid for course….you kind of get the same lecturers, or the same programs…..you know….but because this kind of covered all the various aspects….but it was bringing in very varied people, with very different experience, I think that enriched the program specifically" (LDP003).*

> *"It's a completely different approach……a different manner…a different way of holding yourself….engaging with people…how you see yourself….and it doesn't happen overnight….and a lot of people need to….you got to understand that as well. They don't just trip the switch and now suddenly you become a leader. But it's a journey that one embarks on….and it all depends on how willingly you going into this journey" (LDP013).*

Many other expressions of benefit were presented in the interviews, all suggesting how different aspects of the program may have contributed to the value that each person derived from it.

Aspects of the LDP that made a difference to the executives

The interviewees themselves judged that learning about the self, fed into learning about teams and ultimately, had consequences for the broader hospital functioning. This could best be summarized in the quote below.

> *"Generally speaking……not even just talking about Groote Schuur now….but patient centeredness, compassion, empathy…those are very sensitive cords in me….and those are things that I really aspire to try and improve…..in whichever health organization or healthcare facility that I'm working in…..and I found that in a big institution like Groote Schuur, you deal with different personalities. You deal with people that have different agendas. There are political backgrounds. There are actual sort of personal goals and milestones that we are not aware of in certain individuals that could lead to conflict….for example in terms of aspiring to reaching the hospital goals. So I think with this leadership programme it crystalized very clearly*

the Groote Schuur performance system that evolved out of this leadership programme" (LDP010).

This quote intertwines the LDP, the GPS that evolved out of the LDP and how this links into the core functions of the hospital, which is quality patient care. Being a health worker is not just a job, it is a service unto others that speak to being patient centered, compassionate, empathetic and caring in nature. Functioning with these core innate values within a complex organization such as GSH, requires the leaders to navigate different personalities and agendas in order to fulfil not only their own goal, but also that of the organization. The above quote reflects how that LDP, leading to the GPS, helped this participant achieve not only a personal, but also an institutional goal.

Most of the participants express a sense of accomplishment for themselves as individuals and as an executive team.

"I think I use those learnings to….you know……. to rally my colleagues, and to try and listen also…….for the better ideas….not always just jumping with a solution. Practice the humility. That's always …..kind of spoken about. Yes listen for a better idea. Invite their input actively. Yeah I think that's different you know…..from what we've tried to do before" (LDP004).

"You can be innovative in certain processes……but you must make sure that you adhere to the principles….so that you don't increase the risk…..and that's important" (LDP005).

Each of these comments speak to leadership principles of listening, humility and being more inclusive of other ideas all working towards a common goal, which was the rallying call for the executive leaders in assisting their ability to disseminate messages, work with common tools and speak a language that they all understood. They expressed how this ultimately had a positive effect on patient care. As reflected in the last comment below from the independent interviewer, it was all the smaller changes that would add up to make that bigger difference. Given the size and complexity of the institution, the evidence for this was not measured or expected at this stage of the research.

"I think…definitely patient care has improved…..because a lot of departments function differently. There's still a lot of challenges that we have in the hospital and there's a lot of factors that affect it. I'd like to believe that this journey has had that positive effect on patient care. That's part of the leadership journey….it's the process improvement….it's all linked. So definitely, compared to three years ago, patients at the institution, have a better journey….there must be a difference" (LDP001).

"what I'm hearing you say….sometimes small changes result into bigger and systemic changes that then become embedded….so it's not perhaps so much about thinking……of changing your entire organization all at once, but bit by bit….through these smaller changes…."(Independent interviewer).

The above quote from the interviewer, at the conclusion of the individual interviews, summarizes how all the expressions used during the process of the LDP, such as innovation, change, leadership,

constant learning, among others appear to be contributing in parts that add up to the collective whole that then become institutionalized at the hospital.

The role of the executive in team leadership, team development and team functioning spanned across all the themes. Of significance was the role of the team, on the ground, for ownership of the process, in building multidisciplinary relationships and in building sustainability. At the time of the interviews, all the teams had been established and were functioning for at least 3 years.

Working as a team was part of the buy in that the executive leader needed to navigate as well as the change management related to this. Relationships had to be developed with the individuals in the team and also among the team members themselves.

Within the executive team, the CEO had to gain the support of the team and keep the team motivated and within the respective teams, the executive leaders had to fulfil this role.

Challenges of the LDP

The participants identified some challenges with the integration of the improvement work in a more formal way and requested additional refresher courses on the lessons learnt as well as reducing the complexity with which the detail of the improvement processes were being dealt with and captured. A guide or reference booklet was also suggested as a possible standardized resource for the future.

> *"Say improvement work that maybe hasn't become fully integrated in the formal way…but has become maybe integrated in an informal way, which I know can be a bit dicey, because it can be neither here nor there….but I think that is still a challenge to achieve" (LDP004).*

> *"I think it's a very good balance, maybe there's a few extra things we can add to it. I always found it personally difficult to motivate people" (LDP006).*

> *"maybe if we all had a similar template….in terms of how we were following….in terms of what we should be presenting…in a more structured manner….might have been useful……"(LDP008).*

There was also a sense that more work and a greater investment was needed in the broader hospital environment with other levels of managers. The request was for the leadership learnings to be disseminated, but at the same time, continue with the executive leadership learnings as 'maintenance work.'

> *"Sustainability comes with even more hard work, than getting it there in the first place…..and there is no doubt that some people are further along the journey than others. Let's say the currency goes, and you get a CEO, who is technically right for the job, but hasn't got the same inclination towards this development….. with one false….kind of cross….it could be changed" (LDP003).*

"I think the maintenance work at the executive team has to be there…..which I think is there because there is ongoing leadership sessions….but that kind of can't stop, just because it has happened for three years……….. So it will always need a different kind of leadership, to maintain it. I think further down the line, it will be better possible. Right now, I think it would be very vulnerable, because that change hasn't translated fully. I think in turning such a big ship around, three years is a very early start of a journey" (LDP003).

It was recognized that building such sustainability would require much more work from the executive team and the leader of the executive team, as the success of the program was heavily dependent on the input of the current CEO. A concern was raised about sustaining the program if the CEO should change and what impact this might have on the institution. Another challenge related to sustainability was that the people at other levels of management were so diverse in terms of their experience and job responsibilities. This led to a suggestion of concentrating the leadership learnings for these different managers on learning the basic competencies needed to perform their respective roles.

"I don't think that the type of leadership session that we've gone through would be at this stage beneficial…..and the reason being….A lot of the managers were translated into operational managers' posts [patient ward level managers] but weren't really given any development…..the set of competencies that you need to have. So you've got to go back to basics first before you even look at the other stuff" (LDP005).

Overall, the participants were positive about the program, but one of the participants did express reservations about the time in between the learning sessions and that this needed to be happen more frequently. The participant expressed frustration with the pace at which the program was filtering down and indicated that the leadership learning was a 'waste of time' because of this. Other comments from this participant show that even within the executive team, members were at different levels with respect to value gained. Further comments from this participant reflect a sense of impatience, but also an expectation that this responsibility is someone else's.

"So….I'm not sure…..like we have this learning sessions quite far apart….and whether we need to just meet on a weekly basis but for different things….. If we take like a twenty minutes….you know….we do one leadership learn for that twenty minutes…"(LDP013).

"Yes I'm part of the Exec Management Team. I understand that we all have to be doing this together, but it's wasting my time" (LDP007).

The overall impression gained from improvements to the program were mostly related to refresher sessions and tailoring some of the learnings to other layers of management throughout the hospital.

At the end of the individual interviews, the independent interviewer facilitated a group discussion with the 13 executives who had participated in the study. Analysing the transcript of this conversation revealed four themes as a summary of the executive leaders' experience of the LDP (Table 7 below).

Table 7: Group interview summary

Theme	Interpretation	Quote (*Transcript of focus group discussion with the participants)*	Reference in N Vivo
Appreciation	The team collectively expressed appreciation for the LDP and lessons learnt.	*"We knew that the only way we were going to come out of it safely....was if we pull together."*	Ref 3
Challenges	Challenges were present throughout the journey	*"I don't think that our learning is the only thing we need to acknowledge. I think the response to our learnings...is quite important. As the managers....as I mentioned earlier is quite resilient.....in learning from whatever transpired...and develop new counter measures....or new ideas...or engage with new people. I think the executive is also addressing one of the eight ways which is.....optimising people's skills."*	Ref 3
LDP impact	The lesson of learning and reflecting pulled through all the comments	*"The reflection practices actually gave us that time......to really look at the pros and cons on your actions.....and learning from it....where your blind spots are......what you need to develop. So to date, I'm reflecting in my own capacity....because of the learning....how to reflect."*	Ref 1
Role of improvement processes	The leadership learnings made sense once the actions were practically implemented.	*"I think that when we implemented that...things for me....kind of started falling into place because.....if I wanted something on this journey.....the managers knew exactly what we're all talking about. So, that gap was filled."*	Ref 1

5.3 Chapter summary

This chapter has described the leadership development journey of GSH through a document review and analysis of the experiences of the participating executive leaders. The individual interviews helped fulfil the aim of the study in assessing how their experience of the LDP may have contributed to their capacity as leaders and their ability to implement improvement processes. The analysis shows that the executive leaders were able to motivate and support their teams.

The findings demonstrate, overall, that the LDP improved their leadership and that they found the improvement processes to be beneficial to building their respective teams and working towards a common goal. The next chapter presents the findings of the improvement process case studies.

CHAPTER 6: Improvement process case studies

This chapter presents the study findings concerning how the LDP may have influenced the implementation, functioning and success or failure of the improvement processes at Groote Schuur Hospital. The improvement processes were integrated into the LDP and vision statement of the hospital. This chapter responds to objectives 5 to 8 by answering research question 3 and its sub-questions. It draws on the findings of focus group interviews with each of the teams involved in the cases studied.

The section starts with a descriptive overview of each of the improvement processes included in the study. A total of four cases were included - two of these were from the clinical areas and two from the support services. Within each of the clinical and support service groups, one case was noted by the hospital Improvement officer to be successful and one unsuccessful. Success or non-success was determined as improvements that were implemented for at least three years and sustained or not sustained over this time. The criteria for success or non-success are described in the methods section. (Chapter 3).

The chapter further explores what transpired in the improvement process, how leadership played out and whether and how the learnings from the LDP played a role in how the executives led and navigated these improvement processes.

For the four improvement processes, focus group interviews with the teams and six individual interviews with key informants who were involved in the improvement processes were conducted. The interviews included the specific executive leader who led the improvement process team, the team members who participated, as well as other members of the team who had since retired from their position at the hospital, but played a crucial role in the improvement process.

Data collection for this phase of the study took place during 2020, which presented its own set of COVID-pandemic related challenges for the hospital and this research.

6.1 Description of the four cases

Table 8 below presents the four case studies and offers an overview of the number of participants and the various criteria used to select the specific cases (Stage 8, phase 2 of methods chapter 3). Each of the cases are then described in terms of how and why the improvement was initiated and the role that the team, including the executive leader, played in its implementation. The analysis of the respective team's experiences is then presented in 6.2.

Table 8: Summary profile of the four cases

	Clinical cases		Support services cases	
	Case 1	**Case 2**	**Case 3**	**Case 4**
	Ophthalmology Outpatient clinic	Pharmacy Outpatient unit	Catering unit	Human Resource Development unit
Problem statement	Longer waiting times for various eye clinics	Longer waiting times for patients at the Pharmacy	Wastage of food	Poor attendance of staff at courses
Improvement process implemented	Reduce waiting time for patients in the clinic	Reduce waiting time for patients receiving their medication after a clinic visit.	Reducing wastage of patient food	Reduce non-attendance at designated courses offered.
Executive leader was part of the LDP	✓	✓	✓	✓
Members of the multidisciplinary team	Team included the executive leader, doctors, nurses, Allied health, administrative staff, porters, messengers, folder and data management staff.	Team included the executive leader, deputy managers, all the pharmacy staff working in the out-patient pharmacy and the administrative staff.	Team included the executive leader, the deputy manager, catering staff working in the main kitchen, staff working in the satellite kitchen and administrative staff.	Team included the deputy manager of the section and all the staff working in the HRD unit.
Number of participants interviewed in the focus groups per team	9	11	10	6
Improvement process initiated at least 3 years before	✓	✓	✓	✓
Improvement process	Inefficient processed were reviewed and improvements	The team re-organized flow processes in their work functions. All	Improvements included a system of better communication	Improvements included a timeous process of

	implemented in order to decrease the waiting time for patients. All activities were monitored on a weekly basis by the improvement team.	activities were monitored on a weekly basis by the improvement team	with all the role players with times dedicated to checking patient numbers, etc. All activities were monitored on a daily basis by the improvement team.	informing staff and their supervisors in a different way as well as setting up a team to address the Supply Chain issues. All activities were monitored on a weekly basis by the improvement team.
Used GPS tools with the multidisciplinary team	✓	✓	✓	✓
Improvement sustained to date	No The improvement from 7 hours to 5 hours was only sustained for 18 months	Yes The improvement from 4 hours to less than 1 hour has been sustained to date with the team still actively engaged in addressing challenges	Yes The improvement from 550kg of food losses per day to less than 150kg losses per day has been sustained and improved to date	No The improvement from 35% to 95% attendance was not sustained because the process was stopped once the target was reached.

6.1.1 Ophthalmology Outpatient clinic

The Groote Schuur Hospital Ophthalmology clinic is a high-volume specialized clinic with many sub-specialist services offered by a multidisciplinary team. There are long waiting lists for booked appointments mainly due to the burden of disease and the capacity of the district health system to deal with such cases. To allow for easier access to emergencies, complex case referrals, there is a walk-in system, which provides open access and this further exacerbates the operational functioning of the clinic by extending the waiting time for patients to be attended to.

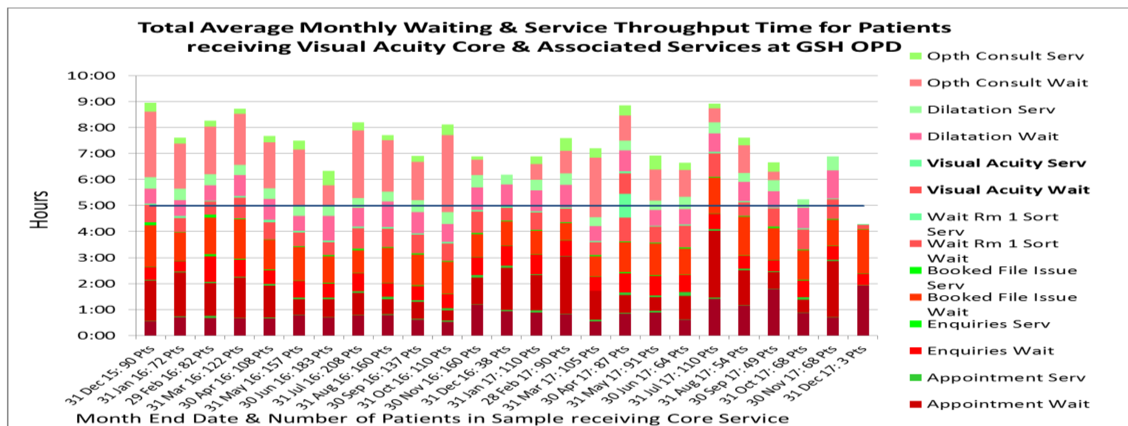
The improvement process was initiated to reduce the patient waiting time for the entire journey from entry into outpatients until the patient left the hospital. The entire flow process was reviewed as a Value Stream Map, by a team consisting of all floor managers and clinic staff who attended to the patient along this journey (Figure 19). This value stream map depicts the complexity of the complex adaptive system within which a solution needed to be sought.

Figure 19: Process flow map for Ophthalmology clinic

Observations were made along the flow process of time spent, time lost, time spent waiting in line, movement between all the required stops, time taken at these relevant stops (for example, getting a folder; having a visual test done; having other tests; being attended to by the doctor, etc.) and each of the processes involved until the patient received their medication from pharmacy, make a follow up appointment and then depart. The entire process on average was mapped out to take 7 hours per patient. Many process flow issues were identified in the process mapping exercise, for example, mainly un-booked patients entering the walk-in clinic; all patients entering the clinic were screened; the need for a medical consultation was uncertain and had to be decided by the nursing staff; once identified, there was a further wait to be seen by the medical staff; access to consultation on first come first serve basis, so patients were scared to leave their spot in the queue; no record of screening visit in official patient record, so patients were screened with every visit; growing backlog of patient numbers for both the booked and un-booked cases; stressed patients and staff and morning peak arrivals pressurized the entire process. The entire system was very inefficient for both the staff and the patients.

Following the identification of the areas along the journey where processes were inefficient or time was being lost, the respective teams then reviewed specific activities and implemented improvements in order to decrease this time, but still deliver a quality service to the patients.

The team then started a monitoring process to test any improvements by implementing a time monitoring sheet to be completed on a Wednesday. The results were then discussed by the team at a weekly huddle[3] held on the Friday, when graphs were presented and any problems or concerns that may have arisen were monitored for action through a PDCA form. Certain concerns were taken forward as new improvement processes.



