# EXPERIENCES OF HEALTH CARE PROVIDERS IN THE FAST QUEUE SERVICEPOINTINPRIMARYHEATHCARE FACILITIES IN ETHEKWINI DISTRICT, SOUTH AFRICA

DG Sokhela, D Nursing; MN Sibiya, D Tech (Nursing) & NS Gwele, PhD

Durban University of Technology: Department of Nursing

E-mail: dudus@dut.ac.za

#### **ABSTRACT**

Public health facilities are congested from increased access and burden of disease. In 2011, the National Department of Health introduced the National Core Standards for health establishments, which reflect the new vision for South Africa's health services. These are standard guidelines aimed at providing quality health services, enhancing the current health outcomes and restoring patient and staff confidence in the health system. One such guideline is the Fast Queue Service Point, a service for people who are usually chronically ill, who have already consulted at higher levels, and who come to collect medications from the Primary Health Care facilities. It also serves people who need short consultations. This study used a descriptive qualitative survey methodology with content analysis to describe the experiences of 13 purposively sampled health care providers assigned to work in the Fast Queue Service Point. All staff performed their duties as allocated and as would be expected according to their scope of practice, though the workload was seen as high. They all knew what the purpose of this service point was and they liked that users got through the system quickly. Participants verbalised lack of support from supervisors. Delays were prevented through well organised patient flow. However, patients would miss out on health education opportunities if they were perceived as 'old' and thought to know everything about their treatment. The study shows that there is a need to make available more health care providers of lower categories to



Africa Journal of Nursing and Midwifery pp. 42–56

Print ISSN 1682-5055

support registered and enrolled nurses and relieve them of the high workload. There is also a need for structured supervisory visits, which can assist in ensuring that facilities receive the necessary support. Nursing staff perceived that users of the Fast Queue Service Point went through the system quicker than other users. Due to the shortage of staff, they felt that the workload was too high and this compromised care for these users.

**Keywords:** clinical microsystems, Fast Queue Service Point, *National Core Standards*, primary health care

#### INTRODUCTION AND BACKGROUND

In South Africa, as in most countries, health care is provided through both public and private health care sectors. Private health facilities are generally better resourced than public ones in terms of structure, equipment, staffing, availability of medication, staff remuneration, interpersonal relationships and waiting times (NDoH, 2011:5). The Fast Queue Service Point is a service to reduce waiting time for people who need short consultations, and those who have already been seen previously in a community health centre (CHC) or hospital and are collecting medications (NDoH, 2001). Elements of the Fast Queue Service Point include routine check-up procedures for chronic diseases, such as blood pressure measurement, cardiac auscultation, weight, measurement of glycaemia, monitoring for the presence of complications, identifying and referring people with disabilities, instructions on taking prescribed medicines, organisation of health education sessions for groups or individuals, booking of next Primary Health Care (PHC) clinic visit, prescription continuation according to protocols, and instructions as well as managing well-baby visits (NDoH, 2001:9). Due to high rates of unemployment and poverty, many people attend public health facilities and health care providers cannot cope with the high demands placed on public health care facilities. The National Core Standards (NCS) are seen as an extension of the Comprehensive PHC package, which introduced the Fast Queue Service Point in an attempt to reduce waiting time for users of PHC services and also a national drive to improve the quality of care (NDoH, 2011:18). The NCS aim to bridge the gap between the private and the public health sectors and improved access to quality health services for both employed and unemployed South African citizens.

## PROBLEM STATEMENT

Decentralisation of PHC services to districts meant that people requiring medical assistance must first report at their local PHC facilities. Chronic illnesses have in recent years included users on Anti-Retroviral Therapy (ART) obtained through nurses who have been trained to initiate treatment (NIMART) (Republic of South Africa, 2010:1; Fairall *et al.*, 2012:89), thus increasing the number of PHC users who

collect treatment from PHC facilities. This resulted in overcrowding and congestion as there was no corresponding increase in resources, including human resources. The researchers were interested in investigating the nurses' experiences in this service point.

#### AIM OF THE STUDY

The study aimed to describe the experiences of health care providers assigned to work in the Fast Oueue Service Point.

