

University of Cape Town  
Faculty of Humanities

The effect of organisational  
practices and relationships on the  
implementation of a clinical  
practice guideline:  
A case study of a primary  
healthcare facility in Cape Town

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A minor dissertation submitted in partial fulfilment of the requirements  
for the award of the degree of  
**Master of Education**

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FRSGIL002

February 2014

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# Declaration

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This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed and has been cited and referenced.

Signature:

*Signed*

Date: 14 February 2014

# Acknowledgements

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“He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows where he may cast.” Leonardo da Vinci

I am grateful to my supervisor, my transcriber, my proofreaders, my colleagues, my classmates, and my family and friends for showing me it is possible.

I am grateful to the Knowledge Translation Unit for allowing me to use PALSA PLUS as the intervention for this case study.

I am grateful to the Western Cape Department of Health for giving me permission for this research.

I hope I have done justice to those who trusted me with their stories.

# Abstract

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This analytical case study aims to determine the effect of organisational practices and relationships on the implementation of a clinical practice guideline by a nurse-trainer at facility level in primary healthcare (PHC). The setting of the case study is the implementation of the Practical Approach to Lung Health & HIV/AIDS in South Africa (PALSA PLUS) a clinical practice guideline introduced by a nurse-trainer, in a primary healthcare facility in the Western Cape Province, South Africa.

Both Activity Theory (AT) and Knowledge Translation (KT), two discourses in which this work is immersed are explained. In reviewing the literature, it was not possible to locate studies of the use of AT within the context of learning in complex healthcare interventions in PHC in South Africa. The literature did, however, provide examples of the practical application of AT as a method for analysis in the fields of environmental education, information technology and organisational development.

Data were gathered from five semi-structured interviews carried out at the site of the case study with a nurse-trainer, her peer, a doctor, a manager and a health promotion officer, respectively. Engeström's use of an Activity System was used to provide the conceptual tools for the analysis of the case data.

Although the PALSA PLUS guideline was well accepted, concurring with the findings of previous research, significant challenges were observed with regard to its implementation. The challenge for this researcher of crossing the boundary between two theoretical discourses, namely KT and AT, provided insights into a possible way of interrogating the historically accumulated tensions and contradictions identified that diminish the implementation of policy into practice. These contradictions manifest between the TOOL (the clinical practice guideline), the RULE (the culture of the organisation, its policies and its management systems) and the DIVISION OF LABOUR (roles and responsibilities of and inter-relationships between the nurse, the doctor and the manager). Contradictions were traced back to the following factors: the differences between traditional off-site training versus the on-site educational outreach approach used to train the staff to use PALSA PLUS; the tension between the traditional perception of nursing as a low-status

profession and the new need to recognise nursing as autonomous professional practice; and the initial lack of buy-in to and support from facility management for the programme. Despite the discordant organisational environment, personal commitment and dedication by the interviewees to those they serve was visible.

This analytical case study demonstrates the complexity of unravelling the effects of interactions and relationships within multiple organisational layers of a PHC facility that impact on the implementation of the guideline. The dissertation concludes that any contradictions identified will remain contradictions and will not become the potential points of transformation, if the multiple layers of the organisation do not engage in dialogue with one another. It is recommended that busy front-line clinicians be given assistance with transforming their workplace in order to enable an expansive learning environment.

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# Definitions and terms of reference

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**Client** refers to the person seeking healthcare.

**Clinical nurse practitioner (CNP)** is a registered nurse who has completed the Diploma in Clinical Nursing Science, Health Assessment, Treatment and Care (Government Notice No R48 of 22 January 1982, as amended by No R1432, R2563, R2189 and R71). This course is required to be a minimum of one academic year (South African Nursing Council, 1982; Mayers, 2010: xi).

**Clinical practice guidelines** are evidence-based, policy-aligned tools that are used by clinicians to inform decisions on patient care. “The wide use of evidence-based clinical guidelines can help to ensure that effective clinical interventions are delivered and that ineffective or harmful interventions are not used” (Grimshaw, 2004).

**Educational outreach** is defined as the “use of a trained person from outside the practice setting who meets with healthcare professionals in their practice settings to provide information with the intent of changing their performance” (O’Brien et al, 2007).

**Facility or clinic** refers to the place where clients can access healthcare. The term “facility” is used in this dissertation.

**Facility Trainer (FT)** is a nurse selected from the healthcare system and trained in both the content of the guideline as well as group facilitation skills to assume the role of facility trainer in their facility or facilities. They are specifically equipped for an educator role to act as outreach trainers to provide on-site training and ongoing support. They are trained during a five-day Train the Trainer to Train (TtTtT) workshop and are mentored and supported after their initial training.

**Master Trainer (MT)** is an experience Facility Trainer who receives further training to train and supervise Facility Trainers. Usually one or two Facility Trainers per district are selected as Master Trainers from among the pool of Facility Trainers and are further equipped to train more Facility Trainers.

**Primary healthcare (PHC)** is the first level of care in the healthcare system where the community directly seeks treatment and advice.

**Professional nurse (PN)** A nurse is a licensed person who is registered with the South African Nursing Council based on completion of a recognised education and training programme to nurture, assist and treat the client, who can be an individual, family or group, sick or well, in the performance of those activities that contribute to the attainment or maintenance of health, to optimal recovery and rehabilitation or to a peaceful, dignified death. In working with the clients according to prescribed professional codes, they are acknowledged as equal partners by helping them gain independence as rapidly as possible (see <http://www.sanc.co.za/archive/archive2001/newsc105.htm>).

**Scope of practice** The framework that governs the scope of practice of nurses in South Africa is complex. This extract from Mayers (2010) succinctly provides an overview of the scope of practice of a nurse in South Africa:

A complex legal and policy framework governs the role and function of nurse practitioners in South Africa. These include the Medicines and Related Substances Act No 101 of 1956, as amended, by Act No 90 of 1997, the National Health Act, No 61 of 2003, the Pharmacy Act, No 53 of 1974 and the National Drug Policy of 1996. The Nursing Act 33 of 2005 provides that the SA Nursing Council determines the scope of practice of all categories of nurses. The Nursing Council may furthermore, under the provisions of Section 56(1) of the Act, register a person who is registered in terms of section 31(1)(a), (b) or (c) to “assess, diagnose, prescribe treatment, keep and supply medication for prescribed illness and health related conditions, subject to proof of prescribed training and qualification”. A nurse who is employed in a state/public health service and who has been authorised by the relevant authority may also examine, diagnose keep and prescribe medication. Currently, nurses who are authorised to prescribe under Section 38A of the Nursing Act of 1978, may continue to do so, while the current Section 56(6) of the Nursing Act of 2005

permits the state to further authorise nurses to assess, diagnose, prescribe treatment, keep and supply medication for prescribed illnesses and health-related conditions in the absence of a doctor or pharmacist. It is evident that, although nurses and nurse practitioners provide primary care services throughout the country, they are constrained by a complex set of laws and policies (Stender, 2009).

## **Notes**

Knowledge Translation (KTU) resource materials:

The KTU is my site of practice. I wish to acknowledge that the information and description about the KTU and the Practical Approach to Lung Health and HIV/AIDS (PALSA PLUS) programme used for this case study has been adapted from various source materials of the KTU of which I have been involved in the writing or editing. For information on the KTU, refer to the website [www.knowledgetranslation.co.za](http://www.knowledgetranslation.co.za).

Referencing:

- *Referencing styles*

The referencing system required by the Department of Humanities of the University of Cape Town is the Harvard System of referencing.

The referencing system used in my work environment references by number in the text and does not require page numbers. Because I have used some of the writings from the resources available, page numbers are not always provided. Where there is no date supplied, I have indicated this as “nd”. No date and/or no page number are also not always provided when using online materials.

The aim is to be consistent in the referencing used in this dissertation.

Photographic permission:

All the photographs in this dissertation are taken from the archives of the KTU. The KTU adheres to a policy of signed consent from all trainers, who give permission for their

photographs to be used in presentations, on the website and in any other materials of the KTU.

# List of abbreviations

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AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-retroviral treatment
AT	Activity Theory
BoD	Burden of disease
CHAT	Cultural–Historical Activity Theory
CBS	Community-based services
CDMT	Chronic Disease Management Team
CHC	Community Health Centre
CNP	Clinical nurse practitioner
CoCT	City of Cape Town
DoH	Department of Health
EC	Eastern Cape
EDL	Essential Drug List
FS	Free State
FT	Facility Trainer
HAST	HIV/AIDS, STI and TB
HIV	Human Immunodeficiency Virus
HPO	Health Promotion Officer
IT	Information Technology
KT	Knowledge Translation
KTU	Knowledge Translation Unit
LMIC	Lower- and middle-income countries
MO	Medical officer
MT	Master Trainer
NDoH	National Department of Health
NGO	Non-governmental organisation
NHI	National Health Insurance

PACK	Practical Approach to Care Kit
PAL	Practical Approach to Lung Health
PALSA	Practical Approach to Lung Health in South Africa
PALSA PLUS	Practical Approach to Lung Health & HIV/AIDS in South Africa
PHC	Primary healthcare
PN	Professional Nurse
RCT	Randomised controlled trial
SACTWU	South African Clothing and Textile Workers' Union
SLA	Service Level Agreement
SOPs	Standard Operating Procedure
SMS	Short Message Service
STATSSA	Statistics South Africa
STI	Sexually transmitted infection
TB	Tuberculosis
TtTtT	Training the Trainer to Train
WC	Western Cape
WHO	World Health Organisation
WIDER	Workgroup for Intervention Development and Evaluation Research

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# 1 Introduction and background

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## 1.1 Introduction

This dissertation aims to determine the effect of organisational practices and relationships on the implementation of a clinical practice guideline by a nurse-trainer at facility level. The analytical case study presented in this dissertation is located in a primary healthcare (PHC) facility in the Western Cape (WC) province, South Africa.

This chapter provides background to and an understanding of the challenges faced by frontline clinicians in a busy healthcare facility. My site of practice, and the role played by the Knowledge Translation Unit (KTU) of the University of Cape Town, is described and explained in an attempt to address the challenge of improving the quality of care faced by the healthcare system.

Through its research and implementation strategies the KTU aims to equip busy clinicians with skills that will improve clinical decision-making during a consultation. This is done through the introduction of its clinical practice guideline, namely a Practical Approach to Lung Health and HIV/AIDS in South Africa (PALSA PLUS), into a facility. The guideline is implemented by a nurse-trainer who is trained to deliver educational outreach sessions, an implementation strategy that is known to change practice (O'Brian et al, 2007; Grimshaw et al, 2004). As the designer and implementer of the training programmes, I had come to realise that the focus of the research output from the KTU to date has been on strengthening healthcare systems through clinical practice.

From an adult education perspective, the complexity of the multiple layers of organisational practices that might affect the success or otherwise of PALSA PLUS has not been fully explored or explained previously. This dissertation is an attempt to introduce an educational language to describe the training and implementation of clinical practice guidelines.

The rationale for this case study, as well as its purpose and meaning, is presented to provide an understanding of the complexity of the multiple

organisational layers as well as the interactions and relationships within the PHC facility that are compounded by existing organisational practices.

Chapter 1 concludes with an outline of the chapters of the dissertation.

## **1.2 Research aim and objectives**

This case study aims to determine how organisational practices and relationships affect the implementation of a clinical practice guideline by nurse-trainers in PHC.

By using Activity Theory (AT) as the conceptual framework and employing the notion of an activity system as a method of analysis, it is hoped that the effects of interactions and relationships in a PHC facility upon implementation of a clinical practice guideline will be better understood. These insights could help the KTU to improve its implementation strategies in order to strengthen the healthcare system.

The objectives of this research are:

- To explore the organisational conditions under which implementing a clinical practice guideline can lead to the embedding of policy in practice.
- To determine the organisational conditions required for nurse-trainers to negotiate a new educator identity in their workplace.
- To explore the use of AT in the context of PHC in South Africa.
- To determine in what way(s) the use of an educational theory complements Knowledge Translation (KT) systems.

## **1.3 Context of the case study**

This case study is located in a PHC facility in the Metro district of the WC. I first provide a brief overview of the challenges faced by healthcare professionals in their daily practice; an introduction to the work of the KTU follows that.

### **1.3.1 PHC in South Africa**

South Africa has a complex and serious burden of disease (BoD) profile. The impact of this burden is experienced at a primary level of care as this is where the bulk of the population consults:

In the South African setting about 16% of the population has insurance and makes use of the private sector. The remaining 84% of the population is dependent on the public

sector, although some will pay cash for ad hoc use of the private sector (Mash, 2012: 2).

In the foreword to the National Department of Health's (NDoH) strategic plan 2010/11–2012/13 (online), Dr A Motsoaledi, the Minister of Health, alerts us to the situation pertaining to the BoD:

South Africa faces a quadruple burden of diseases consisting of HIV and AIDS; communicable diseases; non-communicable diseases; and violence and injuries. The consequence of this is high levels of mortality and morbidity. In 2009, Statistics South Africa (STATSSA) estimated the life expectancy of South Africans to be 53,5 years for males and 57,2 years for females.

The statements by Mash (2012: 2) and Motsoaledi accentuate the burden placed on the healthcare practitioners in PHC facilities in South Africa.

Many of the infectious and non-communicable diseases have a lifelong effect on people and require that they attend PHC services repeatedly. People with Human Immunodeficiency Virus (HIV), for example, are now surviving longer on Anti-Retroviral Treatment (ART), and are themselves at increased risk of developing non-communicable chronic conditions such as diabetes.

The increased BoD puts the health services and those working in healthcare under pressure. The following section illustrates the crisis in terms of the retention of staff as well as the need for frontline clinicians to be equipped to deliver quality care.

### **1.3.2 Who is actually providing the care?**

According to Pillay (2008), the DoH faces significant challenges in retaining quality healthcare professionals, in particular doctors and nurses. The large turnover of doctors is a problem, but the problem of the turnover of nurses is equally, if not more, disturbing, given that “the public sector primary care services are nurse-led with support from doctors” (Mash, 2012: 2). According to Pillay (2008: 40): “In 2005 only 42,5 per cent of registered professional nurses worked in the public sector.”

For the purposes of this case study, it is interesting to note that lifestyle and income were not the most significant factors affecting staff retention: rather, the

working environment and management relationships are critical factors affecting the loss of health professionals in the public health sector (NDoH 2012: 32).

The Mash (2012) study, which aimed to determine the reasons why patients sought care and listed the diagnoses among clients attending the public-sector hospitals, showed that 18 238 (86,1%) out of the 18 856 total consultations were conducted by nurses, while doctors consulted 2 612 (13,9%) clients. There are 388 nurses and 35 doctors per 100 000 clients in South Africa ([www.hst.org.za](http://www.hst.org.za)). This information raises concerns about whether over-stretched doctors and nurses can keep up to date with the growing demand for new and updated knowledge required in clinical practice. This poses the question about the ability of the current health and educational systems to educate and support doctor and nurse clinicians.

The next section provides insight into nurse education in the light of the increasing demands on the health services today.

### **1.3.3 Nurse education in the current health system**

Historically, nurse education has limited nurses to fulfilling what is expected of them to manage the BoD in South Africa today. However, as already shown in this chapter, in the present environment, their increased role in the delivery of PHC has become an increasingly significant imperative. Their expected expanded roles and responsibilities are summarised by Mayers:

Today's primary care nurse and nurse practitioner needs to be a competent clinician, compassionate carer, and confident co-ordinator – the overlapping roles of caring, diagnosing and treating and managing. The challenge for the nurse in primary care is to combine her traditional caring and co-ordination role into a role which encompasses curing, caring and co-ordination, a new, yet critically important identity for the 21st century nurse (Mayers, 2010: 4).

If this is what is expected of the nurse today, a question arises: What prevents the nurse from fully taking on this new role and identity in the health system? Esterhuizen (1996: 11) explains that these barriers may be caused by a number of factors:

First, the paternalistic status of nursing in relation to the medical discipline which has socialised nurses to be non-assertive (Maykovich, 1980). Secondly, the fact that nursing has traditionally been subject to a passive form of education (Nicklin & Kenworthy, 1995; Dolan & Herrmann, 1983). Finally, the fact that the method of nurse

evaluation has been based on a course product rather than integration of theory in practice (Franke et al, 1995; Nolan et al, 1995).

These barriers to the enhanced status of nurses, the passive form of education and the lack of application of theory in practice need to be addressed not only through in-service training but also in undergraduate teaching. Mash (2012: 11) suggests that the problems/symptoms that clients present with in primary care consultations need to inform the curricula of nurses and doctors as well as the content of the clinical practice guidelines produced by the KTU. This will ensure that the needs of the clinician are practically matched to the demand for services required of them.

The next section explains how the KTU has contributed to the research and the implementation of these guidelines that aim to strengthen the healthcare systems.

## 1.4 The Knowledge Translation Unit (KTU)

The KTU, my site of practice, is presented first, followed by an explanation of KT.

The KTU of the University of Cape Town has undertaken three large pragmatic randomised controlled trials (RCT) involving 86 South African clinics and 27 000 patients. The trials have tested the interventions involving an integrated clinical practice guideline combined with educational outreach in South Africa. The interventions tested used PALS PLUS. Table 1.1 summarises these RCTs.

Table 1.1 Summary of three large pragmatic randomised controlled trials undertaken by the KTU

<b>The evidence</b>			
<b>Pragmatic randomised controlled trials</b>			
<b>Intervention</b>	<b>Year</b>	<b>No of clinics</b>	<b>No of patients</b>
<b>PALSA 1,2 Respiratory only</b>	2003	40	1 999
<b>PALSA PLUS 2,3 Respiratory + HIV</b>	2004–2005	15	10 136
<b>PALSA PLUS 4,5 Respiratory + HIV + task sharing</b>	2007–2010	31	15 573

1. Fairall, 2005, 2. Bachmann, 2010, 3. Zwarenstein, 2011, 4. Fairall, 2008, 5. Colvin, 2010

The evidence from these RCTs shows rapid scale-up (see Figures 1.1 and 1.2) of the programme and improved quality of care (Fairall et al, 2005, 2010, 2012; Bachmann, 2010; Zwarenstein et al, 2011; Colvin et al, 2010). Significant improvement was seen, for example, in:

- increased Tuberculosis (TB) case detection while sustaining/improving TB outcomes;
- increased HIV testing uptake among TB patients.

Qualitative evaluations have been undertaken alongside the RCTs and they show that the end-users – nurses in PHC – value the simple, clear guidelines and materials as well as the on-going clinic-based training and support (Stein, 2007, 2008; Fairall et al, 2012; Georgeu et al, 2012):

When nurses, who are consulting, are coming back to me telling me that they feel so confident seeing patients now because of training of PALS PLUS guideline directing them towards proper care treatment of clients. (PALS PLUS Facility Trainer (FT), KTU archival material).

To date the KTU has trained 60 master trainers (MTs) and more than 1 926 facility-based nurse trainers (FTs) who in turn have trained more than 20 000 healthcare workers on-site to use a clinical practice guideline. This programme is currently active in all nine provinces in South Africa.

The above information illustrates how the KTU focuses on health systems research and on promoting the adoption of its research findings into clinical practice.

#### **1.4.1 Knowledge Translation (KT)**

KT is a complex system involving a knowledge cycle, as seen in Figure 1.3. The work of the KTU focuses primarily on the process of putting research findings into practice (Bero, 1998; Grimshaw, 2004). This is done through some key interventions, namely: well-developed evidenced-based clinical practice guidelines that are effective tools when combined with education outreach. This strategy has been shown to change practice towards evidence-based choices (O'Brian, 2007;

Grimshaw et al, 2004). The following quotation from the Canadian Institute, the forerunners of KT, provides a succinct definition:

Knowledge translation is the exchange, synthesis and ethically-sound application of knowledge – within a complex system of interactions among researchers and users – to accelerate the capture of the benefits of research for the public through improved health, more effective services and products, and a strengthened health care system (Canadian Institutes of Health Research: online).

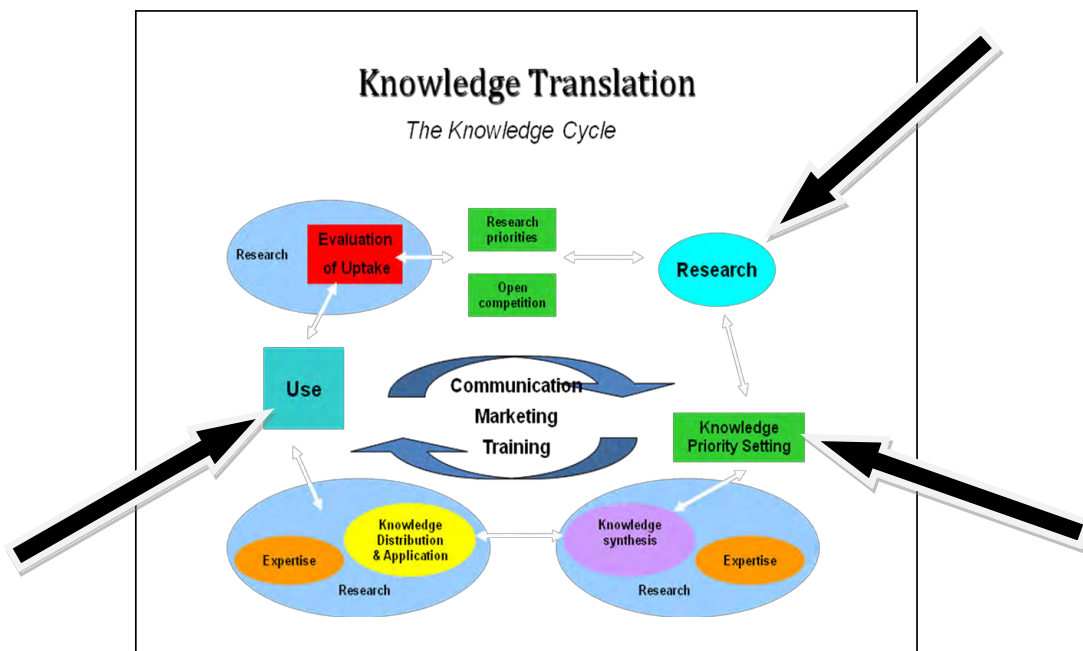


Figure 1.3 The Knowledge Translation Cycle; the arrows showing the aspects of KT which the KTU prioritises which culminates in the PALSA PLUS intervention (source: Canadian Institute of Health Research: online)

### 1.4.2 The PALSA PLUS intervention

The PALSA PLUS intervention comprises three main components, namely:

- the PALSA PLUS guideline;
- the nurse training programme using educational outreach for on-site training and a cascade model for implementation, and
- a structured follow-up support programme.

### **1.4.3 The PALSAL PLUS guideline**

The PALSAL PLUS clinical practice guideline was originally developed from the Practical Approach to Lung Health (PAL) strategy, a World Health Organisation (WHO) initiative to help developing countries better manage lung health and TB ([http://www.who.int/tb/health\\_systems/pal/en/PAL](http://www.who.int/tb/health_systems/pal/en/PAL)). PAL was adapted by the Free State (FS) DoH, the Lung Institute of the University of Cape Town and various other stakeholders for the South African public sector to become a renamed PALSAL.

PALSAL expanded into PALSAL PLUS to address HIV and AIDS and sexually transmitted infections (STIs) in response to the BoD in the country and, consequently, to assist health departments tasked with implementing comprehensive HIV and AIDS treatment services. The PALSAL PLUS guideline provides a knowledge system of integrated management and uses symptoms to guide nurses towards correct diagnosis and treatment, as most people present to primary care with symptoms before a diagnosis has been established. The special features of PALSAL PLUS include:

- algorithms to guide management;
- prioritising the need for urgent attention and referral;
- providing diagrams/photographs to assist in diagnosis;
- flagging chronic conditions;
- following a standardised approach for routine care and drugs are colour-coded to highlight prescribing provisions.

Figure 1.4 below is a snapshot of pages from the PALSAL PLUS guideline to illustrate these features. This guideline is aligned with the policies of the WC DoH.

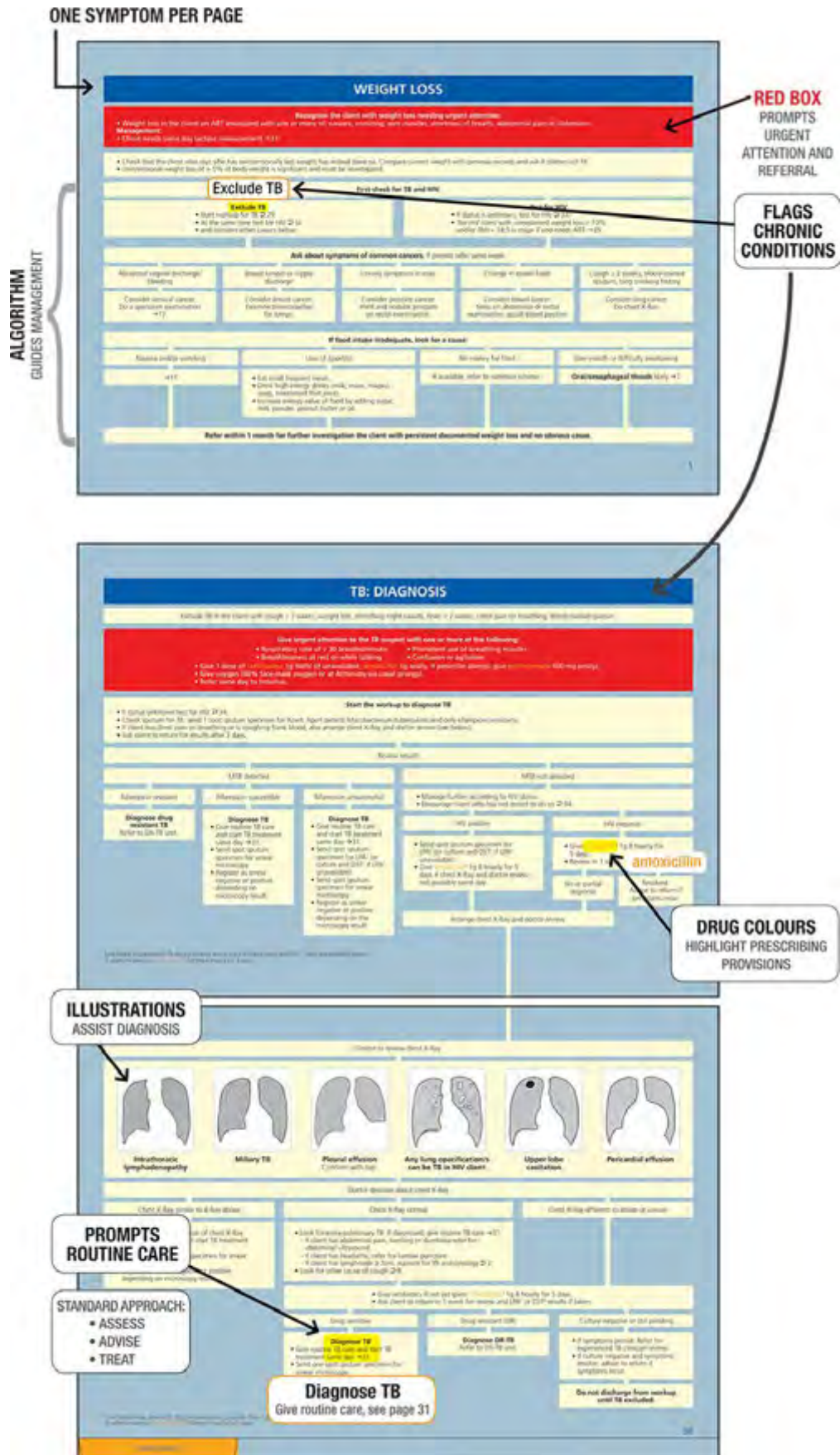


Figure 1.4 A snapshot of the PALSA PLUS guideline illustrating its unique features (source: KTU archives)

#### **1.4.4 The nurse training programme using educational outreach for on-site training and a cascade model for implementation**

The PALSA PLUS programme uses educational outreach a KT strategy as the method of in-service training. Educational outreach training sessions are: short (1–1½ hours), on-site and in-service training delivered by a trusted outsider using a small-group interactive training methodology. This is a multi-event intervention: 8–12 training sessions are held over a 3–4 month period. The passage of time between training and clinical decision-making should be limited. This means that learning and practice should be alternated. This implementation strategy has been tested across a wide range of settings and is shown to improve prescribing practices and the quality of care of the clients (O’Brian et al, 2007; Grimshaw et al, 2004).

The Train the Trainer to Train workshop (TtTtT) equips nurses to be confident in the contents of the guideline and to train interactive sessions on-site. The TtTtT is a departure from the ‘telling’ or the Freirian ‘banking’ mode of teaching – the classroom-based teaching style commonly used in health – and is replaced by ‘participatory liberatory classrooms’ of Kohl, Kozon, Henry. (Foley, 2001: 73). This training is embedded in the principles of adult theories and methods. Vygotsky, Lave and Wenger provide the theory for the social context of learning – theories and methods of learning and teaching that highlight the departure from current training programmes, making this unique programme challenging to bring into a health facility today. (See the table in Appendix A: showing the comparison of KTU and other trainings.) The TtTtT workshop, purposefully integrates content (guideline) and process (training).

This training of trainers is not a once-off training but rather aims to develop relationships of learning with a trainer. This journey starts with an intensive week-long training away from home, work and other distractions. All trainers are required to live in from the start of the training to form a social context for the learning of training and facilitation skills. (Appendix B provides an account of a subject’s experience of a TtTtT.)