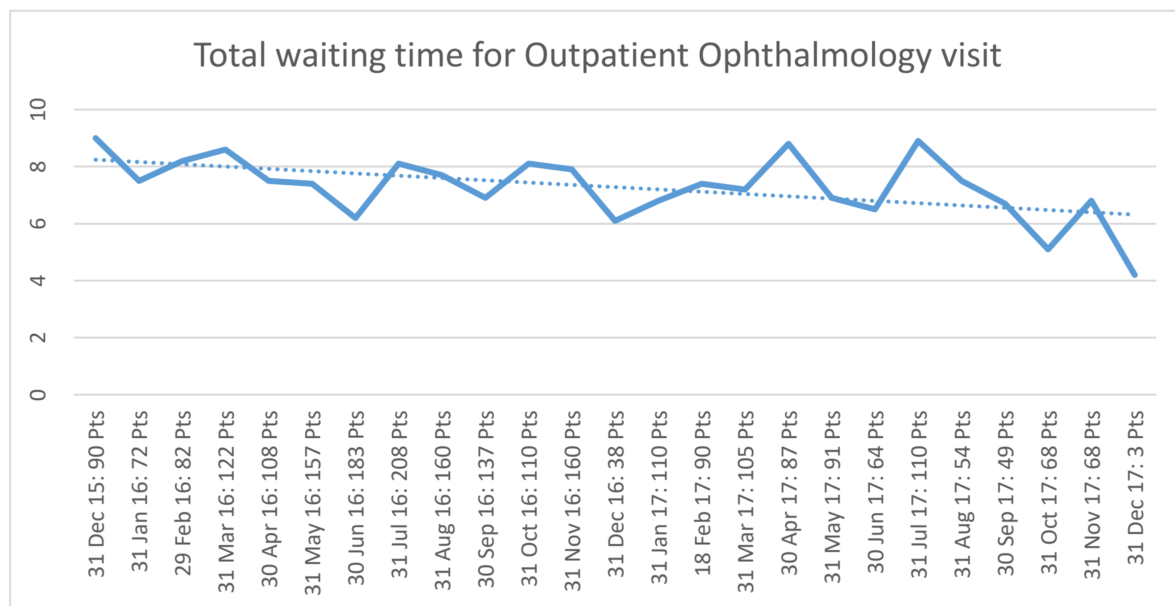


Figure 20: Total patient waiting time for Outpatient Ophthalmology visit

[3] Huddles occurred in the work environment and involved all the team members working in that area. These are 10-15 minute stand-up meetings done as the first task of the day. Issues that arise can then be addressed or escalated to the manager of the area

Over a period of about twelve months, the average waiting time for the service throughput for the patient decreased from 7 hours to less than 5 hours (Figure 20). This was sustained for about eighteen months, when despite all efforts, further improvements were not taking place. One of the consistent shortfalls identified by both the executive manager, the key informant [a retired member of the team] and the focus group members was that the doctors were unfortunately not participating in the meetings. There was a shift in the leadership of the unit both at the executive leader level and the clinical head of division. Staff started to lose interest in attending the huddles on a Friday, doctors implemented additional programs and the waiting times started to creep up again.

Lessons from the LDP used in this improvement included the GPS adapted lean principle tools such as the 7C's, the PDCA and on how to lead the huddles. The executive leader played a key role in getting buy in from the staff, supporting the training on the processes and sustaining these.

The improvement, although highly impactful on the service, was unable to be sustained once the expected waiting time target was achieved.

6.1.2 Pharmacy Outpatient unit

The Outpatients Department at Groote Schuur Hospital attends to about 2000 patients per day in the over 400 clinics in the various departments. Of these, approximately 450-500 attend the Pharmacy situated in the Outpatient building, to receive their medication. With most clinics starting around 08h30 and without an appointment system in place, patients often arrive at the hospital from 06h00 in the hope of being attended to early. However, first they need to retrieve their folders, then visit the doctor, then have additional tests, revisit the doctor, after which they can only get to Pharmacy for any medication and then again to the clerk for a follow up appointment before they can leave for home. On an average day, patients start arriving at the Pharmacy from about 10h30-11h00 and after that there is a huge influx of patients to attend to, with the Pharmacy only closing after 17h00, once the afternoon clinic patients have received their medication. On many days, some patients are asked to return on the following day to receive their medication because of the long waiting times. This value stream map depicts the complex adaptive system within which Pharmacy needs to function.

In this improvement process, the team wanted to reduce the throughput times from the moment the patient reaches pharmacy until they leave pharmacy. At the start of the process patients waited on average about 4 hours. The first activity was for the team to plot the flow or movements of the patients once they place their folder into the box at the entrance to the pharmacy by reviewing on the value stream map where there may be wastage in terms of time and what could be done to eliminate or reduce this (Figure 21).

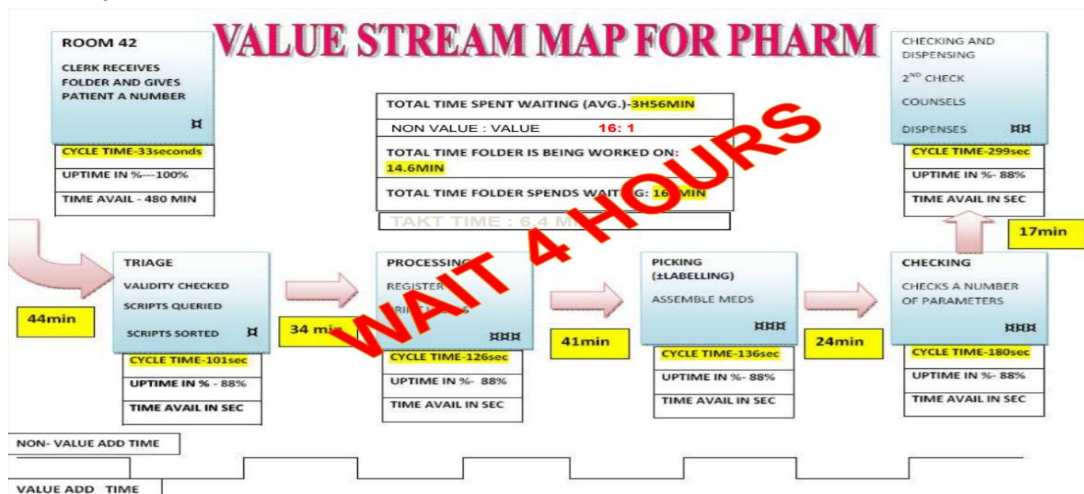


Figure 21: Process flow map for Outpatients Pharmacy

Most of the interventions involved improving efficiency by reorganizing the way that things were set up in the pharmacy department, for example, only processing ten folders at a time; other initiatives included reducing the amount of walk in patients; improving the way the patients flow into the pharmacy, for example, one or two doctors were asked to commence the clinics earlier, while others completed their ward duties; the way they were assigned numbers; the way they took in folders, etc. The team identified multiple steps that needed attention. As mentioned in the focus group by one of the attendees,

> *"We realized that we were all over the place and what we did was to assign a specific role to a specific person. If you are a pharmacist, you are a pharmacist, if you are a pharmacy assistant, you are a pharmacy assistant, if you are a clerk, you are a clerk" (Pharmacy focus group).*

The division of duties was clearly stipulated and clarified. At the same time, the team met on a daily basis and started by familiarizing themselves with the flow, for example, the discrepancies between the number of patients expected to arrive and the number that did. A member of the team was identified as the flow manager. This person's responsibility was to monitor flow, identify bottlenecks and alert the team. This made staff more aware of what was happening in the entire department and not only with the folders they were working on. In this way, the team was better able to assign duties and arrange functions in the pharmacy.

Every Friday, a huddle was held to review the activities of the week and identify any actions to be undertaken. These huddles are still ongoing to date. As a result of these huddles all staff members were kept informed about the daily stats and could instead focus on the bottlenecks that were under their control. The meeting was not chaired by the supervisor but by the flow manager or another team member. Graphs on the waiting times were plotted and presented and the PDCA and problem-solving tools were used. Each person in the team understood what needed to be done, why it was being done and what the outcomes of their actions were. This was shared at the huddles. There was involvement of the whole staff complement that worked in the area with each person having a specific task and each person reporting at the meeting. This combined team effort resulted in a reduced waiting throughput time for a patient at the pharmacy from 3 hours to less than 1 hour.

Similar to the OPD improvement process, lessons were taken from the GPS adapted lean principle tools such as the 7C's, the PDCA and on how to lead the huddles. The executive leader played an important role firstly by leading the team and then supporting the staff by being visible and present at the huddles. Training and mentoring took place outside of the huddles and this allowed for a smoother transition from the executive leader to the staff, with various principles being established that allowed the processes to be sustained. The Pharmacy improvement was the most advanced and successful of the four areas observed and much of this could be attributed to the leader using the leadership lessons on conflict management, on resilience and using every opportunity to build and understand the relationships within the team.
This improvement of reducing the patient waiting time in the pharmacy has been sustained to date. It is understood that measures have changed now due to covid with a reduced number of patients attending the clinics, but the outcome can be interpreted as being sustained as an improvement process.

6.1.3 Catering unit

The Catering unit at the hospital needs to supply three meals per day, seven days per week to approximately 1000 inpatients as well as the crèche and the staff residence. In addition to the meals, tea and coffee is provided six times per day in-between meals. A problem that was identified was that plates of food were being sent to these areas, but the same numbers were not being returned. Staff were introducing new plates into the system on a daily basis, depleting the existing stocks and requiring more frequent ordering of plates for the kitchen. Food was being ordered for patients who could not eat due to a pending theater procedure, or wrong diets being requested, resulting in a wastage of food. Over 550kg of food was being discarded daily. This amount is excessive for any

kitchen and more so in a hospital environment where patient numbers and dietary needs are clearly specified daily.

The staff started the initiative by mapping out the food processes on a white board. They then used this map to identify any inconsistencies and waste in their processes. The value stream map depicts the complex adaptive system within which this unit functions.

It was noted that there was poor communication between the ward manager and the kitchen. Daily patient updates were not being provided and the electronic system, which is at least 6 hours old, was relied upon. This was one of the initiatives that was undertaken to improve the communication between the role players. The kitchen staff also took a keener interest in the ward activities and developed a closer working relationship with the ward staff. Specific times were set to check on any unused plates and how many were being returned to the main kitchen. A tick sheet was introduced to record how the plates flow to the wards and back to the kitchen. The satellite kitchens, based closer to the wards from the main kitchen, took ownership for reporting on these numbers daily, which highlighted which of the satellite kitchens were experiencing a bigger challenge in this regard and where efforts needed to be concentrated on. It was noted that soon after the improvement initiative, the number of plates being lost reduced considerably and the number of plates with wasted food reduced. The improvement noted that plates were being ordered less frequently and new plates had to be put into circulation only three times per month compared to daily before the initiative. Over an eighteen-month period, food wastage reduced from the 550kg per day to less than 150kg per day and this has been consistently maintained to date. To further address the food wastage challenge, the kitchen staff developed a standard operating procedure for plating by colour-coding the utensils used for the different food items.

Another waste identified was the call-back system. This system is used by the wards to request ad hoc meals for late patient admissions. The pre-dished meals were not always used which resulted in additional wastage. The staff then changed this system by having a dedicated person to dish fresh food on request and deliver these meals within 15 minutes.

The ordering system also contributed to many wrong diets being requested, resulting in plates being sent back to the main kitchen untouched. To address this, the staff embarked on various training initiatives and developed visual posters to indicate the different types of diets. This intervention rectified the confusion and there were fewer wrong orders, thereby reducing the wastage even further. The staff also introduced a system to verify the actual patient number on a daily basis so that

the correct number of meals are prepared for patients. This ensures that there is no over- or under production.

Following these improvements, the team also reviewed the menu and presentation of the food on the plate as an improvement initiative. Sample plates of every meal are dished for display, testing and reference. Initially, these were plated as a full meal on a large plate. By simply changing this to a side plate, sample wastage was reduced by 66%.

The kitchen supervisors analyzed the menu and worked with the production staff on potential changes. The explored enhancing flavours by adding different herbs and spices, changing cooking methods (for example, steaming vegetables instead of boiling them), new preparation methods and ultimately adding new and improved dishes to the menu.

The staff started to engage with their measurements on a daily basis in the form of performance huddles. These huddles were facilitated by the supervisors of the respective areas and completed within 15 minutes so that staff could carry on with their duties. The evidence based or measurement focused huddles used an agenda that addressed staffing, performance, quality, safety (wellness) and finance. The huddles were not a platform for lengthy discussions, but rather used for daily preparation and information updates in addition to the measurement monitoring.

Initially, a meeting with the manager was held every Friday to review measurements with set targets. The operational staff were responsible to set their own targets and update the entire team of their progress through graphs and using the PDCA thinking and the problem-solving system developed as part of GPS.

As time progressed and further improvements were noted, other initiatives came about and presently, there are multiple improvement processes being managed by the separate teams in each area, for example, the plating area; the washing up area; the cooking area – all within the main kitchen. Each team meets daily in the morning huddles (15 minutes), which informs the Friday meeting with the managers, when the supervisors meet with the area manager to share learnings and experiences at this platform. The area manager then reports back to the executive leader on a monthly basis. The executive leader visits the weekly team meeting once per month as part of his standard work processes and to show support to the staff. This practice further inspires the staff to seek areas for improvements. The evolution of the system has resulted in an organizational change that has shown improvements not only in the manner in which the catering functions are carried out, but also in the quality of the food presented to the patients.

Lessons from the LDP were more specifically the related GPS adapted lean principle tools such as the 7C's and the PDCA with additional training having been provided to coaches on how to mentor and lead teams. This allowed the general manager to take the lead on this improvement with the executive leader playing a more background role. However, the executive leader used lessons on building relationships and understanding others to get the initial buy in from the staff and with consistent support, managed to sustain this process.
These improvements have all been sustained to date.

6.1.4 Human Resource Development unit

The Human Resource Development unit is one of five sections within the People Management Department. Their functions include, among other activities, the training of staff through courses that are organized by the hospital following a training needs analysis done annually and then offered through external partners or hospital staff. Any allocated budget for this purpose must be spent in the specified financial year, so planning and making the necessary arrangements are integral to the success of the program. Additionally, value for money can only be gained if the staff attend the training sessions on the allocated days.

However, due to various reasons, such as operational needs, leave not aligned to course dates, not being timeously informed, not being allowed to leave by the supervisor, etc the staff often did not attend the courses and the numbers were fewer than originally planned for. External partners would have agreed on certain dates and were paid in advance through the hospital supply chain process, leading to 'fruitless and wasteful expenditure,' if fewer people attended. There were also delays from the HRD team in firstly completing the needs analysis and then needing to follow the lengthy process of appointing the service providers through the hospital supply chain process. This depicts the complex adaptive system within which the HRD services need to be provided.

The above were identified as concerns by the HRD team and they decided to address this as their improvement process. The project started in 2017 when it was noted that program attendance across all training activities was around 35%. A process flow was conducted to identify the wastage areas and possible actions to attend to these. Apart from the low attendance, there were also delays from the Supply Chain Management side in appointing the training providers. These delays resulted in the HRD team having too short a time to make all the necessary arrangements for the courses and inform the staff timeously.

Some of the initiatives that were implemented included how information was being relayed to the staff, which was dependent on a snail mail system, through the hospital messengers, or fax machines,

or emails, to the training coordinator of the area, to the manager and eventually getting to the relevant staff member. If any person along this chain was on leave or did not pick up the mail, then the information was not passed on. When this was addressed through a process of improved communication to a dedicated person, the attendance started to improve.

Weekly huddles were held to monitor the improvements and the attendance of the staff increased from the baseline of 35% in 2017 to 95% by September 2019. The team used both the PDCA and problem-solving tool and displayed graphs on their progress. Another initiative that was monitored was the time taken by the supply chain staff, but since this was a project within the HRD unit, they first reviewed the shortcomings in their own area of changing the way that they drafted the specifications. This was done by teaming up with the supply chain staff who outlined how these improvements could assist them.

The team indicated that when they reached their target of 95%, they stopped monitoring the progress and having the meetings. Attendances at training programmes has dropped since then, hence this project was recognized as being one where the improvement was not sustained.

Since 2020 and the start of covid, courses could not be held as formal on-site lectures and the team started to use e-learning platform, which brought with it other challenges and new opportunities for further improvements. With these new developments, the team started to remind the staff of their upcoming courses, with dates and times being provided in advance so that they could plan their work activities. These reminders were implemented as a system of bulk SMS messaging, which has been sustaining the attendances, but the progress was not monitored and recorded in the graphs as per the GPS standardized tool.

Although the adapted GPS adapted tools of the 7C's and the PDCA were being used, the team leader noted that there had been no executive leaders support for 12 months since the executive leader had resigned. The new executive leader was only appointed in 2019.

These four cases forms the basis of how every activity by every staff member contributed towards the achievement of the vision statement of 'Leading Innovative Healthcare' and helped to shape the Leadership Development Program (LDP) of the executive team.

6.2 The factors influencing the implementation of improvement processes

In this section, the analyses of the four case studies are presented to meet the objectives of exploring what factors underpinned success and challenges and the influence of the executive leaders in the process. The analysis also reviews how the executive leaders' capacity was enhanced/or not by the

LDP with respect to the role that the executive leaders had in implementing improvement processes and what factors resulted in making the improvement sustainable at hospital level.

Drawing on the inductive and deductive themes derived from the analysis of the case studies, the results are presented accordingly.

The overall impression gained from the interviews was that each of the cases were relevant to the functioning of the services and in each case, there were concerns expressed from the teams about the challenges they were experiencing and the effects this had on patient care. The teams then collectively identified which of the concerns needed more urgent attention and together with the executive leader, initiated the improvement process. The teams expressed enthusiasm about how they dealt with these concerns and expressed a sense of pride in what they achieved, even for those where improvements could not be sustained.