#### LITERATURE REVIEW

Nurses are at the frontline of PHC provisions working independently with little or no support from the doctors (NDoH, 1996:18). To deliver quality health care, a health system needs to work well for patients and professionals alike. Health care should be safe, timely, effective, efficient, equitable and patient-centred (Institute of Medicine, 2001; World Health Organization, 2006:9). According to De Maeseneer (2009:133), there is evidence that countries with a strong comprehensive PHC system also provide better overall quality care. There is a greater demand for health services in South Africa due to the increase in non-communicable diseases such as hypertension and diabetes resulting from an increase in life expectancy, which means older people requiring long term care (Kalula, 2011:22). This author further asserted that health practitioners are not well prepared to care for the elderly who not only require management of acute illnesses but also sustained management of complex multiple chronic diseases, with the potential to commit errors. According to Sequist et al. (2010:480), the increased number of patients suffering from chronic diseases emphasises the importance of delivery of high quality care to prevent complications. Clarke and Donaldson (2008) asserted that the nurses' numbers, as well as the appropriate execution of assessments and interventions relevant for the patient's condition affect patient care. Nursing care is also influenced by knowledge, experience and nurses' ability to assess and monitor the patient for complications (Clarke and Donaldson, 2008:3). PHC re-engineering is the strategy engaged by the government to transform the health sector through revitalisation of PHC by overhauling the health care system and revitalising the infrastructure in preparation for the National Health Insurance (NHI) scheme (NDoH, 2009).

## THEORETICAL FRAMEWORK

The Clinical Microsystems Model, which focuses on the smallest replicable unit (SRU) of health care that evolves over time and is embedded in larger systems or organisations, was used to guide the study. In this study the clinical microsystem under examination was the Fast Queue Service Point, which forms part of the macro

system (the PHC facility). The Clinical Microsystems Model is characterised by five elements all starting with the letter P, namely: professionals, purpose, process, patterns and patients (Nelson, Batalden and Godfrey, 2011:4). 'Professionals' are the health care professionals who provide a service for Fast Queue users; 'Purpose' describes the aim of the clinical microsystem, which in this study was the Fast Queue, and what is to be achieved; 'process' relates to how care is delivered and how work is allocated in the Fast Queue; 'patterns' are concerned with the regularly recurring associated or sequential work activities in the Fast Queue and how health care providers working with users from this queue feel about working there, including leadership; and, 'patients' are those who are being cared for in the Fast Queue.

# RESEARCH METHOD AND DESIGN

A qualitative exploratory descriptive survey using content analysis was used to explore the experiences of health care providers on quality of care for Fast Queue Service Point users in PHC clinics.

# Research setting

The study was conducted at selected PHC facilities that had the Fast Queue Service Point in the eThekwini district in KwaZulu-Natal (KZN), one of South Africa's nine provinces. Thirty-four per cent of the total population of KZN live within the eThekwini district (DoH, 2010:11). Sixty per cent of the district health services are provided by the Provincial Department of Health and 40% by the Local Authority (eThekwini municipality).

# Population

The population in this study comprised all categories of health care providers and the target was those health care providers allocated in the Fast Queue Service Point. There were 35 health care providers allocated in the Fast Queue Service Point in different PHCs

# Sampling

Thirteen participants who were allocated in the Fast Queue Service Points were purposively sampled from PHC facilities of both local and provincial health authorities in the three sub-districts of the eThekwini district that provided services to an average of 190 Fast Queue Service Point users of PHC services per month. The sample size was guided by data saturation and comprised two facility supervisors (FSs) responsible for a number of facilities in the same geographical area, two facility managers (FMs) who oversee the daily functioning of the clinic and report to

the clinic supervisor, five professional nurses (PNs) (three from municipal and two from provincial PHC clinics), two enrolled nurses (ENs), and two enrolled nursing assistants (ENAs).

#### Research instrument

The interview guide consisted of section 1, which had participants' demographic data and section 2 consisted of open ended questions, which were guided by the elements of the theoretical framework. The main questions that were used were as follows:

- Can you describe your experience of the Fast Queue Service Point?
- What is the purpose of the Fast Queue Service Point?
- Briefly describe this service point.
- What is your core function in this service point?
- What support do you get in this service point?
- Describe the patients in this service point?