A structured ongoing support programme allows for nurse trainers to go back to the facilities using a *cascade model* of training. See Figure 1.5, which represents the way in which the cascade model is used. I am the External Trainer and I train

MTs, who in turn train Facility Trainers (FTs) who train all the facility staff. The purpose is to minimise disruption to services, train all the staff at the same time to ensure team work and rapid scale-up.

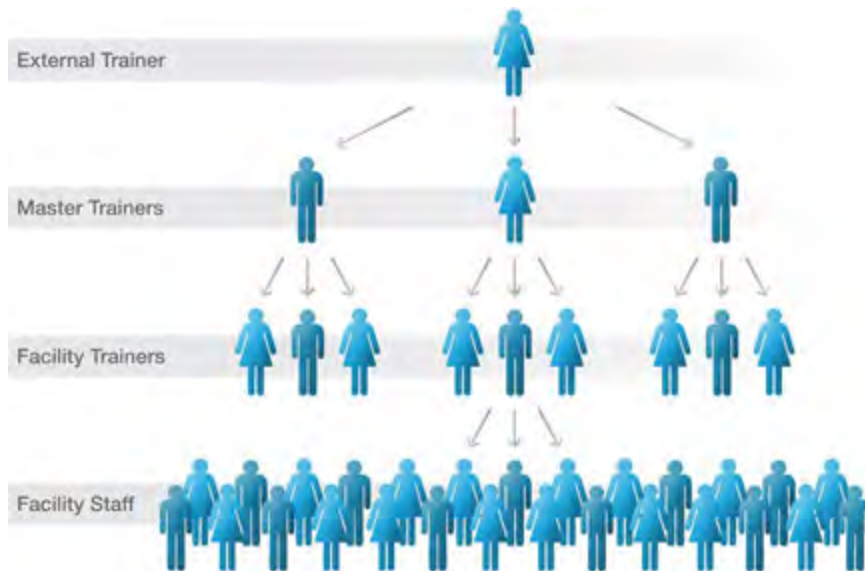


Figure 1.5 Representation of the cascade model of training to ensure team work and rapid scale-up

Figure 1.1 shows the cumulative growth of FTs throughout South Africa and Figure 1.2 shows the recorded number of staff trained in PALS PLUS from 2009 to 2012 as a direct result of the appropriate use of a cascade model.

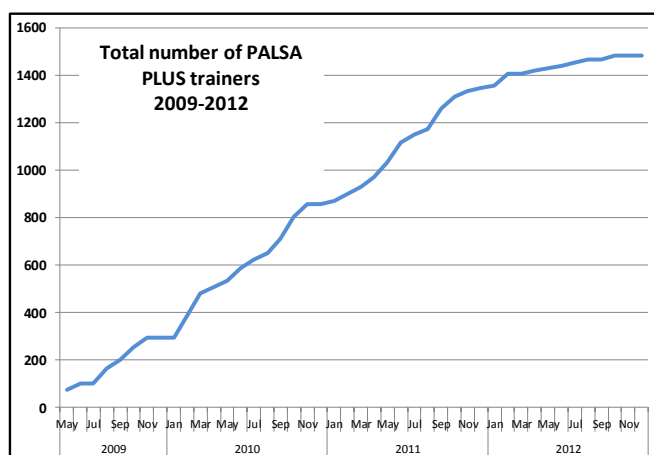


Figure 1.1 Total number of PALS PLUS trainers in South Africa, 2009–2012 (source: Final report to NDoH, December 2012)

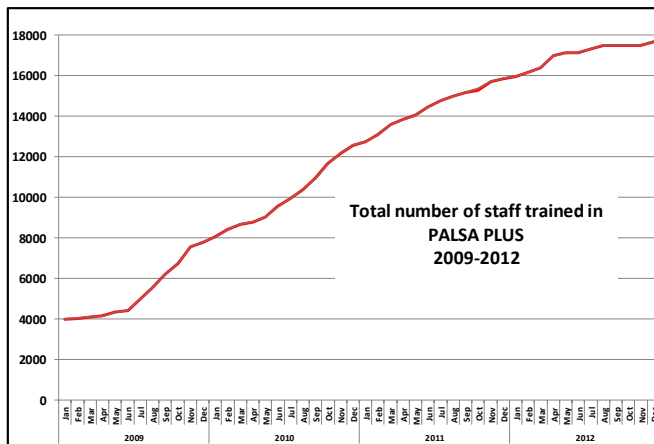


Figure 1.2 Total number staff trained in PALS PLUS in South Africa, 2009–2012 (source: Final report to NDoH, December 2012)

### 1.4.5 Structured follow-up support programme

The ongoing structured support programme offered to MTs and FTs tasked to cascade the information and support to the nurses they have trained is provided through a number of routes. The programme includes regular quarterly face-to-face support, monthly newsletters, including updates to policy, practical training tips and encouragement to use PALS PLUS. Figure 1.6 shows FTs interacting during a quarterly meeting.

The following extract taken from the work of Georgeu (2012: 11) shows the FTs’ experience of the support programme, and the value of educational outreach sustained through the ongoing support programme:

Trainers commented that the quarterly meetings and newsletters facilitated the sharing of ideas, particularly on how to address barriers that they encountered. As many of the trainers also had a supervisory role in the clinics, they saw benefits to interacting more regularly, and less formally, with clinic staff through the outreach training sessions. Some trainers noted that, as TB/HIV coordinators, they were often seen as ‘checking up’ on nurses and that, in contrast, the training allowed more informal interactions. This, they felt, resulted in nurses feeling more empowered to contact trainers directly to ask questions and request support on problems, including clinical queries. For example, trainers reported receiving telephonic queries from nurses regarding the guideline, a communication channel that they thought that nurses were previously quite reluctant to use. This suggests an expansion of their supportive role as managers and not just as PALS PLUS trainers.



Figure 1.6 Picture taken at a quarterly support meeting in the Western Cape 2011. It shows the trainers interacting and discussing the PALSA PLUS guideline

## 1.5 Rationale for research

Drawing on my own experience and that of the MTs, supported by the written evaluations of the participants following a TtTt, emotions run high when the nurses say that if they had had PALSA PLUS earlier, they would not have mismanaged so many of their clients. Some even say that many more people would be alive today – a heart-wrenching statement. Many report that it was the first training they had attended where they were treated like adults who had experience and who could contribute and grow in their professional and personal lives, deepening the purpose and meaning and commitment to their nursing profession (Georgeu, 2012, unpublished).

Nurse-trainers leave the five-day TtTt claiming “transformation” and the commitment to implement the PALSA PLUS programme, yet they go back to their clinics where they seem to face the same barriers year in and year out. I find the claim of being “transformed” after a TtTt and leaving the training on a “high” to be frustrating to witness because of knowing what awaits them on their return to “business as usual” at the facility; the detail of this experience retold during steering committee meetings and the multiple meeting places encouraged through the support programme.

On the other hand, some trainers go back and train other staff members and really do make a difference to the quality of care of the clients through the use of PALS PLUS. There is evidence to support this claim from the training records received, feedback from supervisors about the health statistics in the facility and from the trainers themselves at the quarterly meetings.

The implementation of PALS PLUS varies in practice and in its uptake by the nurses and managers alike. In the most recent research on the PALS PLUS programme, Dr Kirsten Miller undertook to research "The successful diffusion of innovation in the primary healthcare sector in South Africa" for her MBA dissertation (Miller, 2011). Interviewees were asked to provide examples of what they perceived to be instances of either successful or less-successful implementation of PALS PLUS. They were then asked to identify those factors that had an impact on the success or perceived failure in each case they cited. Some of these factors included: ineffective/absent management support, staff turnover, distances between facilities and poor infrastructure. This example of variance in uptake also reflects the barriers and facilitators to implementation, themes familiar in both the qualitative and quantitative research undertaken in the KTU (Fairall, 2005, 2008; Bachmann, 2010; Colvin, 2010; Georgeu, 2012). My case study aims to interrogate further the complexity of the multiple organisational layers of the health system that prevent the uptake of PALS PLUS.

The following extract from Georgeu (2012: 11) pertaining to the external factors that are barriers to implementation provides a glimpse into the realities faced by the FTs.

In the initial stages of implementation, key organizational barriers included the absence of a management directive to nurses to utilize the guideline and insufficient efforts to engage doctors and pharmacists in clinic-level training. The latter had negative consequences for nurses attempting to implement the guideline, as they were working from 'different protocols' to doctors and pharmacists, resulting in disagreements. There were also disparities between facilities in terms of the medicines stocked and available for nurses to prescribe. Most trainers also experienced a number of logistical difficulties in delivering outreach sessions, particularly in securing training appointments and achieving full coverage of clinics. This was seen to result from insufficient management buy-in, competing training courses, work overload of trainers and nurses, attrition of staff, absenteeism for various reasons and often a combination of all of these. Managers did, however, begin to address some of these difficulties in the later stages of implementation. An additional factor was achieving training coverage in some of the rural sites where clinics are distant from one another,

resulting in very large amounts of travel time to reach a small number of staff. In such settings, the full outreach training model may not be a viable option.

### **1.5.1 Purpose and significance of this research**

This dissertation seeks to explain and provide an understanding of the complexity of the multiple organisational layers, the interactions and relationships within the organisation compounded by its existing organisational practices. To date there has not been an explicit focus on organisational practices and relationships that link to the complexity of KT and its promotion of knowledge into action and processes.

The following statement speaks to the complexity of health systems:

Health systems are complex creations with multiple organisational layers. These professional and structural divisions can create impenetrable barriers to innovation diffusion, especially innovations which influence more than one profession or area (Miller, 2011: 17).

Chapter 2 shows in detail how Engeström's (2001) AT provides the theoretical lens and the methodology to explore barriers and facilitators to implementation which takes into account the social context in which learning takes place and at the same time explores relationships within the "multiple organisational layers". I felt that it would be useful to identify the "historically accumulated structural tensions within and between activity systems" (Engeström, 2001: 137) that can be used as a source of change and transformation.

If trainers claim transformation during a TtTtT workshop, who and what prevents them from implementing PALSA PLUS successfully? The heart of this matter is to know what to do practically to assist with the uptake of PALSA PLUS into the healthcare services. It is essential to determine what needs to be done through the design and implementation of the training to address organisational issues, help the nurses to take ownership of their roles and responsibilities with courage and confidence, as in essence, they are the leaders of PHC.

### **1.5.2 Limitations**

This case study is limited to one urban facility in the WC. Ideally time should also have been spent in a deep rural facility in the Eastern Cape (EC), for example, because it would have provided a comparative lens to the data and also provided a

voice befitting a programme embedded in all nine provinces of South Africa. However, because of time constraints, limits to the scope of this dissertation and the complexity of obtaining ethical approval across provinces, this case study remained in the WC.

## **1.6 Structure of the dissertation**

This dissertation comprises five chapters:

*Chapter 1:* introduction and brief overview of the background to the case study.

*Chapter 2:* theoretical underpinning of this case study explained, namely AT and, to an extent, KT. Terminology applicable to this case study is provided.

*Chapter 3:* research design and the methodological approaches used for this in-depth descriptive case study.

*Chapter 4:* findings of the interviewees using the structure of AT. Contradictions and emerging themes identified.

*Chapter 5:* summary and analysis of the findings from chapter 4.

*Chapter 6:* the discussion re-engages with the literature, draws conclusions and makes recommendations for further research.

## **1.7 Summary**

This chapter has situated the research undertaken in the context of PHC in South Africa and looks at the role of the KTU in providing quality care through the introduction of a clinical practice guideline by a nurse-trainer using educational outreach for on-site training and a cascade model for the new implementation of Clinical Practice.

As the designer of the training programmes and their implementation, I had come to realise that the focus of the research output from the KTU is on strengthening clinical practice in health systems. From an adult education perspective, the complexity of the multiple layers of organisational practices that affect the success or not of PALS PLUS had not yet been fully explored or explained. This dissertation is an attempt to introduce a theoretical language into the substantial body of work produced by the KTU.

# 2 Theoretical framework and literature review

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## 2.1 Introduction

This study is framed by AT in terms of its design and method of analysis. I turned to AT because it is a theory which recognises that learning takes place in a social context; there is an organisational focus with regard to learning and it enables relationships to be explored systematically through the use of the components of an Activity System which is described further in this chapter.

I provide a brief overview of healthcare interventions in clinical settings as well as the growing popularity of AT in learning organisations. The development of AT from 1st- to 3rd-generation theory is then explained. One of the complexities of this dissertation is that it is at the boundary of KT and AT. The primary research work is in AT but in order to provide depth and context to the PALS PLUS intervention used for this case study, I found it necessary to provide a conceptual understanding of KT. A brief unpacking of the definition of KT as applied to the case study is provided.

A literature review highlights the gap in studies that use AT in PHC interventions in South Africa; however, the literature does show how AT is used in multiple settings and conditions providing insight into relational aspects of work, how it is done and by whom. It also showed how AT is used for formative work and as an intervention. I have drawn on the empirical work of Engeström, Igira (2008) and Edwards (2008). Kerosuo, although not quoted, also provided an in-depth understanding of the boundaries in healthcare practice.

## 2.2 Healthcare interventions in clinical settings

In an attempt to gain an understanding of the complexity of healthcare intervention in clinical settings, I interrogated journals such as *Clinical Epidemiology*, *Implementation Science* and the *British Medical Journal (BMJ)*. Common themes emerged. First, there is the awareness that changing practice or behaviour is complex, and that there is no easy solution. Also, the notion of knowledge and its

application in practice is being grappled with and health systems are being interrogated, with the purpose of improving the quality of care. The research of Kohn (1999), Davis (2003), Madon (2007), Michie (2009) & Graham (2006) illustrates these themes.

“A large gulf remains between what we know and what we practice” (Davis, 2003: 33). The purpose central to KT is to close this gap. “Health systems fail to optimally use evidence with resulting inefficiencies and reduced quality and quantity of life” (Davis, 2003; Madon, 2007; Strauss, 2011: 6). The question of what can be done arises and Strauss (2011: 1) clearly spells out the growing need to “develop valid strategies for assessing the determinants of knowledge use and for evaluating the sustainability of knowledge translation interventions”.

Furthermore, I read with interest the systematic review of qualitative literature on educational interventions for evidence-based practice by Bradley et al (2005) who recommends further studies to “... explicitly use educational theory to plan, implement and evaluate educational interventions”. This might seem useful; however, it is also recognised that there is a lack of quality in the reporting of behaviour change interventions. Michie (2009) outlines the rationale and requirements for reporting on behaviour change interventions. Albrecht et al (2013) report on the influence of the paper mentioned by Michie, where he explains that it “created and refined a checklist to operationalise the Workgroup for Intervention Development and Evaluation Research (WIDER) recommendations in a systematic review”. The KTU aims to adhere to the WIDER recommendations for reporting on its KT interventions.

Having examined this literature, a gap remains in the understanding and explanation of the relational context in which learning takes place in organisations. The following section explains my quest for an adult education theory.

### **2.3 Growing popularity of AT to review learning organisations**

Twenty years ago, Engeström (1993: 64) stated that “rumours about activity theory have been around in Western behavioural and social sciences for some time. But in

many ways, this theoretical approach is still one of the best-kept secrets of academia.” He continues to explain that:

[T]his is partly due to language barriers and also partly due to the epistemological foundations of activity theory which are not immediately transparent to scholars unfamiliar with classical German philosophy and dialectics (see Ilyenkov, 1982; Lektorsky 1980, 1984; Mikhailov, 1980 and Bakhurst 1991 for careful Anglo-Saxon interpretation) (Engeström, 1993: 64).

Twenty years on, this evolving theoretical framework has indeed gained popularity, as succinctly stated by Roth and Lee:

... the authors demonstrate how it is a theory for praxis, thereby offering the potential to overcome some of the most profound problems that have plagued both educational theorizing and practice (2007: 1).

Perhaps, the lack of use of the appropriate educational theories to develop and implement health systems interventions is the result of the complexity of interventions that cross the multiple layers of the organisation and the associated relationships. With AT being referred to as a “theory of praxis”, praxis needs to be understood as “being creative: it is other-seeking and dialogic” (Smith 2011: 1).

## **2.4 The development from 1st - to 3rd -generation AT**

To describe the Activity System, Engeström draws on the classical work of Vygotsky’s idea of cultural mediation expressed in the triad of subject, object and mediating artefact (see Figure 2.1). The insertion of cultural artefacts into human activities was new and innovative at that time because the unit of analysis “now overcame the split between the Cartesian individual and the untouchable societal structure” (Engeström, 2001: 134). The individual needed to be understood through cultural means and society needed to be understood through the agency of individuals who use and produce artifacts.

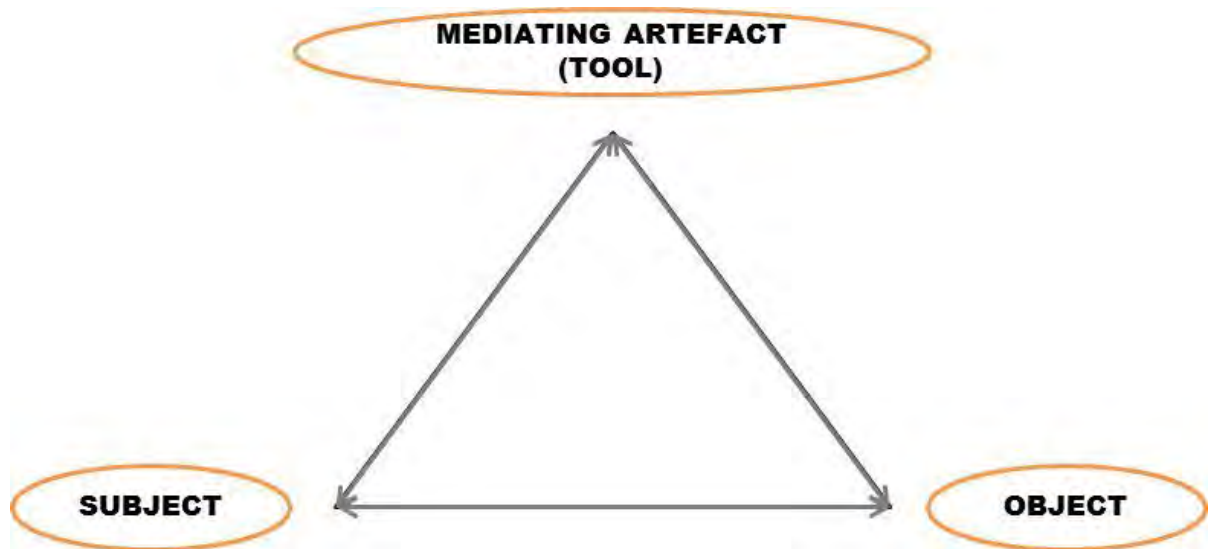


Figure 2.1 1st -generation AT's (Vygotskian) model of action (reformatted from Bakhurst, 2009)

Igira (2008a: 80) explains that the activity system (or unit of analysis) was extended by Engeström, who “added the notions of *rules and procedures, division of labour, and community* to describe the social context within which the collective activities are carried out”. Figure 2.2 is a diagrammatic representation of a 2nd-generation Activity System. Central to the prime unit of analysis is the network of relations to other activity systems. “AT is therefore, committed to understanding both individual and collective practices from a socio-cultural and historical perspective’ (Mwanza, 2009: 2). No activity is taken in isolation and is therefore interrelated with others. These evolve over time and carry the history and the culture of the activity system. “A collective activity system is driven by a deeply communal motive. The motive is embedded in the object of the activity” (Engeström, 2000: 964). The object of the activity or the “problem space/raw material need to be [transformed] into an outcome” (Engeström 2008).

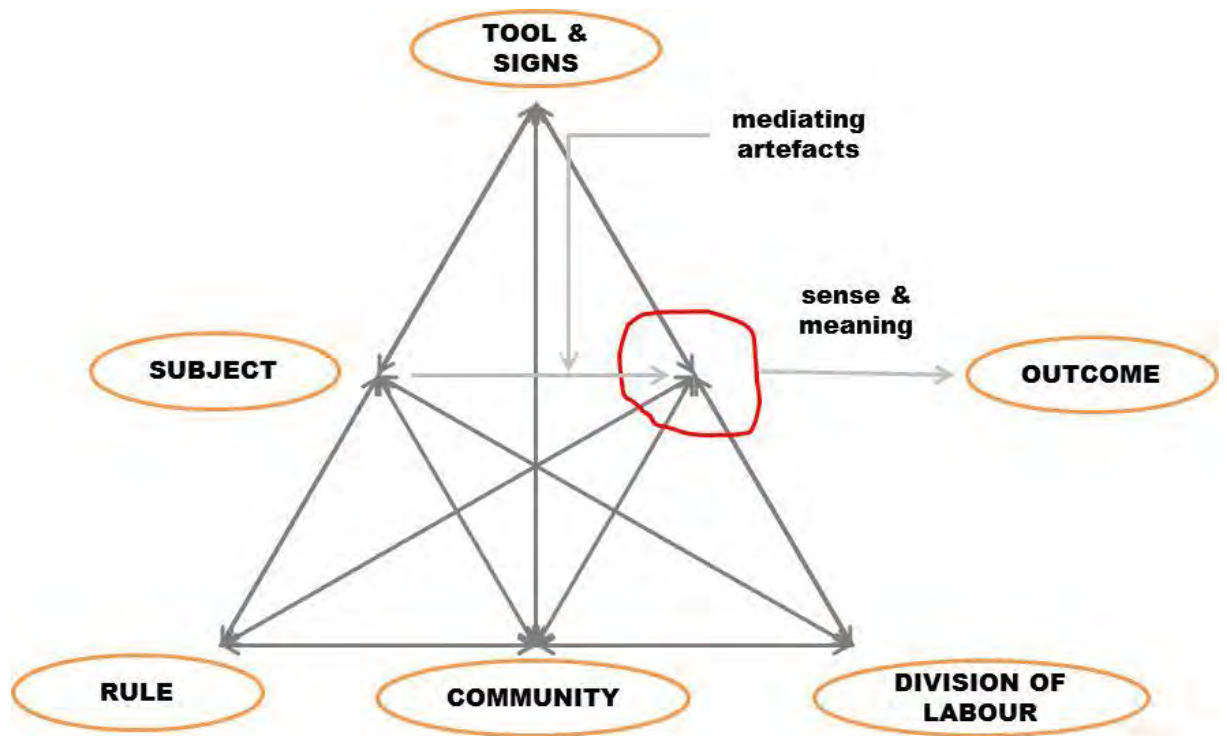


Figure 2.2 The structure of a 2nd-generation activity system (Engeström, 2001: 135)

To summarise and make sense of this progression, Avis succinctly stated:

The upper part of the triangle represents individual and group actions embedded in an activity system, with the lower referring to the division of labour between members of the community who share the general object of activity, and finally the rules that regulate the action (2009: 158).

The ovals in the diagrams of an activity system represent the object-oriented actions and, to quote Engeström (2001: 134), “these are characterised by ambiguity, surprise, interpretation, sense making, and potential for change”. Engeström (2001) emphasises “that the dynamics of the system – the forces of its development – result from ‘contradictions’ between its elements”.

In 3rd-generation AT the prime unit of analysis is the network of relations to other activity systems is central: “AT is therefore committed to understanding both individual and collective practices from a socio-cultural and historical perspective” (Mwanza, 2009: 2). No activity is taken in isolation and is therefore interrelated with others. It evolves over time and carries the history and the culture of the activity system. “A collective activity system is driven by a deeply communal motive. The

motive is embedded in the object of the activity” (Engeström, 2000: 964). Engeström (2001: 136) schematises 3rd-generation AT in the following way:

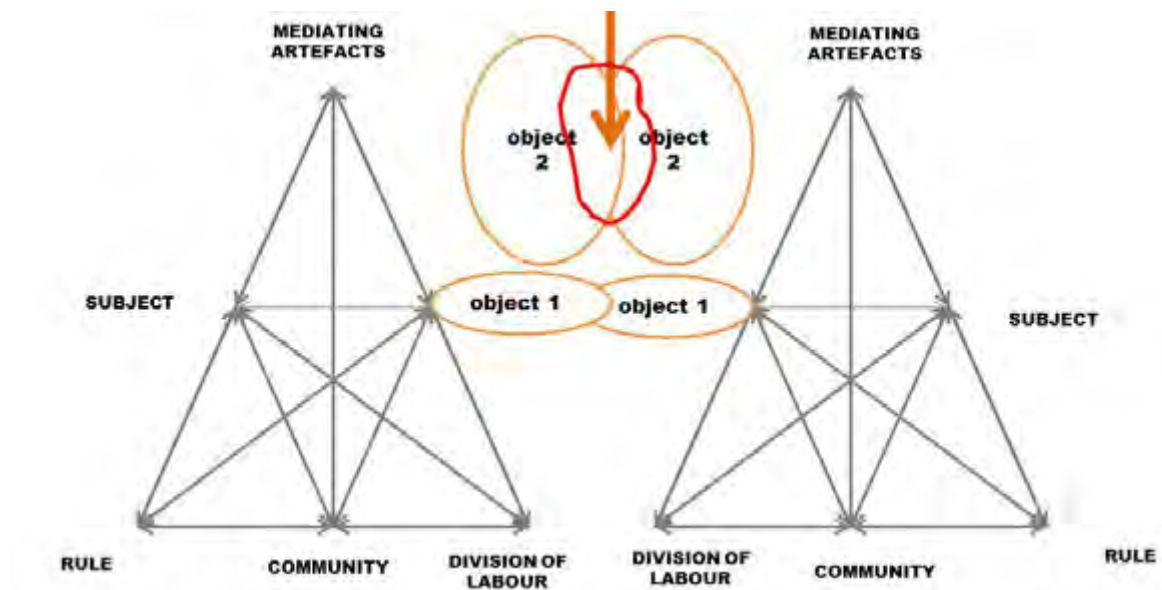


Figure 2.3 Two interacting activity systems as a minimal model for 3rd-generation AT (redrawn from Engeström, 2001: 136)

This case study puts into operation the Activity System to explain the subjects and the interrelations between rules, tools, community and division of labour. Central to the object is the ability to identify and resolve contradictions; which process leads to transformation.

## 2.5 Defining the use and application of AT

After reading many research papers across many disciplines pertaining to the use and application of AT, I found myself confused. AT is referred to as an intervention, a model, a framework, a theory, a method, a tradition or principles; each offering a variety of possibilities and leaving nothing clear or concise in my mind. I first turned to Engeström (1993: 97) for guidance:

Activity theory is not a specific theory of a particular domain, offering ready-made techniques and procedures. It is a general, cross-disciplinary approach, offering conceptual tools and methodological principles, which have to be concretised according to the specific nature of the object under scrutiny.

This definition rang true for me, particularly in my work, which is across disciplines. I have concretised the conceptual tools to provide a structure and method for analysis. I then wondered how other researchers view AT. Clot (2009: 228) acknowledges Engeström for his contribution to the theory of intervention: "... he has repeatedly shown that the nature of a general model of activity is such that it can become an instrument of action for professionals themselves and not only for researchers". My understanding of this quotation is that the creation of models that could prove to be effective in practice would encourage interaction with and engagement of participants, therefore creating the possibility of ownership and agency of work and knowledge within organisations. The model provides a framework and a structure, thereby assisting me to understand the impact of the work of the KTU through its healthcare intervention, through the lens of AT.

The flexibility of AT, in my view, is a strength because it is transferable across a cross-section of disciplines and workspaces, from banks to hospitals to permaculture: "Cultural-Historical Activity Theory (CHAT) has been widely applied in education, linguistics, anthropology, and cultural research" (Igira, 2008b: 80).

To date, I have used AT as a model to analyse, understand and explain a situation.

## **2.6 AT in the literature**

After reviewing the literature, I was unsuccessful in finding studies in the use of AT theory and/or its application within the context of learning in complex healthcare interventions in PHC in South Africa. The search was then extended, also unsuccessfully, to healthcare in lower- and middle-income countries (LMIC). There were no accounts of scale-up to compare with or to help me understand the work of the KTU through the lens of AT. Comparing studies from the North with studies from the South was also unsuccessful because the serious impact of the burden of disease (BoD), the high levels of poverty and complex socio-political structures of the South. What I did find useful was to explore a range of settings in LMICs, where the wide use and application of AT across multiple disciplines and terrains is being used, for example: in *education* (Malawi – Mtika, 2008; South Africa – McMillan,

2011); in *leadership/culture* (Ghana – Oduro, 2003); in *information technology (IT)* (Tanzania – Igira, 2008a & 2008b); in *permaculture* (Zimbabwe – Mukute, 2009) and in *organisational development* (South Korea – Joo, 2011).

I then focused on the application of AT in healthcare. A classic example of the application of 3rd-generation AT in healthcare is the Children’s Health Care Centre in Helsinki (Engeström 2001), where a heavy burden was placed on the families and society because no one took overall responsibility for a child’s care trajectory. The reason that this situation arose was that the child with acute chronic illnesses and, especially those with multiple or unclear diagnoses, would drift between caregiver organisations. As a result of political pressure a change in the division of labour was brought about, leading to the move towards the use of primary care services instead of the Children’s Hospital.