The sense of achieving better team cohesion, of working together and of improved communication in the team were some of the successes to be celebrated.

> *"I'm proud of what we started. There has been much improvement and as much as there are other small problems, they are not so bad and we will get there" (P2 Catering focus group).*

> *"That team is very proud of what they achieved. So, they say, why can't the others do what we did" (P2 VN Pharmacy).*

Role of executive leader

The nature of leadership in the improvement processes is explored in this section, specifically the role and influence of the executive leader as the owner of the improvement process.

All the case participants noted that the executive leader was seen to be more of a facilitator in that they would not actively participate but would always be available to deal with issues that arose and assist the team to remove obstacles through communicating with other executive leaders outside of the team meeting.

> *"he facilitated ….he will come to some of the meetings specifically on a Friday, but what he did was …he will not give his input, but he was an observer and then …give compliments you know from that point of view" (P2 AvS Catering).*

> *"I think if I stepped back and said " we don't need to do this", it would not have happened. You've got to be pushing it. You've got to be and people need to see that you believe in this. You want it to happen" (P2 VN Pharmacy).*

The above quotes show that while the executive leader may have been a part of initiating the improvement process, with time, the role of the executive leader in the day-to-day engagements became less as the teams themselves started to manage the activities on the floor.

The role that the executive leader played was different for each of the improvement processes. In Pharmacy and the Eye clinic, the leader was always present and available. Team members learnt from their executive leaders and emulated the behaviour that they saw. The executive leader played a strong role in initiating and sustaining the improvement with ongoing visible leadership and hands-on championing of the issue.

> *"…what we initially did was…it was just me there and it was not that frequent…and we learnt from that because we would not be there as frequently and you'd find that it was not sustainable and things that you discussed did not happen" (P2 VN Pharmacy).*

> *"I think if I stepped back and said, "We don't need to do this", it would not have happened. You've got to be pushing it. You've got to be and people need to see you believe in this. You want it to happen" (P2 VN Pharmacy).*

The executive leader served as a role model to the team, but this in itself was not the reason for the success of the improvement as seen in the Eye clinic, since despite the presence of the leader, the improvement was not sustained. It was however shown that the executive leader of the Eye clinic improvement process had changed during the program, pointing to a need for consistency in the leadership and possibly the style of leadership that was used, where he became more transactional rather than transformational. A further interpretation could be that the executive leader did not ensure that the rest of the team had the capacity to lead the project and greater effort should have been devoted to make sure that the team could cope without the constant presence and pushing from the exec leader.

> *"There was a shift in the chairperson and there was a shift in the person who provided support. So, there was no consistency there. So, nobody was kind of holding it together" (P2 Eye clinic focus group).*

For each of the other improvements, the leader only visited the teams for specific meetings (Catering) or met with the team outside of the team meetings (HRD). In contrast to the improvements that were sustained, the executive leader was not seen to be supportive, leaving the teams to guide themselves based on a few lessons that they received on how to use the tools. This system worked for the Catering team, where the executive leader was present in the background and always met with the supervisors afterwards, but not the HR team, where the executive leader was notably absent from the group meetings.

> *"The role of the executive leader was important. We went off site to review the implementation plans. He would support us to understand more" (P2 HRD focus group).*

The focus group discussions for all cases reflected that the teams wanted to own the improvements themselves and preferred that the executive leader be present, but play a background role.

Motivating and supporting role

The leaders themselves identified their role to be more supportive and keeping the staff motivated. They assisted by troubleshooting and playing more of a facilitatory role in the process.

> *"my role was motivating, guiding, supporting. Making sure that things were sustaining, because that was the hardest…to keep people motivated and enthusiastic about doing this" (P2 VN Pharmacy).*

This behaviour was seen to be difficult because a default position was noted as often wanting to jump in and resolve the problem. It was noted that through the LDP, this behaviour had to be learned. The executive from Pharmacy noted that one of her challenges was to let go and allow the team to take decisions.

> *"I think I'm responsible as well because it's also about letting go, but I think we're getting there now" (P2 VN Pharmacy).*

Another learning was the need for visible leadership, which the staff commented upon in the focus groups as the leader taking an interest in what they were doing simply by being present. There was no expectation, from the teams, of the leader to act in any way, but a mere presence made staff feel supported and secure in the knowledge that there was someone to whom they could talk to or raise concerns with. The teams noted the understanding that the executive leader could not be involved on the floor all the time.

> *"It's nice that she is there. It shows she has not forgotten about us. People want to see management around" (P2 Pharmacy focus group).*
>
> *"that leadership exposure that we got, it taught us how we now practice. Simple things like the visits, which I was not doing it initially, or doing it so infrequently that it wasn't having that impact… leading from the front. It just takes that 5 mins, that 10 mins, so you doing a lot of walking, but you are there" (P2 VN Pharmacy).*

Keeping the staff motivated appeared to be an important aspect of the role of the executive leader in that they have a sense of being involved in and 'leading' the process. However, each of the leaders also mentioned their role and difficulties experienced in getting the buy in from the staff. From the four leader conversations it can be gleaned that the leaders felt this to be challenging, but each expressed that the learnings from the LDP, such as staying grounded and being resilient, assisted them in this work.

> *"I think they've always got the solutions and sometimes you just need to help them show that they've got the solution. Because sometimes, they focus so much on the problem that they forget they got the solution. And it's just in talking to them, saying we know what the problem is and what are the solutions. And it's amazing that they come up with all sorts of ideas and it's also that you need to trust their idea and even if you think it's not going to work, to let them try it out" (P2 VN Pharmacy).*

“To manage them, I think what helped a lot was I think I communicated everyday with them and the motivation that I also gave them is the end result. On a daily basis, they could see how everything is growing and what also motivated them is a lot of what I learnt on the side, I pumped into them and they appreciated that…share your knowledge with them” (P2 AvS Catering).

“It was also part of developing everybody, their confidence…… so that it’s not like I’m not the only one telling you what to do, we are all here, so we collectively owned this. The problem was to bring the eye clinic waiting time down and everybody plays a role” (P2 Eye clinic focus group).

“I think, initially it was to get the buy in which we really struggled with. It took us about 6 months to get people to see the value of this and then once we started making small gains, it was easier. But then once we achieved a goal then the difficulty was trying to sustain it, especially the daily meetings. So it was the continued motivation, being there to support the teams through that and I must say, the supervisor is also critical, because until the supervisor buys in, the team does not buy in. So, that took a little while. So, until the supervisor buys in, that makes the difference, because she can sustain it in the times you are not there” (P2 VN Pharmacy).

The Executive leaders noted that motivation was not only provided by themselves, but also emanated from the teams themselves. Many comments offered in the interview attest to the motivation of the teams to constantly strive to do better, keeping the patient experience in mind as the ultimate endpoint, to learn, especially from one another and to succeed, for which they expressed a sense of pride. Some teams, for example in Catering, motivated other teams in the unit to also commence improvement processes and their performance became competitive in nature, but still constantly willing to share and learn from one another. This reaction from the teams also speaks to how important the team functioning and cohesion was respected and considered relevant because the teams were perceived to be happier, working well together and achieving results that made a difference to the service.

“So what happened, the people in the other sections, they started to notice a difference in the plating section; they were happy and they also wanted to be like that. And when we started, it was like a privilege for them to be part of this group, you know and it just started to spread” (P2 VR Catering).

What was also evident in all four projects was the energy and enthusiasm of the middle managers or team leaders who functioned in a supervisory capacity in the improvement processes. As the project progressed, the supervisor took greater ownership of leading the team, with the executive leader providing support.

“I just phoned …… and told him this is what the problem is and he contacted the clinic and then the next day, everything happened on time, the patients were there on time” (P2 Pharmacy focus group).

“Yes, definitely we worked better and the others were also there. So, if I’m not available then one of the others will take over….stuff like that. Everyone took responsibility” (P2 Catering team).

This was evident in both the Pharmacy and Catering teams, where the executive leader offered the staff autonomy and trusted them with the process, whilst being available to support when difficulties arose. Additionally, the staff themselves felt a sense of responsibility towards the team and making the process work. In the HRD team, the supervisor functioned alone and merely reported back to the executive leader, while in the Eye clinic team, the executive leader did not manage to hold the team together. This behaviour may link back to the LDP learnings of the executives that the individualized authoritarian style of leadership is less preferred in these instances than a more distributed style of leadership.

Overcoming team challenges

Each of the leaders expressed that they had to play a role in overcoming challenges faced by themselves, for example to get buy in from the team or when they struggled to move forward with the improvement process. Some of the improvements required all the staff to participate, but if the senior clinicians (specific to the Eye clinic) did not see value in the improvement, then the process could not proceed.

“there was a lot of buy in, but the big obstacle from the beginning was unfortunately we could not really persuade the HOD to fully come around to the acceptance of improvement science as an improvement. That line management function and getting the doctors on board, I think maybe to attend the formal huddle structure on a regular basis. I don't know. We don't do well on that” (Interview with BJ Eye clinic).

“Challenges is when some of the staff is not there. You can’t always carry on… sometimes both is not there or something happens and you can’t have the meeting. I’m just talking in that perspective.. And staff going away, maybe retiring, there’s not always ample enough time to show the next one. You can show the person, but they don’t have the same knowledge that person had or applied” (P2 AvS Catering).

“Keeping the staff who are disengaged or not believing. Keeping them engaged or getting them engaged. That was the biggest challenge and not letting the negativity get to the rest of the team” (P2 VN Pharmacy).

Another challenge was with communication across the various departments or disciplines, for example between the Catering staff and Nursing. This was a challenge experienced by the teams as expressed in the focus groups, which required the intervention and support of the executive leader.

“About the nursing side. There was no communication about the patient that was going to theatre, so now our staff will take the plates and it just stays there till 2 o clock, so now we come short in the kitchen” (Catering focus group).

“I noticed that there were problems with attendance with some of the delegates, where they did not confirm that they were going to attend the HRD orientation. So I had that challenge. I was expecting that after this process, that it would at least have improved and maintained,

> *because a lot of people confirmed, but even though people were informed timeously about the training, I wasn't happy with the number I received" (HRD focus group).*

The comments from both the executive leaders and the focus group discussions with the teams highlight the importance of effective communication. In the two successful cases, communication with the teams was addressed early on through the intervention by the executive leader, but in the cases of HRD and the Eye clinic, the leader was unable to do so. In the HRD team, the executive leader only met with the lead person of the team after their meetings and with the Eye clinic, while the executive leader was present, communication with the doctors happened separately and not as part of the team. The role of the executive leader in assisting with communicating with all role players is an indicator of success. However, the role of the doctors within the multidisciplinary teams would need to be explored further, since the professional hierarchy hampered the success of the improvement process in this instant.

Linking this identified role of effective communication with the team and how this role of the executive leader was perceived and accepted by the team, can be seen as an essential contributor to the success of the improvement process.

> *"Communication is very important, whether in writing or talk….all the time, you need to communicate with everyone" (P2 TN Eye clinic).*
>
> *"Communicating with people, it sort of controls you as well, because you know…there's a certain level of trust that you need to put into people and vice versa…so that I found very useful in terms of also just listening to people, analysing people and say…you know…you were there 10-15 years ago and now you can think like this" (P2VR Catering).*

A further contribution of how the executive leader communicated with the team could be from how the they experienced the LDP, in terms of how they understood themselves, how this built confidence to mentor and support, how they understood one another's challenges and how they were able to build relationships following what they learnt about the value that relationship building had provided in the executive team. Having a common language to explain the vision and its link to the LDP and the improvement processes and having common tools such as the 7C's and the PDCA to monitor their progress also assisted the executive leaders to feel more secure in what they were doing within their teams. This was noted by the executive leader in saying that the teams initiated and identified problems and solutions as a team and then only asked for input if needed. While this was an evolutionary process, it must be kept in mind that the team interview responses were based on perceptions at the time of the interviews and did not necessarily speak specifically to the time of implementation. This recall bias is noted as a limitation because the team had evolved over the three-year period since implementation.

"I think in a way for me, now there are other people in the team asking the questions, making the suggestions, so you just have to say one thing and they will have a team to take it forward. Like with covid as well…you needed to be there…offer some ideas…facilitate and then just follow up. Did we do this… but the team actually took responsibility. They could just go forward and do it" (P2 VN Pharmacy).

"I think that improved because they learnt to stand together and they must share. They also learnt that everyone's input..like you said there's no right or wrong. And they feel proud if their graph is on and it looks right… you know. So they learnt to take criticism, but see it in a positive way" (P2 AvS Catering).

"What is also critical is the fact that we could share information because I think the one side didn't exactly know how the other side was working, but the moment we started understanding the way it was working, we could find certain solutions for and assist with the problem" (P2 Eye clinic focus group).

The ability to communicate with the immediate team as well as with other stakeholders outside of the team with the support of the executive leader was once again a factor that contributed to success. However, valuable lessons were learnt through the process, even if the improvement outcome was considered unsuccessful.

Team leader's role

References to team leadership, team development and team functioning was evident in many of the themes. The executives attributed their ability to motivate, encourage their teams and cascade the process to lessons learnt during the LDP exposure.

"I think I learnt from our leadership program that we had, because what we've learnt from leadership is just analyze the problem. Don't get involved there. They will eventually come to you and say, ok, we got a problem now. So, I think all of the leadership programs that we had over the years" (P2 VR Catering).

The above does however conflict with what the teams indicated in the focus group discussions, where they indicated that they, together with their team leader, who was not necessarily the executive leader, contributed to the improvement process. The executive leader was only there for support and troubleshooting. The benefit of having a team leader from the floor ensured that that person could supervise what was happening on the ground, since the executive leader was not always available to do so. It was also noted that the supervisor had influence over the staff and that unless the supervisor was supportive of the initiative, the others would not buy in.

"It was also part of developing everybody, their confidence…… so that it's not like I'm not the only one telling you what to do, we are all here, so we collectively owned this. The problem was to bring the eye clinic waiting time down and everybody plays a role" (Interview BJ Eye clinic).

"we used to select a team leader. So it could be a pharmacist, it could be an assistant. So for that particular week, that team leader would be responsible. Even during the meeting, they

may not be facilitating the meeting, but we will ask for comment from the team leader" (Pharmacy focus group).

"Once we achieved a goal then the difficulty was trying to sustain it, especially the daily meetings. So it was the continued motivation, being there to support the teams through that and I must say, the supervisor is also critical, because until the supervisor buys in, the team does not buy in" (P2 VN Pharmacy).

The role of the team leader could be assigned to any person and does not need to be the executive leader or middle manager. It can thus be said that the role of the executive leader is necessary during the initial stages of the program simply to offer motivation, support and facilitate if required, but not necessarily sufficient, since the leader does not produce the said condition, but rather depends on the activities of the team. This was seen in both successful cases, while the unsuccessful cases were being led by either the executive leader or the middle manager, who were unable to hold the team together. Whether this reason for this was due to a lack of support or capacity of the executive leader, the capacity of the team members or that the learnings were too broad for consistent implementation requires further exploration. The LDP concentrated on building the resilience of the executive leaders and while this was noted to be beneficial, perhaps additional work needs to be done in developing clearer more standardized guidelines to the managers on how to implement improvements. The different roles would need to be teased out and training tailored to these roles and responsibilities. For example, the executive leader must be able to communicate, get buy in and motivate throughout the process, while the team leader needs to have the ability to manage and carry the team along the journey. Cascading the LDP to spread the leadership outside of the central core would need to be focussed on the specific role.

Factors that influenced functioning of teams

Improving communication

For all the teams, communication within the team was improved as the members identified one another's challenges. In understanding the other's responsibility constraints, better cohesion was established, and problems were solved together. It was indicated in all the cases that the teams drove the initiatives among themselves through the PDCA and 7C problem solving tool processes, which were shared from the learnings offered to the executive leaders.

"I think in a way for me, now there are other people in the team asking the questions, making the suggestions, so you just have to say one thing and they will have a team to take it forward. Like with covid as well…you needed to be there…offer some ideas…facilitate and then just follow up. Did we do this… but the team actually took responsibility. They could just go forward and do it" (P2 VN Pharmacy).

"I think that improved because they learnt to stand together and they must share. They also learnt that everyone's input..like you said there's no right or wrong. And they feel proud if their

graph is on and it looks right… you know. So they learnt to take criticism, but see it in a positive way" (P2 AvS Catering).

"What is also critical is the fact that we could share information because I think the one side didn't exactly know how the other side was working, but the moment we started understanding the way it was working, we could find certain solutions for and assist with the problem" (P2 Eye clinic focus group).

Fostering good relationships

Teamwork was highlighted by the participants of all the cases and was seen to be an important consideration for the functioning of the improvement process, whether the outcome was achieved or not. Even for those improvements that were not sustained, the participants noted that they had built relationships with other members of the multidisciplinary team which still hold value even if they don't engage on the specific improvement process any longer. This value is seen as an appreciation of one another's roles and responsibilities and that the work to be done is not dependent on one person alone, but a collective responsibility. Through this collective, they experienced cohesion and joint pride in their achievements while engaging in the improvement process.

"The moment we got together, we started communicating to each other. OK, what's your problem…why don't you do this… we came up with suggestions for one another. And that's when the improvement came. The communication is a positive thing. It brought the team together, it made you understand one another's problems and that assisted you with the improvement. So, that is what I learnt is that problem solving, it can come from anybody. It does not lie with one person" (P2 Eye clinic focus group).