Probes were used where necessary for clarity of responses and to elicit more in-depth information

# Pre-testing of the data collection instrument

The data collection instrument was pre-tested in one randomly selected PHC facility. Four interviews were conducted. No amendments were necessary to the data collection instrument. This facility and results from the interviews were not included in the main study.

## **Trustworthiness**

Three criteria by Lincoln and Guba (1985) were used to establish the trustworthiness of qualitative data. These are: credibility, dependability and transferability (Lincoln and Guba, 1985).

Table 1: Strategies for trustworthiness

Credibility	Member check was conducted through discussions with participants to clarify the researchers' interpretation of data and the audio tape was played back to a participant whose response was not clear.	
Dependability	Rich data were obtained from participants through in-depth semi- structured interviews. Data was categorised and coded into themes.	
Transferability	Transferability Description of study participants who were health care providers allocated to work in the Fast Queue Service Point.	

#### Data collection method

Data were obtained through semi-structured interviews, using open-ended questions and probing where necessary. This allowed the participants freedom to express themselves and give detailed information without the constraints of closed-ended questions. Data was collected over a period of four weeks in November and December 2013. Participants were met during lunch breaks and after they had finished their duties. Interviews were conducted in a consulting room for privacy and confidentiality, and lasted 30 to 45 minutes. Data was collected until data saturation was reached with ten participants, but three more interviews were carried out to ensure this. Interviews were audio recorded with permission from participants to capture all the information and later transcribed.

# Data analysis

Data were analysed using thematic analysis. Tesch's open coding approach was used, which entails eight steps of data analysis (Creswell and Plano Clark, 2009:185–187). This involved reading through all transcripts to get a general impression of the collected data, writing down thoughts that emerged from the data in the margins of the pages, making a list of all topics and clustering similar topics together. These topics were preliminarily organised as major topics, unique topics and leftover topics, abbreviating them as codes and writing these next to the corresponding segments of the data. Any other topics or codes that emerged were also written next to the appropriate segment of the text. The most descriptive wording for the topics was used and turned into sub-categories. Related topics and emerging lists of categories were grouped together, from which themes emerged. Elements of the theoretical framework were used to organise the results as follows: professionals, purpose, processes, patterns and patients.

#### Ethical considerations

Ethics approval was obtained from the Durban University of Technology's Ethics and Higher Degrees Committee (number REC 33/13). Permission to conduct the

study was obtained from the KZN Department of Health and the Municipality Health Unit research committees with support from the district office. Participants were informed about the research through information letters and discussions, which stated the aim and objectives of the study and how they were expected to participate. Participants were informed that participation was voluntary; they could refuse if they did not want to participate and could withdraw at any stage of the study if they so wished. Participants were assured of confidentiality at all times. Codes were used to identify facilities and individual participants, known only to the researchers. Participants were assured that data obtained would only be used for the purposes of the study. All participants signed consent forms.

## FINDINGS AND DISCUSSION

The results were organised according to the five Ps of the Clinical Microsystems model, which is the theoretical framework that was used to guide the study. Themes and subthemes are summarised in Table 2

Table 2: Sum	mary of themes	and subthemes
--------------	----------------	---------------

	Elements of the Clinical Microsystems Model	Themes and subthemes
P1.	Professionals	(1) Demographics of staff working in the Fast Queue Service Point
		(2) Personnel roles (a) Initial screening and prioritisation (b) Patient and clinical care (c) Wellness, preventive and promotive health
P2.	Purpose	(1) Preventing delays and minimising clinic stay (2) Ensuring compliance
P3.	Processes	(1) Patient flow (2) Workload (3) Nature of the consultation
P4.	Patterns	(1) The anatomy of the Fast Queue Service Point
P5.	Patients	(1) Type of patients in the Fast Queue Service Point

# Element P1: Professionals

Professionals in this study were all categories of health care providers that were allocated in the Fast Queue Service Point.

#### Demographics

The participants' demographic data were collected, namely, gender and age and are discussed below.