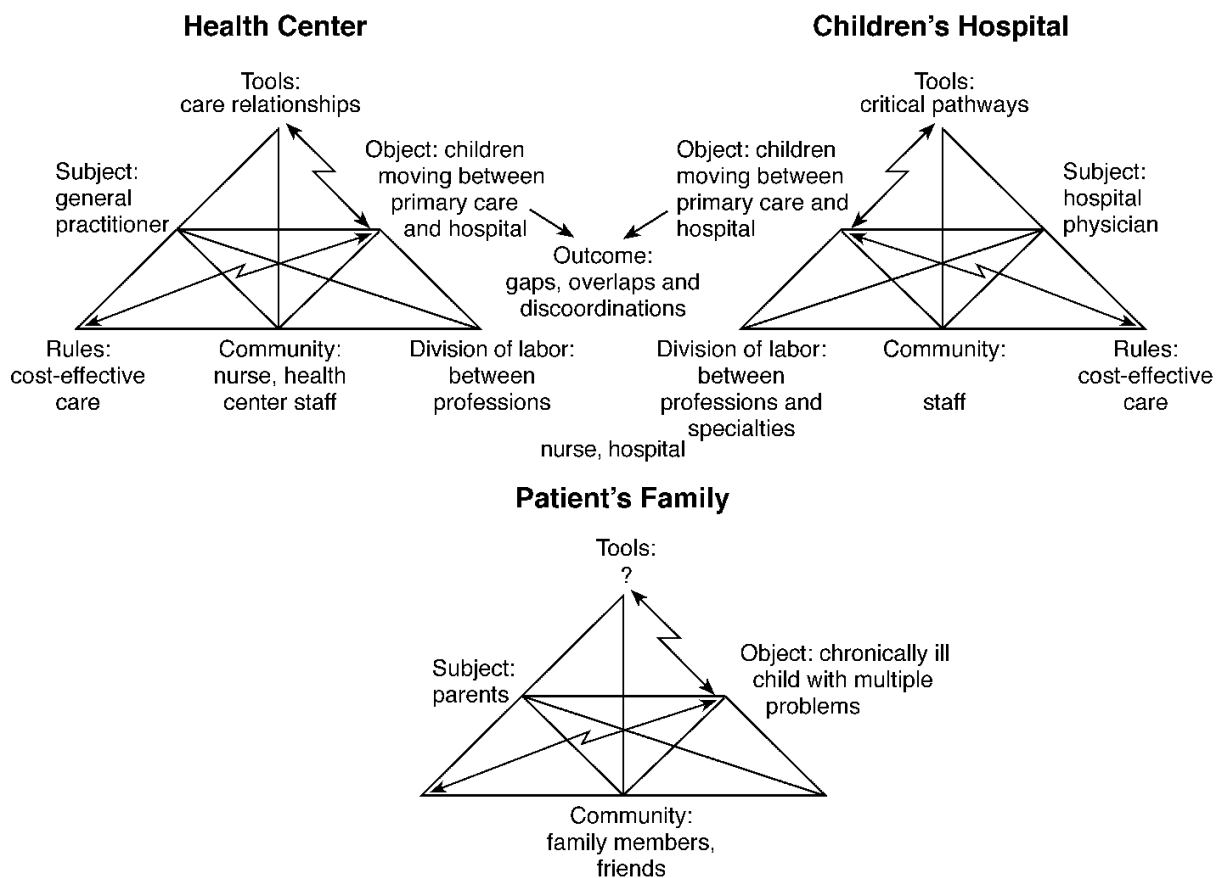



Figure 2.4 A schematic example of contradictions (Engeström 2001)

Figure 2.4 is a representation of the contradictions between the Health Centre and the Children's Hospital causing the heavy burden of the families of chronically ill children. The contradictions between the components of an activity system depicted by the following arrow  brings to light the tensions that need to be transformed into outcomes with the help of appropriate tools to ensure a change in the division of labour where the child's care was moved to primary care services. This example of a formative intervention illustrates where contradictions were identified and how they were resolved.

Apart from the empirical studies by Engeström, I have also read the works of Igira (2008a & 2008b) and Edwards (2008). What sets South Africa apart is the reality of our healthcare system. It is not comparable to well-resourced countries, in terms of both finance and the lack of healthcare professionals. Igira's work is primarily focused on the application of technology in healthcare, a topic of interest here because of the development of the work of the KTU towards applying technology. Useful in her work is the that she too started out using AT as the theoretical lens and then combined that with theories particular to Information Technology (IT).

However, the extensive work of Edwards provided an in-depth understanding of the boundaries in practice and I have referred to her work in the chapters that follow.

What I learnt from the work of Engeström and Mukute in particular, is their systematic, structured use of the Activity System as a unit of analysis. Igira's work brings into focus the transformation aspects of work and how this is affected by design and implementation, a parallel theme to my case study.

In summary, AT assists in identifying and describing work, how it is being done and with whom it should be done. It also provides a mechanism for transformation through the identification of barriers and facilitators to the implementation and ways to change and resolve them.

## 2.7 Why the use of AT for this dissertation?

Bearing in mind that I want to understand the socio-cultural nature of the workplace through exploring what happens to organisational practices and relationships when PALS PLUS is introduced into a facility by a nurse-trainer, the following statement by Igira explains clearly why I have selected AT for this case study:

CHAT offers a dialectical approach, open to change and recognition of the emergence of mundane innovation in everyday practice, with emphasis on the social and holistic nature of individual and collective learning and human development (2007: 80a).

This quotation makes sense because the healthcare system is a dynamic and evolving work environment, challenged by human relationships and complex systems. I sought to find a theoretical framework structured to provide an understanding of the complexity of knowledge systems, relationships and work environments and at the same time showing flexibility for interpretation and adaptation across multiple terrains and contexts.

Table 2.1 summarises the elements of an activity system which have been concretised for use in this case study as described in Chapter 3.

Table 2.1 Summary of the elements of an activity system (reproduced from Engeström, 2008)

<b>Components</b>	<b>Definition</b>
<b>Rules</b>	Explicit and implicit regulations, norms, conventions and standards that constrain actions within an activity system.
<b>Community</b>	Individual groups and sub-groups who share the same general object.
<b>Division of labour</b>	Horizontal division of tasks and the vertical division of power and status.
<b>Subject</b>	Position and point of view of an individual group/sub-group as a perspective of analysis.
<b>Instrument/tool</b>	Tools and signs/mediating artefacts.
<b>Object</b>	Problem space/raw material to be turned into an outcome.

This case study highlights the tensions created by the introduction of PALS PLUS into the healthcare facility. The iterative process undertaken to explore all the possibilities of the inter-relationship between the sub-triangles of an activity system is described in Chapter Three.

Central to this dissertation is the interrogation of *contradictions* because they occupy a rather uncomfortable space that when recognised can become the point of transformation. The traditional understanding of contradictions is defined next.

## **2.8 Definitions applicable to this case study**

This section provides definitions of the additional concepts used by Engeström that are relevant for the analysis of this case study:

### **Contradictions**

Contradictions are “historically accumulating structural tensions within and between activity systems” (Engeström, 2001: 137). The central role of a contradiction is that it is recognised as a source of change and development. What is useful for this case study is to recognise the difference between primary and secondary contradictions. According to Engeström (1996: 72) “Activity Systems are characterised by inner contradictions. The primary inner contradictions reflect the basic contradictions which are characteristic of the socio-economic formation as a whole. While Avis (2007: 170) explains that “secondary contradictions arise when a new element that enters the activity system causes disruption.”

### **Co-configuration**

Co-configuration it is work done within an organisation that explores the contradictions that could lead to transformation. It is adaptive work from the old to the new; the focus is on the development of new products/tools to adapt to the changes experienced by the subjects. These new tools need to be experienced for them to “bridge the design and implementation of organisational transformation” (Engeström, 2007: 24).

### **Boundary crossing**

Working in healthcare today requires teamwork whereby the essence of boundary crossing is the understanding of the demands made on practitioners by inter-professional work. "These demands involve working within systems of distributed expertise, exercising relational agency and negotiating their identities with other professionals and with clients" (Edwards 2008: 5). These boundary spaces can also be understood as "horizontal expertise where practitioners must move across boundaries to seek and give help, to find information and tools wherever they happen to be available" (Engeström, Engeström & Kärkkäinen, 1995: 332). Another clarification is that "... they [boundaries] can be uncomfortable places where identities are questioned and priorities argued" Edwards (2008: 6).

### **Knotworking**

Knotworking can be defined as: "The rise and proliferation of knotworking is associated with ongoing historical changes in work and organizations" (Engeström, 2000: 972). Engeström continues:

[T]he notion of a knot refers to rapidly pulsating, distributed and partially improvised orchestration of collaborative performance between otherwise loosely connected actors and activity systems. A movement of tying, untying and retying together seemingly separate threads of activity characterises knotworking (2000: 972).

From this quote I understand knotworking to be as an active process whereby the evolving changes within an organisation are actively negotiated between actors and activity systems.

### **Expansive learning**

The process of expansive learning can be defined as "the capacity of participants in an activity to interpret and expand the definition of the object of activity and respond to it in increasingly enriching ways" ... "expansive learning involves the creation of new knowledge and new practices for a newly emerging activity" ([www.bath.ac.uk/research/liw/resources/Expansive%20learning.pdf](http://www.bath.ac.uk/research/liw/resources/Expansive%20learning.pdf)).

In other words expansive learning could be understood as a dynamic process between participants involved in expanding their object towards a more creative work environment.

As mentioned in the introduction, one of the complexities of this dissertation is that it is at the boundary of several disciplines. Discussing the findings became almost impossible when using the language of AT only. In the following section I briefly provide a conceptual understanding of aspects of KT used by the KTU and the use of the language of AT to interpret the role-players of the KTU.

## 2.9 Knowledge Translation (KT)

The PALSA PLUS intervention is essentially about the embedding of a clinical practice guideline into practice. To understand the implications of and provide a language for this case study, I found it necessary to revisit the definition of KT which is:

Knowledge translation is a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of South Africans,<sup>1</sup> provide more effective health services and products and strengthen the health care system (Canadian Institute of Health Research: online).

In my understanding (through interrogating the Canadian website), KT is a dynamic and iterative process that comprises the following aspects; its application to Sunnyvale<sup>2</sup> can be explained as follows:

- \* *Synthesis* – the KTU guideline developer engages with the local policy, research findings and examines systematic reviews in order to synthesise this knowledge into an understandable, user-friendly clinical practice guideline. Once pages are formulated, end-users are engaged in working groups to provide their expert opinions.
- \* *Dissemination* entails ensuring that the messages contained in the guideline and training materials are tailored to the end-user.
- \* *Exchange* refers to the interaction between decision-makers – in this instance, the DoH, researchers, and the KTU, who engage in the process of planning,

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<sup>1</sup> Changed from “Canadians” to “South Africans” by researcher.

<sup>2</sup> Sunnyvale, the name given to the facility used in this case study.

producing and implementing tools to apply new research to decision-making and practice. Exchange therefore influences the relationship between the KTU and the DoH.

- \* *Ethically sound* means working within appropriate regulatory frameworks, which means that the recommendations in the guideline need to be in line with the nurse’s scope of practice. All the recommendations also need to be scientifically based.
- \* *Application of knowledge* in KT means exactly that: the application of knowledge gained from research findings and policies is then applied in practice in Sunnyvale through the use of the guideline.

Figure 2.5 highlights the current focus areas of the KTU, namely, research, knowledge, priority setting and understanding the user. This is done so that the knowledge translation cycle can be examined and improved upon. The underlying theme of translating research findings that effect changes in policy is a constant.

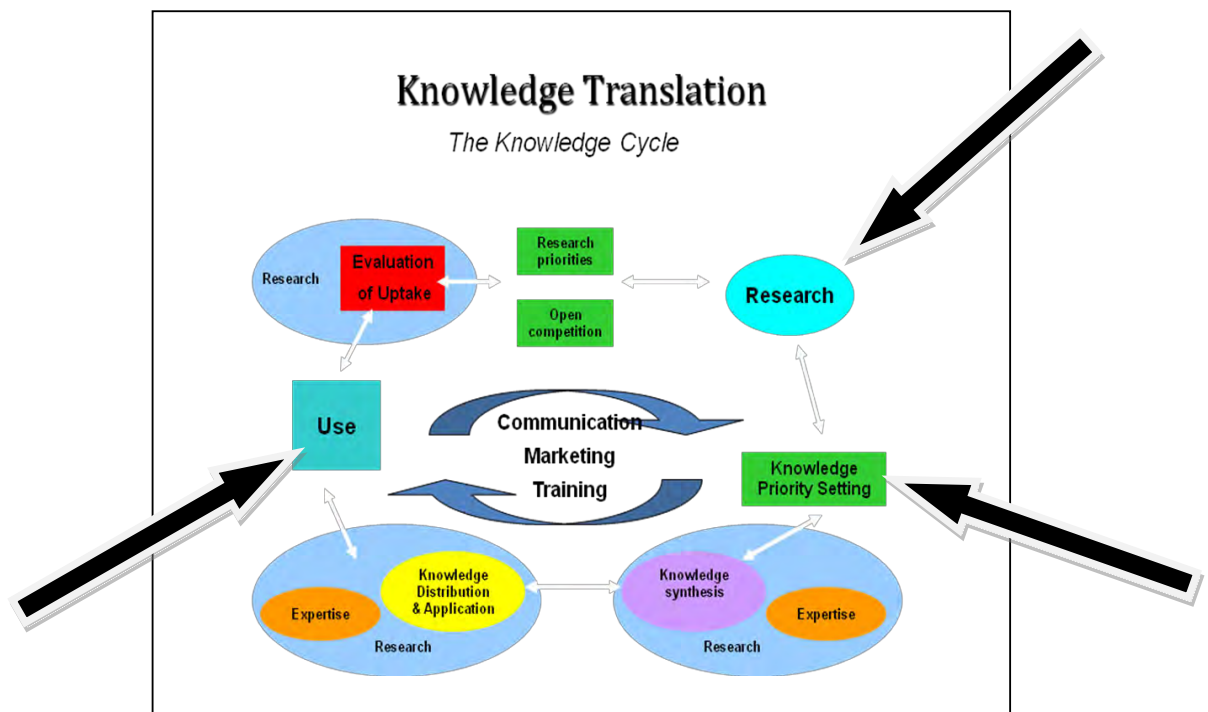


Figure 2.5 The Knowledge Cycle of Knowledge Translation (source: Canadian Institute of Health Research: online)

## 2.10 Illustrating the conceptual use of AT for the KTU

In an attempt to explain KT further, and to illustrate how AT can be used conceptually, I identified the key role players of the KTU who would be directly involved in working with the DoH and the implementation of the PALSA PLUS programme.

The **SUBJECTS**, namely, the Guideline developer, the Researcher and the Trainer and Implementer, are explained through the application of the nodes of an Activity System.

The collective **TOOLS** of the **SUBJECTS** are the PALSA PLUS guideline and the PALSA PLUS training and support materials. **RULE** refers to the organisational practices pertaining to the training culture and the information and communication systems used in the DoH; the policies and practices used to inform the content of the PALSA PLUS guideline. **DIVISION OF LABOUR** ensures that the scope of practice is clearly stated to ensure safe and confident practice. **COMMUNITY** directly involves managers and nurses and indirectly their impact on the client population. The desired and combined **OUTCOME** could be summarised as quality of care.

Figure 2.6 below first provides a possible overall interpretation of the KTU as an activity system.

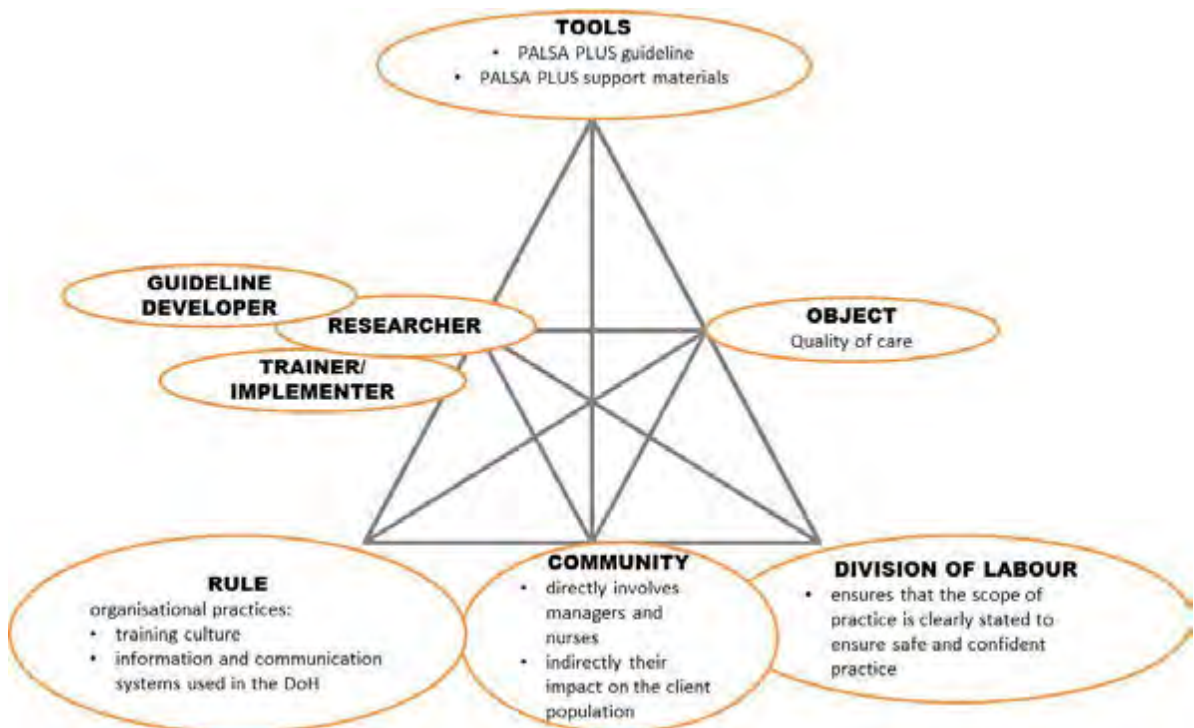


Figure 2.6 The KTU represented as an Activity System

Figure 2.7 shows the Researcher represented as an individual Activity System, indicating the particular focus of the nodes. To provide specific and focused care that has a positive outcome on population health, the researcher and research team are required to do ethically sound research and understand population health and economic trends; this in turn provides input on policy decisions which the policy makers use. This policy then informs the guideline development team (as seen in Figure 2.8), who in turn have a direct bearing on the Trainer and Implementer, as shown in Figure 2.9.

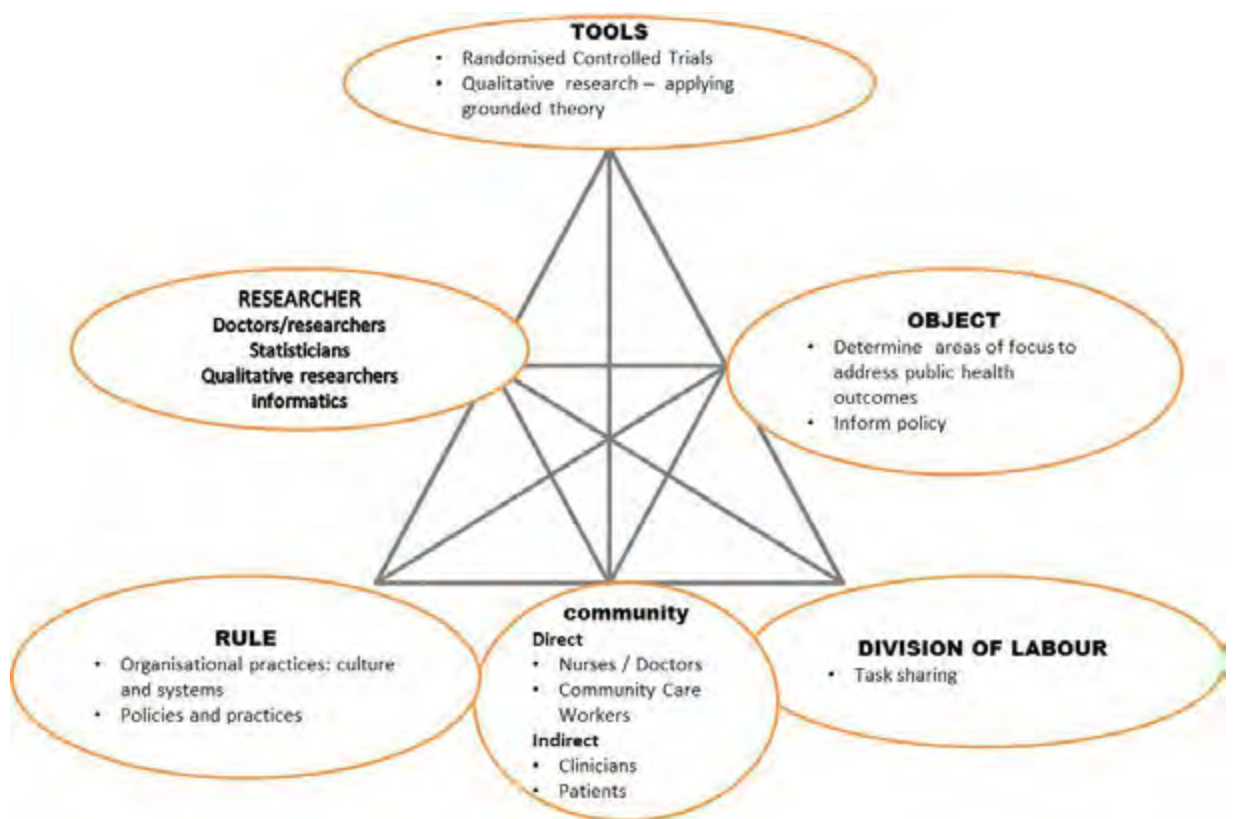


Figure 2.7 The Researcher represented as an individual Activity System

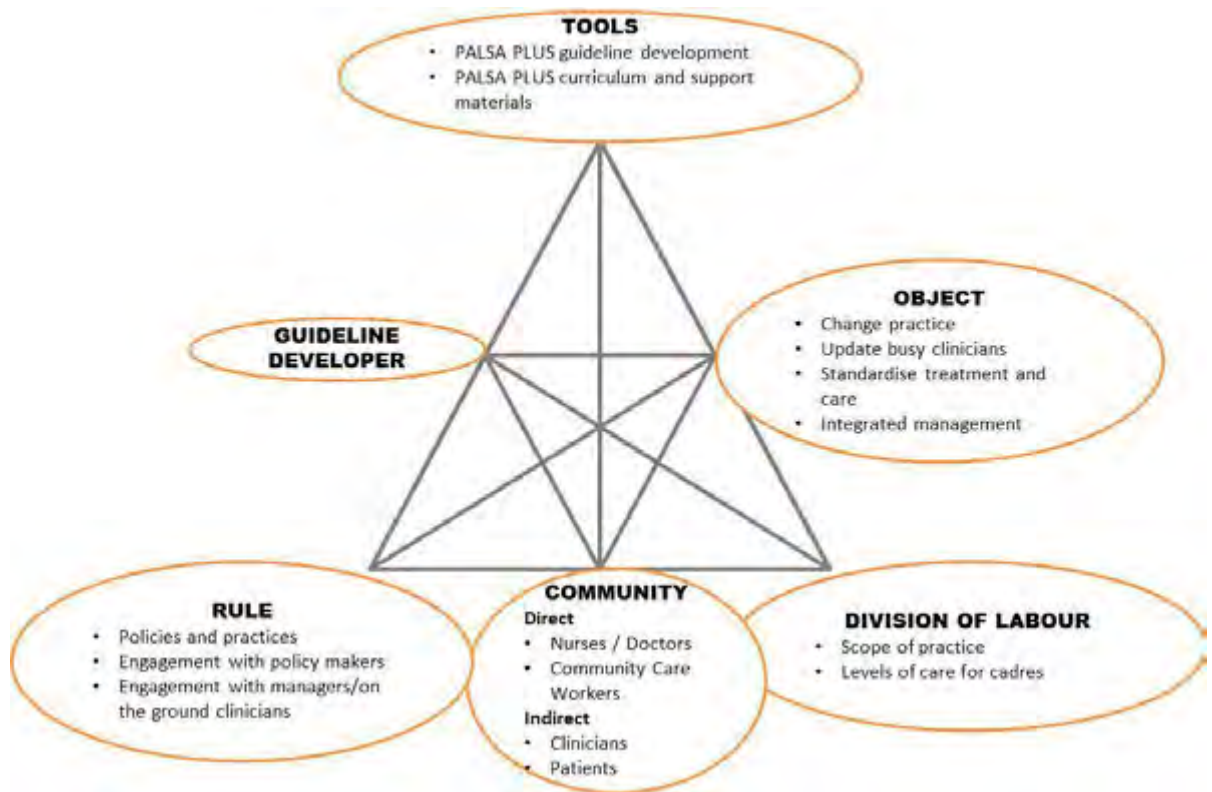


Figure 2.8 The Guideline developer represented as an individual Activity System

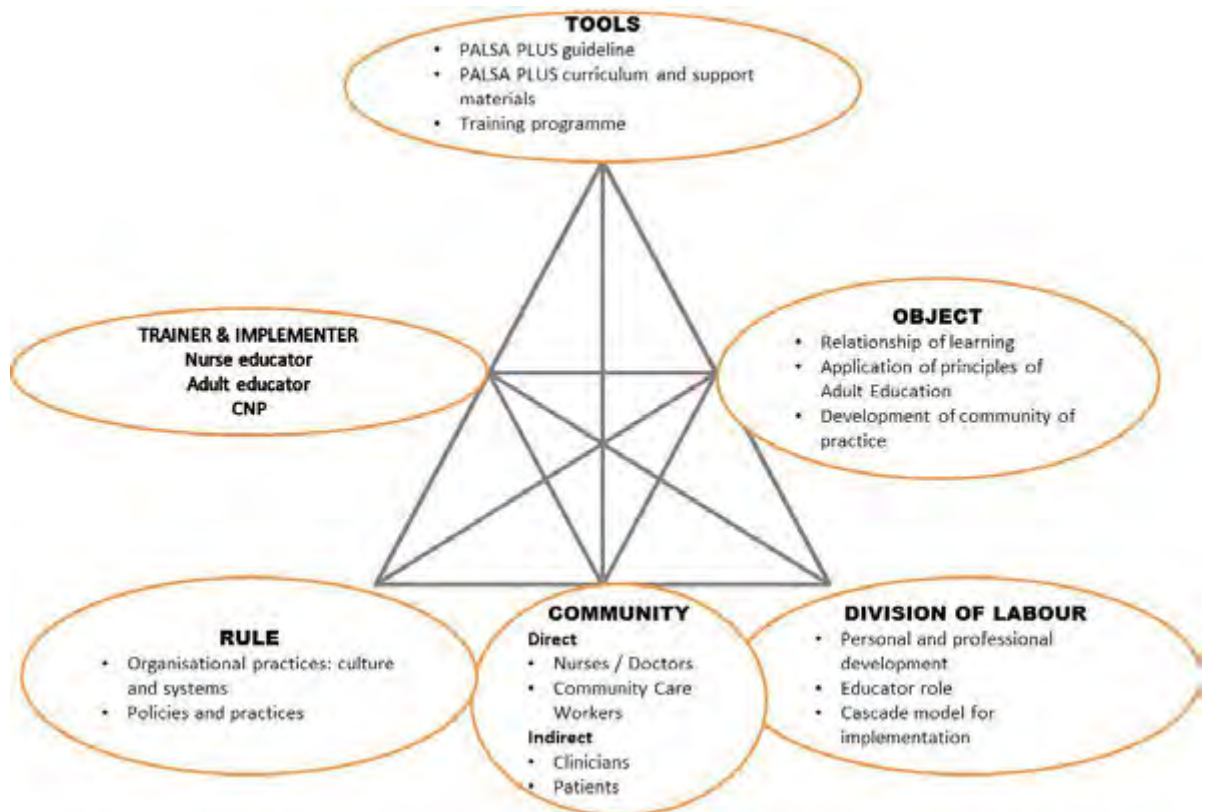


Figure 2.9 The Trainer and Implementer represented as an individual Activity System

The above representation is rather simplistic; however, it is an attempt to explain a complex system. These three activity systems do not work in isolation: each is required to work in synergy with the other. Their interactions are always open to interpretation and are not without contradictions themselves.

## **2.11 Summary**

This chapter introduces and explains the conceptual understanding and the language associated with AT, the theory which forms the theoretical lens for this case study. Because the case study is rooted in KT, this, too, is explained to provide an understanding of the challenges faced by healthcare systems when embedding policy into practice with the aim of improving quality of care.

AT helps to identify and describe work – how it is being done and with whom. It also provides a mechanism for transformation by identifying barriers and facilitators to implementation, and offers ways to change and resolve them.

# 3 Research methodology

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## 3.1 Introduction

With the understanding of the conceptual framework provided in Chapter 2, this chapter focuses on the research methods and the design used for this qualitative case study. Sampling, data collection and data analysis are discussed. Ethical considerations, validity and generalizability to this case study are also presented.

This research took the form of an in-depth analytical case study where five staff members were interviewed during semi-structured interviews in a healthcare facility in the Metro sub-district of the WC.