Within the teams, their multidisciplinary nature focussed on what contribution every staff member made to the activity, from the clerk, to the nurse, the doctor, the messenger or cleaner. It was noted in the focus group discussions that everyone had a role that needed to be recognised and respected as part of the team. Team excitement was generated from discussions around the graphs which mapped their progress and performance.

"the clerks. Because they remained positive… and they were part of the meetings. A lot of answers came through them and clearly they also felt included, because what they had shared, contributed to the improvement……." (P2 Eye clinic focus group).

"The other thing that for me was critical, was measurements. When we started measurements, you always thought we doing well, but until you measure it, you see, well we actually don't do well" (P2 Eye clinic focus group).

Teamwork in the two successful cases was evidenced in both the executive leader and focus group interviews. In both cases the teams were seen to respect each other's roles and responsibilities, despite being at different professional levels. In both the unsuccessful cases, teamwork was noted to be present, but the leadership of the team was lacking, both from the executive leader as well as the team leader. This finding speaks to the differing styles of leadership of the executive leaders as being

more distributive in the successful cases, but more hierarchical in the unsuccessful cases. The style of leadership practiced would need to fit the context of the problem and the team and would require additional development of the LDP.

6.3 What determined success or challenge in implementing improvement processes?

A direct link cannot be made between the experience of the learning process through the LDP and the implementation of improvements through guidance offered to the subordinates by the executive leaders as there may be many other enablers and risks that influenced the process. The risks are disablers that may impede this link and the mechanisms enable the results. However, based on the role they played in motivating the teams and supporting the progress made, it can be said that the LDP had contributed to their capacity as leaders. This was however not directly tested in this research.

What worked and what did not work and why

In reviewing what worked and did not work, this section presents the learnings across the cases and outlines the factors that enabled the successful cases and those that did not (Table 9). The enablers were present in the Pharmacy and Catering cases, while the possible reasons for the unsuccessful cases in HRD and the eye clinic are presented as disablers.

Commonalities between the cases included the use of the standardized tools and the role that the teams played. However, the differences represent behavioral aspects of either the executive leader, the team leader or the participants within the team that contributed to the non-success of the improvement process.

Table 9: Enabling and disabling factors

The enabling and disabling factors have been summarized from what worked in the two successful cases and what did not work in the two less successful cases.

What worked (Enabling factors)	What did not work (Disabling factors)
Multidisciplinary team functioning	Doctors did not come on board and implement activities without communicating with the nurses
Improved communication across the different sections	Change in leadership affected the momentum of the process and motivation of staff
Inspired and motivated by improved patient service to continue the improvement and do more	Change due to retirement affected consistency of meetings

Standardized methods of reporting progress and standard procedures provided structure and understanding		Tediousness of completing monitoring forms manually
Huddles allowed for coordination and staff on the floor became leaders		Seen as separate from other workload pressures
Success in one area stimulated other staff to also implement improvements		Effective communication of what GPS meant and how to use the standardized problem solving tools
Ownership and pride in accomplishments		A lack of the ability of the team leader to sustain and keep staff motivated once a target is achieved

6.3.1 Enabling factors for sustainability of improvement processes

The table clearly notes the need for leadership, multidisciplinary team functioning and keeping staff motivated as essential for ongoing sustainability. Such leadership may not necessarily be that of the executive leader, but someone who is able to lead the team on the ground, with the support of the executive. Sustaining an improvement is dependent on the teams identifying and prioritizing their concerns and then getting the buy in from all those working in the team to support the initiative. Using the common tools assists in the team members understanding the process, but also encourages other teams to initiate improvements in their areas of work. Communicating through huddles allowed for a common understanding of roles and responsibilities as well as keeping the leader informed to assist with trouble-shooting.

Using the problem-solving tools

For sustainability, it was noted that there was a need to adopt the tools used for problem solving and ongoing monitoring as developed by the executive leadership of the hospital. Once the improvement process was in progress using these tools, the PDCA identified other concerns that were then addressed in the same manner, thereby building a culture of continuous improvement.

> *"The SOP, how to use it for queries for instance. And it's a constant reminder that people see then that's what needs to be done" (P2 Pharmacy focus group).*
>
> *"I like the structure. Obviously, you have some structure, but with this 90% of the time, you know when you supposed to do it, what you supposed to do and why" (P2 Pharmacy focus group).*

To build continuity and sustainability of the program, the learnings need to incorporate clear guidance on the use of the GPS adapted standardized tools and how to develop the Standard operating procedures (SOPs), so that a new team or team members can easily be brought up to speed on how

to initiate and maintain an improvement process. As suggested by one of the participants, the need for structure assists in keeping the team on track and ensures consistency of the processes.

> *"You gonna look who is your customer, what is the concern, you know…so here you gonna look what is the issue…what is the problem and this will determine at the end of the day that… I can either sustain just with a SOP or otherwise it must go to a project.…so it's not the same and I think lots of people…and in the hospital also in areas where I've been they tend to dig very quickly into the project, but they miss this part" (P2 AvS Catering).*
>
> *"So it's more about the process than about the project, so it became a standard" (P2 AvS Catering).*

The consistency was also noted to be beneficial in that the same process was followed throughout the hospital. These learnings were introduced later as part of the LDP.

Leading a team culture of continuous improvement

The leadership that the manager provided was also a contributor to how the team functioned. As noted previously, the leader was not necessarily the person in charge, but anyone could take on the role of the leader. The comment below, speaks to the commitment that is needed from the leaders, at whichever level they are. If the leader does not agree and support the initiative, then they will not be able to motivate the staff. Additionally, the leader is expected to 'trust' the teams to do what they need to do. The teams that were successful found that they were more productive with improvements if left to manage by themselves. In the Catering case, it was noted that when the floor manager could lead, the attitude of the manager towards the improvement process and the attitude of the team was more positive. However, the executive leader felt that there was still a need to ensure that oversight was always in place to continue motivating the staff and showing interest in what they were doing. In the Pharmacy case, the use of the problem-solving tools have become part of their day to day functioning and the principles were being used to address new issues faced during covid.

> *"all started to change because of the manager's attitude started to change" (P2 VR Catering).*
>
> *"So, it took a while, and I think I'm responsible as well because it's also about letting go, but I think we're getting there now. So now with the daily huddles I'm leaving things up to them and I must say in the last year and a bit with covid, we've learnt a lot. So, I think we didn't stop using the principles, but even with covid, all those changes worked perfectly. So we're using exactly the same principles" (P2 VN Pharmacy).*

Building such a culture of continuous improvement was an outcome of the study that was not necessarily tested but can be assumed. The learnings of using standardized tools, of working as a multidisciplinary team and of leader driven initiatives being seen as a source of motivation for improvement have been identified to serve the operational functioning of the teams. This was more evident in the teams that were regarded as successful than the other two teams.

> *"If I look at where we started and where we are now. It was definitely a success and we would*

not have gotten through covid if it wasn't for learnings in the past few years" (P2 VN Pharmacy).

"Self-motivation, also committed staff, that are willing to try as a team and probably patient care, because at the end of the day, a lot of them, that's why they are here. So even if they don't buy into it, they're willing to try if they can see it's going to impact on the patient" (P2 VN Pharmacy).

6.3.2 Factors undermining sustainability

The role of the executive leader in the two unsuccessful cases reflected a visible absence for the HRD case and a change in leadership or lack of capacity of the leader in the Eye clinic case. In both cases, an identified challenge was effective communication. The teams that did not sustain their achievements either had a loss of communication from their leader or there was a change in leadership and hence a loss of momentum in how the team functioned. This was evident in the HRD group where there was a change in the executive leadership with no communication during the handover, and since the new manager had not been exposed to the LDP, there was a lack of knowledge and interest to offer support. In all the other cases, the executive leader was present from the start and had been part of the LDP since its inception. This finding speaks to the need for leadership continuity and succession planning as a deliberate leadership capacity development strategy. Without the support and guidance of the executive leader, the team assumed that there was no need to continue with the improvement process once the target had been achieved.

Getting the support and buy in from the staff was identified as a common challenge for all teams. Where multidisciplinary teams required the assistance of doctors (Eye clinic team), this was found to be lacking and can be attributed to leader buy in from the start. While the executive leader initiated the improvement process, the clinical leader was not being supportive. This is an aspect that would need further attention.

Overall, there needs to be consistency in the approach of the executive leader as the anchor in the process, but not in the capacity of getting operationally involved, but more as a support, to communicate the standards and to keep the team motivated.

The leader and team interviews suggested that there were various factors contributing to the non-success of the improvements.

Required tasks

In the Eye clinic, because the patient was tracked from the entry to outpatients to the exit from outpatients, the improvement process was designed for the staff to have manually completed many forms along the way. The challenge of getting the doctors on board resulted in a further stumbling

block where they did not see the value of the form. This together with a lack of communication with the nursing staff contributed to the non-success of the improvement.

> *"They found it I think quite onerous to fill in the forms you know, especially when they had to monitor the waiting time of each patient on the Wednesday and it was not good buy in for that. That was often missing. We were able to get clinic times, you know, from the overall things, so that was always a stumbling block" (P2 BJ Eye clinic).*
>
> *"The challenge is really to get the doctors on board. We would have meetings and we would have representatives from every department and when the change came about… the doctors weren't there and the nurses used to work in isolation" (P2 Eye clinic focus group).*
>
> *"That lack of communication that caused things to break down afterwards apart from the fact that you couldn't get the doctors to participate and they were an essential part of the team" (P2 Eye clinic focus group).*

Leading a team culture of continuous improvement.

In the HRD project, many leadership issues came to the fore as described earlier. The change in executive leadership and the non- visibility of the leader in the improvement process implementation.

> *"My understanding was that when we reached our target, we closed the project" (P2 HRD focus group).*

Of note is that while the Eye improvement process was considered to be non-successful, the executive leaders were noted to be present, but this changed when the line manager changed, not because the executive leader was not present, but because the new leader did not communicate effectively.

> *"And then Dr …. came on board, but he was not that active. I used to ask – "Are we gonna have a meeting" and then when we got there, there was nobody there or just Sr ……. Nobody was there, so I just also left" (P2 Eye clinic focus group).*

6.4 Chapter summary

This chapter concludes the analysis of the four case studies, which was to describe the four cases and then assess what worked and did not work in the implementation of the improvement processes. The analysis shows that the executive leaders were able to motivate and support their teams. Communicating with the teams was a contributor to possible success of the improvement process, along with visible and responsive leadership. This visibility and responsiveness involved the executive leaders being physically present, but at the same time trusting the teams to manage the process by themselves. The element of trust in this regard while still having oversight was found to be essential. The use of standardized tools was shown to be beneficial for sustainability of the improvements.

The overall impression gained was that the LDP did improve their leadership and that they found the improvement processes to be beneficial to building their respective teams and working towards a

common goal. The next chapter presents a discussion of the findings and makes recommendations for the way forward.

CHAPTER 7: DISCUSSION

This research studied the implementation of a home-grown leadership development programme across a large tertiary hospital in South Africa, also exploring how the hospital leaders drew on learnings from the programme to facilitate improvement processes within the hospital. The research further considered which factors made these improvement processes sustainable, seeking to develop learnings from these experiences that can be translatable to other areas of the hospital in creating an organization-wide improvement capability.

In this chapter, the empirical findings presented in Chapters 4, 5 and 6 are both synthesized around the core themes that emerged from the analysis presented in these earlier chapters, and these themes are set against the relevant international literature on leadership development programmes in healthcare settings. The chapter will conclude by drawing out a conceptual framework of hospital leadership development derived from this study and related recommendations.

The hospital context of the LDP represents the complex adaptive system as described by Plsek (2003, p3), in which leadership by multiple interacting stakeholders is required, a change in the actions of one could impact others and their leadership is influenced by both internal and external factors. Developing a LDP in such a context is challenging and learnings from the experiences of the hospital's executive leaders emphasized that such programmes must focus on developing the individual through self-awareness, enhancing the growth of the leader by challenging them to be innovative and create change, and developing teams through building relationships - thus contributing to building the overall hospital system and its component parts.

The overall LDP experience as examined presents a picture of a constantly evolving process that needs to be adaptable to the environment as it changes. Therefore, there can be no end point in developing a LDP. This study also reviewed the implementation of improvement processes arising out of the LDP, linking the two within the hospital's GPS which had the overarching common vision of 'Leading Innovative Healthcare'. The examination of these improvement processes offers further learnings on how leadership development can lead to an improvement capability at hospital level.

The key discussion points that emerged from this study include the following analytical themes, which emanated from the data analyzed:

- The need for a context specific, practical LDP
- The importance of developing the individual and the team

- The benefits of creating a culture of continuous improvement for sustainability.

Considering the three dimensions of the individual, the team and the system, the discussion reflects on how the study findings interdigitate across these three dimensions and how they provide lessons for further leadership capacity development in a hospital as complex as GSH.

7.1 The need for a context specific, practical LDP

The conceptualization of the hospital's home-grown LDP took place over a 5-year period and remains ongoing. It should also be noted that the LDP started in response to a perceived need by the CEO of the hospital and was not initially introduced as part of a research study. As revealed in this research (Chapter 4), the components of the LDP were designed by the hospital executive team and made to be practical, applicable and relevant to the work that was being done. The practicality, relevance and applicability of the programme were noted as important by the executive leaders in that they were able to apply the tools that were given to them during the learning sessions, they learnt about reflective practice and they noticed how they used their skills in developing their core teams as well as the teams they worked with during the implementation of the improvement processes. The home-grown nature of the program was part of the success in creating a learning environment from which the executive leaders benefitted.

There are many studies and reviews of leadership development programs that suggest the importance of leadership training for hospital managers (Ravaghi et al. 2021; Flaig et al. 2020, p69; Figueroa et al. 2010; Sonnino 2016; Stoller 2013). However, none of the studies reviewed offer an account of implementing a home-grown leadership development program with improvement processes, specifically in a large tertiary hospital in South Africa.

As early as 1994, the African National Congress's National Health Plan recognized that leadership training in the South African context was considered to be a priority (Schaay et al. 1998, p93). However, the contexts and content of where and how this was to be done was not spelt out, offering little guidance or knowledge on what training might be effective. Gilson and Agyepong (2018, pii2), in a review of six papers spanning three African countries, including South Africa, suggest that training individuals alone is not sufficient; instead it is necessary to engage workplace teams in LDPs that are developed within the workplace, and to develop an organizational context to sustain the new and enhanced leadership practices. Further support for more research on innovative context sensitive leadership development initiatives was proposed by Gilson and Agyepong (2018), a gap to which this study contributes to.

Within South Africa, Cleary et al. (2018) provided insights into existing leadership practices in one sub-district management team in Cape Town, South Africa. The study further proposed how leadership development could be enabled and strengthened. Similar to the GSH experience, their findings highlighted a hierarchical governance and rigid accountability mechanisms as constraints to developing a more distributed, relational leadership supportive of team development and engagement. Choonara et al. (2017), meanwhile, reviewed the leadership development of finance managers in a district health system in Gauteng, South Africa[4] and concluded that lower middle-income countries such as South Africa, face resource constraints that render formal training to develop leadership competencies costly. They therefore suggest the need to focus on more cost-effective approaches, such as on-the-job training, which allows for context-specific learning.

While many parallels can be drawn with the above studies in terms of the public service context, none of the studies related to a large central hospital with multiple stakeholders. The LDP developed at GSH offers a description of how such a program could be implemented in a public hospital within South Africa facing similar hierarchical structures, rigid accountability requirements and resource constraints. The insights and evidence provided in this study show that leadership development need not necessarily be a formal teaching program to be beneficial, but could be an in-house programme, with content developed to fit context and adapted to complement the practical aspects of the work can be beneficial. The programme content also evolved based on changing needs over time, showing that such a LDP needs to be adaptable and that constant reflection and ongoing formative evaluation is an important part of the process of sustaining such programmes.

Wider national and international research supports the need to make leadership training programs locally relevant (Filerman 2003, p1; Naidoo et al. 2007; Doherty et al. 2018; Goldstone et al. 2016 Agyepong et al. 2018; Dixon-Woods et al. 2011; Kakeman et al. 2020; Grider et al. 2014; Pillay 2008; Liang et al. 2013; McAlearney 2008 and 2010; Cocowitch et al. 2013; Liang et al. 2013; Kelly 2014; Sonnino 2016; Ross 2007). However, there is little evidence about the appropriate form or structure of such programmes. Internationally, studies have been done in first world settings and nationally, studies have mostly concentrated on smaller district level facilities. This study offers local relevance to a large hospital in the South African context.

A recent detailed scoping review of LDPs in Sub-Saharan Africa (Johnson et al. 2021, p128) found that the differing formats of existing LDPs, considering duration, content and approaches to delivery of the courses, provide little evidence to suggest that some may have greater impacts than others. The

[4] Gauteng is one of the provinces in South Africa.

review also suggested that the lack of a clear theoretical framework or leadership framework resulted in an inconsistency in establishing and offering guidance on the learning content (ibid).

The principles gained from this study suggest that to achieve a contextually relevant program, there must be buy in from the senior management team and the leader of that team, who would need to ensure that the team remains focused on the goal; that there must be a collective effort in constructing the vision and content of learning as determined by those who are to participate in it; that there must be an openness to adapt to the environment and needs; that self-awareness is the cornerstone of a LDP and that team development follows on from this so that leaders feel empowered through relationship building. Accepting that any LDP should be contextualized for the local environment, this LDP offers an example of what is possible for other settings. The courses and home-grown material developed could provide a basis for others in similar environments to expand on or adapt to their own contexts, and to create their own journey using the foundational principles found in this study. This study therefore offers new practical and implementable lessons in response to the sub-Saharan review.