#### Gender

There were 12 females and one male who participated in the study. This gender proportion is consistent with other studies and is explained by Clow, Ricciardelli and Bartfay (2014:450), who found that men were deterred from nursing as a profession because they were irritated by the implication that doctors are more important than nurses and that doctors disrespect nurses.

#### Age

The age of participants ranged from 27 to 56 years with an average of 42.4 years, indicating that the majority of participants were older. According to the South African Nursing Council (SANC, 2013), older females are the majority on nursing rolls and only 4% of nurses were younger than 30 years of age (SANC, 2013).

#### Years of experience

Participants' years of experience ranged from 3 to 32 with an average of 15 years. According to Benner (2011:34), the more experienced a person is, the easier and quicker it is for him/her to judge the situation and act accordingly.

# Theme P1 (2): Personnel roles

Health care providers had clearly defined roles thereby contributing to the flow of work and eventually ensuring that users at this service point received the desired care. All professionals were allocated roles according to their scope of practice as laid out by the South African Nursing Council (Republic of South Africa, 1978). When asked about her role in the Fast Queue, the PN explained her role as follows:

I consult, prescribe and issue medication, give health education and counselling about adherence to medication. With every patient that comes in, it is important that I ask this because I have to make sure that they have the information. It is important for patients not to default on their ARVs which can happen if they have problems and you have not asked them.

# Subtheme P1 (2) (a): Initial screening and prioritisation

## The ENA responded as follows:

I check vital signs on all patients because the queue will not move fast if the professional nurse has to check them herself. I check the diagnosis and then see which clinical tests to

check, sometimes they complain about something to the professional nurse then they need more clinical tests e.g. if they have hypertension and when they complain the professional nurse thinks they might be diabetic then they will ask me to check urine and prick the finger for blood sugar.

#### Subtheme P1 (2) (b): Patient and clinical care

Professional nurses work independently of the medical officer and refer to the next level of care whenever necessary. They are involved in providing services and work according to their level of training and competence within their scope of practice as prescribed by the controlling body, the South African Nursing Council as per Regulations 2598 and 2488 of the *Nursing Act 50 of 1978* as amended (Republic of South Africa, 1978). The PNs in this study consulted with users and issued medications and set up return appointments. Their scope of practice allows them to diagnose and prescribe medications, which is what they said they did. The PNs explained their role as follows:

I consult, prescribe and issue medication, give health education and counselling about adherence to medication. With every patient that comes in, it is important that I ask this because I have to make sure that they have the information. It is important for patients not to default on their ARVs which can happen if they have problems and you have not asked them.

Screening patients and issuing of medication. I give them the return date.

## Subtheme P1 (2) (c): Wellness, preventive and promotive health

The ENs carried out procedures that had been prescribed by the PN, or the doctor if the patient had been referred from another level of care. The scope of practice limits them to this function. When asked about their role in the Fast Queue Service Point, the ENs had this to say:

I give injections to family planning and TB clients and immunisations to babies.

I am responsible for the injection room. All injections in the clinic are given by me for family planning and TB clients and I watch TB clients taking their Tablets. I also give immunisations to babies.

## Element P2: Purpose

All categories of health care providers who were interviewed agreed that the purpose of the Fast Queue Service Point was to reduce waiting times. They were of the opinion that it was successful in fulfilling this purpose because the health care users who utilised this service point spent a reasonable amount of time in the clinic compared with their counterparts.

## Theme P2 (1): Preventing delays and minimising the duration of clinic stay

It emerged during interviews that the Fast Queue service approach, applied where participants worked, did reduce the amount of time users spent in the facility. These users came to the clinics regularly to collect their chronic medications and did not need to stay long in the consulting room. Clinical tests were performed prior to the consultation, which helped to speed up the consultation. Irrespective of whether the consultation provided quality care for the users, 'fast' was seen as good. Providing service on time is key in PHCs (Dobson, Hasija and Pinker, 2011:455). If delays can be prevented and patient flow improved, the microsystem can achieve its goal of a quick service (Hall, 2013:9). Participants' views were expressed in the following excerpts:

This queue prevents delays for patients who are regular clinic attendees and minimise clinic stay for patients who are only collecting medication.

For me the purpose of this queue is so that babies who come for immunisation do not wait with sick patients and so that they go home quickly before they catch infections from sick adults.