## 3.2 Research design

“Case study research is an approach to research rather than being a research method in itself”, according to Willig (in Maree, 2012: 75) continues to explain that this approach is widely used in the field of education because it allows for a phenomenon that has a “bounded system” to be explored. The defining factor for a case study approach is that it is the “unit of analysis” rather than a topic is being investigated. This is also supported by Denscombe (2007: 44), who adds that this unit of analysis or case study needs to be “fairly self-contained” and have “fairly distinct boundaries”. The case needs to “contain a clear vision of the boundaries to the case and provide an explicit account of what they are”. The case study in point aims to adhere to the definable characteristics of this approach namely, it creates a “rich description of some phenomenon, idiographic, meaning that it explores individual differences, and explores a phenomenon in context” (Willig in Maree, 2012: 75). To meet these requirements, the unit of analysis is the work environment of the Sunnyvale [pseudonym] health facility, a typical health facility where a PALSA PLUS trainer introduced a clinical practice guideline into their practice. Engeström’s theoretical framework and, in particular, the notion of an activity system was used as a method for analysis of this bounded system. From the literature review, I had read the case studies undertaken by Engeström and other researchers who had applied the Activity System successfully as a method for analysis.

### **3.3 Choosing the case study**

I initially set out to do a comparative study using two different sites of practice. The intention was to do a pilot study observing three to five healthcare facilities from which I would choose two for the study. Permission to enter the facilities took several months, much longer than anticipated. When permission was finally granted to enter two of the five facilities, the trainer(s) involved had either retired or had been transferred to another facility. This left me with one facility in which to carry out my research project, a situation over which I had no control. However, in retrospect, this afforded me the opportunity to research the case with far more depth rather than breadth:

When a researcher takes the strategic decision to devote all his or her efforts to researching just one instance, there is obviously far greater opportunity to delve into things in more detail and discover things that might not have become apparent through more superficial research (Denscombe, 2007: 36).

### **3.4 Data: sources and collection methodology**

“A strength of the case study approach is that it allows for the use of a variety of methods depending on the circumstances and the specific needs of the situation” (Denscombe, 2007: 37). This case study uses interview data, documentary sources, resources from the KTU archives and my eight years’ experience in the field.

I collected the data and undertook the analysis myself but accessed support to transcribe the recorded interviews. Through having read Chapter 7 of Maxwell (2008), I remain acutely aware that I bring intimate experiential knowledge to the case study. I run the risk of having clouded the data collection and analysis with my own assumptions and values. Reason (Maxwell, 2008: 225) uses the term “critical subjectivity” and suggests that “rather we raise it to consciousness and use it as part of the inquiry process”. Discussions with and feedback from my supervisor have assisted in this regard; and I hope that I have acquitted myself with integrity.

### **3.4.1 Sampling**

In selecting interviewees, I sought a 360° view of team members involved with the trainer. The five interviewees consisted of the following:

- the nurse-trainer
- a peer
- the nurse-trainer's immediate manager
- a staff member who reports to the nurse-trainer (in this case a health promotion officer (HPO))
- a doctor working at the clinic.

The five interviews took place in the consulting rooms or offices of the interviewees at Sunnyvale on the 2, 3 and 9 October 2012. The interviewees have been named the TRAINER, the PEER, the DOCTOR, the (OPERATIONAL) MANAGER and the HPO.

The number in brackets following the interviewee indicates the line number of the transcript. If the information provided by the interviewee be viewed as controversial or too personal, they are referred to as interviewee i, ii, iii, iv or v followed by the line number of the transcript.

### **3.4.2 Semi-structured interviews**

I developed table using questions specific to the components of an Activity System (see Table 3.1, below). In particular, column 4 (shaded) explores why I thought this information is useful and what information it hoped to access. From this an interview guide was developed for use during the interviews (see Appendix C). Questions 1–3 hoped to source information about interviewee profiles and questions 4–9 aimed to source information about rules, tools, division of labour.

Both English and Afrikaans were used during the interview process.

Table 3.1 Components of an Activity System applied to Sunnyvale

<b>Components</b>	<b>Definition</b> (Engeström 2008)	<b>Application to case study</b>	<b>Why useful?</b> <b>Information hoping to access</b>
<b>Rules</b>	Explicit and implicit regulations, norms, conventions and standards that constrain actions within an activity system.	Policy documents Standard Operating Practice (SOPs) Circulars Schedules – work Nursing Acts Meetings Routine activities	<ul style="list-style-type: none"> <li>* What is the culture of the clinic?</li> <li>* How is policy used?</li> <li>* What method of communication is used?</li> <li>* Channels of communication?</li> <li>* Operational systems (eg ordering of medication)?</li> <li>* Access to care (eg waiting queues, supply of medication)?</li> </ul>
<b>Community</b>	Individual and sub-groups who share the same general object.	Nursing staff working in the PHC facility Pharmacist/pharmacy Non-clinical staff – cleaning, security Rotating students linked to medical schools, nursing institutions NGOs, churches, community forums/organisations	<ul style="list-style-type: none"> <li>* What is the context of the clinic? Do they have access to technology? Water? Electricity?</li> <li>* Who works with who and how do they relate/coordinate activities</li> </ul>
<b>Division of labour</b>	Horizontal division of tasks and the vertical division of power and status.	Scope of practice of the nurse Role of the nurse: nurse as educator, nurse as clinician Role of doctor Who else does the nurse-trainer relate to?	<ul style="list-style-type: none"> <li>* Task-sharing in particular through and from the PALSA PLUS nurse-trainer and the effect that has on organisational practices and relationships.</li> <li>* What happens when a nurse is “promoted” to trainer over a manager or more senior nurse in a clinic? (ie power dynamics and how they play out).</li> </ul>
<b>Subject</b>	Position and point of view of individual/sub-group as a perspective of analysis.	PALSA PLUS master or facility trainer who claims ‘transformation’ The immediate manager of the nurse-trainer A peer of the nurse-trainer A nurse working directly under the nurse trainer Doctor	<ul style="list-style-type: none"> <li>* In what ways does the staff view the organisational changes and relationships since the introduction of the PALSA PLUS guideline and on-site training by the nurse-trainer?</li> </ul>
<b>Instrument</b>	Tools and signs/ mediating artifacts.	PALSA PLUS guideline and related training materials; desk blotter, waiting room scene and case scenarios, training handbook Method of training	There is a body of work done around acceptance of the PALSA PLUS guideline by nurses. The entry point into the clinic is through the guideline. What is different to other guidelines introduced into a clinic is the training of how to use it.

### **3.4.3 Documentary sources**

The following documents were collected:

- An organogram describing structure of the healthcare system to understand hierarchies and pre-determined power relationships.
- Training records to assess training coverage.
- Communication books and documentation, for example memos to identify rules of the clinic. (I viewed these but found them to be rather cryptic and of no real use without detailed explanation. I abandoned their use.)
- Resources from the KTU such as reports, draft manuscripts, training manuals, archives and photographs.

### **3.5 Data analysis**

The analysis proved to be an iterative process. The following process was undertaken in order to reach the final analysis:

- Using grounded theory, data was first analysed by exploring the themes that emerged. This left me feeling rather despondent, asking “So what’s new/different?” Examples that emerged were lack of buy-in from management and the challenges of trainers successfully delivering on-site training.
- Listening to, and re-reading the interviews several times, I remembered the two main questions I posed during the semi-structured interviews: (1) Tell me about daily life in this facility, and (2) Tell me about PALS PLUS. (Refer to Appendix C for the full interview guide.)
- Bearing in mind the relational and social context in which this case study took place, I then undertook a second data analysis using the components of an activity system that was applied in the Sunnyvale healthcare facility. These were printed and pasted on a wall. The visual display gave me the opportunity to track and colour-code the common themes that emerged.
- See Appendix D as an example of how I explored this with one of the research subjects.

- I interrogated the contradictions and focused on the specific themes pertaining to an activity system that were raised by each interviewee (see the sample table in Appendix E).
- I reported on the *Object* and applied the components (nodes) of an activity system to this case study in the following way:
  - *Tools* are the clinical practice guidelines and related training materials.
  - *Subject* – views of the selected person interviewed for this case study.
  - *Division of labour* is understood as the work the subjects do in the facility, how they relate to their co-workers relationships.
  - *Rules* pertain to the organisational life in the facility; the culture both spoken and unspoken, the channels of communication and the systems of management.
  - *Community* includes the patients and staff. For the purposes of this case study only staff were interviewed, because interviewing patients was not necessary in this instance in order to answer the research question.

This case study highlights the tensions created by the introduction of PALSA PLUS into Sunnyvale. To maintain the focus of this case study, the selected themes carried forward into the discussion are sourced through identifying the “inner contradictions which characterise activity systems” (Engeström, 1996: 72 in Avis, 2007: 170), bearing in mind their potential for change and transformation. All possibilities of the inter-relationship between the sub-triangles have been explored. The relationship between the following key nodes provides the vehicle to understanding the contradictions that were identified and their possible areas for change:

#### **Tool**

- *Tool linked to division of labour* → where new hierarchies, relationships and scope of practice have been negotiated.
- *Tool linked to rules* → challenging practices and communication between staff working in and associated with Sunnyvale. This emphasises the need for systems changes, for example, a more efficient ordering system. A better

understanding of the roles and responsibilities is identified and a clearer delegation of tasks is required.

- *Tool linked to subject* → the provision of a clinical practice guideline to negotiate quality care.

### **Subject**

- *Subject linked to subject* → relationships between co-workers are explored.
- *Subject linked to tool* → indicates resistance to change practice and alignment to ever-changing policies and practices set out by the DoH.
- *Subject linked to division of labour* → useful to explore the negotiation of boundary crossing. Indicates the effects on hierarchies and the negotiation of power relations.
- *Subject linked to rules* → relates to how the subject uses the rules pertaining to policy and how the unspoken culture in the facility is explained and/or negotiated.

The inter-relationships and themes are analysed and presented in Chapter 4.

## **3.6 Validity and generalisability**

The collection of data was an iterative process whereby the findings were discussed and scrutinised with my supervisor. The choice of a variety of participants also provided triangulation in that they either confirmed or disagreed with one another's experience and/or understanding of issues discussed.

As discussed in Chapter 1, a limitation of this case study is that it is limited to an urban healthcare facility in the WC. However, a significant strength of case study approaches is that they can help to extend theory, and thus make possible theoretical generalizability. In this case I have used the same conceptual tools used in other case studies. The implications are discussed at length in Chapter 6.

## **3.7 Ethics**

Permission and/or consent for this case study was granted by the University of Cape Town Human Research Ethics Committee, the School of Education of the University

of Cape Town, the WC DoH and the Knowledge Translation Unit of the University of Cape Town Lung Institute.

### **3.8 Consent and confidentiality**

Signed consent was obtained from the interviewees and all measures have been taken to maintain confidentiality. In the process of negotiating confidentiality, it was surprising that all the participants were not perturbed by this and felt that they wanted to learn from this case study. They also stated that in their previous experience with researchers they received no feedback about the outcomes of the studies in which they had participated. They felt that their participation was as much a learning experience for them as it is for me. I will fulfil my promise and provide them with feedback when appropriate.

Although confidentiality is not their concern, it remains a concern of mine and I have maintained confidentiality by not disclosing the identity of the participants nor the facility or sub-district involved.

The information provided to the participants about the case study can be seen in Appendix F.

### **3.9 Concluding thoughts**

When setting out to invest four years into a Masters' Dissertation it is appropriate to question the significance of this undertaking. There are several different areas of significance and the two that speak to me pertain to theoretical significance and personal significance. Maree (2012: 9) states: "With any research, the first obligation is to understand, not solve." By undertaking this research I have been able to interrogate and deepen my understanding of AT through the use of a case study. I have not found any studies that use the boundary space between KT and AT. Of personal significance, this case study has stimulated my growing interest in the discourse of organisational practices and relationships that link with the complexity of KT and its promotion of knowledge into action processes.

# 4 Research findings and analysis

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## 4.1 Introduction

Sunnyvale healthcare facility, where the case study is located, is described in section 4.2; it is the backdrop to an account of the daily life of the interviewees. As seen in Chapter 3, AT provides the vehicle with which to interpret the everyday, as schematised in the Figure 4.1 below.

Although the interviews followed a semi-structured approach by using the same open-ended questions, the flow and outcome of each of the five interviews were different. This provided different possibilities and opportunities for continuing to explain some of the essential aspects of the PALSA PLUS programme within the context of how it unfolds in daily life at Sunnyvale. For example, the training of PALSA PLUS and educator identity are described under the TRAINER, and the strategy for implementation, namely on-site training, is described as experienced by the PEER. Because of the different outcomes of the interviews, I have attempted to set out the findings in a structured way by first providing an account of the interviewees in their daily life, further explaining aspects of the PALSA PLUS programme where appropriate and applicable, and then presenting the findings and analysis by using the structure of an Activity System. This is followed by highlighting the contradictions identified and listing further themes that emerged. Contradictions usually involve two to three components within an Activity System or they arise between two (or more) Activity Systems.

This chapter transitions the case study from the everyday (“the world”) and translates the stories of the interviewees (raw data) into the language of AT (theorising), which forms the basis of the discussion in Chapter 5.

Since the mid-1980s, much of my work has been within or in association with the Health Sector. In this chapter, I present my experience, and sometimes my implicit knowledge of the systems, the organisational processes and the people with whom I have been associated. Wherever possible, I state the source of the information.

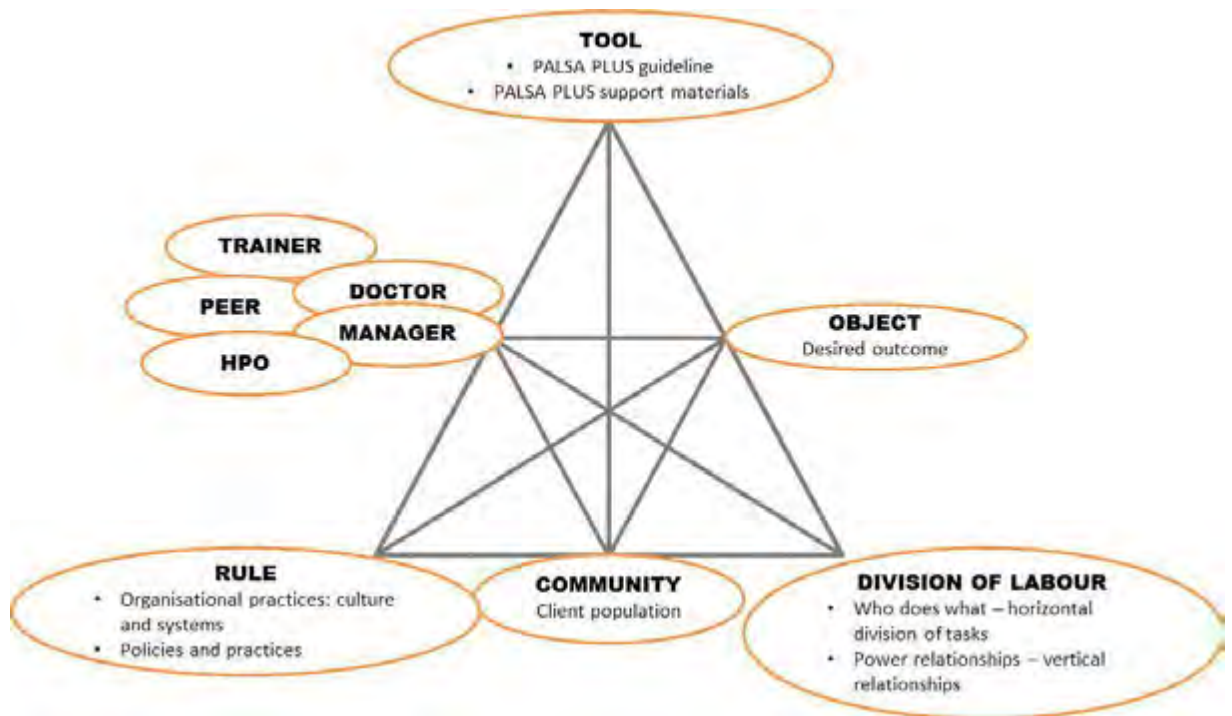


Figure 4.1 Schematic representation of an Activity System put into operation to interpret the everyday for this case study

## 4.2 A day in the life of the five Western Cape healthcare professionals

This picture of a waiting room is the site of practice, the daily bread and butter, of the nurse in primary healthcare.



Figure 4.2 A typical waiting room in a healthcare facility (source: KTU waiting room scene used as a tool during training to identify cases to assist in discussion and use of the guideline)

Health services in the WC are administered by the Provincial DoH and the City of Cape Town (CoCT) or “City”; a variety of different services are offered: City clinics manage TB and child health and the DoH, through its Community Health Centres (CHC), provides adult curative services, trauma and emergency services, and satellite services in the community, for example mental healthcare, school health, dermatology and dental care.

One Way,<sup>3</sup> a township in the WC, is home to 1,6–1,8 million people. There the community’s health needs are catered for by six City clinics and one CHC.

According to the DOCTOR from One Way I interviewed, it is the largest area on the Cape Flats with the highest population growth rate in the WC, with areas that still show growth and expansion.

Despite this growth, this community consists of mainly middle-aged to senior citizens where chronic conditions are reported to be the bulk of the burden of disease, as discussed in Chapter 1. Social issues, mainly due to the high unemployment rate and drug and alcohol abuse, are an added burden, particularly on grandparents, who have to deal with the complexity of these problems as they are often the ones at home during the day caring for their grandchildren.

Typical for this community had been employment in the South African clothing and textile industry. According to Vlok (2006: 227), this industry has been a significant source of employment, particularly for women. The industry had for many decades been “rooted in the unique history and cultural traditions of many South Africans”. In the early 2000s significant changes in the industry resulted in high rates of unemployment. Substantial liberalisation has “resulted in large scale loss of employment that recorded more than 55 500 job losses by the South African Clothing and Textile Workers’ Union (SACTWU) since 2003” (Vlok 2006; 227).

These retrenchments led to the loss of medical aid, so people turned to the public health sector, and in this case to Sunnyvale in One Way. The DOCTOR provided the following information and insight into the increased workload of the facility’s staff and the waiting time of clients who had already waited three months for an appointment.

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<sup>3</sup> Name changed for the purpose of this case study.

This facility is divided into two main sections: Side A deals with the chronic diseases of lifestyle, for example diabetes and hypertension, where these conditions are diagnosed, treated and routine follow-up care is provided. Clients with acute conditions not needing urgent attention are also managed on Side A. “Acute” refers to a symptom, for example a headache or a fever, that does not necessarily need urgent/emergency medical attention. Side B manages all the HIV clients receiving ART. The clinical<sup>4</sup> staff component of Side A comprises five community service doctors, two medical officers (MOs), five full-time clinical CNPs and one operational manager. The clinical component of Side B comprises one operational manager, two to three CNPs and two doctors.

Side A, the chronic conditions section of this facility, accommodates 200 bookings per day and this excludes non-appointments, which can average between 50–100 clients per day. This is verified by the PEER, who states that on any given day:

Each, CNP sees 30 clients and that is a mix. It can be 20 of those 30 clients can be chronic people with chronic diseases and then your other 10 would be people with acute problems (82).

Because this is a 24-hour facility, staff rotate duties to ensure that there is 24-hour coverage of clinical staff. The DOCTOR who works at Sunnyvale reminisces about his community service (explained below) in 2006:

At that time there were four CNP, three MO and five community service officers and together they saw up to 100 clients a day. They seldom turned people away (198).

He added “but this is not the case today; clients are told to return the next day where they are given priority appointments” (200). The staff–client ratio has not increased sufficiently to accommodate the impact of burgeoning retrenchments thereby placing an added burden on the staff. On paper, the staff members at Sunnyvale total 190. According to Interviewee ii, the appointment and retention of staff appears to be uncoordinated and there are claims that staff who are appointed at Sunnyvale also hold positions at other healthcare facilities: “Daar is mense wat

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<sup>4</sup> Clinical staff refers to professionals involved in direct client care (diagnosis and management) as opposed to non-clinical staff, such as administrators, involved in non-direct client care.

op onse establishment is wat by ander facilities werk" (*There are people at this establishment who work at other facilities*) (Interview ii: 210).

The DOCTOR made it clear that staff turnover is generally high, particularly in the case of doctors who usually move on to specialise, go overseas, do locum work, or enter private practice once they have completed their one-year of compulsory community service. The following quotation, taken from the DoH Human Resources Strategy for the Health Sector (2011: 33) verifies the statement by the doctor and further explains the significance of community service:

The attrition of Community Service professionals leads to a notable loss of trained professionals to the health system. "Community Service" is a requirement which entails one year of practice in the public sector for most health professionals following their graduation. A survey of medical community service professionals in 2009 reported that 17% did not report for community service, and a further 6,1% reported that they would emigrate after completing community service. This amounts to 23,1% planning to leave the country. If the doctors do not report for community service, they cannot practise in South Africa.

At Sunnyvale, the rotation of a community service doctor is approximately 6–12 months. This creates high staff turnover, resulting in decreased continuity of care. This decreased continuity of care was made clear to me when the OPERATIONAL MANAGER stated that since the "Zuma hotline"<sup>5</sup> was initiated, clients have become more vocal about their experiences of their treatment and care. The OPERATIONAL MANAGER (who sits on the committee that deals with the complaints received by the hotline, which are then referred to the relevant facility) reported that 80 per cent of the complaints deal with poor staff attitudes and clients having to wait in long queues for their medication.

The five health professionals whom I interviewed, namely, the TRAINER, the PEER, the DOCTOR, the OPERATIONAL MANAGER and the HEALTH PROMOTION OFFICER (HPO), are all fully committed and want to work at Sunnyvale. Like the rest of the staff, they are from One Way or have ties to the community. The PEER,

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<sup>5</sup> The Presidential hotline, locally known as the "Zuma hotline", was established by the government. President Jacob Zuma launched the Presidential Hotline on 14 September 2009. The hotline was established for the purpose of offering the citizens of South Africa, an effective way of providing accurate information, counselling and precise referrals to government institutions at all levels and in all spheres (available at [www.thepresidency.gov.za/pebble.asp?relid=4135](http://www.thepresidency.gov.za/pebble.asp?relid=4135)).

having worked in the private sector for 15 years and having experienced “emptiness” in that sector, explained that he was prompted to move to Sunnyvale, because “I’m part of the community. That’s what I preferred” (200).

Even though the interviewees are committed to Sunnyvale and to their respective roles and responsibilities, it is also understandable why the interviewees often refer to Sunnyvale as “this place” in a derogatory way. The sentiment expressed in the following quote reflects the tensions of working in a stressful environment:

Yea you need to be sensitive towards each other and sometimes it’s very difficult. You often get that you ... you lost it, you completely lost it because your nerves is really hanging on a thread and then you lost it, but ag I mean it’s not an ideal world. (Interview i: 177).

The context of this work environment gave me food for thought when analysing the interviews within the framework of AT. The identification of the contradictions in and between the nodes of the activity system made it possible for me to track the organisational practices and relationships once PALS PLUS had been introduced into Sunnyvale by a nurse-trainer.

In the next section the research findings relating to each of the interviewees<sup>6</sup> are presented in the following order:

4.3.1 The TRAINER

4.3.2 The PEER

4.3.3 The DOCTOR

4.3.4 The MANAGER

4.3.5 The HEALTH PROMOTION OFFICER (HPO)

## **4.3 Research findings**

### **4.3.1 The Trainer**

#### **4.3.1.1 Introduction**

In this section, I continue to provide information about the training and implementation of the PALS PLUS programme that was introduced in Chapter 1.

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<sup>6</sup> It so happens that the doctor I interviewed is male and the other interviewees are female. No gender discrimination or preference is intended by using him or her for their respective professions.

By weaving in the information about the PALS PLUS programme explained through describing how this CNP came to be a TRAINER, her experience of the training workshop and on-site implementation of the programme, I hope to provide a more realistic account of this key interviewee, who introduced the PALS PLUS programme into Sunnyvale.

Her story, or the “everyday”, is theorised using the language of an Activity System. The themes and contradictions identified during the TRAINER interview are raised and are discussed in Chapter 5. (The TRAINER is Afrikaans-speaking and her use of English has not been corrected or changed.)

#### 4.3.1.2 Meet the TRAINER in her daily life

I met the trainer in 2006 and over the years have formed a long-standing relationship of learning with her. This posed the challenge of being impartial, a challenge particular to qualitative research, as discussed in Chapter 3. To counteract this, I have made every attempt to be as objective as possible and put aside preconceptions.

I have come to know the TRAINER as someone who is to the point and expresses herself with humour and warmth. For example, when asked to comment about the stressful environment she works in, her (verbatim) response was: “Many a times I feel like committing a small chicken murder in this place” (313). However, she clearly displays a passion for nursing: “but I mean you know, it’s just you feel so fulfilled if you, at the end of the day take you little black Spar bag with all your stuff in and you walk out by that door and you say, at least, thanks God today I could’ve ... I could changed something” (310). The TRAINER’S fighting spirit and perhaps even her philosophy of life as portrayed in the following quotation are characteristic of her, a recurring theme I have witnessed over the years:

If you don’t fight your own battles nobody else is gonna do it. So you cannot expect management’s behavior to change for you to change. You must change for your benefit. You must change for your benefit and if people see that because you have changed, they might change (509).

The TRAINER’s journey as a nurse started many years ago and through perseverance and determination, she progressed from staff nurse (entry-level nurse) to fulfilling

her dream by becoming a CNP, a position she has held at Sunnyvale for the past eight years. Progressing through the levels in nursing expands one's scope of practice, each time adding to one's clinical responsibility. Being a CNP enables her to conduct a physical examination, and to diagnose and treat according to current policy and practice. The TRAINER is one of the six CNPs working with clients with chronic and acute conditions, and on any given day they each consult between 20–30 clients.

#### 4.3.1.3 A trainer since 2006

In 2006 the TRAINER was sent to the PALS PLUS TtTtT workshop by the senior doctor who was working in the facility at that time. I had the privilege to train the group she was part of who were all intending to become PALS PLUS trainers. Despite the KTU having supplied the managers with a welcome letter to be distributed to the participants in which information was provided about the TtTtT and their educator role, upon completion, the TRAINER reported in the interview that she had not known what the training was about. She also had not known that she was expected to become a trainer – becoming an educator was not on her agenda. (The process of becoming a PALS PLUS FT is explained briefly in Appendix B.)

Seven years later, she still uses PALS PLUS in her daily practice and formally keeps the staff in the facility up-to-date with on-going PALS PLUS training.

#### 4.3.1.4 The TRAINER'S experience of the TtTtT workshop

From the interview I had hoped to gain in-depth insight into a TtTtT and I was perturbed to hear that the remote retreat-like centre, the training venue in the countryside, did not appeal to her and in fact seemed to raise her anxiety. She also reported feeling out of place being a CNP amongst coordinators,<sup>7</sup> highlighting the

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<sup>7</sup> Coordinators form part of the middle-management structure of the Western Cape DoH. Their role includes programme monitoring, quality control and mentoring and support of staff. They also form a link between the facility and the next level of sub-district management. Each coordinator is responsible for a group of facilities that form a sub-district within a district. The Metro district, for example, has five sub-districts.

hierarchical model evident in health structures. In the management structure of the DoH, one of the group of coordinators would have been assigned to the TRAINER'S facility and usually this person would be viewed as an authority figure; someone with knowledge and therefore power. The following expresses her feelings of inadequacy and lack of knowledge compared with her seniors on the TtTtT:

They were TB and HIV coordinators, oooh here I'm sitting, shame. Ek is 'n CNP (*I am a CNP*) ... don't even know where to start with TB, did some TB training in my community health year, do I still even know how the TB wheel<sup>8</sup> look (273–274).

I wanted to know whether the TtTtT equipped her for on-site training. The TRAINER said that this experience taught her to start with what the group knows and build on that knowledge and experience. She was referring to the scaffolding that was made explicit during the TtTtT. "I would say 50 per cent – taught me how to manage different cadres but not content experts" (262). What the TRAINER was referring to was that she was better able to manage the relationships of learning but did not feel that she was expert in the conditions/diseases in the guideline. The TtTtT equipped her to "get more stations<sup>9</sup> to one stop" (304), supporting her desire to render an integrated holistic service.

Once back in Sunnyvale, she took on her educator role seriously, commenting that if the doctor who nominated her for this training believed in her and the DoH had financed her training, she had a responsibility to go back to the facility and train as planned.

#### 4.3.1.5 Back in Sunnyvale to assume an educator identity

In addition to her role as CNP, she has also had to negotiate a trainer role with her peers and colleagues. According to the PEER and the DOCTOR, the TRAINER is known to set a high standard for herself (and others!) and is also known as a competent PALS PLUS trainer. This is evident because her colleagues seek her out for advice during consultations with their clients and for clarification of the

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<sup>8</sup> An aid in the diagnosis and routine management of TB.

<sup>9</sup> The PALS PLUS guideline integrates the management of conditions. The TRAINER equates stations with conditions. For example, on the TB page the user is prompted to look for HIV and vice versa. Most health guidelines in circulation cover one condition only.

guideline, if required. According to the other staff members I interviewed, she is unafraid to confront those who do not use their clinical knowledge and skills. She has taken her role as trainer seriously and ensures that all new nursing staff are introduced to PALS PLUS. As mentioned in Chapter 1, there is a structured support programme to promote on-going relationship of learning between the trainers and the KTU training team. The TRAINER started her interview by saying that she values the PALS PLUS quarterly support meetings and monthly newsletters because they have kept her updated with changes to policy and practice. As soon as the annual revised edition of PALS PLUS is released the TRAINER is at the support meetings, goes back to her facility and ensures that everyone is updated. To date the TRAINER has delivered approximately 150 on-site training sessions, the majority of these at Sunnyvale, as well as a few training sessions at two other facilities<sup>10</sup> in the sub-district.