Further review of the programme's sustainability, and how it could be rolled out to other levels of hospital leadership over a 5-10 year period would add valuable insights to the wider knowledge base.

7.2 The importance of the development of the individual and the team

The findings presented in Chapters 5 and 6 show that the LDP supported the executive leaders to be: more confident about their role, able to adapt and lead change, more humble, listening more, asking rather than telling, more reflective and responsive and about being able to lead and enable others through mentorship, ongoing learning and leadership. These abilities stemmed to a large extent from the self-awareness nurtured through the LDP that enabled the executive leaders to understand themselves and understand others, which then facilitated the relationship building and strengthening both within the executive team and with their respective teams on the ground. The success of the team development at an executive level as well as the team development on the ground signifies the commitment of the leader to take responsibility for the actions of the team, to keep the team motivated and to adapt and hold the changes as they occurred. Without this commitment, the teams may not have progressed.

Choudhary (2017), in describing the winning edge for corporate sustainability, notes that professionalism drives personal and skilled interactions, but sustainability is the ability to endure through renewal, maintenance, and sustenance or nourishment, in distinction to sturdiness. The inevitability of change all around us requires a realization that there needs to be a change in the way

that we lead. This need for change is described by Gibson (1998, p10) as “In the twenty first century, the winners will be those who stay ahead of the change curve, constantly redefining their industries, creating new markets, blazing new trails, reinventing the competitive rules, challenging the status quo.” This ‘winning edge’ leadership was thought to be the recipe for continued learning and change in organizations. In support of defining this ‘winning edge’, it was noted by Nilsen et al. (2020) in a study that reviewed the characteristics needed of successful change, that staff identified three requirements: having the opportunity to influence the change; being prepared for the change and valuing the change. They also noted that it was important for them to understand the need for and show clear benefits to the patient. The role of the leader in this regard was not discussed.

It can be said that the executive leaders in this research, through their exposure to the LDP have satisfied the three requirements described by Nilsen et al. (2020). Their role in the implementation of the improvement processes, meanwhile, supports the description from Choudhary (2017) and Gibson (1998) of being at the winning edge, ahead of the curve as we progress through the twenty first century towards becoming sustainable. Responding to the inevitably of change is not restricted to the corporate world, but applicable to the health environment as well. This research shows that through the processes that evolved in this LDP and through the implementation of improvement processes as well as reflecting using the PDCA cycle, the hospital functioning became adaptable to change. The LDP experience also show the importance of concentrating on self-development and team development in order to develop leaders and enable them to facilitate sustained hospital-level change.

Self-development

Self-development was key to how the team was able to adapt and shift their thinking about leadership, team development and change. Each member had an enneagram evaluation (personality assessment) and these were consolidated as a team enneagram, which formed the basis for each person to understand themselves and every other member of the team in relation to themselves. The level of self-awareness and reflective practice were integral aspects of the LDP and formed the foundation of the executive leaders’ learning and success. It was seen to offer the greatest benefit to the leaders in that they felt this self-awareness had enabled them to become better as a person and as a leader, both in their personal and professional lives. The self-awareness also allowed for a better understanding of their team members and how to work with them. It should therefore become the foundation upon which any LDP is initiated. Although self-development is not a new concept in leadership development, this study demonstrates a practical approach to support it, through combining the self and team learning. As the GSH experience also indicates, such self-development is

not achieved through a one-week exercise, but is a continuing and iterative process of reflective practices and discussions over time as the individual and the team develop.
An interpretation of a key benefit from the programme could be that the LDP had improved the executive leaders' self-awareness and a sense of their own ability to lead and build their respective teams. Comments from clinicians and other managers (personal communication with the CEO), note that leaders were seen to be more available, more engaging and more confident over time. This change in management style cannot necessarily be fully attributed to the LDP, but as the leaders themselves noted, it certainly had something to do with the learning process. Whether or not this change is sustained over time needs to be assessed, to support the continuing development of the LDP model of learning - one that others can also implement to improve leadership at a hospital level.

The ways in which self-reflection can influence behaviour, with consequences for motivating others, is highlighted in the thinking about transformational leadership literature (Bass 1985, DeGroot et al. 2000; Judge and Piccolo 2004; Wang et al. 2011 (cited in Sandell 2012, p6)). Both Bass (1991) and Burns (1985) emphasize that transformational leadership begins with individual and team self-awareness, using this knowledge to then impact on behaviour and thereby affect others.

These studies noted the importance of self-awareness, but did not consider it in health care contexts as in this study. However, Mandana et al. (2018, p108), in a study on nurses in Kuala Lampur, reported a positive impact on job performance when staff are motivated and intellectually stimulated through learning. While the study had concentrated on nurses, the harmonizing effect of these factors on job performance supports the finding that developing the self contributes to the contextual role that the person needs to perform. The importance of a contextualized program of leadership support was, then, once again highlighted by this study. In a similar process also only using questionnaires, Nuel et al. (2021, p179), in a study at a tertiary university in Nigeria concluded that the implementation of leadership through self-development is a critical success factor in improving organizational success. Both these studies offer support to the need for self-development, but this analysis of the GSH LDP offers insights about how such self-development contributes to self-awareness and how this influenced the executive leaders in a complex hospital context to implement improvement processes. Once again, whether this is sustained can be explored in future research.

In contrast to the Nigerian study, Mustafa et al. (2019, p87), in a study assessing the impact of a healthcare leadership development program implemented at the Cleveland Clinic in the USA, showed that the participants experienced personal and social growth in their leadership competencies, including self-awareness, self-management and relational management. However, there was no

reported organizational impact (ibid, p88). Similarly, Hackworth et al. (2018), in a study of Paediatric Faculty members at a hospital in Cincinnati, USA, showed that the implementation of a LDP resulted in enhanced confidence, self-awareness, strategic, operational and relational skills and the development of supportive peer networks with physicians, psychologists and other clinicians. But again, there was no reported organizational impact. Given that there may not be a linear progression from a process of leadership learning to developing an impact in an organization, this current study cannot, then, infer an organizational impact. However, it did identify that there was a positive difference in the leadership style of the leader following engagement in the LDP, and that being able to motivate and support was beneficial to the success of the improvement processes studied. In addition, as the participants of the GSH LDP included multidisciplinary teams of medical managers, a pharmacy manager, nursing managers, an allied health manager, quality managers, an improvement process manager and all the support service managers such as Finance, Human Resources, Engineering and Support services, the leadership learnings were spread quite widely in the hospital, resulting in a possible system level of improvement in hospital functioning or at least a system-wide recognition of the need for continuous improvement. Aside from the individuals in the multi-disciplinary team, the individual executive leaders (Chapter 5) reflected on how they started working better with one another, thus further contributing to a wider organizational influence beyond individuals in their areas or in their core teams. One of the support service managers specifically noted that the process afforded an opportunity for others in the team to understand his role and function in the hospital more deeply and, as a result, their interaction with him changed. The examination of the four improvement cases (Chapter 6) illustrates the potential for this hospital-wide impact, although further exploration should consider assessment beyond individual cases at a hospital level.

Team development

Together with individual development, both the executive team well as the leaders' respective core teams were perceived to have improved because of the GSH LDP. The executive leaders felt a sense of accomplishment when their teams did well and their ability to impart knowledge and skills, empowered them to do more and be better (Chapter 5). This team development theme, as with the self-awareness theme, appears to be one of the core elements in leadership development.

Belbin (1993) cited in Bolden et al. (2003, p13), in a study on factors separating successful and unsuccessful teams, noted that balancing and complementing different individual styles and roles resulted in greater team strength. The relevance of this conclusion is seen in the improvement processes that were implemented at the ward level by the multidisciplinary teams. Wider literature on the implementation of quality improvement processes (Francois et al. 2005, p239; Firth-Cozens

and Mowbray 2001, p3; Uhl-Bien and Marion 2008; Lord 2008; Delia 2010 (cited in Weberg 2013, p1); Wallace 2012; Martin and Bal 2006 (cited in Morgeson et al. 2010, p6)) also shows that they commonly result from team development, which is then another foundational aspect for the development of leaders. In this PhD, the LDP exposed the leaders to theory, reflective practice and learning from role models along this journey.

Fitzgerald et al. (2013) focused on the change leadership in complex, pluristic public sector settings in English healthcare, by comparing ten cases. They identified three themes showing that a pattern of widely distributed change leadership leads to improvements in clinical outcomes; hybrid managers (as doctors performing clinical and managerial duties perform their duties to suit the organizational needs and thirdly, that a foundation of good pre-existing relationships underpins the link between distributed leadership and service improvements. While this work cannot be related directly to this study as the leaders were not clinicians, the distributed leadership concept as described by Harris (2013) speaks to the manner in which the leaders conducted themselves with their teams. The findings in this research are comparable to the three themes identified by Fitzgerald. Firstly, there was an improvement in clinical outcomes and while not specifically tested, the role of change leadership did contribute to this; Secondly, while the team members were not necessarily doctors, their duties were performed to suit the organizational needs and thirdly, the foundation of good pre-existing leadership, as seen in the two successful cases, was noted to support the success of the team.

Broadly these studies suggest that developing teams, motivating teams and functioning as a team could result in, for example, the improvement processes examined working well. However, this study also presents an analysis of what worked and what did not work for team functioning. These factors included the visibility of the leader, the need for multidisciplinary team functioning, improved communication within the teams and across teams, improved coordination through the huddles and team ownership and pride. These factors could serve as core principles for others who wish to build teams, whether through quality improvement processes or a system of continuous improvements that can be scaled throughout a hospital using standardized tools and methods of implementation.

None of the wider quality improvement research examined presents similar findings to this study, but the factors identified above do reflect the findings of a study (Lanham et al. 2013, pp201-202) that evaluated two innovation case studies related to adherence to treatment practices using mobile technology and supporting proper infection control to reduce infection. Both these innovations were reported to be successfully spread throughout the organization. The study authors suggest that scaling up improvements across an organization, especially complex organizations, requires flexible planning to account for the dynamic and unpredictable nature of the improvement efforts. Lanham (ibid)

further identifies self-organization as being critical to understanding variations across local contexts, with self-organization occurring as a result of interdependencies among individuals and the way that individuals make sense of the changes taking place. By improving the quality of these interdependencies and sense making, self-organization is positively influenced and may support intervention success.

In the GSH experience, the cohesion of the executive team and that of their respective teams improved over time with the understanding that unless they worked together, they would not succeed. This stimulated multidisciplinary conversations with a strong sense of belonging and pride in their achievements. Once again, however, it is important to note that there is no clear pathway of linking this improved cohesion and working together solely to the LDP, as teams were also driven by the needs of the service and the goal to be achieved by working together. A longer-term study on how this teamwork is sustained will assist in understanding whether or not there was any link to the LDP, but the evidence of this study suggests that the learnings from the LDP had contributed to the manner in which the teams interacted.

A core finding from this study is that relationships within the senior management team were seen to improve in that there was more openness to approach one another with reciprocal willingness to help resolve issues. This contributed to improved cohesion, communication and trust. One of the concerns raised by the CEO before the LDP was initiated was the lack of communication and cohesion, with resultant silo'ism. Post the LDP, the findings suggest that this has changed with significant impacts on the senior leadership team.

Many studies have focussed on team cohesion as a recipe for organizational success (Uhl-Bien & Marion 2008; Lord 2008; Delia 2010 (cited in Weberg 2013, p1); Martin and Bal (2006 cited in Morgeson et al. 2010, p6); Sanfilippo et al. 2008). However, this study also offers suggestions on how team cohesion can be improved, considering both the executive leaders and the operational teams. Not only was it important to balance and complement different individual styles and roles, but strengthening the trust relationship was an important factor for team cohesion and the ability to be dependent on one another. It could be that the sense of ownership and pride that was demonstrated by the executive individuals and the team members resulted from the time taken with the executive team to develop the self, provide tools to develop the team and additionally, allowing the team to be a consistent part of developing the vision and being a part of the strategy that was introduced at the hospital.

Although there is paucity of research on interventions to develop team leadership (De Brun et al. 2019, p17), many studies have shown the value of team development as experienced by those who were part of such teams (Pelayo 2008; Klein et al. 2009; Boak et al. 2015; Vogus et al. 2016). It is depicted across studies as being shared, goal oriented, enhanced communication, recognizing the contribution of other team members, co-creation, ownership and shared leadership. These values were also noted in this study (Chapters 5 and 6).

A question for further exploration arising from this study, relates to whether different competencies are needed for the leadership development of individuals and as team leaders. The LDP implemented in this study identified the need to develop the leaders to be able to motivate and support their teams, but the training could be adapted and tweaked to specifically address this need. This will allow for a deeper exploration of which aspects of leadership development would benefit team leadership.

7.3 Implementing/supporting improvement processes

The role of leadership in improvement processes

Evidence linking leadership to the implementation of improvement processes is sparsely quoted in the literature (Ovretveit 2005, p419). However, studies do note that support for enhanced innovation results from leadership that takes on encouragement of staff, promoting efficiency and providing motivation as identified in various studies (Howell and Avolio 1993; Ogbonna 2000; Jung et al. 2003; Manev 2005; Henry 2001; Howell and Higgins 1990; West et al. 2003; Jung et al. 2003 cited in Sarros et al. 2008, p147; Birkinshaw et al. 2008 cited in Vaccaro 2010; Uhl-Bien et al. 2007, p18). Such studies note the effect of leadership on innovation and see it as essential for change.

This study offers some specific insights into how improvements can be made and sustained. For example, the LDP included a standardized system that all leaders could adapt and use to implement improvement processes. Indeed, the interviews with GSH executive leaders suggest that the program enabled them to respond to staff concerns about patient care by using a standardized problem-solving tool to assist them in addressing these concerns. Such responsiveness to staff concerns reflects wider ideas which suggest that 'walking the walk and talking the talk' is seen to build commitment and increase performance (Judge and Piccolo 2004; Wang et al. 2011 (cited in Sandell 2012, p6); Mandana et al. (2018); Nuel et al. (2021); Mustafa et al. (2019). As already noted, while this study did not seek to identify whether the executives became different types of leaders, the data speaks to a positive change in their behavior.

The analysis of the four improvement cases studied identified the important role of the leader in the successful cases compared to those that were not as successful. This role was played either by the executive leader or the team leader. Despite the different levels of training that the two leaders received, their role entailed empowering people to take ownership and leading the team from a managerial perspective, by facilitating the activities of the team. In addition, the leadership lessons were used by the executive leader when there was a need to deal with the more complex issues outside of the control of the team and hence it was said that they played a more facilitatory role. This was also reflected in the two improvement cases that were deemed not successful. In one case, the leader was not visible and in the second, there was perceived miscommunication in the team that resulted in their non-success.

Sustainable changes in leadership were also visible in the way the individual improvement teams responded during the Covid pandemic through an organised, cohesive and team approach to dealing with the crisis. This was noted by the Pharmacy team where they reflected on how they were easily able to respond to and adapt to the Covid needs of the hospital using the same tools they learnt in the improvement processes. However, studying the overall effect of these improvements on the organizational culture was beyond the scope of the study, even though it remains part of the vision of the hospital.

Empowering the employees is key to improvement

Shiramizu et al. (2007, p139) in comparing Japanese and American philosophies of quality in a non-health industry said that the hardest step for management to make is empowering employees, because it means that they have to give up some form of control and the ability to tell people what to do. They indicate however, that instilling pride in the work that staff do requires the new wave of thinking of employee empowerment so that they feel some ownership in their work and that this will eventually lead to improvements in the workplace. Such empowerment requires leadership.

In the improvement cases studies examined in this study, team buy-in was identified as the first component to ensure that the improvement processes started in the first place. The executive leaders spoke of allowing their teams to choose their own team leaders and how important this person was, since the role they played on the ground could ensure the success or non-success of the improvement process. The team was also an essential component in the journey to improve organizational outcomes.

Many external factors may have played a role in this empowerment of the employees and conclusively linking it to the LDP is not possible through the findings of this study. LDP learnings may have

contributed to the style of leadership that the executive leader displayed, but many personal attributes of the leader could also have played a role: for example, the experience of the leader; the will to get involved, the willingness of the team; the ability to sustain the behaviour required, among others. Boguslavsky et al. (2019, p1) identified a set of leader attributes and competencies relevant to leading improvement processes. They note that leaders must be able to induce others to become leaders, to see the potential of something, honor it, and support others in improving care. This was perceived to be the case in the improvement cases that were successful but cannot be said for those that were not successful (Chapter 6). In this study, it was noted that the leaders who were more actively involved in supporting their teams led the successful cases, while those whose leadership style was to be less involved, led the unsuccessful cases.

Belrhiti et al. (2020) and Rahbi et al. (2017), attribute such behaviour to leadership style, where leaders adopt an appropriate mix of transactional, transformational and distributed leadership that fits the objectives, culture and nature of the task to be performed. Leadership also demands a degree of responsiveness from the leader and the change management that was required of the leaders to adapt from being more transactional and controlling to directing staff to address their own problems with their own solutions, was challenging. By distributing leadership responsibilities, complex leaders create an enabling environment for collective efficacy and creative problem solving (ibid 2020). Keeping staff motivated is in itself a complex phenomenon since each employee may have different individual needs. Alhassan et al. (2016) indicates that these needs could vary from basic psychological fulfillment to self- actualization needs. The role of the leader in identifying these needs would be an important component of developing leaders. Having a common goal is but one aspect of motivating a team, but with each team member identifying their specific role in terms of their perception of their job requirement, motivating a team may require more attention from the leader. Sustaining such motivation for the future will need further exploration since it has been identified as an important leadership quality to keep frontline staff engaged.