#### Subtheme P2 (2): Ensuring compliance

For patients with chronic conditions, noncompliance with appointments and defaulting on treatment can lead to complications such as strokes, multi-drug resistance TB, and women at child-bearing age falling pregnant unintentionally. Interviewees perceived that health care users were motivated to visit the health facility because they knew that they were going to receive quick service. Non-compliance is not limited to failure of taking medications but also to failure to adhere to lifestyle modifications that can be achieved through health education (Lu *et al.*, 2015:12). The views of participants were expressed as follows:

If they are old regular patients there is no need for health education because they have been collecting medication for a long time. Medication would give them problems if they were still new patients. They are new within the first six months of starting medication after six months they are old patients.

It depends; if the clinic is not busy I have time to talk to them. We are supposed to tell them that it is the same medication it is the packaging that changed. We do not always do this like I said that if the clinic is full there is no time to talk. We have so many new programmes and the patients are so sick.

#### Element P3: Process

At this Fast Queue Service Point, users were admitted by a clerk who handed them their clinic-based records, then had clinical tests assessed by the ENAs, then waited for consultation where they were seen by either the EN or the PN.

#### Theme P3 (1): Patient flow

According to Hall (2013), 'patient flow' refers to how the patient physically flows through the health facility from the point of entry to discharge. Results from this study show that patient flow was well organised and understood by all participants, including the facility managers and the facility supervisors, and was seen as a major component of rendering quick service. The smoothness of this process contributed to the short consultations, thus minimising delays and reducing clinic stays for users. Views expressed by participants are as follows:

Patients are first seen by the clerk who takes their details and gives them their cards, together with all other patients. They then go for checking of clinical tests, weight, blood sugar /blood pressure whichever applies and urine tests.

#### Theme P3 (2): Workload

All participants complained about the workload, which they felt was too high. 'Workload' is described as the number of patients the professional nurse attends to daily at a health facility. According to Reagon and Igumbor (2010:592), a high workload results in long waiting time and patient flow problems. Georgeu *et al.* (2012:8) assert that initiating chronic medication has increased the workload not only of nurses but other categories of staff, including the reception clerks, pharmacists, laboratory technicians and dieticians. Participants expressed their views as follows:

If one nurse is not in or the ENA to checks the vital signs, we have to do it ourselves or not do it at all, the manager has no staff to spare; everyone is allocated in their own area of work.

# Theme P3 (3): The nature of the consultation

Participants felt that consultation times were shorter at the Fast Queue Service Point. However, opinions differed regarding what a 'short consultation' entailed regarding what was meant to take place during a consultation. In the current study it was found that what occurred during a consultation differed per patient and health care provider. A previous study by Sokhela *et al.* (2013:5) found that in South African PHCs patients viewed any form of communication by health care providers as good even if it was not health related because this was viewed as a sign of respect (Sokhela *et al.*, 2013:5). According to Hansen *et al.* (2008:386) patients were satisfied if communication and physical examination were thorough. The voices of professional nurses:

We are supposed to tell them if the packaging of the medication has changed. We do not always do this like I said that if the clinic is full there is no time to talk. We have so many new programmes and the patients are so sick.

If they are new patients we ask if the medication is not giving them problems. If they are old regular patients there is no need for all that because they have been collecting medication for a long time.

#### Element P4: Patterns

Health care providers who work at the service points included in the study seemed satisfied with the work patterns. However, support from facility management was important to the health care providers for this to be achieved. Patterns included support from the leadership within this service point and the leadership of the facility as a whole. In South Africa nurses have complained that the middle and upper management does not offer them the support they need to sustain their clinic work (Georgeu *et al.*, 2012:8). According to Rispel and Moorman (2010:14), nurse managers need to be able to lead in addressing issues of the disease burden in South Africa. Participants in the current study had this to say:

I am unable to do the scheduled clinic visits because of other commitments like meetings which come at a spur of the moment and are unscheduled. They throw one off completely. As a clinic supervisor you come to the clinic to merely collect reports and statistics from the clinic manager.