I was interested to unravel the threads that the TRAINER had alluded to on several occasions during the interview and in discussions over the years about her **educator identity**, a role often imposed on nurses when they become FTs.

Being unafraid to ask when uncertain, supported by her inquisitive nature and her desire to care for the whole person, are characteristics she displays as an educator: “I am not afraid to ask ... maybe it’s because I’m a bit more than inquisitive in management of the person in totality” (70). The TRAINER continually updates her knowledge by reading journal articles and textbooks and then enjoys sharing that information with those she meets in the passages of her workplace if she knows their interest. She describes these encounters as “informal like peer teaching” (91):

I share. I don’t like keeping things to myself, and if I find that something work, and I’ve got evidence. You know I think PALS PLUS has also taught me evidence-based<sup>11</sup> (81).

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<sup>10</sup> By agreement with the DoH, PALS PLUS facility trainers are responsible for training two to three facilities.

<sup>11</sup> Evidence-based means that the management and treatment is based on the latest research and is shown to be the treatment of choice.

Training across the cadres means training across different levels of knowledge and skills, which proved to be a “struggle”: “there is basic knowledge at each level – helps with understanding why things get done in a certain way rather” (226).

The TRAINER says that teaching is not her first choice, although she “enjoys sharing information on an adult level” (249), showing patience towards those who have not had her exposure because “him or she has not been in my position” (251).

It’s ... to me worthless you getting information but you don’t apply it, and Gill for me is as the trainer you know how frustrating it is, because then I ask it myself what has I actually been doing if you cannot apply ... (450–455).

This expression of frustration does not stop her from persevering and making sure that what she teaches is used during a consultation.

In the next section the findings of the TRAINER are analysed using an Activity System.

#### 4.3.1.6 Findings using an Activity System: the TRAINER

Data from the hour-long interview were categorised and organised using the conceptual structure of an Activity System.

##### **OBJECT**

At the heart of the TRAINER’S work is her expressed desire to care holistically and to make a difference in the lives of the community she serves. She applies her experience for the benefit of the patient (140) and will even work outside of the scope of practice. She strives to be an autonomous CNP. I read this as the **object**; the outcome she strives towards to find fulfilment in her daily life; a source of meaning for her.

##### **TOOL: PALSA PLUS**

The PALSA PLUS guideline, discussed in Chapter 1, is the TOOL of the Activity System. When the TRAINER was asked about her view on what works or does not work in terms of the PALSA PLUS guideline, her comment on “what works” was:

... the algorithm and that’s what made it quite easy. To go ... it’s either left or right. You get your conclusion and if you compare it with your clinical notes, your destination is the same. In a shorter way (33–37).

This statement fulfills the purpose and value of a clinical practice guideline as discussed in Chapters 1 and 2. The TRAINER regularly applies the PALS PLUS guideline during a consultation; in particular when she needs to manage complex cases and when there is no available doctor. During the interview the TRAINER expressed the view that the guideline does not inhibit her clinical intuition; an important element when using a guideline, which should not be used as a cookbook that replaces clinical judgement. This raises the critical issue of phronesis or the use of “practical wisdom” with regard to the use of guidelines; this is discussed further in Chapter 5.

PALS PLUS taught her about evidence-based practice and has stimulated her desire to read journal articles.

### **RULES: Organisational practices**

By definition RULES means: “Explicit and implicit regulations, norms, conventions and standards that constrain actions within an activity system” (Engeström, 2008: no page). When applied to the case study, in particular, I was focussing on policy documentation, work schedules and routine activities, as well as how the staff use Standard Operating Practices (SOPs) so that I could understand relationships, how policy was used, and gaining information about the culture in general of the organisation.

When analysing the TRAINER, three themes relating to RULES were identified, namely:

- implementation of on-site training and the use of the PALS PLUS guideline (use of policy);
- organisation life and culture;
- access to care.

#### **➤ PALS PLUS implementation (use of policy)**

In order to standardise and regulate the management of care, policies are put in place by the DoH. During the interview, the TRAINER often expressed frustration

because PALSA PLUS is not always applied in practice, leaving her feeling incompetent as a trainer (450).

Initially, there was very little buy-in from management at the Sunnyvale healthcare facility. This left the trainer feeling disturbed by their lack of understanding of the programme, which played out in her not feeling supported during the on-site training sessions.

➤ **Organisational life and culture**

The introduction of on-site training led to feelings of frustration on the part of some of the staff members who were supposed to apply the guideline in practice. They did not always come to a training session because of their clinical responsibilities, nor did they recognise the need to be trained. Unfortunately, doctors and pharmacists were not formally included in the on-site training, although they had been informed by management that they should attend. Prior to the implementation of the PALSA PLUS programme in the health facilities the KTU would do short presentations for the doctors during one of their regular meeting slots, and would provide a doctor/pharmacist information brochure.

Another feature of the organisational life at Sunnyvale is the Wednesday teaching slot at the facility taught by external specialists. The TRAINER attends this session but she does not attend staff meetings or team-building events organised by the management of Sunnyvale. The reason she gave for non-attendance is that the organisation is not supportive or constructive in dealing with complaints, both individual and at facility level.

➤ **Access to care**

Fragmented services are a cause of frustration for her because she “seeks a one-stop shop” (300). The general shift in healthcare is towards integrated management and care. The move is away from the entrenched verticalised health system where traditionally patients with conditions such as TB or HIV would be limited to designated areas of a facility and would be seen by a TB/HIV specialist nurse/doctor. If a client has TB and HIV, this means different queues and sometimes even different locations. Ideally, the TRAINER would like to be able to manage

clients holistically, as well as diagnose and treat whatever complaints they present with during a consultation. In her experience, the triage<sup>12</sup> of clients at Sunnyvale is not effective because they do not always end up with the “right” person (427–441).

The TRAINER experiences many patients as abusive and finds this demoralising. She takes to heart comments from a client such as: “Here you first have to die before anybody actually does something” (323). These comments are heard through the paper-thin walls, indicating the poor quality of the actual structure of Sunnyvale.

## **DIVISION OF LABOUR**

Division of labour examines the horizontal division of tasks: who does what at Sunnyvale and how this impacts on the vertical division of power and status. Three themes were identified relating to division of labour, namely:

- roles and responsibilities;
- power relationships;
- peer-to-peer relationships.

### ➤ **Roles and responsibilities**

The TRAINER takes on her role as educator and confronts nurses who do not manage the clients according to the PALSA PLUS guideline. She also makes a point of sharing information (fitting for an educator role) as discussed in the section on educator identity. “I am more than willing to share, even if it’s a doctor. Irrespective of whether it’s most junior or most senior” (84–85).

### ➤ **Power relationships**

Although the TRAINER claims to be “only a nurse” (181), she is able to work autonomously and claims to be an independent practitioner (152). She also reports that there are more CNPs at the facility than doctors but CNPs do the same work and have the same case load. This statement is often heard in my discussions with

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<sup>12</sup> Triage is a process of sorting clients requiring treatment and care. This is based on the order of priority: for example, emergencies or severely ill clients are attended to first.

nurses and by inference she is saying that a nurse is just as good as a doctor. When discussing doctor–nurse dynamics, the TRAINER says clearly “... no, don’t let them walk over you” (190). And “I think you have to be, what’s the correct word, assertive, but also in a professional way, and when I crack a joke in between, I will tell them “I’m much older than you, I could’ve been your mother” (192–194). She adds “Ya, I mean there is ways and means that you can approach people, without let them feel small and worthless.” “Even if (pause) ... (201), the interviewee says: “No, no, no, that I don’t tolerate. You will treat me with dignity.”

Nou sien jy as ek ‘n ongeskikte jong doktortjie kry, wat vol draad gaan wees, dan gaan ek sê “hey, you know this person?” (*Now you see if I find a rude young doctor who can be full of nonsense, then I go and say ‘hey ...*) That is me, “so please know who you get to do with. I’m not so local; I am a bit high, nê?”

This comment was provided when she reminded me that she had been part of a working group that had given input on a section in the Practical Approach to Care Kit (PACK) clinical practice guideline for adults, the expanded version of PALS PLUS which includes the chronic conditions of lifestyle and mental health. By being able to contribute to the guideline development process, she was claiming the confidence and power she gained from the process.

#### ➤ **Peer-to-peer relationships**

On the one hand, the TRAINER expresses her frustrations to her peers and, if a senior member of staff walks in on the discussion, she continues to vent, thereby claiming that she has good relationships with her seniors. On the other hand, she is also unsure whether they take her seriously and said: “perhaps they think she forgot to take her hou-jou-bek pille” (“... *keep your mouth shut tablets*”) (345).

She displays confidence in the knowledge of her peers as she would consult with them during a consultation by using the telephone in the consultation room or her cellular phone. Peer consultation seems to be mutual at Sunnyvale as the interviewees claim they use their PALS PLUS to clarify their diagnosis and/or management during consultations with clients who present with complex diagnoses.

#### 4.3.1.7 Contradictions

When reviewing the TRAINER'S account of what happens to organisational practices and relationships when a clinical practice is introduced into a facility, the following was highlighted: the educator role imposed on nurses by the programme that needed to be negotiated is a dominant theme. Another theme highlighted by the TRAINER is the mismatch of introducing a guideline where subject-matter is not aligned to services offered.

The contradictions highlighted through the interview with the TRAINER are now presented.

#### **Contradictions between SUBJECT, TOOL and DIVISION of LABOUR**

Placing a clinical practice guideline in a facility where the staff are unable to use the guideline fully due to verticalised services and subject-matter that is not aligned could have contributed to the non-use in practice. For example, placing a guideline such as PALSA PLUS, which integrates the management of TB and HIV, into a facility such as Sunnyvale that does not provide comprehensive TB care defeats the purpose of applying a guideline in practice. The mismatch had the potential to cause tensions between the TRAINER and the facility staff.

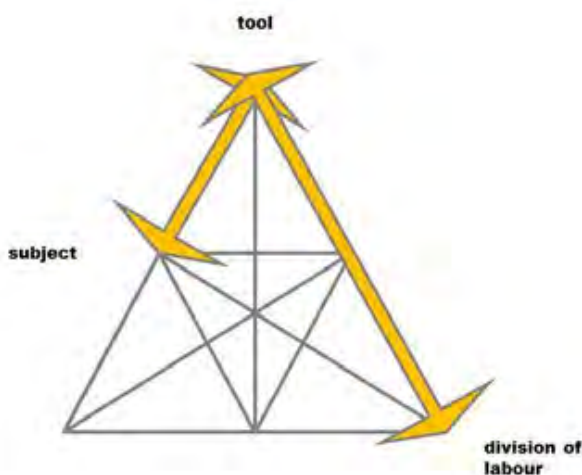


Figure 4.3A Diagram showing contradictions between SUBJECT, TOOL and DIVISION OF LABOUR

#### **Contradictions between SUBJECT, RULE and DIVISION OF LABOUR**

As per the usual practice in healthcare, cadres are trained together at off-site venues. Usually only one or two people are allowed to leave the clinic so that

services can continue uninterrupted. The expectation is that when the staff return to the facility they will provide feedback to their colleagues and implement what they have learnt. The problem encountered is that this usually does not happen, resulting in no change of practice. The difference with educational outreach such as the one in this case study is that it aims to target *all* the staff at a facility, which promotes team work. The trainers are recruited directly from the facility or are known to the staff through their supervisory roles and functions. This therefore enhances their mentoring role by fostering relationships of learning that lead to a change in practice.

Traditionally, trainers come from outside a facility and not from within. Having someone from within the facility creates a change in role, thereby adding an educator identity to the CNP and creating changes in relationships – the “PALSA PLUS go-to person”.

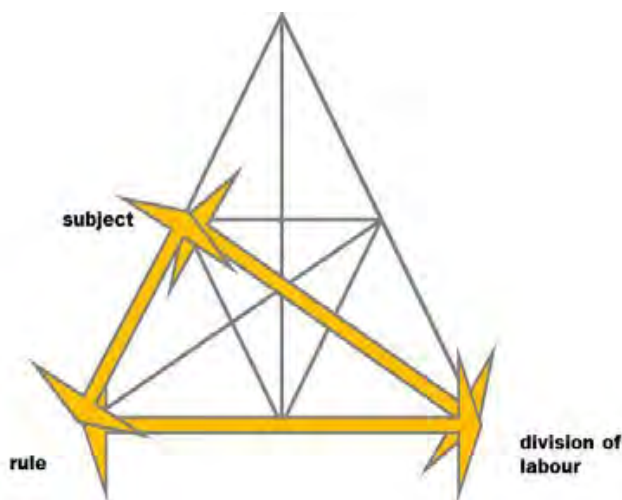


Figure 4.3B Diagram showing contradictions between SUBJECT, RULE and DIVISION OF LABOUR

### **Contradictions between SUBJECT and DIVISION OF LABOUR**

It was most unfortunate that when PALSA PLUS was first introduced into the facilities, only nurses were formally included in the on-site training. The FTs were encouraged to include doctors and pharmacists where possible. Not formally including doctors and pharmacists in on-site training seemed to entrench the “them and us” situation between cadres.

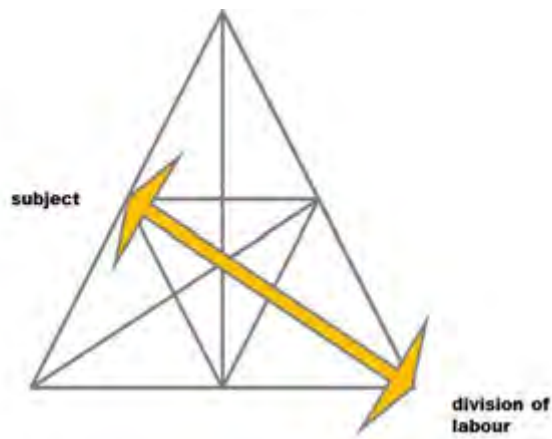


Figure 4.3C Diagram showing contradictions between SUBJECT and DIVISION OF LABOUR

## 4.3.2 The PEER

### 4.3.2.1 Introduction

A critical factor that sets PALSA PLUS apart from other health interventions is the use of trainers from within the healthcare system and the use of on-site training. In section 4.3.1.4, we saw the process that a trainer undergoes to prepare for an in-service educator role. In section 4.3.2.3 of Chapter 4, I further explain educational outreach in the context of the nurse's experience and the environment of a busy clinic – the “real world” in which policy is proposed to be embedded in practice.

The data from the hour-long interview are explained using the conceptual structure of an activity system. This is followed by a commentary on the lessons learnt from this interview with regard to the contradictions observed. This interview also shows the use of KT, and provides rich data for the discussion on boundary crossing in Chapter 5.

### 4.3.2.2 Meet the PEER in her daily practice

As previously mentioned, the PEER chooses to work in the public health environment. Having worked in the private sector proved to be a challenge for her as she felt removed from the community:

To give you an example, I worked in the private sector for 15 years and it came to a point where I said I couldn't work like this, because it seems like you are not nursing the person, you're nursing the 'who' behind the person or you're the bank balance, and that wasn't me” (192–196).

The PEER has been a CNP at Sunnyvale for eight years and, despite the challenges, feels at home and appreciates being part of this team. “You must *love* what you do. It’s like many a day patients will say ‘but you work hard sister’ and I say, ‘Yes I work hard, but that is what I choose to do’” (212).

The TRAINER and her PEER are both CNPs and it was the PEER who emphasised the complexity of the cases the nurses are expected to manage the impact of the BoD evident in daily practice.

So you are challenged daily with the type of conditions you see. It’s not only acute cases, it’s chronic conditions with new complaints or acute problems and then your person with your common complaint like cough and your cold, is ... I would say, you tend to see less of those people. You are seeing more chronic people in reality (24–28).

The hard work and dedication displayed by the PEER coupled with her clinical skills is commendable. The PALSA PLUS guideline and associated training are supposed to equip busy nurses to manage the complexity of cases that present to PHC services.

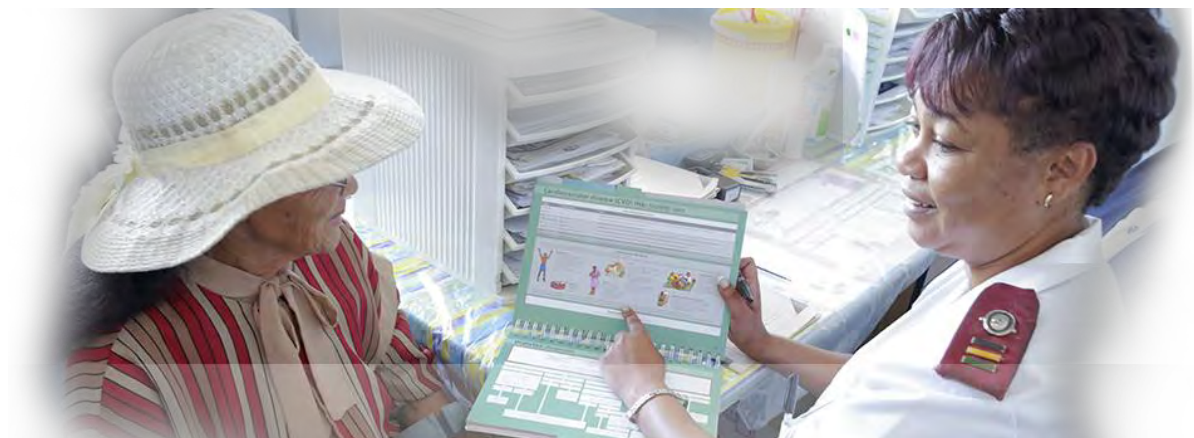


Figure 4.4 Nurse using a PALSA PLUS guideline to interact with her client (source: KTU archives)

#### 4.3.2.3 Experiencing educational outreach using on-site training

At first the PEER did not take the on-site training seriously. The reason she gave was in part that it was her peer who was providing the training and partially that being training on-site was a “foreign concept”. Doing the training off-site was the norm and for those attending training, being able to leave the healthcare facility is often a relief from the pressured daily routines of the facility environment. After the PEER missed two on-site sessions, she was called in by the TRAINER and was told that she

needed to complete six sessions in order to receive her certificate of attendance. The training approach employed by the KTU highlights the radical departure from the conventional training methods commonly used in healthcare education. Conventional and PALS PLUS training approaches were mentioned in Chapter 1 and are further explained in Appendix B. It is these differences that needed to be negotiated between the TRAINER and the PEER.

What the PEER eventually appreciated about on-site training was that “you know what others [other staff members of the healthcare team] know” (537). (This reassurance was reiterated by the DOCTOR and the MANAGER in their interviews.) She liked working in small groups and enjoyed the interactive approach to training: “The way she presented it, it was like she wasn’t a teacher. We were a group of people ... “ (548).

From my experience of training and implementing PALS PLUS, I have noticed that once the initial resistance to on-site training is overcome there is an appreciation of key elements of educational outreach, the ideal for which the KTU strives. Elements such as the application of learning in practice and regular, ongoing, in-service training delivered in a supportive learning environment were mentioned during the interview with the PEER.

#### 4.3.2.4 Findings using an Activity System: the PEER

Data from the hour-long interview were categorised and organised using the conceptual structure of an activity system. The PEER’s love for nursing and her community was evident; however, there was no clearly stated objective and I do not want to create one for her.

#### **TOOLS: PALS PLUS**

It is interesting to note when and how the PEER uses her guideline. Important for her is the use of PALS PLUS as a reference tool and she consults it when managing complex cases to confirm her knowledge and thus provide herself with the confidence to manage her clients appropriately. Another example of when she uses the guideline is when she is unfamiliar with the management of a condition, for example ART care. The PEER also likes the contents page as it helps choose a

symptom that leads one to the appropriate page. The purpose of a clinical practice guideline is precisely this: to help busy clinicians make informed decisions during a consultation.

However, the PEER admits at first that she does not always use the guideline, especially when she is busy, but then on reflection states that she could have managed her clients better if she had had her guideline on her desk. “That is the problem; if it’s not on your table, then you won’t open it” (384). The PEER prefers PALS PLUS to Essential Drug List (EDL), because it is symptom-based compared to the EDL, where you need to have a diagnosis first before using this tool. The following statement highlights the simplicity of the guideline and explains why it is an easy reference tool. The PEER compares it to a reference book that is promoted and used by the DoH. “The EDL confuses people ... PALS PLUS will give you a symptom or a complaint, plus a description of whatever you might find, and EDL does not do that” (624).

#### **RULES: organisational practices**

The lack of organisational support as expressed by the PEER leads to feelings of frustration. Ideally, one expects that when, during a facility meeting, one raises practical systems issues that impact the provision of quality care, they will be addressed by the appropriate manager through the relevant procurement systems. However, this did not seem to be the experience of the PEER at Sunnyvale. The PEER felt that issues raised at the regular staff meetings are not addressed: “It doesn’t change or sometimes when it does change, you actually forgot about it. ... you put that forward. You learn to live with things that you can’t change, which is terrible. It’s a matter of ‘you can’t beat them, so join them’. It’s demotivating” (258). An example provided was that at times there is no stationery or no medication and this “translates into you not giving the patient what they need, and patients remember you for that” (222). She related a story of how she prescribed medication for a client who did not receive the full amount at the pharmacy and the next time she saw the client in the passage of the healthcare facility a comment was passed that she does not care because she did not prescribe enough pain medication.

The move in healthcare is towards an integrated system where a client with multiple chronic conditions can walk into a facility and get the required care during a single consultation. This is not the experience of the PEER and leads to her feeling frustrated because the system still operates in silos. This results in her clients who are on ART not being referred to Side A (the side on which she works). The PEER feels that she loses the relationships she tries to establish with her clients, resulting in a lack of continuity of care.

Patient flow in a healthcare facility has an impact on waiting times of patients. The longer clients sit in multiple queues in facilities, the greater the frustration and source of complaints which one sometimes reads about in local newspapers. The triage (“sorting room”) or “prep” room (the first port of call for the clients in a facility after they have received their folder) seems to be used inappropriately at Sunnyside. The reason for this is that clients wait for several hours to be seen by the CNP, but if they were appropriately managed in the prep room, would be in the correct queue from the get-go. An example provided by the CNP was the waste of time and manpower in the case of clients, with referral letters from doctors, who are seen by the CNP instead of being seen directly by a doctor, which is the level of care they were referred to at the facility in the first place.

## **DIVISION OF LABOUR/RELATIONSHIPS**

In analysing the PEER in relation to the division of labour, her relationships with the doctors, the level of care and her peer relationships were identified.

### **Doctor–nurse relationships**

The PEER feels that PALS PLUS empowers her. After a training session, she could work out formulas that the doctors were uncertain of and they were surprised at her level of knowledge and her application of it. Even though she states that she is empowered through the guideline, beliefs held by nurses that doctors are superior remain: “You must never forget that you're still just a nurse” (390). Ideally, what is aimed for in PHC is that cadres feel that they contribute significantly within their level of care and ability. The PEER feels “good” when she can assist the doctors, and

shared with the interviewer that the community service doctors will ask a CNP rather than a doctor [peer] because the CNP has “practical knowledge”.

The PEER told me that at Sunnysvale, there is a “clinical nurse assistant” (a doctor) assigned to oversee the CNPs daily to provide support for referrals or to manage complex cases. This clinical nurse assistant also has to manage his or her own patient folder pile for the day. The PEER stated that this makes it difficult to approach the busy doctor and results in her managing on her own when many of her cases should effectively be managed by the doctor (meaning that they are complex cases). Even where help is available in the room next door, the nurse does not feel free to access assistance.

When I facilitate the support meetings offered by the KTU for the FTs, I often hear that nurses can now manage on their own, as the guideline helps them to do so; they feel empowered and confident. The interview with the PEER left me wondering whether her not asking for assistance and managing her own complex clients verifies what I had heard from my interactions with the trainers. Perhaps I could then confirm with the PEER and support her statement that PALS PLUS empowers?

In most rural facilities in South Africa where there are no doctors or where nurses have limited access to doctors, nurses are required to diagnose and treat every patient who comes into the facility and only the very severe cases are referred to the hospital. The following statements by the PEER highlight the skill required by nurses to manage clients appropriately: “most of them come in unstable, that is actually their reason for the visit” (33). The PEER goes on to explain: “Referrals from Sunnysvale to the next level of care, the hospital, should come from the doctors, but this is not always the case. It is very time-consuming to manage very ill clients” (140). The clinical content of the PALS PLUS guideline equips nurses to manage these often co-morbid and complex cases. “Because of PALS PLUS training, the managers know what their nursing staff knows” (584) ... “They tend to think when a person walks in that door, there is no difference in what the doctor must see and what the CNP must see. You are the doctor now, what do you do?” (598).

## Peer relationships

The PEER feels that she has sound relationships with her peers, especially with the TRAINER, and feels free to share and ask advice. She reports that this ability is often facilitated by the use of PALS PLUS as it provides a common platform to share and discuss clinical issues and points of care.

### 4.3.2.5 Positioning the PEER'S contribution/contradictions

When reviewing the contribution made by the PEER to the understanding of what happens to organisational practices and relationships when a clinical practice guideline is introduced into a facility, several key findings pertaining to both contradictions and confirmation of the use of KT were observed.

The discussion now considers the contradictions, or not, between the subject (PEER) and the nodes of the activity system:

### Contradictions between SUBJECT and TOOL

One of the uses of the guideline is that it is meant to provide quick and easy access and reference when CNPs are busy. Unfortunately, this was not the case with the PEER. It was only upon reflection that she realised that if the guideline is accessible, as in being available or visible on her desk, she would use it more regularly.

She did, however, use PALS PLUS (the tool) when she was uncertain and needed to verify her knowledge – another important use of the guideline. What is useful is that she knows how to use it as a resource.

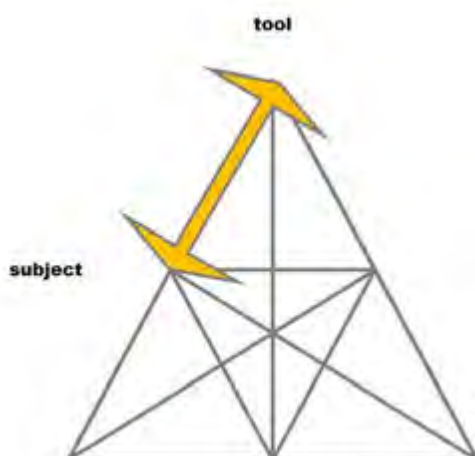


Figure 4.5A Diagram showing contradictions between SUBJECT and TOOL

## **Contradictions between SUBJECT, RULE and DIVISION OF LABOUR**

Frustration with management for not providing basic equipment to fulfil tasks was evident. This lack of being heard leads to disengagement and low staff morale. There is a lack of appropriate management with regard to the systems flow when clients are triaged [placed in appropriate queues] in the prep room, which leads to some clients sitting in the wrong queues, which in turn leads to long waiting times and frustration for both client and service provider.

Although the PEER reports sound working relationships with her colleagues and advanced clinical knowledge and skill, she still holds the entrenched belief that doctors are superior to nurses. I had expected to see a levelling of the playing field through the introduction of PALS PLUS into Sunnyvale. Or perhaps, better still, that each level of care is empowered to perform with certainty within the scope of practice. This means that nurses manage complex cases and refer only those clients that require doctor diagnosis and management.

Nonetheless, the PEER supports the purpose of the guideline in that it provides her with power through updating her knowledge and skills.

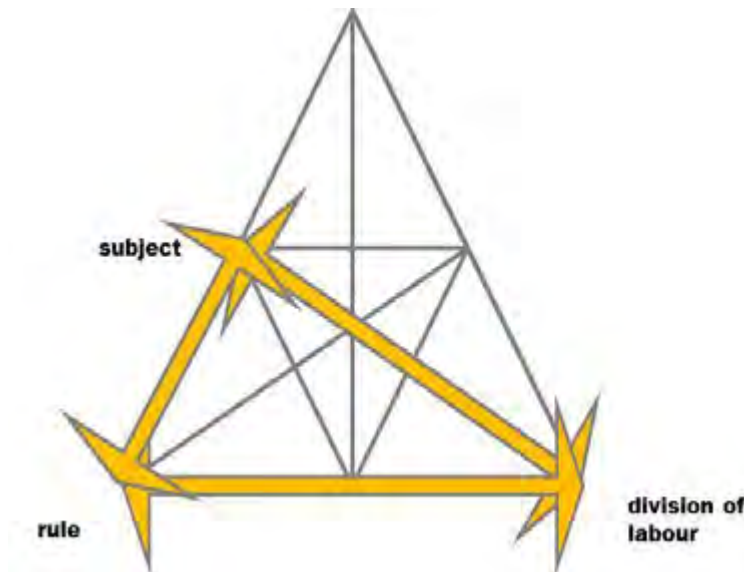


Figure 4.5B Diagram showing contradictions between SUBJECT, RULE and DIVISION OF LABOUR

### **4.3.3 The DOCTOR**

#### 4.3.3.1 Introduction

Most of the data presented in this section is taken directly from the interview with the DOCTOR; where this is not the case, the source will be identified. Fortunately, the DOCTOR was the first person I interviewed and his in-depth knowledge of the facility and the community provided the context of daily life at Sunnyvale. This perspective highlighted the challenges that the staff face due to the socio-political environment (see section 4.2 above).

The DOCTOR is introduced in his daily routine at work, followed by the findings from the hour-long interview that were categorised and organised using the conceptual structure of an activity system. The contradictions identified are presented diagrammatically and also serve as a summary of the findings.

The themes raised by the DOCTOR foreground key concepts of AT such as boundary crossing and co-configuration that is used in the discussion in Chapter 5.