Many studies on team leadership in healthcare settings have concentrated on physician and nursing leaders rather than hospital leaders or executive leaders who may be non-clinical, but the principles of finding ways to develop and motivate the team is a core aspect of implementing successful initiatives (Wallace (2012); Martin and Bal 2006 (cited in Morgeson et al. 2010); Kelly (2014); Cunningham et al. (2018); Dovey (2002); Dixon-Woods et al. (2011); Singer et al. (2011); Bolden et al. (2013); Sanfilippo et al. (2008); Amundsen et al. (2014)). The improvement cases in this study were led by non-medical/nursing colleagues, supporting the finding that multidisciplinary teams can lead to the successful implementation of improvement processes and that leadership in the health environment does not have to be attributed to a doctor or the nurse.

Several researchers have written about the need to have clinical and nursing leaders to implement quality improvements (Weiner et al. 1997, p503), but few have mentioned their success in leading teams. Other studies have noted the importance of buy-in and effective communication, not only the ability to communicate, but specifically, communicating the vision and aligning the leadership to that vision (Longenecker et al. 2014). In this study of frontline leaders, it was noted that a failure to create buy-in, a lack of communication and senior management support were some of the greatest barriers to hospital change efforts (ibid). Involving doctors is seen to be particularly challenging (Weiner et al. 1997), since they do not see themselves as players in the process, they consider their higher salary level an impeding factor to participate in teams and they see data collection as an added burden if not done for the purposes of research outputs. A suggestion was made (ibid) to improve such buy-in through the leadership at the highest level linking the improvement to the organization's vision.

The benefits of daily huddles (Chapter 6), specifically, were also seen by Bonnette et al. (2020, p210) to include improved communication, better coordination of resources, improved awareness of daily operations, swifter issue resolution, and a greater sense of collegiality. Their study was done over a broader region and not a hospital, but the principles they identified were comparable to the findings in this study. One of the factors identified for sustainability of the initiative was to ensure that the huddles continued on a daily basis. This regularity was also noted as important in the 'successful' cases of improvement processes considered in this study.

Overall, there needs to be consistency in the executive leader acting as the anchor in improvement processes, but they do not need to get operationally involved. The role of the executive leader in such processes is to be supportive, to communicate the standards and to keep the team motivated. This is one of the lessons for enhancing the LDP for the leaders.

7.4 Implementing continuous improvement

The LDP, as it evolved, led on to the concurrent development and implementation of improvement processes. The skills learnt in the LDP related to understanding the self, understanding the team, building relationships and being resilient were then evident in the multidisciplinary team efforts that supported success in the improvement processes. These skills are also emphasized as important in other studies reporting quality improvement processes and that highlight the need for a transformational leadership style. Such a style incorporates ensuring buy-in from the team and providing visible leadership to support the team as also reflected in this study (Francois et al. (2005, p239); Firth-Cozens and Mowbray (2001, p3). In the successful GSH improvement processes examined, staff were encouraged to come up with new ideas and they were supported by the executive leader. As discussed in chapter 6, these experiences suggest that such leadership, combined

with the necessary tools, guidance and support from the leader, might support the emergence of a culture of continuous improvement. Paulus et al. (2008, p1235) and McCauley (2008) report similar findings about the emergence of improvement cultures. However, it should be noted that these studies were conducted in higher income country settings, where improvements related to quality of care are well advanced and in private health facilities, limiting the transferability to the public health sector environment in South Africa.

Compared to the wider literature on clinical improvements, this study was unusual in its focus on improvement processes that brought about different facets of change to address challenges being experienced in patient care, and this included 'non-clinical' improvements. In addition, McCauley (2008) suggested that there was a knowledge gap in understanding why certain leadership interventions worked or did not. This gap may have been addressed in this research in the analysis of why certain processes were successful and others not. Measuring success was a subjective process, which the leaders felt had more to do with team functioning and team dynamics than the role that they personally played in the team. The importance of team cohesion reflects a model of leadership being shared among the employees, facilitating mutual goals (Uhl-Bien & Marion 2008; Lord 2008; Delia 2010 (cited in Weberg 2013, p1). Addressing both individual leadership capacity and building a team culture of recognizing and addressing improvements as a team would, then, build the sustainability of the improvement process.

Many leaders and team members expressed how they 'owned' the problem and the solution. According to Martin and Bal (2006 cited in Morgeson et al. 2010, p6); Kelly 2014; Cunningham et al. (2018), this could be attributed to being due to the leadership provided to the team satisfying the needs of the team and offering opportunities to understand and share common goals and values.

The impact of the program on the leadership capacity was seen to be very positive, not only for themselves, but for their respective teams (Chapter 5). They felt that the staff were taking greater ownership and that the impact on patient care had improved. This ownership within their own teams was seen to be as a result of the executive leaders' own success. This was also noted to be positive for self-motivation and feelings of self-worth among the leaders. There was a sense of openness to explore without fear, being innovative and getting noticed for it, with small changes resulting in bigger changes and embedding this into the institution. The positive benefits of the program were also noted by the two participants who initially felt that always aiming to be the best affected the teams in a negative way (Chapter 5).

The role of training managers and leaders for continuous improvement was highlighted by Day (2001, pp582-583), saying that they need different forms of training. Leadership training specifically aims to build capacity in the team through understanding the self and often by way of active mentoring and coaching. However, in the LDP examined in this study, self-development, team development and learning about the management aspects of the job were integrated as part of this home grown initiative. This sort of program that integrates a LDP with the implementation of improvement processes has not been evaluated in any of the available published research for comparison of value gained. Therefore, the benefits being noted contribute to the knowledge on the topic. An empirical study on 200 hospital managers (McAlearney 2008, p324) also suggests that there should be a difference between training provided to managers and that provided to leaders. However, in the GSH LDP, middle managers were exposed to the same content of material as the executive leaders, and the only difference was the amount of time spent on reflection and discussion. Both groups ultimately reflected that they benefitted from the GSH LDP, supporting the underlying principle that anyone can be a leader.

7.5 Consolidating the findings into the framework of the Individual, the Team and the System

In this section, the findings of the research are combined to formulate a conceptual framework for leadership and the needs for leadership development.

The study findings presented in chapters 4, 5 and 6 suggest that by learning about themselves personally, the executive leaders were supported also to strengthen their leadership capacity through better understanding others. This understanding then enabled them to strengthen team functioning through relationship building and by being more supportive. These strengthened leadership practices then, in some cases, supported the implementation of the improvement processes to achieve their goals.

These findings correlate with the framework of the Individual, the Team and the System, as described by the Leadership framework company (PeopleFit Australasia) and by Keijser et al. (2019, p13) (Figures 5 and 6 respectively). The latter is a Dutch medical leadership competency framework, which has a focus on the individual's personal and professional development, as well as team development and suggests that both of these impact on the wider system (Chapter 2). Both these other studies were framed around competency development based on a needs analysis. This framework helps to demonstrate the interactions between individuals, teams and wider system change. As found in this

study, it is important within a LDP to develop the individual as a leader by understanding the self and the self as part of the team; to develop the team by involving them in a standardized way of addressing problems they face in their areas of work, with the tools being supported through internal hospital processes and can be made applicable to clinical and non-clinical environments; to ultimately develop the system as an organizational culture for improvements that become sustainable through being institutionalized as part of the day to day operational functioning of the hospital. At this hospital, over 150 improvement processes have been implemented over a period of about five years and whilst not studied in detail as an outcome for the study, was noted to have an overall impact on organizational culture through building teams, improving relationships and improving outcomes (Themes generated from the improvement processes are provided in Annexure 8). This study therefore outlines some of the specific components of what can be done to lead the self, lead the team and thereby contribute to leading in the system.

The competency framework of the individual, team and system is supported in other studies as well (Cummings et al. 2013; Pillay 2010; de Bron 2020; Curry et al. 2020; Singer et al. 2011), but these authors called for more formal programs and further research on the topic. While each author presents the framework in the contextual reality of their respective studies, the core terms of the Individual, the team and the system or organization can be used to explain the findings. This framework essentially reflects the LDP of GSH as it evolved over time, and with its vision of Leading Innovative Healthcare, as is described in Chapter 4. However, as discussed in this chapter, the LDP process was not experienced as a linear progression from self to team to system, but as an integrated process of events that interlink with each other. The GSH experience also emphasizes that LDPs need to be contextualized and adapted to the needs of those being served by the program.

At an individual level, apart from self-awareness, through the enneagram process, coaching and mentoring were regarded by the executive team as a critical element of the LDP that supported personal development. It was designed into the programme to support leaders to manage the change processes involved in hospital improvement. As Beer et al. (2016), in an article about corporate training and development, argue, coaching and feedback is necessary to deal with the change processes. The collective inputs and wisdom generated from reflection were then used to refine the strategy and program. These efforts helped contextualize the LDP and make it more relevant, practical and applicable. Indeed, although the LDP initially intended to offer business skills to the leaders, over time more effort was placed on the soft leadership competencies needed to navigate the complex environment through building relationships. Such leadership development, as described by McCauley (2010, p2) is an investment in human capital. Through building the self-awareness of the leaders, they

were able to work to strengthen their relationships with each other, and so each developed a better understanding of themselves and each other's roles in the workplace.

Self-development was then clearly linked to team development. Other critical LDP features that supported team development were that through the self-awareness and further understanding of one another, the executive team were able to align themselves to the common goal and build greater cohesion within the team. As the LDP extended to the middle managers through the implementation of the improvement processes, the executive leaders were able to establish a similar cohesion with their respective teams of building relationships, having a common goal and aligning themselves as a team who wanted to achieve improvements in their work for the ultimate benefit of the service. A suggestion from Gilson and Agyepong (2018) in a review of six papers from Ghana, Uganda and South Africa on leadership and management competencies, is that individual leadership alone is not sufficient. Investing in the leadership development of multidisciplinary workplace teams within an organizational context will serve to build leadership capacity.

Team development was then linked to system development as the learnings gained at an individual and team level were used to implement the improvement processes, further generating team learnings, but establishing a means whereby the individual and the team felt a sense of pride in their achievements that were contributing to the improved functioning of the hospital. While such a statement is being made on the basis of reviewing only four cases, further support can be gained from a wider review of the improvement processes implemented at GSH. At a system level, achieving a balance between learning concepts around leadership and the business aspects of the job had to be done carefully so as keep the executives interested in the program. Such a balance is necessary given how leadership can have an impact on an entire health system, especially in a complex and 'messy' context (Mitzenberg 1997 cited in Denis et al. 2010, p68) such as GSH. Both the leadership and management competencies needed to be strengthened and specifically the business courses were presented by the leaders themselves and made practical, relevant and applicable. This aspect of the course design was noted to be positive, as relevant examples were used as part of the teaching. The participation of the leaders as 'educators' and 'learners' generated enthusiasm for them to do more.

The learning on resilience, emotional intelligence and the experience of the reflective sessions was often commented upon in interviews. Building such resilience relied on the improved relationships and various other hard and soft resources. (Barasa et al. 2017 cited in Nzinga et al. 2021, p1). Examples of this were seen in their collective interaction when speaking to the staff and managing challenging situations on the shop floor. It was also noted in comments from their colleagues, both peers and those who reported to them (Personal reflection and interaction).

As stated previously, there is no linear progression from the individual to the team to the system. The benefit of the program was demonstrated in the analysis of the experience of the LDP by the executive leaders. At a leadership level, the executives expressed that they noticed a change in their leadership style and how they expressed themselves at an emotional level. This was largely attributed to being more self-aware, which strengthened their relationships with one another in the team and helped them navigate relationships with others in the complex environment. This self-awareness in turn assisted them to develop the relationships within the executive team as well as in each of their respective teams. In particular, the skills of guiding, motivating and specifically listening were found to be useful in the management of their teams and the implementation of improvement processes. In the analysis of the improvement processes, it was noted that the executive leader's presence in guiding and supporting the team was beneficial to the improvement succeeding. Depending on the type of improvement, this success led to an improvement in patient care, as reflected by the executives and their teams. Triangulating these experiences back to the Individual, the Team and the System framework offers a fit for the GSH LDP. Although the Individual, team and system framework is not a new concept, this study offers a new knowledge in the form of a workable example of how the theory can be put into practice and adapted for other healthcare environments.

The model derived from this study, presented in Figure 22, is modified from the frameworks presented in Chapter 2 (The Leadership Framework and Keijser et al. 2019). It aligns both with the vision statement of the hospital, which is Leading Innovative healthcare, and the activities implemented as part of the LDP and the improvement processes analyzed in the study. Overall, the LDP had concentrated on three main aspects, which can be linked to the Individual, the team and the system framework.

- Leading the self and the team
- Being Innovative through the implementation of improvement processes
- Having an improved effect on improved patient care.

The model (Figure 22) offers guidance to health leaders on how to structure such an intervention for leadership, including improvement processes, which maintain and sustain initiatives to enhance service delivery to the patients.

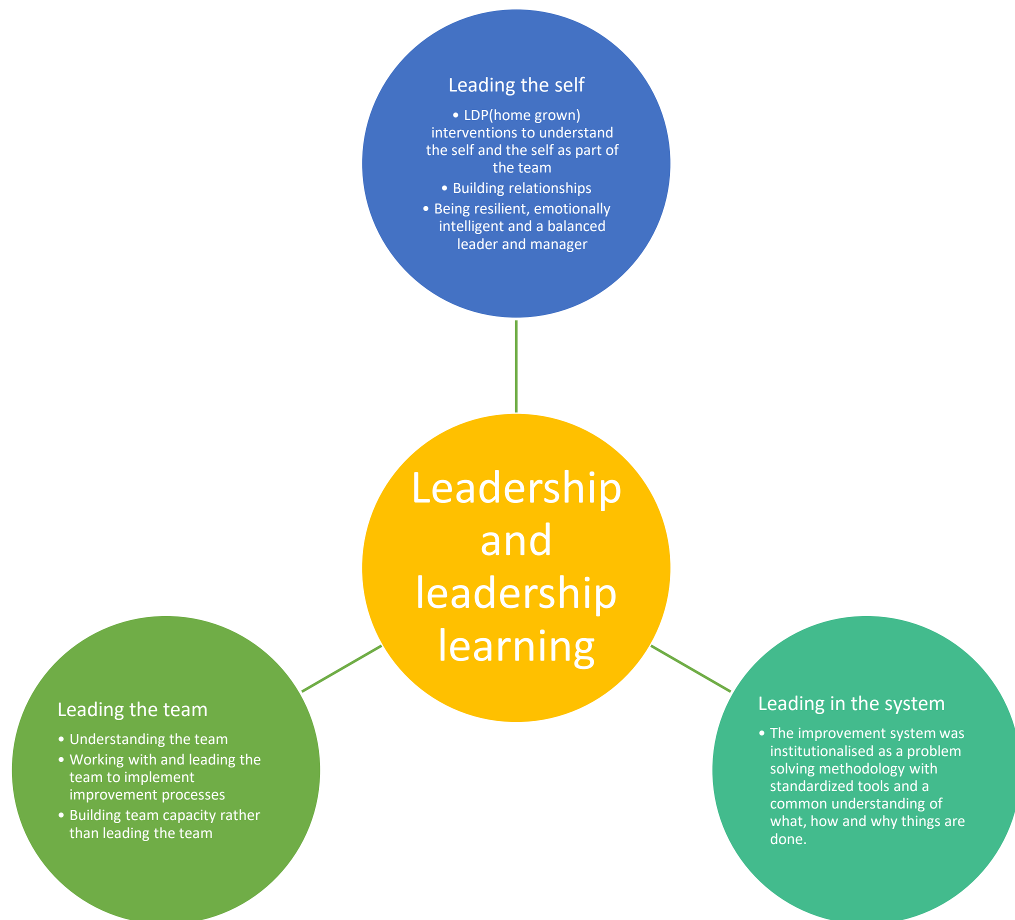


Figure 22: Adapted model for this study using the Individual, team and system

Being conducted at one of the central hospitals in South Africa, means that the study findings could be easily adapted to suit any other central or regional hospital in South Africa or other lower middle-income countries, since the principles are very generic and clear.

Of note is that the program was conceptualized by the CEO of the hospital and this required consistent input and a 'holding together' of all the activities taking place. Whilst not essential, leaders would need to account for such a person who will accept the responsibility and accountability if implemented elsewhere. Such accountability is required to ensure that the program is supported, that it is aligned to the vision of the hospital and that the staff buy into the program. This research has shown the benefits of such investment from the highest level in the organization. The program itself, as it undergoes the many iterations of change and adaptation to the context over time, will require consistency of the leadership, for both the executive team and the middle management teams. This lack of consistency was shown to be disruptive to effective team functioning and progress made with

improvements during the recent covid pandemic, although some of the teams adapted the learnings to address their challenges.

The study has also highlighted some considerations that need to be made for future LDP sessions, which can be built into the Individual-Team-System learning model.