The support would be mainly to assist the clinic manager with motivating for posts since there are so many chronic patients needing to be seen in this queue. It would also help to nag maintenance offices for equipment that went for repair because it goes for an unreasonably long time while there is nothing to use in the clinic interfering with patient flow.

#### Flement P5: Patients

In this study users were those who came for family planning, to collect medications for chronic illnesses such as hypertension, diabetes mellitus, TB, mental health, epilepsy, asthma, ART, and babies coming for immunisations. Planning had been made for particular groups of users to be routed to specific service points to meet their needs. The participants' responses were as follows:

It is those that come to collect treatment for chronic illnesses like TB, diabetes, hypertension, ARVs, family planning, and immunisations.

It is divided according to what the patient came to do for an example family planning, tuberculosis, ARVs, hypertension, diabetes and immunisations for well babies.

#### CONCLUSION

Patients utilising the Fast Queue Service Point received fairly good quality care and went through the facility quicker than others. All staff performed their duties as

allocated and as would be expected according to their scope of practice, though the workload was seen as high. Delays were prevented through well organised patient flow. However, patients would miss out on health education opportunities if they were perceived as 'old' and thought to know everything about their treatment. The implication is that services are provided to reduce the stay of patients in the facility while quality is compromised. Some services are not rendered if the personnel assigned are not there, for example, vital signs and health education.

## RECOMMENDATIONS

More health care providers of lower categories such as ENAs should be provided to support registered and enrolled nurses and relieve them of the high workload. Facility supervisors should embark on structured facility visits and be available whenever required to give support to the facility manager who is faced with the daily struggles related to the functioning of the facility. Every patient should be asked about their health to ensure that they have correct information and not having problems with medication.

#### LIMITATIONS

Interviews were conducted with health personnel only and not patients who could have highlighted other perspectives on the Fast Queue Service Point.

#### REFERENCES

- Benner, P. 2001. From novice to expert: Excellence and power in clinical nursing practice, commemorative edition. Upper Saddle River, NJ: Prentice-Hall.
- Clarke, S.P. and Donaldson, N.E. 2008. Nurse staffing and patient care quality and safety. In Hughes, R.G. (ed.), *Patient safety and quality: An evidence-based handbook for nurses*. Rockville, MD: Agency for Health Research and Quality. Available at http://www.ncbi.nlm. nih.gov/books/NBK2676/ (Accessed 11 November 2012).
- Clow, K.A., Ricciardelli, R. and Bartfay, W.J. 2014. Attitudes and stereotypes of male and female nurses: The influence of social roles and ambivalent sexism. *Canadian Journal of Behavioural Science*, 46(3):446–455. Doi: 10.1037/a0034248
- Creswell, J.W. and Plano Clark, V.L. 2009. *Designing and conducting mixed methods research*. 2<sup>nd</sup> Ed. London: Sage.
- De Maeseneer, J. 2009. Primary health care in Africa: Now more than ever! *African Journal of Primary Health Care and Family Medicine* 1(1). Available at https://biblio.ugent.be/publication/940480 (Accessed 11 November 2012).
- Dobson, C., Hasija, S. and Pinker, E.J. 2011. Reserving capacity for urgent patients in primary health care. *Production and Operations Management Society*. Doi 10.1111/j.1937-5956.2011.01227.x