#### 4.3.3.2 Meet the DOCTOR in his daily life

The DOCTOR is stationed at One Way and he continued to work at Sunnyvale after having fulfilled his community service at the same facility. He now has ten years' experience and comes across as dedicated and approachable, and has sound relationships with the nurses and other staff members with whom he interacts. The other side of this committed man is that he was visibly irritated when I arrived a few minutes early for the interview; I later understood the reason why, after he openly expressed his feelings of being overburdened and weary.

His roles and responsibilities include: client consultations and also an administrative function in setting rosters to ensure staff coverage of the facility. Support for CNPs and community service doctors are also part of his daily routine. Ideally, there are two MOs whom the clinical staff can rely on for assistance, but because of his experience and approachability, he is their ideal go-to person.

What he hopes for and works towards in the facility is an integrated, comprehensive service. This is fully in line with the trend in healthcare today: a "one-stop-shop" (295), as referred to by the TRAINER.

#### 4.3.3.3 Findings using an Activity System: the DOCTOR

Data from the hour-long interview were categorised and organised using the conceptual structure of an Activity System.

##### **OBJECT**

The DOCTOR often made reference to changes being implemented in the facility to facilitate the transition in healthcare towards an integrated service. With the patient as the object, the driving force for many clinicians is quality care. The DOCTOR expressed his personal struggle towards achieving this quality of care: “I feel the pressure and rush and then let things slip” (243). He goes on to say that “complex clients take more time to manage” (299). Referring to the pressure imposed by the socio-political environment on the delivery of healthcare at Sunnysvale, he continues that “Most clients suffer from arthritis because of the manual labour and other chronic diseases of lifestyle. Seeing a new face precipitates a long consultation as they go through all the complaints again and again ...” (256). Finally, he went on to say that “if you do spend more time with the patients, those outside moan because they are waiting too long” (150).

The tension between wanting to provide quality care and the realities of dealing with people in need of care was palpable.

##### **TOOL: PALSAPLUS**

At the time of this case study, it was true to say that doctors in general were known to not use PALSAPLUS. Doctor non-use of clinical practice guidelines is not uncommon. Cabana et al (1999) reviewed 76 articles that included 120 different surveys to investigate potential barriers to physician guideline adherence to the use of clinical practice guidelines. This review identified 293 potential barriers categorised according to knowledge, attitude or behaviour:

The barriers affected physician knowledge (lack of awareness or lack of familiarity), attitudes (lack of agreement, lack of self-efficacy, lack of outcome expectancy, or the inertia of previous practice), or behaviour (external barriers) (Cabana et al, 1999: 1460).

The DOCTOR and the TRAINER (nurse) interviewees suggest that some doctors might think it beneath them to use the PALSAL PLUS guideline. Over the years, and the past two years, in particular, I have keenly watched the growing requests from doctors to be trained in the use of the PALSAL PLUS guideline. Many of the doctors own an unused copy, or a copy they use from time to time when a client has been referred by the nurse, who reports on the management according to PALSAL PLUS and now requires further management by a doctor. This “bottom-up” approach seems to have worked, although interesting for me was the DOCTOR’s suggestion that PALSAL PLUS be introduced by top management “not as a training” (386), because he believes that expecting doctors to attend the same on-site training as nurses is not realistic. He suggests that the guideline be introduced in undergraduate studies so that it is not new when doctors and nurses come to work in PHC.<sup>13</sup>

Useful to understand is this DOCTOR’S perception and use of PALSAL PLUS. He appreciates the systematic structure of the guideline. He uses PALSAL PLUS “for conditions such as STIs” (105) because he does not see this condition every day and therefore PALSAL PLUS acts as a reminder. He maintains that he cannot remember everything, especially when he does not always treat a particular condition nor need specific information. For example, he does not directly work with ART because there is a separate section in the facility for this specialised treatment. He would consult PALSAL PLUS if he were required to check or adjust a dosage.

The DOCTOR accepts that PHC is a nurse-led system and finds it “useful to know what they are using [PALSAL PLUS] and why they are referring” (104). The use of PALSAL PLUS is an attempt to standardise treatment and care. The TRAINER realises that this DOCTOR is supportive of a nurse-led health system and appreciates the value of standardised care.

The DOCTOR’s suggestion about the non-use of a clinical practice guideline was the following:

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<sup>13</sup> The KTU is currently involved in a programme that introduces medical students to PALSAL PLUS during their Infectious Diseases block in their third year of medical training at Stellenbosch University. PALSAL PLUS has already been included in nursing undergraduate curricula in the Western Cape and Free State universities and colleges.

I think it's more of ignorance, not ... being afraid of stuff that might be pointed out that you should know. Or it's more of things you would think people would think you would know and [are] too ashamed of bringing out that you are not really skilled (493).

At face value, I interpreted this knowledge gap as a contributing factor towards the power struggles and the power dynamics between nurses, where the perception is: "If I know something, then I need to act upon it; if I don't know, I can be excused." Perhaps non-use of the guideline can be viewed as being equally as powerful as the use of the guideline. The DOCTOR's view with regards to use/non-use gave weight to the frustrations expressed by the TRAINER of those she trains who do not use the guideline. However, the understanding, from a psychological perspective, relating to the non-use of guidelines is discussed at length in the PhD of Pat Mayers (2010), where it is proposed that the use of the guideline creates anxiety in the user. Perhaps this is what is being experienced at Sunnyvale.

#### **RULE: organisational practices**

In trying to formulate an understanding of the RULE, and in this case the focus on organisational practices at Sunnyvale, associated with the data from the DOCTOR, some key points were raised:

Low morale was explained through (1) the split caused by HIV services, and (2) the increased workload:

- 1 The impact of having Side A (chronic care) and Side B (HIV services) in this facility highlights the split caused by having a specialised service such as HIV care under the same roof as other services. Historically, HIV was originally managed only by specialist doctors, who were few and far between. Funding for many years was awarded to HIV services making HIV the focus of care and often neglecting the common routine illnesses that present in PHC. It is often referred to on the ground as the "Kingdom of HIV"! The DOCTOR talks about the impact of HIV services at Sunnyvale: "This HIV service caused the split – them and us – that led to cliques at facility events, for example, pharmacy, reception staff, ARV staff in on themselves." To address the challenge, team-building events are planned for the staff. The DOCTOR continues: "Sometimes

they would go away and have events but it's usually not well attended. Staff morale is a little bit on the low side" (193).

- 2 The impact on the workload due to the increasing number of clients as a result of added pressure on the PHC system due to layoffs/retranchments in the clothing industry:

It's more the increase and what happens is ... there is friction both ways between staff and patient and that also makes the environment not very nice. And with the increase, because we're so busy, there is obviously increased waiting times, increased amount of complaints and all of that and the staff doesn't always see that the complaints are being dealt with fairly (221–225).

The DOCTOR goes on to explain:

Just too much and it's everything nowadays. It used to be that the staff would complain that the patients are rude, but I think it's everything now, for me it's everything now. After a while you get used to the patients being rude but if you work in things and it seems that management doesn't support you or anything like that it just adds to the problems (297–300).

The tensions caused by wanting to provide a quality service, being overridden by the sheer workload, coupled with staff and patient attitudes gives meaning to the DOCTOR's expressing that it is "Just too much and it's everything nowadays". Complaints from the staff and clients alike are supposed to be dealt with by the facility manager. The DOCTOR explained that they are a pilot site for the new Short Message Services (SMS) line initiated by the government, "... but we are the busiest clinic in the WC and therefore receive the most complaints" (230).

## **DIVISION OF LABOUR**

Division of Labour pertains to who does what and in this case the power relationships between doctors and nurses.

The two nurses (TRAINER and PEER) expressed their experiences of the challenges they face with regard to the power dynamics between doctors and nurses. However, this DOCTOR did not exhibit any signs of inappropriate power relationships between himself and the nurses. It was to the contrary:

At the moment the CNPs are basically functioning as MOs. They are writing up medication, initiating medication like an MO would initiate and we would counter-sign with you because we are not going to argue with you because the CNPs are much more experienced than the actual MOs that are working here (526).

His experience is that CNPs ask appropriate questions:

They do come with appropriate questions and unfortunately most of the patients that they do see aren't actually really meant for them, but because they are the actual majority of the staff that are actually seeing the patients in the rooms, it becomes their babies. And they handle it (545).

The DOCTOR goes on to say: "I actually trust them. Some of them do have little hiccups, but most of them I trust. My parents are also patients here so ... I ask them [the nurses] to see them" (551).

The two nurses I interviewed were appreciative of the DOCTOR's attitude towards them and when needed, he was their go-to person. The DOCTOR's attitude is one that dispels a common assumption held by many nurses that ALL doctors are power-hungry, rude and arrogant.

#### 4.3.3.4 Contradictions

The contradictions identified through the data from the DOCTOR were complicated by the external contributing factors of the dynamic and evolving healthcare system as well as the changing face of the client population at Sunnyvale. Perhaps these types of contradiction could be classified as "tertiary contradictions between a newly established mode of activity and remnants of the previous mode of activity" (Engeström, 2010: 7), because of the changed requirements of the healthcare system that were not catered for or made explicit enough so that the front-line clinicians could fulfil their role and function.

#### **Contradictions between SUBJECT, RULE and DIVISION OF LABOUR**

The contradictions observed are between rule and division of labour that affect the outcome for which this clinician strives. At Sunnyvale the staff were dealing with a high volume of complex clients, a tool that did not fully provide the requirements for integrated treatment and care in addition to their experience of management being unsupportive.

Contradictions identified through the DOCTOR were in particular focused between the healthcare system and the services that did not recognise the changes that the front-line staff were required to continually negotiate to fulfil their object.

Management was also not seen to be “standing up”/supporting the staff as the complaints received did not seem to be addressed adequately. The pressure experienced by the staff translated into their perceived lack of quality care that caused low staff morale.

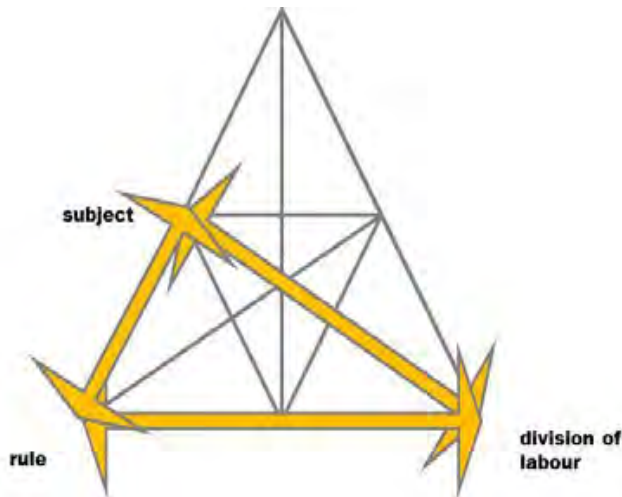


Figure 4.6 Diagram showing contradictions between SUBJECT, RULE and DIVISION OF LABOUR

#### 4.3.4 The (OPERATIONAL) MANAGER

##### 4.3.4.1 Introduction

What the MANAGER presented during her interview was essentially different from the TRAINER, the PEER and the DOCTOR. Her primary role is in the organisation and management of Sunnyvale, whereas the others have clinical responsibilities.

This interview was continuously interrupted, with the MANAGER either having to take or make a call, or to address staff queries. As a result, the duration of the interview time was reduced to 42 minutes only, although contact time was an hour. She came across as busy, easily distracted; seemingly with too much on her plate.

Essentially, this interview provides data for the discussion on the contradictions that arise because of the complexity of the multiple layers of an organisation.

##### 4.3.4.2 Meet the MANAGER in her daily life

The MANAGER for nursing, formally known as a matron, is in favour of on-site training because it does not deplete the services of her staff, as services can continue uninterrupted, and it promotes peer education:

I am very much pro on-site training ... Say, for instance, you have the trainer also on site, there is always somebody to consult with if you're not sure. I think that helps

quite a bit if you have new staff you don't have to send them ... you do it right here ... So ek hou van die idea van in-service education (*So I like the idea of in-service education*) (299–307).

Such a comment is understandable when one of your main responsibilities is to manage Side A, the section of Sunnyvale that deals with caring for clients with chronic conditions. Another aspect of her responsibilities is to manage the nursing staff working in this high-pressured environment. As a middle manager, she attends meetings with the management structures of the facility and is also responsible for holding meetings with the nursing staff she supervises and cares for. On her list of daily activities is managing the complaints from the “Zuma hotline” mentioned in the TRAINER interview. There are several operational managers at Sunnyvale, each responsible for a different section of the facility, for example trauma and emergency services, HIV care.

Despite the pressured environment, the MANAGER “worked” herself into the position she currently holds through further studies and working up the ranks in the facility. She displays high ideals and aspirations in furthering her knowledge and skills. Besides having a Bachelor of Nursing Degree, she also holds a diploma in nursing management, a PHC nursing diploma, and she is currently studying towards a BTech degree. This range of qualifications shows the multiple roles and responsibilities nurses assume in their daily professional practice.

#### 4.3.4.3 Findings using an Activity System: the MANAGER

Data from the interview were categorised and organised using the conceptual structure of an Activity System.

#### **TOOL: PALSAPLUS**

Although the MANAGER did not see the value of the PALSAPLUS when first introduced to it, she now promotes its use because she believes that its use standardises the quality of care. The MANAGER said she observed that CNPs use PALSAPLUS but not the doctors. She recognises that the guideline is not within the scope of practice of all the nursing staff, but says she encourages them to use what

is appropriate and applicable for their level of care. The example provided was the technique for how to use an inhaler in the treatment of conditions of the lung.

As a manager she uses PALS PLUS as a problem-solving tool. The example she provided was that she noticed that the counsellors were not managing to stage<sup>14</sup> HIV-positive clients appropriately, so she used the appropriate pages in the guideline to teach them how to stage an HIV-positive client (251–263). This example indicates to me that in her role as a manager she does try to improve the quality of care of the clients by rectifying the knowledge deficits of the staff under her management.

**RULE: organisational practices**

The MANAGER conducts bi-weekly meetings with nursing staff on Mondays and Wednesdays, and says she makes a conscious effort to make the meetings interactive by asking the staff about their problems. During this interview I was afforded the opportunity to review the meetings book as a source of documentary data. The notes were scant and did not hold meaning for an outsider without a detailed explanation. Because I could find no concrete evidence of her interaction with the nursing staff, I asked her how challenges raised by the staff are managed. I learnt that it is her responsibility to take up the issues raised by the nursing staff to management meetings and provide feedback after them.

An example provided was the staff request for more shelving for the client files as the filing system was not efficient. The client folders were often lost or missing, causing unnecessary frustrations and problems for both the clients and the staff. The requisition for shelving had been in the process for three years when the MANGAGER finally involved the unions to get action from the sub-structure (next level of management outside the facility) (190–198). This example might be viewed as trivial, but it has serious consequences for the continuity of care of a client, and as the MANAGER noted, it is “Not good for staff morale” (171–198).

On the surface her relationship with the nursing staff appears open but that is a superficial perspective on the facility: “... but it’s not that open. It’s not like I would

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<sup>14</sup> All HIV-positive clients are staged at every visit to determine the appropriate treatment.

want it to be” (63). This statement shows the MANAGERS desire for open supportive relationships with the nursing staff.

The organogram provided in Figure 4.7 below shows the levels of the management structures of the WC DoH. The highlighted areas shows where the KTU directly engages with management structures and where the PALSA PLUS intervention is located in the health system.

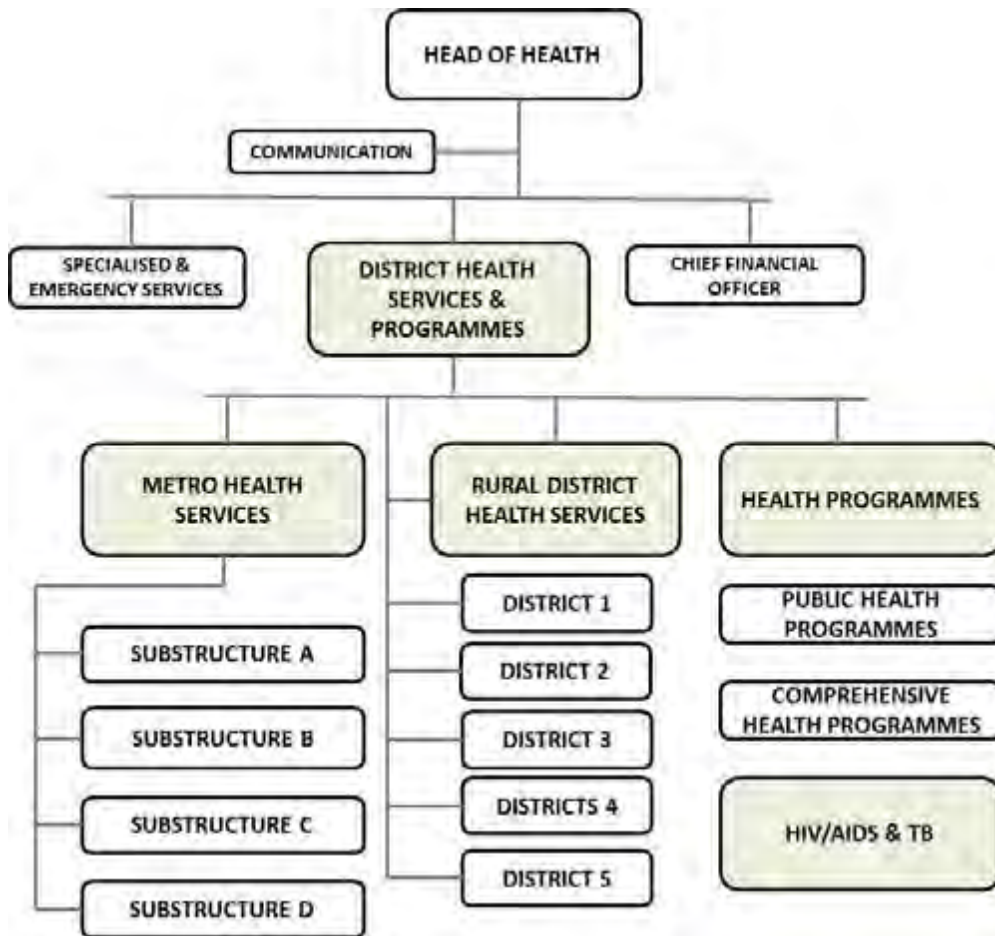


Figure 4.7 Authors adaption of organogram of senior management with highlighted areas showing the direct levels of engagement of the KTU with the management structure. (source: [http://www.westerncape.gov.za/text/2011/10/doh\\_part1\\_annual\\_report\\_2010-2011.pdf](http://www.westerncape.gov.za/text/2011/10/doh_part1_annual_report_2010-2011.pdf))

#### 4.3.4.4 Contradictions

##### **Contradiction between SUBJECT, RULE and DIVISION OF LABOUR**

The contradictions identified through the data from the MANAGER bring into focus the fragmented or disturbed line management which impacts the culture of the facility, or the morale of the staff, which impacts the division of labour. The contradictions were made visible through the tensions created when issues

pertaining to shelving or stationery were not resolved in a reasonable timeframe. This then impacted on staff moral and their ability to care for their clients.

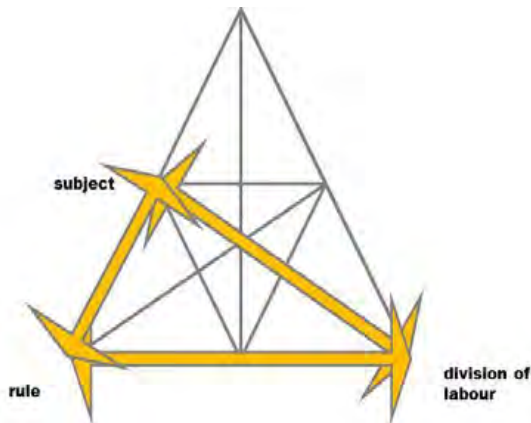


Figure 4.8 Diagram showing contradictions between SUBJECT, RULE and DIVISION OF LABOUR

### **Contradictions between two activity systems**

Another significant contradiction is between two Activity Systems, Sunnyvale and the provincial health sub-structure:

What appears to have transpired in Sunnyvale is that the MANAGER had to resort to going outside of the SOP with the sub-structure and engage the unions to help resolve the issue of the shelving. One can only imagine working in a situation where problems such as a lack of shelving leading to inefficient filing of client records remain unresolved for prolonged periods of time; the resultant low staff morale is understandable. There seemed to be little trust in both local and provincial levels of management of the healthcare services.

Object 3 in Figure 4.9 indicates the desired outcomes that have not yet been negotiated between the two Activity Systems.

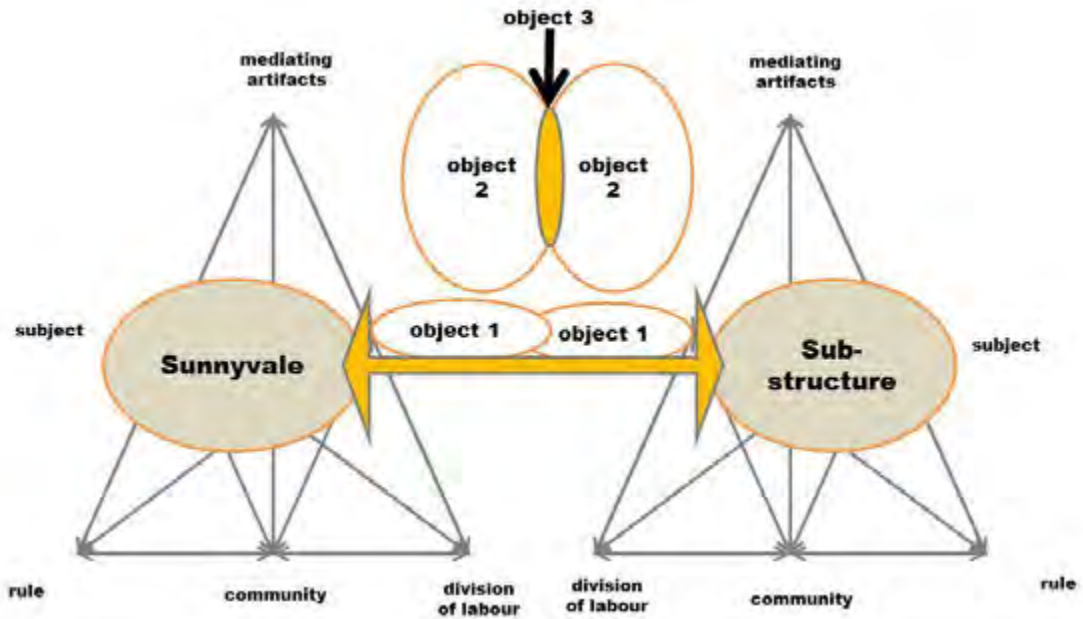


Figure 4.9 Diagram showing contradictions between Sunnyvale and the sub-structure

## TOOL

It took time for the manager to accept PALSA PLUS. “When it was initially introduced to me, it didn’t do anything for me. Because, let’s face it, I’m, say, 80 per cent in an office and obviously that’s [PALSA PLUS] clinical” (233). In my eight years’ experience of implementing PALSA PLUS, I have found that statements such as this from a manager strongly influence the environment in which a trainer is required to motivate the staff to attend on-site training and apply what they have learnt in practice. If management is supportive and encourages PALSA PLUS, the staff follow suite. This statement also speaks to the way in which the PALSA PLUS programme is presented (sold) to management. PALSA PLUS ought to be presented to management at facility level as a programme that could be used to standardise treatment and care.

### 4.3.5 The HEALTH PROMOTION OFFICER (HPO)

#### 4.3.5.1 Introduction

In the District Health management structure, a HPO falls under the umbrella of Home and Community-Based Services (CBS). Figure 4.11 (NDoH, Module 1: nd) graphically shows the structure of the District Health System and where the HPO is positioned in it.

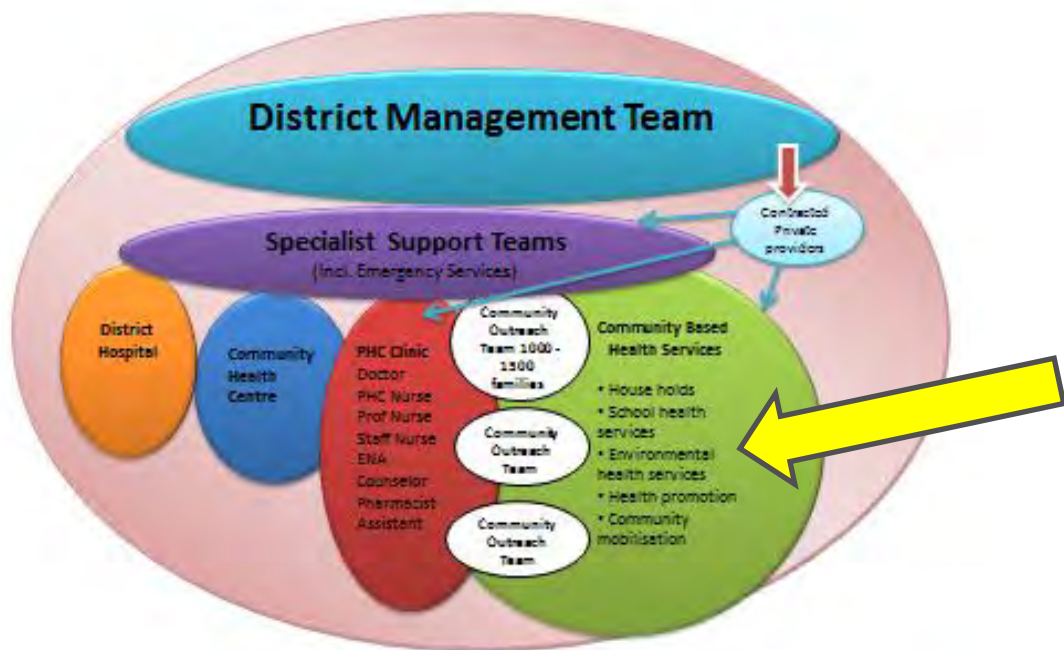


Figure 4.10 Diagram showing the district management team (source: NDoH, Module 1: nd)

Determining the role and function of the level of health worker is a challenging issue in the health arena today, because there does not seem to be consensus about what they do and what they are called. In the WHO (2007) document I totalled 36 different titles, each implying a different role and responsibility. The following definition used by Lewin et al in their Cochrane review provides clarification:

any health worker carrying out functions related to health care delivery; trained in some way in the context of the intervention; and having no formal professional or paraprofessional certificated or degreed tertiary education (Lewin et al, 2005 in WHO, 2007: 4).

The core role and responsibility of an HPO is to ensure that clients know about their condition and know how to manage it.

When deciding on whom to interview to provide the 360-degree spectrum of life in a facility to show what happens to relationships and organisational practices when a clinical practice guideline is introduced into a facility, I had not intended to interview an HPO. PALS PLUS is aimed at nurses and doctors because it promotes clinical decision-making towards diagnosis and the management of a client. This guideline falls outside of the HPO's scope of practice. In selecting the interviewees however, the TRAINER had decided that *this* is the person who reports to *her*. I was curious and went ahead with the interview and was exposed to an aspect of PHC that forms the link between the healthcare facility and community-based services.

#### 4.3.5.2 Meet the HPO in her daily life

The interview with the HPO was at the end of a busy day for her and yet she came across as easy-going and conversational; her unassuming confidence oozed her 20 years' experience in patient education. She calls herself the "glue" in the facility and sees herself as being the link between the doctors, nurses, pharmacists and the client:

We have the six weeks programme<sup>15</sup> with them ... [some] will take in what we taught them. The rest might not worry about it. Only when they become really sick then they'll come back and then they'll start [the programme] over again (135).

This six-week programme focuses on educating newly diagnosed clients and those whose chronic condition is diagnosed as unstable.

The training of an HPO is informal and on-going, dependent on the political/health agenda. The HPO tells her story:

I was an ordinary field worker offering family planning advice, then they wanted us more for the TB. And then it became HIV and the plate just got bigger and bigger and bigger. Now we're doing the diabetes, all the chronic diseases, all of those things (15–20).

The group of 40 HPOs in the Metro district of the WC meet quarterly; this is invaluable for her as she enjoys sharing ideas and receiving on-going training: "...

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<sup>15</sup>Sunnyvale offers their clients a six-week educational programme to assist them to manage their chronic conditions

and like I was telling you now what we're doing, they will say what they're doing and we will then pull from each other's ideas" (170).

The HPO attended the required six PALS PLUS on-site training sessions and is proud of her PALS PLUS certificate of attendance.

#### 4.3.5.3 Findings using an Activity System: the HPO

From the interview with the HPO, the following data were categorised and organised using the structure of an Activity System.

##### **OBJECT**

Her expressed desire is to standardise care to prevent her clients from receiving mixed messages from doctors and nurses. She also seeks improvement that will bring about change through on-going informal learning. The HPO is self-motivated and works steadily towards achieving this **outcome**, which shows insight into rendering a quality service to those in her care. In exploring the HPO's comments about PALS PLUS, the **object**, she expressed her desire for the standardisation of care to be made clear.