Linking this model to the theory of change defined as a set of interventions expected to lead to specific developmental change over a short, medium and longer term. This draws on a causal analysis based on available evidence (UNDAF, p4). In this study, a causal link cannot be made to show absolute efficiency gains, since the research concentrated on the implementation of a LDP and that of improvement processes, and the reviewed the participants experiences and sustainability of the programs, not specifically looking at effectiveness. However, the theory of change as a process from individual development resulting in change in behaviour to making an impact through the development of teams on the ground, has been reflected in this research and remains ongoing. It is acknowledged that further research on its effectiveness would support the value gained, but based on the experience of the participants, value was shown. Some of these factors could be explained on the basis of the executive leaders consistently motivating their teams to recognize value in serving the patient and attending to both the patient and staff needs. This thesis journey itself was an iterative PDSA process and the PhD findings had at different points influenced new thinking and new directions in the leadership capacity development process.

7.6 Future research ideas

The need for leadership development in healthcare has previously been noted. Developing a program that suits the needs and context of the South African environment needs further exploration. This research offers a start to ensuring that leadership training is balanced between the individual leaders' needs, team leadership needs and the managerial competency needs. Future research can offer valuable insights into what is practical and effective for public health care leaders as well as whether such a LDP could be implemented at another hospital facing similar contextual challenges. Research could also add to the knowledge on the functioning of the individual, the team and how this impacts on the system so that the model developed at this hospital could be further improved and sustained.

7.7 Reflections on the methodology used

The overall method of inquiry for this study was action research, with two phases of work. Phase 1 entailed a document analysis and one-on-one interviews with the hospital's executive leaders. In phase two, four improvement process case studies were examined in more detail.

The underlying principle for using action research lies in the ability for the researcher and the participants to learn from one another, share knowledge and in so doing create new learnings from one another in an ongoing manner (Coghlan and Brannick 2014). Applying this principle to this study was important in enabling this research itself to feed back into the continuing development of the LDP.

As a medical professional conducting research, both qualitative research and action research were concepts that had to be learnt and practiced. However, this learning process in itself became part of the Plan-Do-Check-Act phenomenon used in action research. For example, although the leadership program had been initiated about three years before the research commenced, studying the process started by reviewing previous documentation.

During the interviews with the hospital's executives, the discussions required facilitation by an independent person and involved tapping into how the team felt about concepts and leadership lessons that either took place in the past or were still about to happen in terms of their needs at the time. Such reflective practices rely on the perceptions of the team member, since while the team may have been exposed to the same learning program, each one may have experienced it differently.

One of the challenges for the researcher was to consolidate these perceptions and allow for new thinking based on the researcher's own perceptions. This included reviewing the transcripts and constantly reflecting, followed by re-introducing what was said in a summarized format and ensuring that every person's views were not neglected because of the researcher's own perceptions. Anonymizing the data was one way of reducing this insider researcher bias. This iterative process of constantly moving back and forth until something clicked and made sense or until certain commonalities or themes were identified contributed to the learning and reflecting and also provided alternate views to interpret the data.

A second challenge that was experienced was ensuring that while the team was learning, they were also addressing collective problems, proposing plans to deal with this and then constantly reviewing these as a cyclical process. Teams had to be kept engaged and the researcher had to ensure that the research process did not interfere with the learning and day to day activities of the team.

The process engaged the PDCA cycle most of the time, but this was not formally recognized as such. Ensuring this rigor while maintaining objectivity was a third challenge for the researcher as an insider researcher. General research principles to ensure the validity of the data were followed in this study. The inputs of the participants were anonymized and the researcher was very aware of the need for objectivity and ensuring that the data was captured in a manner that reflected what was said.

Identifying themes in qualitative research could be seen as generalizing certain concepts and individual inputs. Once again, rigor was applied in the research principles were followed, where the anonymized data was entered into N Vivo and themes were generated as an iterative process.

In phase 2, the use of the case study methodology was more defined for the researcher and the use of qualitative research when analyzing the data posed the same challenges as above. However, in phase two, the researcher collected the data and facilitated the focus group and individual interviews. No bias was anticipated as the researcher was not aware of the specific details related to the cases chosen and allowed for open discussion relying on the recorded data for analysis.

In this PhD, while every effort was made to ensure that the research was well planned, its execution was dependent on external factors, such as the covid pandemic, that changed the circumstances, requiring a constant review of how the study was progressing and whether the objectives being asked were still valid. This PDCA process of learning as an individual for the researcher formed part of the growth of the research and while such iterations remained ongoing, the process was seen to be constantly evolving, hence one could not consider a final outcome for the study.

The South African healthcare system will need to adapt to the ever-changing environment. Building leadership capacity to develop resilient leaders will become more urgent if not addressed by the country as a whole. However, individual leaders need not wait for a nationally developed system of learning and should take their own initiative to develop themselves and their teams.

7.8 Conclusion and recommendations

Based on the analysis and discussion of the findings of this research, there are eight major conclusions that can be drawn about the LDP together with improvement processes implemented at a large central hospital in South Africa since 2014.

1. The research identifies that a broad conceptual framework of the Individual, the Team and the System are components that need to be taken into account in any LDP.
2. The development of the individual and the team occurred and evolved over time based on the learning and organizational needs.
3. Multidisciplinary teams at all levels of the system can work towards a common goal.
4. Development of the individual and the team form the foundation of any LDP and this combined process then translates into improving the system.
5. Most of the strategies used during the implementation of the LDP and improvement processes were considered to be beneficial. This process and its research contribute to the continuous learning of the organization.

6. A bottom-up approach to implementation of improvement processes as a key takeaway and contribution to this study.
7. The various tools developed for use within the GSH LDP could serve as a basis for others to use in similar contexts. The tools for the implementation of the improvements processes are generic and can be used at any facility wanting to introduce improvements.
8. The LDP as conceptualized at this hospital is easily adaptable to other facilities.

Overall reflections

The eight major conclusions reflected above show that this study has made a contribution to what is possible in the public health sector. Leadership needs to be nurtured and supported at all levels, but more specifically, there needs to be buy-in and support from the top in order to sustain the momentum gained. In the context of a healthcare system that is struggling to meet the demands on its services, especially in the public health sector, the need for strong leadership is essential. Leaders need to be able to navigate the ever-changing world into a new era of healthcare that focusses on financial sustainability, quality of care and meeting the growing health needs of the population. More specifically, the experience of the covid pandemic has shown the need for leaders to be adaptable to change and to re-focus the priorities for a new future that can continue to grow and remain sustained.

This study has shown how this could be possible by developing people as individuals and teams, by endearing a culture of motivating and supporting staff to collectively address problems and through successes gained, to develop a learning organization. As documented in this study, the use of the Individual, Team and System framework can be used as a model for any hospital or health facility. The basis for learning through a LDP, as identified in this study, lies in the foundation of the individual understanding themselves and then their team in relation to one another. The implementation of improvement processes then allows for the leaders to use their learning in their work environment, building capacity further and developing sustainability of learning through continuous improvement.

CHAPTER 8: My personal reflections

My personal reflections and learnings of this journey and being an insider researcher

Conducting this research was a rich journey of discovery and learning for myself, both as being the leader of the organization as well from an academic perspective. The thinking around the activities of learning had commenced at least two years prior to my current role and it was only once I had become the CEO that I was able to encourage the process. Reflecting on this made me realize that while I kept preaching that anyone could be a leader, there is a need for commitment and support from the senior leadership and from the most senior executive in charge of the organization. Given the size and hierarchy in a hospital (such as GSH) of this size, there would be a need for funding for such an LDP; there would need to be a commitment to allowing time for such activities and there would need to be an alignment to the vision of the hospital – all of which would not necessarily be accomplished without the support of the senior leadership. I still believe that anyone can be a leader, but leaders need to function as part of the team and always place the needs of the team and the organization before the needs of themselves. As a leader, I too cannot function in isolation, but would only succeed with the support of a team.

Given my perception that external courses were not beneficial to the executive leaders and that a home-grown, locally conceptualized, relevant and practically applicable learning program was needed, my initial thinking related to the required leadership competencies. The LDP therefore started as learning objectives that I perceived were needed by the executive leaders, but this quickly changed track to building the personal capacity of the individuals through learning about themselves. The enneagram activity had sparked a need for further insights into what the team dynamic was and how this could influence the roles and responsibilities. The systems thinking workshop then highlighted how through wider engagements, ideas could be sought and implemented with results that improved staff motivation and engagement. This was a revelation in itself for me personally and served as an impetus to adapt the program constantly attempting to address the needs as they arose. It seemed haphazard at the time, but each learning generated enthusiasm and sparked ideas that were then taken forward. It was only after about 2-3 years into the program that a picture started to emerge on how all the puzzle pieces created a picture of this exciting journey.

The enthusiasm generated through the self-awareness exercises was encouraging and there was such excitement about the way in which the enneagram outcomes were received, that I felt it could not just end there. The benefits felt spilled over when each executive leader received six months of coaching from a trained psychologist as part of the program. The positive feedback received from the

executive team following the systems thinking workshop resulted in the idea of building a leadership team for the hospital that we could all feel proud of. Becoming a manager and a leader is not taught during the undergraduate years and often develops with years of experience. The challenge for the leaders was the fast-paced world of healthcare being delivered in a large central hospital and having to deal with aspiring academics with big egos, while at the same time, attempting to ensure the demanding needs of patients are satisfied using a restricted budget. Our training did not offer such skills and many leaders make mistakes as they enter this role, often to the longer-term detriment and lack of respect for hospital leaders, who are perceived to be incompetent and merely administrators. Creating that self-awareness and realizing that these feelings are also being felt by others, created a sense of improved confidence, self-worth and a re-energized purpose.

There was so much commitment from the team to do more; to do better and to do what they needed to so that the patient had a better experience. Such commitment and dedication was often unrecognized because the executive leaders were not respected by the clinical staff. When I functioned as a manager, my thinking was always that I had to work to the beck and call of everyone instead of functioning as a clinical executive leader. I spent more time trouble-shooting than actually taking my unit forward and strategically leading the services. My aspiration was therefore to change that mindset and build a management team that was respected by all the staff of the hospital for the value that they added to the service and the functioning of the hospital. Over these past few years, the hospital executive team have presented themselves in a different way and while this cannot be scientifically linked with certainty, my view is that the LDP had contributed to this. We are still at the beck and call of everyone today, but at least the requests now come with respect, recognition and appreciation. Having changed that attitude has for me been an achievement for myself as the CEO and for the leadership team of the hospital.

For the first few months after my appointment as CEO, motivating the team during our executive meetings was the start of planting a seed for growth. We talked through our roles and what capacity we needed to strengthen. Strangely, one topic that arose often was the need for training on conflict management. This made me realize how much pressure the executives were feeling on a day-to-day basis just putting out fires and attempting to meet unreasonable demands. Eliciting the help of facilitators was easy, as one of the board members had just completed his MBA and knew who was best placed to assist us. The executives came away from these sessions with tools they could use in their areas of work and when they saw that this worked, it was as if a renewed energy blossomed among them. The team came up with more ideas and requests and as the leader of the team, I tried to ensure that I searched for those people who could help us, gave them strict instructions on what I

wanted as an outcome and we started to see the benefits. It turned out to only be the three people with whom we became so comfortable, that we called them back for other talks as well. I too was learning and sought the inputs of others. One person in particular who helped shaped my thinking and was often a sounding board for my ideas, was the head of Human Resources at the time. We spent many lunchtimes chatting and joking around on many topics and it was he, who encouraged me to ensure that whatever we were doing at the hospital for the leadership development should be shared and written up. However, this was not a singular effort and the entire team had contributed to the program, once again, implying that for such an initiative to get off the ground and succeed, there is a need for someone to play the role of motivating others, supporting others and persisting, even when things may fail. Once the buy in is achieved and the commitment of the team is there, there seems to be a natural flow of ideas and improvements that take place. Losing such commitment can happen very easily and this requires consistency in working towards making the initiative sustainable.

It was at this stage that the research idea was sparked. I was initially very skeptical about introducing the idea to the executive team, as I felt that they might consider this as taking advantage of my role and there being an abuse of power. The fear was about communicating to them that I wanted to further my academic career and they were unfortunately participants. However, none of them objected and I had to indicate that this was not my project, but that we collectively owned what we were doing, since we were all on this journey together. At this stage of the journey, our team had developed a sense of cohesion and trust, so any misgivings were expressed freely. One person did express some discomfort with my pursuing this academically, but once explained, it was accepted. The level of participation in the team was also different and it took approximately 6 months to bring everyone on board and to the same level of understanding. I felt relieved at this stage to see the comfort with which the team engaged and shared ideas that could be used in the study, but there was always the nagging feeling that I may be compromising my position as the CEO and an insider researcher. My participation in the leadership learning activities was the same as any one of the team and I had to consciously be aware of my participation as a team member and as a researcher. The learning continued over time, while I prepared the protocol and submitted the final version to my supervisors for approval. Many iterations later, and while the leadership program remained ongoing and in full swing, with myself also exploring many new possibilities as I read for the literature review of the study, my language started changing, the manner in which I dealt with difficult people was more confident and I personally noticed a change in myself. I felt more comfortable in my role as the leader of this huge institution and year on year, added more and more to benefit the staff and the institution. All of this cannot be attributed to my role because I merely facilitated what others wanted while I offered strategic direction.

As the protocol was finally approved, my anxieties were again perked in that the actual work had to begin. The first part of the research entailed the document analysis which did not require any interaction with the team members. I was lucky to have an office assistant who was studying a Masters degree herself and understood the need to record the reflections of the meetings in a certain way, while I chaired the engagements. Much of the document review would not have been possible without some of these in-depth written recordings. Her diligence was also evident in that not only did she have written notes, but she also kept her shorthand version and tape recordings for my records. Only once I was satisfied with what was written in the minutes, and once this was approved by the team at the following meeting, did she delete these voice records and short-hand notes. These notes formed the data that was used for the document review.

At the next stage of the research, the one-on-one interviews had to be conducted. Since I was the insider researcher, there was once again anxiety about who would conduct the interviews for me, what the team members might say and how I would receive the recordings so that I was not able to discern who the person was when analyzing the data. The interviewer agreed to conduct the sessions and my office staff organized all the logistics, but not once did they inform me of who had been for an interview and whose recordings were being downloaded. I felt a bit sidelined, but at the same time respected their behaviour to ensure the ethical requirements of the research were being observed. The first time I saw the transcripts was when I received them from the interviewer and they had been transcribed, with all the identifying data removed. I was both excited to read these transcripts and at the same time was worried about what thoughts might come to the fore. Questions of uncertainty about whether the leaders had found value in the LDP; whether I was wasting their and my time and whether they supported the initiative or not. In my rush to do this, I first taught myself, through You Tube, to use N Vivo and later realized that I had done it all wrong, so repeated the whole process about twice after that. This however deepened my understanding of the data and my sense of relief that all the comments were mostly positive. I was also wary that the team knew what this was for and may have said what they thought needed to be heard, but in reviewing the transcripts, I noted that they each spoke from the heart and said what they felt. Perhaps the sense of trust and comfort in being able to relay the truth was as a result of the many reflective sessions we had and the relationships we had developed. Thank you to the interviewer for her experience in probing at the right time and for taking the inordinate amount of time to do this work for me. I felt quite honored.

I was then able to analyze the information and commence the further work on the study. Thinking through what the information was telling me gave me a sense that we were on the right track in this journey as all the transcripts reflected a positive attitude to the learnings. Of note was that the

executive leaders attributed their development more to what they gained from the leadership lessons as a personal achievement for themselves. I thought that this was quite interesting, but at the same time, noted that if asked, my response would have been the same, as I too was a participant on this journey first and the researcher second. The learnings were actually revelations of ourselves as a person and then being taught how to use these revelations in the role required of us. The openness with which we engaged one another was what was needed for the team to feel supported and stronger on the ground, since they knew that someone else was also experiencing what they were and when they spoke about it, they shared ideas on how to deal with the situations they faced.

Being an insider researcher, I found it difficult to separate my thinking processes while analyzing the data and wanting to share the preliminary findings with the team. I remained mindful of this but did share and used some of the information as generalizations to enhance the learning and keep moving forward on the journey. This was the joy about using PDCA, reflective practice, action research and qualitative methodology. I was able to justify this as part of my learning and reflection. Being mindful is one thing, but whether I was able to be truly objective as an insider researcher, remained a question in my mind. My priority throughout remained to my role and the journey that we had embarked on. There were many occasions when I considered giving up on the research because of this internal conflict. Having supervisors to guide and assist was essential in my continuing on this academic journey. In research, I think that the concept of objectivity is underestimated and through this process, made me appreciate the rigor with which qualitative research needs to take place. I also learnt that through this experience, I gained the ability to always question, to critically analyze and to reflect without necessarily using numbers. However, based on my experience, I would not advise the leader of a team to research the very team that you are part of. It does not do justice to the research or the role as a leader and unconsciously, I am not sure which may have taken priority in my actions.

As time progressed, I noticed a huge shift in the organization from comments being made about our leadership, about where we were heading as an institution and how proud the staff felt about working at GSH. These comments also came from random managers across the services and the senior provincial leaders as they noted this shift themselves and praised our leadership for this. I would say that since the inception of the program, we got to this stage after about 2-3 years. Once again, I must qualify that this cannot be directly attributed to the LDP, but for me it was about creating an environment for people to grow and flourish. It was about being supportive of ideas and helping the staff realize that their ideas were as important, whether they succeeded or failed. It was about saying, let’s try it out and if we don’t succeed, then its okay. This was the culture that we created as leaders, while still maintaining our management functions. The balance was there. We spoke of ourselves as a

family and that our family always came first, no matter what. What we did at work was part of our job, but our families must be prioritized. The team built trust, were vulnerable with each other and reflected these vulnerabilities transparently. This in turn built personal and professional maturity. As a family, we carried and supported one another along this journey. On reflection, what was beneficial was that the team remained mostly stable, allowing for the growth. New members quickly fitted into the style of leadership and displayed the ethos that the team had developed. Being noticed by people outside of the organization, being invited to conferences to speak about our journey and share our experiences was indeed a feather in our cap and a reminder that we were making a difference. This served to add the encouragement to continue. Despite this work being researched, the hospital shared the learnings with whoever could benefit. Strong emphasis was placed on any program being home-grown and practically relevant to the staff at that organization. For me, this was the essence of our program.