- Fairall, L., Bachmann, M.O., Lombard, C., Timmerman, V., Uebel, K., Zwarenstein, M., Boulle, A., Georgeu, D., Colvin, C.J., Lewin, S., Faris, G., Cornick, R., Draper, B., Tshabalala, M., Kotze, E., Van Vuuren, C., Steyn, D., Chapman, R. and Bateman, E. 2012. Task shifting of antiretroviral treatment from doctors to primary-care nurses in South Africa (STRETCH): a pragmatic, parallel, cluster-randomised trial. *The Lancet*, 380:889–398.
- Georgeu, D., Colvin, C.J., Lewin, S., Fairall, L., Bachmann, M.O. Uebel, K., Zwarenstein, M., Draper, B. and Bateman, E.D. 2012. Implementing nurse-initiated and managed anti-retroviral treatment in South Africa: A qualitative process evaluation of the STRETCH trial. *Implementation Science*. Doi:10.1186/1748-5908-7-66
- Hansen, P.M., Peters, D., Viswanathan, K., Rao, K.D., Mashkoor, A. and Burnham, G. 2008. Client perceptions of the quality of primary health care services in Afghanistan. *International Journal for Quality Health Care*, 20(6):384–391. Available at http://intqhc.oxfordjournals.org/content/20/6/384.full.pdf (Accessed 20 November 2012).
- Hall, R. 2013. *Patient flow: Reducing delays in health care delivery*. 2<sup>nd</sup> Ed. New York, NY: Springer.
- Harutyunyan, N.T., Demirchyan, A., Thompson, M.E. and Petrosyan, V. 2010. Patient satisfaction with primary care in Armenia: Good rating of bad services? *Health Services Management Research*, 23:12–17. Doi: 10.1258/hsmr.2009.009012
- Hutchinson, P., Do, M. and Agha, S. 2011. Measuring client satisfaction and the quality of family planning services: A comparative analysis of public and private health facilities in Tanzania, Kenya and Ghana. *Biomed Central Health Services Research*, 11: 203. Doi:10.1186/1472-6963-11-203
- Institute of Medicine. 2001. Crossing the quality chasm: A new health system for the 21st century. Washington, DC: The National Academic Press. Available at http://www.nap.edu/catalog.php?record\_id=10027 (Accessed 3 August 2012).
- Kalula, S.Z. 2011. The quality of health care for older persons in South Africa: Is there quality care? Conference paper. *Economic and Social Rights Review,* 12(1): 22.
- KwaZulu-Natal Department of Health. 2010. Strategic Plan 2010–2014. Available at www. kznhealth.gov.za/stratplan2010-14.pdf (Accessed 15 February 2012).
- Lu, C., Tang, S., Lei, Y., Zhang, M., Lin, W. Ding, S. and Wang, P. 2015. Community-based interventions in hypertensive patients: A comparison of three health education strategies. *Biomed Central Public Health*. http://dx.doi.org/10.1186/s12889-015-1401-6
- National Department of Health. 2001. *The comprehensive primary health care package for South Africa*. Pretoria: Government Printer.
- National Department of Health. 2009. *The health sector strategic framework: The 10 point plan.* 2009–2014. Pretoria: Government Printer.
- National Department of Health. 2011. *National core standards for health establishments in South Africa*. Pretoria: Government Printer.
- NDoH: see National Department of Health
- Nelson, E.C., Batalden, P.B. and Godfrey M.M. 2011. *Value by design: Developing clinical microsystems to achieve organizational excellence*. London: Jossey-Bass.

- Reagon, G. and Igumbor, E. 2010. Strengthening health systems through training of health care providers in the conduct of routine waiting time and system efficiency surveys. *Studies in Health Technology and Informatics*, 160 (Part 1):590–594.
- Republic of South Africa. 1978. *The Nursing Act (Act 50 of 1978*, as amended). Pretoria: Government Printer.
- Republic of South Africa. 2010. *The South African Anti-Retroviral Treatment Guidelines*. Pretoria: Government Printer.
- Rispel, L. and Moorman, J. 2010. *Health legislation and policy: Context, process and progress*. Centre for Health Policy. Johannesburg: University of the Witwatersrand.
- Sequist, T.D., Cullen, T., Bernard, K. Shaykevich, S., Orav, J. and Ayanian, J.Z. 2010. Trends in quality of care and barriers to improvement in the Indian health service. *Journal of General Internal Medicine*, 26(5):480–486. Doi: 10.1007/s11606-010-1594-4
- Sokhela, D.G., Makhanya, N.J., Sibiya, M.N. and Nokes, K.M. 2013. Experiences of fast queue health care users in primary health care facilities in eThekwini district, South Africa. *Curationis*, 36(1):E1–E8. Doi: 10.4102/curationis.v36i1.60
- South African Nursing Council. 2013. Time series statistics. Growth and age distribution of nurses on the registers and rolls. Pretoria: SANC.
- World Health Organization. 2006a. Quality of care: a process for making strategic choices in health systems. Geneva. Available at http://www.who.int/management/quality/assurance/QualityCareB.Def.pdf (Accessed 5 February 2012).