##### **TOOL: PALS PLUS**

The HPO makes use of various sources of information available to her and does not rely solely on PALS PLUS. "Even with the research people that come in that do research on diabetes, or asthma or whatever, they will then give it to us on a presentation and then we will take that information and see where we can improve" (163). The following statements show how she promotes the transfer of policy into practice:

And some of the doctors, is sometimes not even doctors from the facility, but is the interns or the ... they come and they want the PALS PLUS booklet (218) ... and we will tell the doctors about the PALS PLUS, especially the new ones. This is the thing that this is how it should be done, because sometimes they won't go [and ask] to the next doctor (226).

I queried whether she would be able to find a tool specific for the scope of her work. Her response was: "Yes we will benefit, but on the other hand, for me it doesn't really matter because either way, we get the information and they [CNPs

and doctors] also assist us, and they also empower us and we work very closely with the CNPs and the doctors” (235). This interview highlighted her ability to work closely with doctors and nurses to achieve her aim of client education.

Her observation concerning the use of PALS PLUS in the facility was: “Yes they do [use PALS PLUS] I can say, like the STI audits and stuff” (217). Of her own use of PALS PLUS she says: “If it’s something that the guideline [PALS PLUS] requires, then we try to stick to what the guideline wants us to do, and we will always refer our patients” (209).

### **RULES: organisational practices**

The HPO has several roles within and outside of the facility. Two themes were identified, namely:

- work done inside the facility, and
- work done outside the facility.

### **Work done inside the facility**

The HPO acts as a link between the clients, the staff in the facility and the community through use of a referral system between the HPO and CBS’s to support follow-up of clients from the facility to the community. The community care workers will then do follow-up visits to the clients in their homes.

The HPO organises her work routine around the structured activities of Sunnyvale, for example, the diabetic club on a Wednesday, the day set aside by the facility for clients with diabetes to attend. She attends regular meetings in the facility with other HPOs, nurses who work in the clubs and doctors where they deal with “whatever problems we experience and how we can rectify it” (157). The meetings aim to promote a culture of working together and providing a platform to engage and understand each department’s role in the treatment and care of clients. Everyone<sup>16</sup> gets feedback: “So it becomes everybody else’s baby, it’s not just that specific department that have to see to it” (303). Monthly meetings provide

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<sup>16</sup> “Everyone” refers to all those attending the meeting. Those who attend are required to provide feedback to those who are not present.

feedback from management about how the facility is doing, for instance, targets that are reached. (This is linked to the “seasons” discussed in the division of labour below.) My impression was that because the HPO views herself as the “glue” in the facility, she takes pride in carrying out her roles with integrity and wants to continually improve on her work ability.

### **Work done outside the facility**

Because of the community focus of her role, the HPO also liaises with the NGOs who provide support groups in the community, for example the TB/HIV support group.

She meets with NGOs to plan special events such as World AIDS Day: “like now for HIV we already met with the different NGOs and with the sisters [CNPs] to plan out our programme for that specific day. What we’re going to do. So we do meet and we do have on-going ... um ... and there is also training and feedback” (157). My understanding is that it is important for the community to see that the facilities and NGOs collaborate with one another and that clear, standardised messages are being put forward. This links to the HPO’s driving passion: to standardise care in order to prevent confusion in her clients.

### **DIVISION OF LABOUR/RELATIONSHIPS**

As indicated in the introduction, the core function of an HPO is client education. This takes the form of group education and/or individual information sessions. There are also “Health Seasons” which are dependent on what the DoH is promoting – for example, women’s health, diarrhoea and TB which impacts the whole facility.

During the routine Chronic Club meetings,<sup>17</sup> if the client’s condition is under control, the HPO refers them to the CNP and if not, they are referred to the doctor. Making the appropriate referral does require a level of knowledge about a condition, and what to look out for and when to refer to the next level of care.

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<sup>17</sup> Clients diagnosed with chronic conditions are provided with an opportunity to receive information about their condition and also meet with others in similar situations, thereby harnessing support and information.

The HPO sees her role as a link or the voice of the community: “We are the eyes and the ears, whatever, from the community, for the community and for the hospital. We are the link between the two” (97); “We are all over” (243). Once clients are diagnosed with a condition or have returned for a regular routine visit and do not seem to be managing their condition, they are referred to the HPO. They would then either join the six-week programme as described previously or receive individual sessions about their condition.

The clients seldom consult the same doctor or nurse twice, which leads to different messages from different doctors and nurses. Clients also receive different messages from doctors who rotate through Sunnyvale and it is the HPO who is required to clarify or explain the mixed messages received. The HPO is therefore often in a sensitive yet powerful position, where she hears who says what to the clients. Again, it was made clear to me why she strives to encourage standardised information and care.

#### 4.3.5.4 Contradictions

##### **Contradictions between TOOL and the DIVISION OF LABOUR**

One of the contradictions raised by the HPO pertains to the use of the TOOL by a non-clinical user. She prefers to use PALS PLUS because it is a requirement for nurses and doctors to follow the DoH policies and evidence-based practice. Her object is to standardise information because her experience in dealing with the clients is that they receive mixed messages. This possibly leads to non-adherence to treatment.

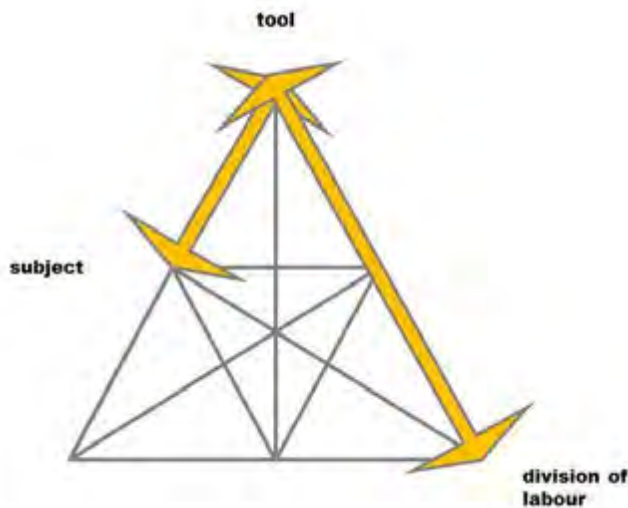


Figure 4.11 Diagram showing contradictions between SUBJECT, TOOL and DIVISION OF LABOUR

An interesting observation, although it did not present as a contradiction, is that junior doctors find it less threatening to ask the HPO for a PALS PLUS guideline than to go directly to staff who are viewed as more senior. It is also the client who seems to be comfortable enough with the HPO to ask for clarification about their conditions. It seems to be the HPO who is able to be available to assist the clients in understanding the condition affecting their life.

#### 4.4 Summary

Figure 4.12 below provides a broad overview of the contradictions and themes identified in this chapter by using the nodes of an Activity System. These form the basis of the discussion in Chapter 5.

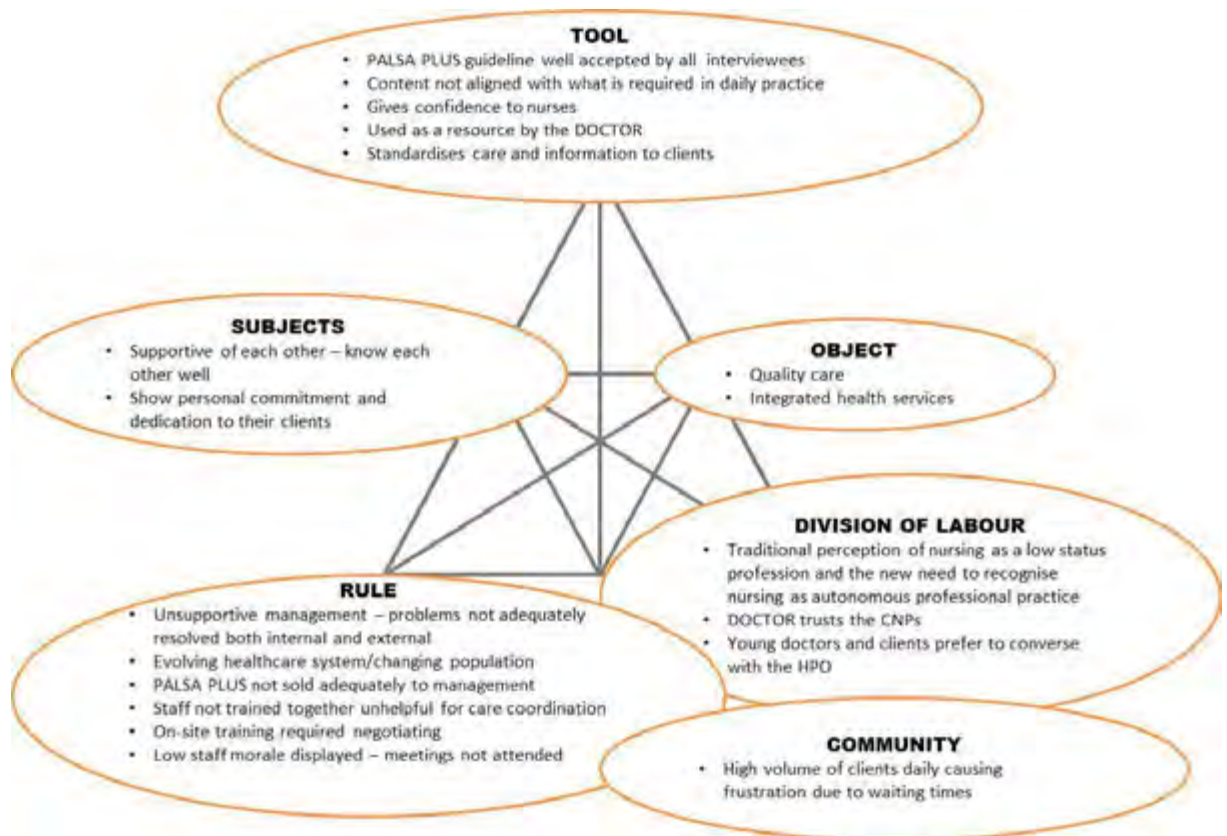


Figure 4.12 Diagram showing broad overview of contradictions and themes identified for discussion in Chapters 5 and 6

# 5 Further analysis and discussion

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## 5.1 Introduction

Key contradictions, themes and points for discussion that emerged from the findings in Chapter 4 are analysed and discussed further in this chapter.

A significant contradiction brought about by the mismatch of the PALSA PLUS guideline is where the clinical content does not equip the clinical staff of Side A (the “Chronics” side) to manage the common conditions they treat. An everyday example of this would be that PALSA PLUS does not aid the management of a client with diabetes and HIV concurrently. This striving for the object and managing the treatment gap certainly kept this particular activity system “unstable”, to use Engeström’s terminology.

At Sunnyvale the staff were dealing with a high volume of complex clients, and here the PALSA PLUS guideline proved to be a tool that did not fully provide the required integrated treatment and care, especially given the unsupportive management. Contradictions identified through the DOCTOR were in particular focused between the health system versus the services that did not recognise the changes that the front-line staff were required to negotiate continually in order to fulfil their objective. Management was also not seen to be “standing up” (ie supporting) the staff as the complaints received did not appear to be addressed adequately. The pressure experienced by the staff translated into their perceived lack of quality care that led to low staff morale.

It was in analysing the role of the MANAGER that I gained the realisation that my original intention was to use 3rd-generation AT as a comparative case study between two or more trainers and facilities. This would possibly have provided a more effective analysis to show the layers of the complexity within the situation at Sunnyvale and also between other activity systems involved.

The analysis of the data from the MANAGER confirms the experiences and frustrations of the TRAINER, the PEER and the DOCTOR working in the Sunnyvale healthcare facility. The latter three interviews were presented as individual units of

analysis and their contradictions were presented within the nodes of the activity system.

This afforded me the opportunity to understand some of the elements I was looking at in order to satisfy my impressions: educator identity, professional and personal development, change in practice by embedding policy into practice.

The notion of boundary crossing became a focus when reviewing the meaning of the contradictions presented in this case study; the sharing of tasks required for effective and efficient health services today, the inter-personal relationships between the interviewees, the negotiation between the layers of the organisation, for example Sunnyvale and the sub-district, as well as my own negotiation of AT and KT.

These themes and contradictions are discussed through the theoretical language of boundary crossing, knotworking and co-configuration, which have been defined in Chapter 2.

## **5.2 Boundary crossing and professional practice**

The nurses' acceptance of their own considerable knowledge and experience and expertise – in my view – was not obvious. The PEER and, to a certain extent, the TRAINER, hid their knowledge behind that of being “only a nurse”; neither seemed supported by their scope of practice nor the affirmation offered by the DOCTOR – he trusted the nurses to care for his aged parents.

Being part of a collective, a community of practice, I expected the use of knowledge to aid the nurses to enter the “uncomfortable places where identities are questioned and priorities argued” (Edwards, 2008: 6) in order to take ownership of and responsibility for being professional in their own right.

The realisation that nurses are the backbone of PHC is a “priorities argued” space that needs to be further explored at Sunnyvale. In my experience, this space is accepted by nurses in rural South Africa, where there is no doctor present.

Boundary crossing and professional practice could also have been analysed through the lens of the task-sharing discourse, one that is dominant in healthcare today (Fairall, 2012). However, I chose to remain within AT and rather highlight the discomfort of the space created between those who do share tasks or cross

boundaries in their professional practice. The individual's failure to negotiate their own professional practice stories showing their respective expertise, which could have been used to advance into new and transformatory spaces, was a missed opportunity.

### **5.3 Boundary crossing and historicity**

Historicity refers to the historically accumulated tensions that remain unresolved for example when the retrenched textile workers sought treatment and care at Sunnyvale. This caused an excessive workload but no additional staff were sent to assist. These historically emerging tensions between clients, management and the staff at Sunnyvale remain unresolved.

The lack of recognition of the challenges in the relationships between the doctors and nurses, between the manager and staff, between clients and staff remain unchanged. This made me realise the need for an intervention to help name and negotiate the barriers to these historically rooted relationships having an impact on care.

The data also presented how history has compounded the fragmented images and relationships firmly held in place between doctors, nurses, patients, pharmacists and administrators. I had been optimistic in hoping that by the enthusiastic TRAINER introducing the PALSA PLUS programme into the healthcare system, the SUBJECTS would have found ways to break down their real and perceived barriers in order to explore harmonious ways of working towards their desired outcome. After all, their desired outcome – in whatever way it would be expressed – is to provide the best care for their client.

I imagine that for transformative learning to take place, these historically accumulated tensions would need to be recognised and named in order for knotworking and co-configuration to be translated into new systems to be implemented towards organisational transformation.

## **5.4 Boundary crossing and educator identity**

The TRAINER made it clear during her interview that she had no intention of becoming an educator. However, becoming a FT automatically required of her to negotiate this new role. The interactive methodology used to train a TtTtT workshop modelled for her how to facilitate small group learning required in the delivery of educational outreach. Section 1.3.3 in Chapter 1 provides an understanding of the status of nurse education in the current healthcare system, which does not sufficiently prepare nurses for what is required of them today.

The TRAINER has negotiated several boundary spaces: first, her own transition in becoming a FT and taking on the expected educator identity. Secondly, becoming the PALSA PLUS “go-to” person at Sunnyvale. Thirdly, taking on new clinical content introduced by PALSA PLUS such as TB/HIV when her daily practice involved the management of diabetes and hypertension. The frustration of negotiating these spaces became evident when the TRAINER personalised the fact that nurses did not attend the on-site training or were not using their PALSA PLUS guideline during consultations.

Besides the preparation for this educator role provided by a TtTtT, more appropriate nurse education could also assist nurses in the future to negotiate the boundary spaces shown by the TRAINER.

Ideally, education should prepare the nurse for the “overlapping roles of caring, diagnosing and treating and managing” (Mayers, 2010: 4) required of them to take on a new identity in the 21st century. The nurses at Sunnyvale were expected to step into a role of taking ownership of their own learning through the on-site training. This method transitions the nurse from passive learning to group involvement, making provision for effective team work and the ability to share tasks. The PEER made it patently clear during her interview that she was not sufficiently equipped for the role she currently holds. It was the PALSA PLUS guideline that bridged the gap between what she learnt in college to what is required of her in a clinical consultation.

## 5.5 Boundary crossing and educational outreach

The data made reference to a change of practice aimed at integrating policy into practice. One of the basic tenets of educational outreach is the alternation of learning with practice. This externalisation, or small group interactive training using case studies to highlight “new knowledge” or find ways to resolve problems, together with being able to practise independently using the PALSA PLUS guideline during a consultation, is a strategy that aims to integrate policy into practice:

The PALSA PLUS training model ... draws on adult education principles and the outreach education approach, and has been shown to be effective in changing nurse clinical practice (Uebel, 2011P: 8).

What we witness in action though the story of the PEER is successful educational outreach: Uebel (2011 verified by Fairall, 2005; Zwarenstein, 2011; O’Brien, 2008) talks about educational outreach as a technique used to facilitate the uptake of an intervention.

According to Engeström (1999), learning takes place through the *externalisation* of learning, when a solution to a problem or new knowledge is created by individuals or a group of people. It also takes place by the *internalisation* of learning, when an individual is able to take problem-solving or the acquisition of new knowledge a step further and make sense of their social relations, thinking and actions. Expansive learning encompasses both forms of learning. Central to KT is the internalisation of knowledge in order to ensure that policy is translated into practice through appropriate implementation. The shift in the uptake of PALSA PLUS in Sunnyvale comes about when the MANAGER promotes on-site learning and supports the TRAINER in her required delivery and attendance at a support programme.

In order to fully employ expansive learning in an organisation, doctors and nurses need to be trained together, especially if they are required to standardise treatment and care and jointly resolve contradictions through boundary crossing, or task-sharing, and effective knotworking.

## 5.6 Knotworking and the object

When analysing the DOCTOR'S desired object and taking into account the findings from the TRAINER and the PEER, the following quotation shows the complexity of their mutual striving towards the outcome of an integrated service. This object manifests in the ongoing changes within PHC:

... while the object and the motive give the actions coherence and continuity, by virtue of being internally contradictory, they also keep the activity system in constant instability (Engeström, 2000: 964).

According to Engeström (2000: 964), "The object of medical work is the patient, with his or her health problem." While I concur with this statement, I have also seen that if the multiple layers of the organisation do not work towards the holistic care of the patient, the contradictions that arise from this are often left unresolved. This, I believe, keeps the activity system "unstable" – to use Engeström's terminology – and possibly the source of much of the frustration and symptoms of burnout (for example tired, irritable, short-tempered) that I witnessed during the interviews at Sunnyvale.

The interviewees came across as burdened and, in particular, the interview with the DOCTOR and the MANAGER felt heavy. Amid these feelings, I wondered how this organisation could negotiate the impact of the changes they experienced daily. The image they portrayed is one of each group working on their own and in isolation: the CNPs together, management to one side, HIV services on another.

Sunnyvale reminded me of what happens in organisations when change is not adequately addressed and individuals live with a sense of unpredictability and uncertainty. The uncertainty of learning "into" something that had not yet been formulated led me to the notion of knotworking – the continuous process of working with the evolving changes within an organisation. "The rise and proliferation of knotworking is associated with ongoing historical changes in work and organizations" (Engeström, 2000: 972).

At Sunnyvale there are several actors and activity systems, and associated activity systems. The dominant actors, I imagine, could be the management, doctors, nurses and all the auxiliary staff. The activity systems could be the various departments at Sunnyvale, middle and top management housed at the provincial

office in town and the KTU. The multiple layers of the organisation that, from an outsider's viewpoint, caused the tensions and conflicts did not appear to meet at any point in time to negotiate the transformation. "The unstable knot itself needs to be made the focus of analysis" (Engeström, 2000: 972). Knotworking is a continuous, active process that requires intervention and engagement:

Knotworking is a longitudinal process in which knots are formed, dissolved, and re-formed as the object is co-configured time and time again, typically with no clear deadline or fixed end point. In temporary groups, the centre still firmly rests in a definable, bounded group. In knotworking, the centre does not hold (Engeström, 2000: 973).

What is possibly missing in the organisational life of those at Sunnyvale, where the "centre does not hold", is for the interdependency of the identified activity systems to be made explicit. "Knotworking may be seen as the emerging interactional core of co-configuration" (Engeström, 2000: 973).

## **5.7 Co-configuration**

Although there were multiple opportunities for the staff at Sunnyvale to meet and plan a way forward or, engage in knotworking activities to streamline their systems and working relationships, these did not seem to take place. The TRAINER and the PEER felt that there was no point in going to meetings and preferred to be part of the group of CNPs to share the difficulties they experienced.

To understand co-configuration, I had returned to some of Engeström's empirical studies. The example provided through a three-year intervention study (Engeström, 2007: 27–31) was aimed at analysing and transforming work and learning. I found the case study on the PHC centre useful for understanding this case study better.

The contradictions experienced by the staff at the PHC centre in Helsinki were between the complexity of the co-morbidities that the patients presented versus the tools and rules for treating single problems at a time. Together, the staff formulated a new concept where two "patient pipelines" were put in place; one for the complex patients and another for the simpler cases. The team of doctors and nurses then tested the new tools. What they realised is that there were not that

many complex cases after all. “Real-time knotworking” was seen in action between this care team:

To overcome the gap between action and imagination in history-making, it may be necessary to bring them closer to one another and occasionally to merge articulative decision-making and configurative modelling (Engeström, Engeström & Kerosuo, 2003: 305 in Engeström, 2007: 31).

At Sunnyvale, what was not evident is the staff’s use of the multiple opportunities presented by their meetings and team-building exercises to engage with “real-time knotworking” or “merge articulative decision-making and configurative modelling”.

## **5.8 Summary**

In summary, this chapter highlights the need for the resolution of the contradictions that manifest between the TOOL (the clinical practice guideline), the RULE (the culture of the organisation, its policies and its management systems) and the DIVISION OF LABOUR (roles and responsibilities of and inter-relationships between the nurse, the doctor and the manager). This could be done through boundary crossing activities involving knotworking and co-configuration. In so doing the differences between traditional off-site training versus the on-site educational outreach approach used to train the staff to use PALS PLUS; the tension between the traditional perception of nursing as a low-status profession and the new need to recognise nursing as autonomous professional practice; and initial lack of buy-in to and support from facility management for the programme could be resolved. The effect of boundary crossing could lead to an expansive learning environment.

Chapter 6 concludes this dissertation with a succinct discussion of the case study and a number of recommendations for further research.

# 6 Findings, conclusions, recommendations

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## 6.1 Introduction

This chapter concludes the dissertation by presenting the main findings in context. The strengths and limitations of the case study are discussed. The implications for policy and practice are highlighted and recommendations made for further research.

## 6.2 Main findings

The main findings show that when an environment is created in which personnel are provided with the opportunity by a supportive management to have their workplace expertise and context-specific knowledge recognised, a point of growth can be created from which to enter into a collaborative space where personnel are enabled to work towards the whole or object-oriented relationships that are promoted:

A CHAT view of workplace expertise is to see it as a collective attribute spread across systems, which is to draw upon to accomplish tasks. For Engeström, for example, expertise lies in both a system and in individuals' ability to recognise and negotiate its use (Edwards, 2008: 9).

Having said this, there is also a need for standardised treatment and care within the context of health. The HPO used PALS PLUS so that she could prevent confusion for her clients through giving them the (supposedly) same message as the doctors and nurses. Knowledge priority setting is one of the key activities of KT; the use of standardised knowledge needs to be context-dependent and this has to be recognised and negotiated.

The PALS PLUS guideline was well accepted, in line with the findings of previous research, although significant challenges were observed with regard to its implementation. The contradictions identified between the nodes of the activity system led to several boundary-crossing spaces, the dominant boundaries being

between KT and AT; the tension between the traditional perception of nursing as a low-status profession, and the new need to recognise nursing as autonomous professional practice; and an initial lack of buy in to and support from facility management for the programme.

### **6.3 Findings in context**

To place the findings in the context of the literature reviewed in Chapter 2, the formative intervention of Engeström in the Children's Health Care Centre in Helsinki (Engeström 2001) was re-examined. The patient's family, the Health Centre and the Children's Hospital were afforded the opportunity to engage in dialogue with each other in order to identify and resolve contradictions. The outcome was the development of appropriate tools to ensure a change in the division of labour where the child's care was moved to primary care services. The study involving Sunnyvale could be viewed as an academic exercise in the pursuit of understanding a theory. The subjects remain untouched by their interviews other than a possible cathartic spinoff through the sharing of their stories. What has been observed is that appropriate tools need to be developed and used to promote the resolution of contradictions. Although the tools developed did not arise directly through negotiation with the subjects, the tools for wider implementation have been put in place (see section 6.4).

The elements of boundary crossing such as professional practice and the resultant negotiation of new "uncomfortable" spaces are resonant of the work of Edwards, who has been quoted extensively in the present case study.

### **6.4 Strengths and limitations**

A potential threat to the generalisability, validity and potential bias of the case study lies in the fact that only one facility was used. However, the findings were supportive of the previous qualitative research undertaken by the KTU. What this case study adds is an education theory that provides a different lens with which to analyse the work of the KTU.

Significant theoretical advances were made in that KT and AT have not been combined before to bring boundary crossing to the fore. One of the boundary

spaces that exists between KT's direct use of policy to change practice through the use of clinical practice guidelines and AT's more flexible approach to workplace expertise and knowledge have been challenged in the present case study. The article by Greenhalgh (2011) challenges the assumptions that underpin KT, which are that knowledge equates with objective, impersonal research findings; that it is useful to conceptualise a "know-do" gap between scientific facts and practice, and that practice consists more or less of a series of rational decisions. Outside of the field of medicine, these assumptions are widely questioned. For Aristotle:

[K]nowledge included not only *episteme* (facts) but also *techne* (skill) and *phronesis* (a form of practical wisdom). Other philosophers also emphasised the importance of tacit knowledge (knowledge that is difficult to write down and transmit) (Greenhalgh, 2011: 503).

Moreover, the discourse is raised about what knowledge and whose knowledge, a topic that requires further exploration and clarification.

Another strength of this case study is the rigorous use of AT to analyse the findings; every interview follows the same format, through which contradictions were identified and analysed. However, this rigour also posed the threat of the researcher's becoming too critical of the facility and the interviewees. Themes that did not fall into the category of contradictions could have been overlooked. Furthermore, a strong theme of the "heart" of the SUBJECTS has not yet been made explicit and could have been overlooked (see section 6.7).

## **6.5 Implications for policy and practice**

PALSA PLUS was developed to address TB, chronic respiratory diseases and HIV. The Practical Approach to Care Kit (PACK) Adult is the expansion of PALSA PLUS and includes the diagnosis, treatment and management of NCDs (hypertension, diabetes, cardiovascular disease), mental health, end-of-life care and women's health (antenatal care, contraception). PACK proposes a suite of materials that align with one another, hence the development of a Community Care Worker (CCW) guide, the Patient Information Leaflet and an Implementation Toolkit. The KTU tested PACK Adult in a RCT in the Eden district (the results are currently being written up).

This case study informed the development of some of the PACK materials that are already having an impact on policy and practice.

The interview with the HPO was a turning point in my work in the KTU: her plea for standardised messages was acknowledged. This interview led to an engagement with the educational materials currently in circulation in the facilities. PACK CCW guide, the Patient Information Leaflet and the associated training programme were designed and successfully implemented in a National Health Insurance (NHI) site in the WC. The Patient Information Leaflets are currently being printed for widespread circulation to all the facilities in the WC.

Included in the 2014/2015 service level agreement (SLA) between the KTU and the WC DoH are the Implementation Toolkit and the Chronic Disease Management Teams (CDMT) workshops. These were developed through the workshops that I facilitated in the Eden district in the WC. Their purpose is to help districts to establish CDMTs that will take ownership of and responsibility for the roll-out and implementation of PACK.

## **6.6 Further research**

This analytical case study provides opportunities for further research in the following areas:

- The direct voice of the COMMUNITY is absent from this study. Their voice was heard through the experiences of the interviewees. *All* nodes of the Activity System should be considered to provide the complete picture for analysis and understanding of the interrelationships of an activity system.
- The use of AT as a conceptual framework could be used for a comparative study across different terrains, as was originally intended. Perhaps comparing rural with urban facilities would provide conclusive recommendations.
- The use of AT in the form of an intervention (Change Laboratory) and not simply a theoretical framework for transformation is recommended to allow front-line clinicians to recognise and actively negotiate contradictions towards an expansive learning environment.

- The exploration of *phronesis* within the KT framework to allow for this tacit knowledge to find expression and become acceptable in the clinical judgement and expertise of the clinician.

## **6.7 Conclusion**

The lived contradictions during the case study have consequences on the individuals we met through the case study who in turn affect the layers of the organisational functioning (and vice versa). The dysfunction of Sunnyvale as an activity system affected the very lives of the actors in this system. This was often expressed as low morale with a deep sense of not being able to fulfil their personal and collective objective of comprehensive patient-centred care. The many missed opportunities that occurred to “make right” did not take place and the actors seemed to be trapped in the old-time song of “this is how it is”.

The lack of recognition and therefore the expression of the possible boundary-crossing activities that precipitated some of the challenges in the relationships between the doctors and nurses, between the manager and staff, between clients and staff, remain unsaid. “To find a ‘solution’ often means confronting new contradictions. Thus, the process of change is likely to be contradictory itself” (Langemeyer, 2006).

In conclusion, this analytical case study demonstrates the complex nature of unravelling the effects of interactions and relationships within multiple organisational layers of a PHC facility that affect the implementation of the guideline. Any contradictions identified will remain contradictions and will not become the potential points of transformation if the multiple layers of the organisation do not engage in dialogue with one another.

## **6.8 Honouring the heart of the clinician**

I left clinical practice many years ago. I know that I am not the only one who cried in the car parks of health facilities – paralysed.