In the last section of the research, I needed to interview the executive leaders and their respective teams on the selected cases for the research. This too was challenging at first. However, since I was not integrally involved in the improvement processes, it became easier for me to ask some leading questions and allow the teams to speak. What encouraged me was that once they understood the purpose of the interview being for research, the participants were quite transparent and open to share how they felt. For them it was also about being heard and recognized for what they were contributing and I had to ensure that I included my appreciation not only as a researcher, but also as the head of the hospital. For me, they were also wanting to know the outcome of 'testing' what we had put in place as a system and whether this had worked or not. It became somewhat of a competition of who was the best, but at the same time, there was so much pride and ownership in what they did, that it did not matter if they did not reach their target or did not succeed. The application of the rigor needed in the research was more evident with the case studies and once the data was collected, I asked the improvement officer to confirm some of the comments made and the findings of the improvement processes that were shared. This was my way of triangulating the information to ensure validity. This process helped me understand how far and wide our initial LDP learnings had spread and that the executive leaders were really trying to institutionalize improvements across the hospital.

Most of the inner reflection for myself as the insider researcher came during the final stage of writing up the thesis. Many nights and weekends were spent scanning through the data and other articles and the realization that what felt like part of my job and responsibility, has made such a huge impact on the lives of these individuals and that this impact is also spreading to other managers at the institution and in the province. Many hospital managers, including those from private facilities, visited GSH to

see what we had done and how we implemented this. Many asked for us to share our tools with them and they have implemented improvement processes at their hospitals. The provincial office developed a competency framework and a behavioral charter to which our hospital could conform, as we had already done most of the work in our own way. These were all very encouraging and humbling.

Being an insider researcher does not make the research less reliable. Any bias or objectivity can be reduced because the researcher has to rely on the data and the data cannot be changed. This is applicable to qualitative research as well and despite my early reservations about engaging in qualitative research, I did enjoy all the exploratory and sense making aspects of it. I will not fear engaging in qualitative research in the future.

The team have developed and continue to grow. The leadership of the hospital feel recognized and appreciated and because of this, we are often the envy of other hospitals. Many email and whatsapp communications from other managers and staff show that GSH has become a first choice as the place to work. Our application lists keep increasing for the few vacancies that we have. This is but one aspect that we can use as testimony of what we have achieved. At the same time, we should not fool ourselves into thinking that we have arrived and there are days when I ask myself if this was all worth the effort, but then something happens to change all of that again. These are the realities of life and we learn to adapt with every changing day.

The LDP will remain an ongoing learning part of what we do and in the many reflections, it is with a sense of pride that I hear the executives remembering previous lessons, previous facilitators and practicing what they have learnt, not only in the workplace, but also in their personal lives and in their homes. Five of the leaders were also inspired and encouraged to explore their own academic interests. All five were aged over 50 and had not studied since either high school, college or university. Of these three have already qualified with an additional degree, one is preparing to do an MBA and the other wishes to pursue a PhD. If our learning process had anything to do with this inspiration, then for me as the leader, the program was entirely worthwhile. Overall, the participants have reflected on the benefit they've received, and this too makes it all worthwhile. All I did was to plant the seed. The rest came from the team. I remain proud of my team for what we collectively have achieved at the hospital and feel secure in the knowledge that when I leave this hospital tomorrow, the learnings will continue.

"Start by doing what's necessary, then what's possible, and suddenly you are doing the impossible"

(Saint Francis of Assisi)

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Annexure 1: CONSENT FORM – Executive leaders

Participant information and consent

To whom it may concern,

You are receiving this document as a Groote Schuur Hospital staff member and I would like to ask whether you will consider taking part in a research study. The purpose of the research study is to assess leadership development at Groote Schuur Hospital. This is to make sure we are offering our patients the best care we can at Groote Schuur Hospital.

If you agree to take part in the study, you will be asked to participate in answering a questionnaire administered by an external facilitator in order to ensure objectivity and to allow you to feel free to answer the questions. This should last no more than 60 minutes and any information will be recorded for the research purposes only and stored safely in the researcher's office.

There are no risks associated with this study. The direct benefits to you for taking part in this study include your own development and your development in your work performance. There is also no payment for taking part in this study. We hope that the findings of this research study may help to improve the service and care we offer to our patients and your role as a leader in facilitating that as well as form a basis for training managers/leaders at health institutions similar to Groote Schuur Hospital.

The data will remain confidential. Anonymity will be maintained at all times, so your name will not be divulged to the researcher after this interview. The findings of the study may be published in a scientific journal or discussed at meetings, but no individual participants will be identified and your role in the study will be acknowledged as part of the executive team.

You are free to withdraw at any time from the study without penalty.

If there are any further questions, please contact the Principal Investigator, Dr Bhavna Patel at 021 4043178 or Bhavna.Patel@westerncape.gov.za.

If you have any questions or concerns about your rights or welfare as a research participant, please contact Professor Marc Blockman, Chairperson of the University of Cape Town, Faculty of Health Sciences Human Research Ethics Committee on 021 4066626 or marc.blockman@uct.ac.za.

Consent statement

I have read the above information. I have had the chance to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to take part as a participant in this study and I understand that I can withdraw at any time from the study.

Participant signature: ______________________

Date: ______________________

Investigator signature: ______________________

Annexure 2: INFORMATION SHEET AND INDIVIDUAL INTERVIEW GUIDE

The purpose of the interview is to assess your experience of leadership before we started the program and how this has transpired to date. We would like to understand the impact that the Leadership Development Program has had, what has worked well or not, why has it worked or not and what can we do to improve the program for the future. You can opt to write this as a narrative (anonymous) or participate in this interview.

You have already signed consent for this interview at the start of this research study, with the understanding that you can still decide not to participate at any time if you so wish. Please be assured of your anonymity during this interview.

Do you have any questions before we proceed with the interview?

This interview is open ended with some guiding questions, but please stop me at any time for clarity or explanation if needed.

Take as much time as you need.

Interview guiding questions – only for the interviewer

1. Please describe your experience of the LDP from the beginning until now
2. How has the LDP impacted on you personally and in your work?
3. If your team was asked what are you doing differently now compared to two years ago, what do you think they will say?
4. Do you think the vision of 'Leading Innovative Healthcare' is appropriate and why?
5. Our vision was Leading Innovative Healthcare and the context of the LDP was about developing the individual, the team and ultimately the service that we render through the implementation of improvement projects. Which of these three aspects did you find most beneficial and Why?
6. Were there any ideas/ models / frameworks from the LDP learnings that you applied to your work? What are those and how are you using them?
7. How has your relationship with other members of the executive and your immediate team evolve over the course of the leadership journey?
8. What specific things have you learnt and found useful?
9. What specific things have you not found useful?
10. Did you face any challenges during the program? Please elaborate.
11. If you could change anything in the training program, what would you change?
12. Has the leadership training program changed your behaviour?
13. Do you think you would have set yourself different goals if you were not involved in the Leadership Training program?
14. Do you think that the executive management team is more cohesive than before?
15. Do you think that the Leadership development program has enabled you to:

	Yes	No, because of the following reasons:
Understand yourself better as a person		
Understand others and how you interact with them because of that		
Be a better team leader		
Changed your behaviour		

Think innovatively		
Be more focused on problem solving rather than crisis management		
State with confidence that you are able to improve the healthcare we offer to our staff and patients		

Annexure 3: DOCUMENT REVIEW AND THEMES

The following themes will be used to extract information from the documentation.

Over the years, do the documents reflect actions or changes in:

1. Leadership
2. Leadership Development
3. Change Management
4. Improvement processes
5. Self-awareness
6. Team development

	Document	Date	Type	Comment	Theme
1	Name of document				

Annexure 4: CONSENT FORM – Team members

Participant information and consent

To whom it may concern,

You are receiving this document as a Groote Schuur Hospital staff member and I would like to ask whether you will consider taking part in a research study. The purpose of the research study is to assess leadership development at Groote Schuur Hospital. This is to make sure we are offering our patients the best care we can at Groote Schuur Hospital.

If you agree to take part in the study, you will be asked to participate in an open ended focus group discussion administered by the researcher of the study. In order to ensure objectivity and to allow you to feel free to answer the questions. This should last no more than 60 minutes and any information will be recorded for the research purposes only and stored safely in the researcher's office.

There are no risks associated with this study. The direct benefits to you for taking part in this study include reviewing your team's experience in the implementation of the improvement process and understanding what you and others in your team have learnt from this. There is also no payment for taking part in this study. We hope that the findings of this research study may help to improve the service and care we offer to our patients and your role as a leader in facilitating that as well as form a basis for training managers/leaders at health institutions similar to Groote Schuur Hospital.

The data will remain confidential. Anonymity will be maintained at all times, so your name will not be divulged to the researcher after this interview. The findings of the study may be published in a scientific journal or discussed at meetings, but no individual participants will be identified and your role in the study will be acknowledged as part of the team.

You are free to withdraw at any time from the study without penalty.

If there are any further questions, please contact the Principal Investigator, Dr Bhavna Patel at 021 4043178 or Bhavna.Patel@westerncape.gov.za.

If you have any questions or concerns about your rights or welfare as a research participant, please contact Professor Marc Blockman, Chairperson of the University of Cape Town, Faculty of Health Sciences Human Research Ethics Committee on 021 4066626 or marc.blockman@uct.ac.za.

Consent statement

I have read the above information. I have had the chance to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to take part as a participant in this study and I understand that I can withdraw at any time from the study.

Participant signature: ______________________

Date: ______________________

Investigator signature: ______________________

Annexure 5: INFORMATION SHEET AND TEAM INTERVIEW GUIDE

The purpose of the interview is to assess your experience of the implementation of the improvement process in your area and the role played by your team leader. We would like to understand the impact that the Leadership Development Program has had, what has worked well or not, why has it worked or not and what can we do to improve the program for the future. You can opt to write this as a narrative (anonymous) or participate in this interview.

You have already signed consent for this interview at the start of this research study, with the understanding that you can still decide not to participate at any time if you so wish. Please be assured of your anonymity during this interview.

Do you have any questions before we proceed with the interview?

This interview is open ended with some guiding questions, but please stop me at any time for clarity or explanation if needed.

Take as much time as you need.

Interview guiding questions – only for the interviewer

16. Please describe your team's improvement process – why it was done, what it entailed and how the different steps were implemented.
17. What was the role of the executive leader in the team?
18. If your team was asked what are you doing differently now compared to two years ago, what do you think they will say?
19. If your team was asked whether there has been a change in the manner in which the team leader approached the process compared to how he/she may have done it before, what would you say?
20. How has your relationship with other members of your immediate team evolve over the course of the implementation of the improvement process?
21. What specific things have you learnt and found useful?
22. What specific things have you not found useful?
23. Did you face any challenges during the program? Please elaborate.
24. If you could change anything in the process, what would you change?

ANNEXURE 6: Competency assessment tool

Leadership development needs assessment					
Instructions: Only complete the grey blocks					
Name: (optional)					
Age					
Qualifications					
Additional qualifications					
Position					
How long have you been in this position	<5 years	5-10 years	10-15 years	15-20 years	>20 years
Have you received training on any of the following	Leadership	Systems thinking	Lean Managemt	People Managemt	Financial Managemt
	Strategic thinking	Innovation	Conflict Managemt	Quality Managemt	PDCA
	Mentoring & Coaching	Change Mx	Information Mx	Teamwork	Other
Describe Other training					
Duration of the course	Leadership	Systems thinking	Lean Managemt	People Managemt	Financial Managemt
	Strategic thinking	Innovation	Conflict Managemt	Quality Managemt	PDCA
	Mentoring & Coaching	Change Mx	Information Mx	Teamwork	Other
Duration of other training					
Did you find the training beneficial	Leadership	Systems thinking	Lean Managemt	People Managemt	Financial Managemt
	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	Strategic thinking	Innovation	Conflict Managemt	Quality Managemt	PDCA
	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	Mentoring & Coaching	Change Mx	Information Mx	Teamwork	Other
	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
Comment related to other or general comments					
Have you implemented any projects based on your training	Leadership	Systems thinking	Lean Managemt	People Managemt	Financial Managemt

	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	Strategic thinking	Innovation	Conflict Managemt	Quality Managemt	PDCA
	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	Mentoring & Coaching	Change Mx	Information Mx	Teamwork	Other
	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
Describe the project in 3 sentences					
Do you prefer in -service traning or formal training	In-service	Formal	Both		
Should such training be compulsory for leadership development			Yes / No		
How long should the training be (Max)	2-3 hours	One day	Two days	Ongoing	
What competencies do you think you need as a leader	Leadership	Systems thinking	Lean Managemt	People Managemt	Financial Managemt
	Strategic thinking	Innovation	Conflict Managemt	Quality Managemt	PDCA
	Mentoring & Coaching	Change Mx	Information Mx	Teamwork	Other
Describe other					
What competencies do you think you have as a leader	Leadership	Systems thinking	Lean Managemt	People Managemt	Financial Managemt
	Strategic thinking	Innovation	Conflict Managemt	Quality Managemt	PDCA
	Mentoring & Coaching	Change Mx	Information Mx	Teamwork	Other

What competencies do you wish to develop as a leader	
How can your institution assist you to develop these competencies	

Thank you for your participation

ANNEXURE 7: Types of ducuments analyzed (2014-2019)

Meeting minutes / notes	Number of meetings included in the analysis	Type of document	Date range
Executive Management meetings	71	Meeting minutes	Bi-monthly from 02/2014 until 02/2019
General Management meetings	34	Meeting minutes	Monthly from 09/2014 until 06/2019
GPS review session	1	Notes	08/2017 and 02/2018
Absenteeism	1	Learning session slides	09/2019
Accountability framework	2	Learning session slides	07/2019; 08/2019
Developing personal resilience	1	Learning session slides	07/2017
Developing team resilience	1	Learning session slides	08/2017
Elevator speech	2	Communique	2017
Functional Business unit meetings / GPS Business Management meeting	36	Meeting minutes	Monthly from 10/2013 until 04/2019
Finance presentation	2	Learning session slides	05/2015
Leadership development presentation	1	Learning session slides	04/2017
GPS presentation	1	Learning session slides	02/2018
GPS A3 workshop	1	Learning session slides	04/2014
GPS review session	14	Meeting minutes	Quarterly from 09/2015 until 10/2017
GPS steering committee	39	Meeting minutes	Monthly from 11/2015 until 02/2018
GPS VSM workshop	1	Learning session slides	04/2014
Time Management	1	Learning session slides	2018
GPS roadmap	2	Learning session slides	2017
GPS true north	2	Learning session slides	
Unlocking flexible organizations	1	Notes	2016
Presentation on Humility	1	Learning session slides	
Insights questionnaire	1	Learning session slides	
Leadership input for MEAP	1	Learning session slides	
Finance SCM	1	Learning session slides	10/2018
IMC presentation	1	Learning session slides	05/2018
Labour relations	1	Learning session slides	04/2018
Leadership Behaviour Charter	2	Meeting notes	
Owners and coaches	1	Leadership learning session	06/2018
AOP mid-year review	1	Meeting notes	09/2019

Daily management system	1	Learning session slides	01/2018
Introduction to GPS	multiple	Learning session slides	
Open discussion on LDP	1	Meeting notes	08/2016
Organization diagnosis and design	2	Learning session slides	
Outpatients	1	Learning session slides	05/2015
Patient experience	1	Learning session slides	05/2016
Resilience	7	Learning session slides	04/2014 and 08/2017
OHSC workshop	1	Learning session slides	12/2015
WCG Governance & Accountability framework	1	Learning session slides	12/2015
Support services	1	Learning session slides	05/2015
Systems approach for transforming health services	1	Learning session slides	01/2014

Annexure 8

Themes generated from the improvement processes

1 – Using Waiting Times more effectively
What if we could design a better experience for patients who are waiting for treatment - across the hospital? What if we saw waiting not as "wasted time" but as an opportunity to engage patients in a different way?

2 – Sustaining a culture of care and dignity
What if we could support staff to deliver the compassionate care, that we are known for, all the time?

3 – Tracking and Communicating
What if we had better visibility of patients' experiences, waiting times, wards' stock levels, which beds and theatres are free and how well our patients are doing - in real time?

4 – Patient records and notes
What if we had a better system of keeping track of patients' records, inputting data, and ultimately spending less time on admin and more time with patients?

5 – More efficient entry and exit
Could we improve the referral process, appointment bookings and discharge? Could we speed up the process so that patients could be discharged quicker, feeling safe and supported?

6 – Improving care for specific patient groups
What if we could radically improve the experiences, quality and safety of care for one of the following groups: adolescents; TB patients; patients awaiting procedures?

7 – Working better with community service
What if we could support health and community services to deliver high quality care that we can rely on, and which would enable patients fewer unnecessary trips to the hospital?

8 – Boosting volunteer resources
What if families and volunteers had a more central role in this hospital? How might we support them to support us?