Despite their low morale and with a deep sense of not being able to fulfil their personal and collective objectives of comprehensive patient-centred care, the TRAINER, the PEER, the DOCTOR, the MANAGER and the HPO willingly step into Sunnyvale every day, year in, year out. Somehow they seem to overcome the systems that fail them and continue to care with love and compassion:

**“First and foremost you need to have that love to work with people ... you must *love* what you do” (Interview iii: 190, 212).**

I end my journey with love, honour and respect for the five interviewees who have lived within my heart-space. It is for you that I continue to engage with my own vulnerability when breaking through the boundaries that lead to transformed spaces.

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# Appendix A: Comparison of conventional and PALS PLUS training approach

Comparison of conventional and PALS PLUS training approach for clinic staff (source: KTU archives)

	<b>Conventional in-service training</b>	<b>PALS PLUS educational outreach training</b>
<b>Venue</b>	Centralised and removed context of clinical practice.	Decentralised – on-site at individual clinics, within the context of daily clinical practice.
<b>Trainers</b>	Trainers from DoH training department.	Supervisors embedded in district system and known to nurses
<b>Trainees</b>	Separate programmes for different cadres of health workers, from multiple clinics. Reduces identification with clinic team.	Team approach targeting those working in the clinic, but prioritising nurses.
<b>Format</b>	Intensive, once-off, burst training, with little opportunity to consolidate new learning and integrate with practice.	Repeated, 1–2 hour trainings over a period of weeks, facilitating the alternation and integration of learning with clinical practice.
<b>Style</b>	Tendency towards didactic: uni-directional, expert presentation of large volumes of content by specialists. Learners are passive recipients with little room for testing own understanding or asking questions.	Interactive discussion engaging all trainees facilitated by outreach trainer, with explicit attention paid to small group processes. Experiences managing patients discussed without judgement, encouraging sharing of difficulties.
<b>Content</b>	Disease-oriented training focus, often with substantial basic science component. Perpetuating vertical care delivery.	Case-based using symptoms as entry points. All content is applied. Content often driven by learning needs of the group. No basic science component.
<b>Materials</b>	Materials from multiple sources, and of variable quality. Increasingly, training includes the PALS PLUS guideline as the applied component.	PALS PLUS guideline and support materials only. Single set of high-quality, integrated materials highlighting key messages from the guideline and facilitating the use of the guideline’s algorithms.

# Appendix B: The process of becoming an FT

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## **Becoming a PALS PLUS facility trainer**

During the negotiations between the KTU and the DoH, the selection criterion to become a facility trainer was established. By mutual agreement between the KTU and the DoH, it was established that the trainers were to be drawn from the middle-management structures of the DoH and in this case, from the pool of coordinators<sup>1</sup> of the TB and HIV programmes. The KTU requested that where possible, the nurses selected should fulfil the following criteria: nurse manager/coordinator/trainer/experienced CNP, who exhibits sound relationships with the personnel in a particular facility/district, for example HIV/AIDS, STI and TB (HAST) coordinators. The reason for this was to promote systems strengthening through integration of the PALS PLUS programme in the health system. They should display sound knowledge of TB/HIV/AIDS and have hands-on clinical experience in these areas of work within PHC. The nurse did not need to have any formal education or experience in training and facilitation. She or he needed to have time to train, be energetic and passionate about making a difference in healthcare and needed to show an enthusiasm and willingness to develop facilitation and training skills. Some of their key activities once trained would include: a willingness and availability to attend on-going training and support from the PALS PLUS master trainers (MTs); delivery of facility-based training according to the educational outreach strategy; be in a position to provide on-going support to the facilities in their care through quarterly support workshops; be available to solve problems raised by facility staff; give feedback about PALS PLUS at district/facility meetings; keep track of those who leave their facility and those who are new on the staff so that they can be

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<sup>1</sup> Coordinators form part of the middle-management structure of the Western Cape DoH. Their role includes programme monitoring, quality control and mentoring and support of staff. They also form a link between the facility and the next level of sub-district management. Each coordinator is responsible for a group of facilities that form a sub-district within a district. The Metro district for example has five sub-districts.

trained; assist the MT with planning on-going training to accommodate staff attrition at the facilities and act as the link between their facility and the MT. These were all in addition to her current job description, placing an additional responsibility that had not been negotiated on her already full plate.

Although the criteria for becoming a FT was agreed upon between the KTU and the DoH, the TRAINER did not fit all the requirements in terms of her knowledge and experience of TB and HIV nor her enthusiasm to take on an educator role; both key requirements. In my experience, this is often the case; nurses arrive at a TtTtT oblivious of the purpose of the training and what their roles and responsibilities would be once they return to their facilities. The TRAINER relayed the story of how one day the senior doctor provided her with the dates she needed to be at a training and she was told she would receive further notification in due course. She never did.

With the background of the selection, roles and responsibilities of a PALS PLUS facility trainer identified, the following section briefly explains the TtTtT to provide a sense of the TRAINERS experience thereof and indicates her experience of it being quite different from previous training experiences.

### **The Train the Trainer to Train (TtTtT) workshop**

When designing the TtTtT workshop I set out to purposefully integrate the clinical content with the process of how to train and facilitate. The training workshop aims to mirror the delivery of on-site training by providing multiple opportunities to practice and engage in a dialogue and reflective process of progress made. This training is embedded in the principles of adult theories and methods, in particular recognising that adults come to training with knowledge and experience which needs to be recognised and build upon. As referred to in Chapter 2, Vygotsky provides the theory for the social context of learning; theories and methods of learning and teaching that highlight the departure from current training programmes, making this training challenging to bring into a health facility today.

Training of trainers is not a once-off training event but rather aims to develop relationships of learning with a trainer. This journey starts with an intensive week-long training away from home, work, shopping malls and other distractions. The

training starts on a Sunday evening and ends on a Friday at lunchtime. All trainers are required to live-in from the start of the training to form a social context for the learning of training and facilitation skills. It follows the principle that “... knowledge is socially constructed and that learning often occurs in social interactions” (Schugurensky, 2003: 168). Learner ownership of the guideline and the training strategy is imperative for successful implementation. The importance of this is emphasised by Ismail (2003: 105):

‘... there is a strong emphasis on the ownership of the process, learning in a collective, keeping the learning people-driven, and the ownership of the knowledge by the participants.’

Learner ownership is encouraged through the structured on-going support programme that allows for nurse trainers to go back to the facilities and use educational outreach. As discussed in Chapter 1, the purpose is to minimise disruption to services, train all the staff at the same time to ensure team work and rapid scale-up.

# Appendix C: Interview guide

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## Interview notes

Archival #:

New name:

Date:

Start:

End:

1. How long have you been working here?
2. What is your role here?
3. Who do you work more closely with?

Questions	My observations
4. How would you describe the life and culture of your clinic?	
5. Please tell me what happened when the PALS PLUS <b>guideline</b> was introduced into <b>your life</b> ?	
6. Please tell me what happened when the PALS PLUS <b>guideline</b> was introduced into <b>your facility</b> ?	
7. Please tell me what happened when the PALS PLUS <b>training</b> was introduced into <b>your life</b> ?	
8. Please tell me what happened when the PALS PLUS <b>training</b> was introduced into <b>your facility</b> ?	
9. Anything else you want to tell me about the organisation or relationships of this facility?	

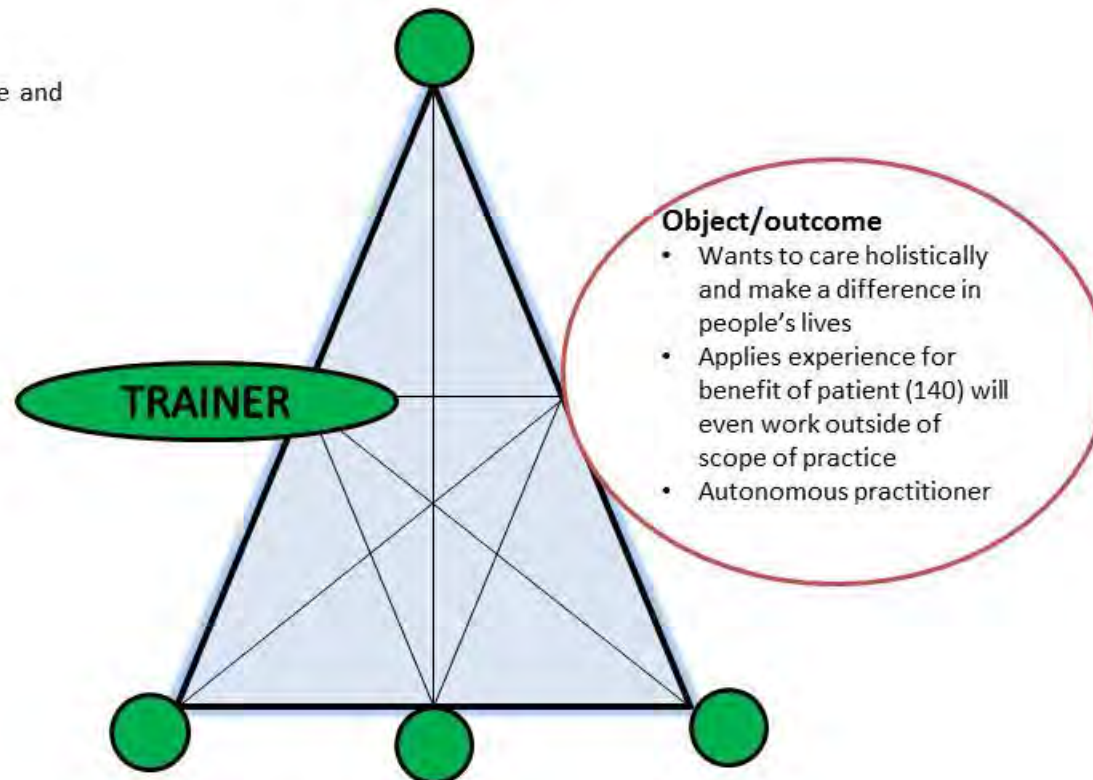
# Appendix D: Example of analysis using AT

## Profile:

- Humorous, expressive, to the point describes her
- Independent autonomous practitioner - sets high standards for herself
- Popular in the facility

## Core role and responsibility

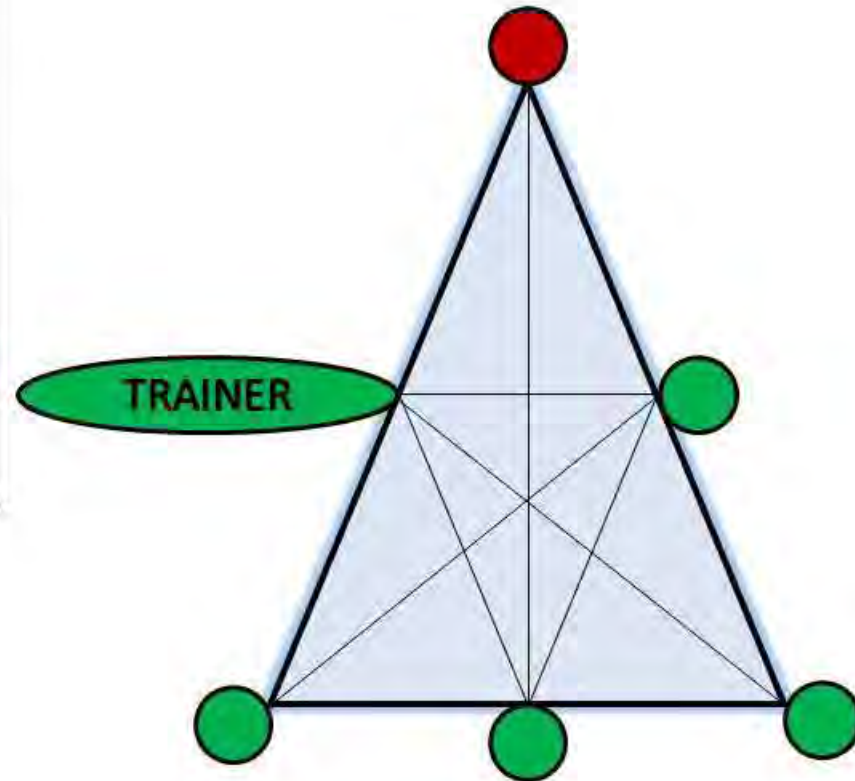
- Works as a CNP – able to examine, diagnose and prescribe treatment for patients
- Consults acutes and 'chronics'
- PALSA PLUS trainer



## TOOLS:

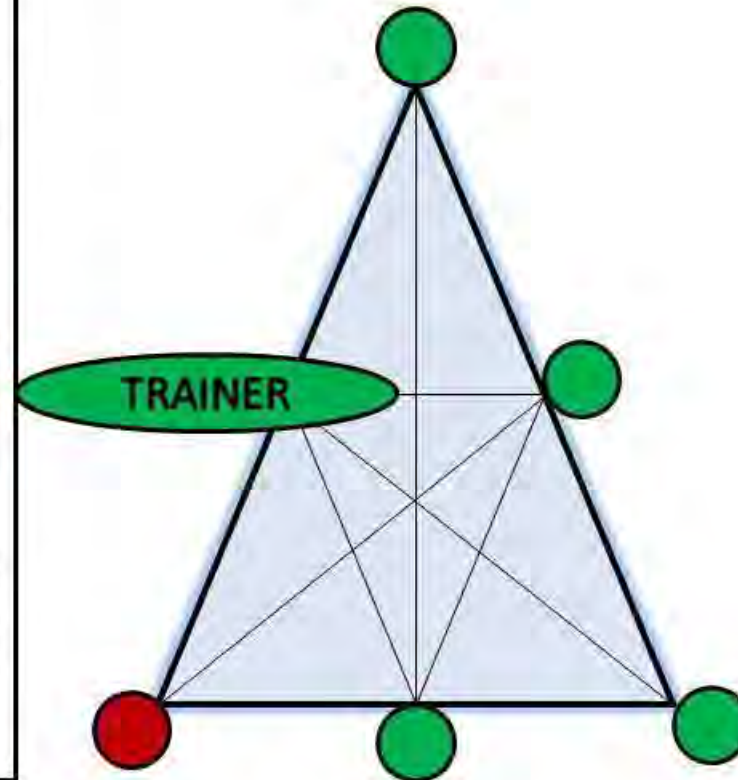
### Guideline into practice:

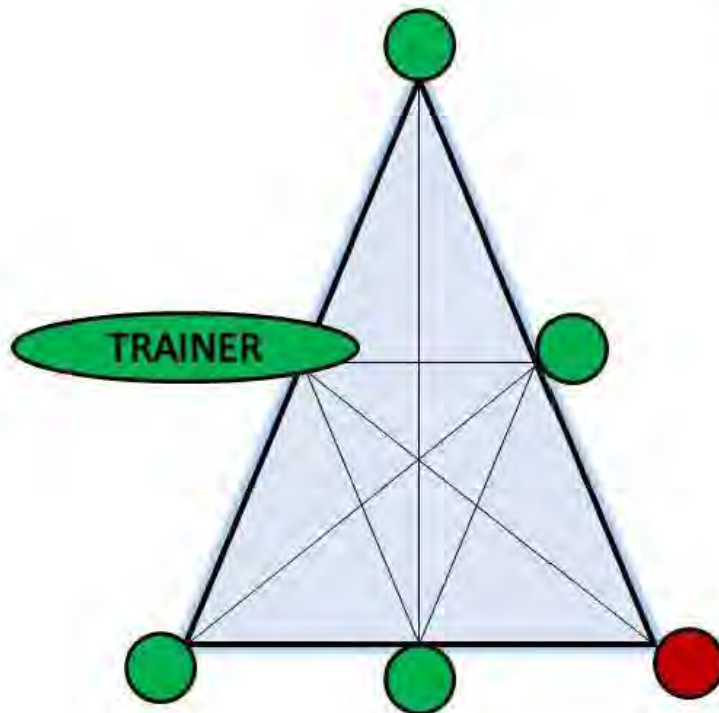
- Keeps all her old guidelines
- Makes changes every time there is an update
- Values guideline updates/ quarterly meetings and monthly newsletters
- Intuition – (134)
- Not always a doctor around and need to make a judgement – but needs countersign so needs to understand guideline (108)
- 505 “But ok, there application come in again. It doesn’t help Gill, you sit with your bucket full of knowledge and you don’t know how to apply it.”
- PP taught me about “evidence based”



### Organisational practices:

- Regular Wednesday teaching slot in the clinic – GSH, Cosmos, MOs Clinical nurse
- On-site education – frustration as those who could use the guideline did not always come to a training because of clinical responsibilities / did not see the need/ doctors and pharmacists were not included initially
- Staff do not apply guideline after training: (450) lead to her feeling incompetent
- Does not attend regular facility meetings or team building events.
- Services fragmented eg facility does not do TB/STI – these get done by City clinics – “seeks a 1-stop shop” (300)
- Dealing with complaints, both individual and facility level and – many pts abusive = demoralising (323) Pt: “ here you first have to die before anybody actually does something”
- Walls paper thin and can hear all the comments. (*poor quality of structure*)
- Does not feel that organisation supports formally but vents.
- ICAS does not work (406)
- Triage – pts don't always end up with the right person (427-441)
- Recognised that management did not buy in initially





**Themes:**

**1. Power relationships:**

- Doctor / nurse
- Nurse / CNP
- Peer to peer

**Division of labour/ Relationships:**

- Difference btw CNP and PN scope of practice (123)
- Interdependent practitioner (152)
- 'Only a nurse' (181)
- "I am more than willing to share, even if it's a doctor. Irrespective whether it's most junior or most senior." (84,85)
- doctor nurse dynamics: ... "no don't let them walk over you"
- "I think you have to be, what's the correct word, assertive, but also in a professional way, and when I crack a joke in between, I will tell them "I'm much older than you, I could've been your mother" 192-194 Ya, I mean there is ways and means that you can approach people, without let them feel small and worthless. Interviewer: 201 I: even if they ... R: no, no, no, that I don't tolerate. You will treat me with dignity."
- Vents to peers and if senior walks in – relationship with seniors good – able to vent but unsure if they take her seriously: "perhaps they think she forgot to take her hou-jou-bek pille"
- Consults peers – telephone in room/own phone/
- CNPs on the "outskirts" 426 "That's how we feel, that's why most of us don't go to staff meeting, we don't go to team buildings, because it's almost its if anything goes wrong, they did it...If something doesn't go the way it's supposed to, they did it. If there is any complaints, they did. We just also say YOU."
- Staff ratio to pts – few doctors
- Confronts nurses who don't manage the patients according to the guideline
- 509 "if you don't fight your own battles nobody else is gonna do it. So you cannot expect management's behavior to change for you to change. You must change for your benefit. You must change for your benefit and if people see that because you have changed, they might change."
- Well known to her colleagues as she has progressed in her profession – staff nurse, student, sister, CNP and always comes back to share
- "Nou sien jy as ek 'n ongeskikte jong doktortjie kry, wat vol draad gaan wees, dan gaan ek se 'hey, you know this person? That is me, "so please know who you get to do with. I'm not so local, I am a bit high ne?"

## TRAINER

### Educator identity (to answer sub-question 3)

- Continually updates herself (not common) and shares info (84) – ‘informal like peer teaching’ (91)
- Continually updates herself (not common) and shares info (84) – ‘informal like peer teaching’ (91) - will share with those she meets in the passage and share if she knows they will be interested.
- Tried to work it out for herself – consults books, has discussions with doctors and peers, not afraid to ask
- ‘maybe it’s because I’m a bit more than inquisitive in management of the person in totality’(70)
- “I share. I don’t like keeping things to myself, and if I find that something work, and I’ve got evidence. You know I think PALS PLUS is also taught me evidence based.” (81)
- Struggled to train across cadres – different levels of knowledge – quote 226 there is basic knowledge at each level – helps with understanding why things get done in a certain way rather
- Teaching not her first choice – enjoys sharing information on an adult level – shows patience for those who do not know ‘him or she has not been in my position’. Also different rates of learning.
- 450 “It’s...to me worthless you getting you getting information but you don’t apply it, and Gill for me is as the trainer you know how frustrating it is, because then I ask it myself what has I actually been doing if you cannot apply...”

### TtTtT experience

- Temenos – ‘die spokies’ – remote/retreat/uncertain/not at ease in location
- CNP vs coordinators – ie those with knowledge vs her with experience (*explicit knowledge vs tacit knowledge*)
- *TtTtT discussion and how it assisted/or not with on-site training.* 50% - taught her how to manage different cadres but not content ‘experts’. The TtTtT highlighted her inadequacies: “They were TB and HIV coordinators, oooh here I’m sitting, shame. Ek is ‘n CNP...don’t even know where to start with TB, did some TB training in my community health year, do I still even know how the TB wheel look”
- has learnt to start with what the groups knows and builds on that (*scaffolding*)
- Training equipped her to “get more stations to one stop” (304) (*referring to a holistic approach to care*)

## TRAINER

### Contradictions:

- Not formally including doctors and pharmacists in on-site training (*created a them and us divide*)
- Subject matter for that trainer and facility – works with 'chronics and acutes' but guideline focuses on TB/HIV integrated management and also asthma/COPD/STI
- Verticalised services a challenge for a guideline that integrates management of clients

### Knowledge/ KT

- 505 "But ok, there application come in again. It doesn't help Gill, you sit with your bucket full of knowledge and you don't know how to apply it."

Contributed to PC101:

- "See there's my name, my very own name is ...no, no, no. see I said to them, I've been in nursing for how many years and at least I've done some contribution. I'll be dead gone by my name will be still there."

### Professional practice:

- Passion for nursing (310) "but I mean you know, it's just you feel so fulfilled if you, at the end of the day take you little black Spar bag with all your stuff in and you walk out by that door and you say, at least, thanks God today I could've ...I could changed something."
- Sets high standards for herself
- Independent practitioner – 398 "You know, we all adults, can't still look for a hand to guide you"
- Intuition – (134)

### Issues/questions to flag

- Is it ok to expect trainers to manage any content? *The content expert*
- Is training *how to use* the guideline sufficient?
- Could in part explain high drop-out rate

**COMBINED**

**On-site training:**

**Knowledge/ KT**

**Contradictions:**

**Issues/questions to flag**

# Appendix E: Contradictions table

This summary table provides the salient points for the discussion. The component column on the left is the source of the contradiction, the contradictions column states the contradiction and the second component column is the affected component. The analysis and discussion column presents the activity theory language that is used in the discussion chapter.

Summary table of contradictions between components

Component (source)	The contradiction	Component (affected)	For analysis and discussion
<b>Tool</b>	<b>T:</b> Placing a clinical practice guideline in a facility where the staff is unable to use the guideline fully due to verticalised services and subject-matter not aligned. For example, placing a guideline that essentially integrates the management of TB and HIV while the services at this facility do not include the management of TB. Clients with TB get managed at a local authorities facility.	Rule	KT Coconfiguration Professional practice
	<b>M:</b> Guideline usage by different cadres	Division of labour	
	<b>D:</b> Non-use of guideline due to fear or not “sold” appropriately to doctors.	Division of labour	
	<b>P:</b> Unconventional training methodology	Rule	
<b>Rule</b>	<b>T:</b> Not formally including doctors and pharmacists in on-site training, entrenching the “them-and-us” situation between cadres.	Division of labour	Boundary crossing Professional practice Co-configuration Knotworking
	<b>M:</b> Disturbed line management	Subject Division of labour	
	<b>P:</b> Organisation of care affecting the flow of the facility – inappropriate use of the prep room	Division of labour	

	P: Not being heard by management causing frustration and low morale		
<b>Community</b>	T: “You have to die in this place before you get help” Impact of clients being rude to staff		
	HPO: Political agenda drives knowledge	Tool	
<b>Division of Labour</b>	T: Not formally including doctors and pharmacists in on-site training, entrenching the “them-and-us” situation between cadres. T: Use versus non-use of the PALSA PLUS guideline and the power relations behind both stances. D: Nurses working outside of their scope of practice	Division of labour Tool	Inter-professional collaboration Boundary crossing

This summary table of the themes emerging will be used in the discussion and also linked to the aim and the objectives of this case study.

Summary table of other themes emerging

Component	Other theme emerging	For analysis and discussion	Link to aim/objectives
<b>Tool</b>	T: Use of PP as independent practitioner The use of intuition in clinical decision-making	KT Professional practice	Objective 1 & 2
<b>Rule</b>	D: Low staff morale		Objective 2
<b>Community</b>	T: Impact of clients perceived as being rude. HPO: Political agenda drives knowledge D: Feelings of frustration caused by demands of the clients	Community mirrors the disempowerment of the staff = Invisible carer linked to professional practice	Objective 1 & 2

<b>Division of Labour</b>	M: Position of authority and maintaining an on-the-ground presence. M: Role of negotiator between management and staff	<ul style="list-style-type: none"> <li>➤ Inter professional collaboration</li> <li>➤ Boundary crossing</li> </ul>	
<b>Subject</b>	T: Educator identity		Objective 3

Key: T = Trainer; D = Doctor; M = Operational manager; H = HPO; P = Peer

# Appendix F: Participant information

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HREC REF: 210/2012

A case study in the application of Cultural Historical Activity Theory (CHAT) in Primary Healthcare in the South African context

## **Participant information sheet for interviews**

Dear \_\_\_\_\_

After every TtTt (Training the Trainer to Train) nurses leave the training claiming transformation and renewal. They feel empowered by the training and feel confident to use the PALS PLUS guideline. What often happens is that they go back to the facility where they work and become disillusioned because of challenges to implementing their new-found skills. On the other hand, some nurses manage to train their colleagues and find new ways of practicing, despite all the challenges. For my Master's thesis in Adult Education, I want to understand the following research question:

How is the transformatory effect of a new clinical practice guideline introduced into the workplace by nurse-trainers mediated by organisational practices and relationships: a comparative case study of two primary healthcare clinics?

Two nurses who have claimed transformation have been selected. The researcher would like to understand what this means and how they achieved this. This information will be obtained through interviews and also documentary sources.

Who will be interviewed?

Semi-structured interviews with the nurse-trainer as the focus of the primary healthcare facility:

- the nurse-trainer
- a peer

- the nurse-trainer's immediate manager
- a staff member, who reports to the nurse-trainer
- the doctor working at the clinic.

### What documentary sources?

- 1 Organogram for structure of each healthcare facility
- 2 Training records
- 3 Reports from clinic to district office
- 4 Communication books and documentation (eg memos).

This research has been formally approved by the University of Cape Town Health Science Human Research Ethics Committee. I have also obtained permission from the Western Cape Department of Health to conduct research in your clinic.

*Only people who accept to be interviewed can be included in this case study. Please take your time to make your decision about taking part. Please ask the researcher, if you have any questions.*

### What will happen if I take part in this research study?

The research will be done as follows: you will be invited to take part in an interview which will last for about an hour and with your permission will be recorded and notes will also be taken. This full recording will be typed up on a computer after the interview. Any mention of names will be taken out so that the information cannot be traced back to you. The audio recording will then be destroyed. The typed-up notes will be kept. These notes will be available to the research team, but names will not be recorded on these notes.

What risks can I expect from being in the study?

Some of the questions in the interview may make you feel uncomfortable. Some questions in the interview may make you feel upset. You do not have to answer any questions that you do not wish to answer. You are free to leave the interview at any time.

Will information about me be kept private?

Gill Faris will make sure that the personal information collected for this case study is kept private. She will not use your name on any case study documents. She will not use other information that may identify you on any case study documents. She will also not use your name or other information that may identify you in any reports or presentations. Only your consent form will be kept for record. You may, however, be part of an informal group discussion, and in this context confidentiality cannot be ensured.

What are my rights if I take part in this research?

Taking part in this research is your choice. You may choose either to take part or not to take part in the research. You may leave the research at any time. No matter what you decide, you will not be jeopardised in any way.

Who can answer my questions about the research?

You can talk to the researcher about any questions you have about this research. You can do this at the time of the interview or focus group. The researcher for this case study is Gill Faris. Her telephone number is 021 406 6979 or her email is [Gill.Faris@uct.ac.za](mailto:Gill.Faris@uct.ac.za)

Any concerns about the case study can also be sent to the Chairperson of the University of Cape Town Health Science Research Ethics committee. Contact details: Health Sciences Faculty, Human Research Ethics Committee, Groote Schuur Hospital. Tel: 021 406 6338, email: [nosi.tsama@uct.ac.za](mailto:nosi.tsama@uct.ac.za) and [shuretta.thomas@uct.ac.za](mailto:shuretta.thomas@uct.ac.za).



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HREC REF:

210/2012

A case study in the transformatory effect of a training programme for nurse-trainers in Primary Healthcare in the South African context

### **Consent form for participants**

I agree to participate in a research project that poses the following question:

*How is the transformatory effect of a new clinical practice guideline introduced into the workplace by nurse trainers mediated by organisational practices and relationships: a comparative case study?*

I have had an opportunity to ask questions and discuss this case study with the researcher and have received satisfactory answers to my questions. I have also read the information sheet provided to me.

I will participate in the study under the following conditions:

- I will allow interviews to be audio-recorded. I understand that these will be recorded so that nothing is missed and so that my words are not changed or misunderstood. I understand that I can turn off the recorder at any time during the interview and that I can refuse to answer any specific question posed by the researcher.
- I agree to allow the researcher to use the information gained by my participation in the research in reports and research publications, but understand that my privacy and confidentiality will be protected and that my name and the name of the facility in which I work will not be recorded.

