

# The quality of feedback from outpatient departments at referral hospitals to the primary care providers in the Western Cape: a descriptive survey

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**Background:** Coordinating care for patients is a key characteristic of effective primary care. Family physicians in the Western Cape formed a research network to enable them to perform practical research on key questions from clinical practice. The initial question selected by the network focused on evaluating the quality of referrals to and feedback from outpatient departments at referral hospitals to primary care providers in the Western Cape.

**Methods:** A descriptive survey combined quantitative data collected from the medical records with quantitative and qualitative data collected from the patients by questionnaire. Family physicians collected data on consecutive patients who had attended outpatient appointments in the last three months. Data were analysed using the Statistical Package for the Social Sciences.

**Results:** Seven family physicians submitted data on 141 patients (41% male, 59% female; 46% metropolitan, 54% rural). Referrals were to district (18%), regional (28%) and tertiary hospitals (51%). Referral letters were predominantly biomedical. Written feedback was available in 39% of patients. In 32% of patients, doctors spent time obtaining feedback; the patient was the main source of information in 53% of cases, although many patients did not know what the hospital doctor thought was wrong (36%). The quality of referrals differed significantly by district and type of practitioner, while feedback differed significantly by level of hospital.

**Conclusion:** Primary care providers did not obtain reliable feedback on specialist consultations at referral hospital outpatients. Attention must be given to barriers to care as well as communication, coordination and relationships across the primary–secondary interface.

**Keywords:** communication, coordination, primary health care/standards, physician–patient relations, referral, secondary care/standards

## Introduction

High-quality primary care is characterised by accessibility, continuity, comprehensiveness, coordination and patient-centredness.<sup>1</sup> Coordination implies the ‘the ability of primary care providers to coordinate the use of other levels of health care’.<sup>2</sup> Coordination of care can refer to coordination between different members of the primary care team, coordination with other services in the district or coordination between primary and secondary/tertiary care. Another feature is the extent of gatekeeping and to what extent patients must go through primary care to access other levels. In well-developed primary care systems primary care providers take responsibility for coordinating care for individual patients across the primary–secondary care interface.

A number of initiatives have been established to try and improve coordination of care in the Western Cape. The Vula app (<https://vula.uct.ac.za/portal>) enables primary care providers to contact the specialist on call, provide patient information and receive feedback on a patient that they would like to refer as an emergency, but is not intended for outpatient referrals. Many patients are handled with advice from the specialist, while others can be quickly accepted for referral. Another system (eCCR—Electronic Continuity of Care Record) is enabling electronic in-patient discharge summaries to be created and accessed across the platform. The single patient viewer system is also trying to link patients’ electronic information across levels of care by using a

unique identifier. None of these initiatives, however, address the quality of referrals and feedback from outpatient visits.

In public sector primary care in the Western Cape, access to outpatient departments at hospitals is dependent on a referral and appointment system. Primary care acts as the gatekeeper to secondary care. Communication between primary care and secondary care is essential so that the outpatient department can address the key issues raised by the primary care provider and give useful and effective feedback that will guide the ongoing management of the patient in primary care.

Family physicians are the most senior clinicians supporting primary care teams within the district health services. Family physicians may be appointed at community health centres as part of the primary care team or at district hospitals where they provide regular outreach and support to the primary care team in their catchment area.<sup>3</sup> Performing ‘practical research’ is part of the family physician’s job description, although most family physicians struggle to do this due to their many other competing demands. The Stellenbosch University Family Physician Research Network (SUFPREN) was recently established to link busy clinicians in the health services with established researchers at the university. Family physicians can identify the key research questions and collect data within a network while primary care researchers at the university can assist with methods, analysis and report writing. The first research topic

identified by SUFFREN was how to improve the coordination of care between primary and secondary levels.

Overall coordination of care was rated quite highly by patients, providers and managers in a recent survey in the Western Cape, with rural areas reporting significantly better scores than urban.<sup>4</sup> The quality of feedback from specialists to primary care was, however, only one of the components measured. Family physicians are also reported to have improved coordination of care within the primary care team as well as with the referral hospitals.<sup>5,6</sup> Family physicians may reduce the number of referrals by providing a higher level of expertise in primary care, and improve the quality of referrals through training of primary care providers as well as through closer relationships with specialists at the referral hospital. A recent observational survey of primary care consultations suggested that primary care providers have some commitment to coordination of care, although opportunities were missed in 40% of consultations.<sup>7</sup>

Frustration with a lack of feedback from referral hospitals is a recurring theme in South African primary care.<sup>8,9</sup> Reasons for not replying have been explored and include: lack of time and high workload, patient is deferred or does not bring the referral letter, there are no specific instructions necessary for primary care, there is no incentive for the specialist to reply as might be the case in the private sector, the referral letter is poor or illegible, the referral was unnecessary, the specialist does not think the primary care providers will understand their feedback, the specialist is going to take over management of the condition, and the reply letter will not reach the clinic anyway. Other studies, however, have shown the value of feedback in terms of improving continuity of care for the patient and capacity building of primary care providers.<sup>10</sup> Providing a structured reply form with the referral letter has not been shown to improve feedback.<sup>11</sup> No studies, however, have evaluated the primary–secondary care interface, in our setting, in terms of visits to hospital outpatient departments. A recent global review of the research gaps in the organisation of primary health care in low-income and middle-income countries identified that evaluating the factors related to successful referral from primary to secondary care and back was a top priority.<sup>12</sup>

The aim, therefore, was to evaluate the quality of referrals to and feedback from outpatient departments at referral hospitals within the Western Cape's primary care platform as well as patient satisfaction with the primary–secondary care interface.

## Methods

### Study design

A descriptive survey was undertaken.

### Setting

Primary care facilities with their primary care providers (clinical nurse practitioners, medical officers and family physicians) that are supported by family physicians within SUFFREN participated in the study. The network included 15 family physicians on the service platform across four of five districts in the Western Cape. Family physicians might be employed full time in primary care at sub-districts or community health centres or district hospitals. Family physicians in district hospitals were responsible for outreach and support to their primary care facilities. Patients could be referred to their local district hospital, where they might see visiting specialists, or to regional hospitals

with specialist departments or tertiary hospitals with sub-specialist departments.

### Sample size

Assuming a proportion of 50% of patients, 95% confidence intervals and a 5% margin of error, a sample of 385 was required. In order to achieve this sample size each of the 15 family physicians was expected to provide data on 30 patients to give a total of 450 patients. This would enable us to achieve the sample size while allowing for some family physicians who might not provide data.

### Selection of patients

All adult patients (> 18 years age) who had attended a referral hospital OPD appointment within the last three months were identified by primary care providers (PCP) during their consultations on days when the family physician was providing clinical care at the facility. These patients were asked to see the family physician to collect data for the study. Patients had to be seen in a primary care facility in order to collect data and the referral hospital could be a district, regional, tertiary or other specialist hospital. Patients who were referred as an emergency were excluded as well as patients who were unable to complete a questionnaire due to illness. Patients discharged after hospital admission and those sent only for an investigation that was organised directly by the PCP were also excluded.

### Data collection

Data were collected from the medical record or patient if necessary on the following issues:

- quality of the referral information;
- who made the referral (nurse practitioner, medical officer, family physician, other);
- where was the patient referred (name of facility and discipline);
- what was the reason for referral;
- quality of the feedback information;
- source of the feedback information (letter, information technology, patient, other);
- did the feedback make a difference to clinical care at this visit.

The quality of written referral and feedback letters was judged according to a list of criteria that were constructed and validated by the family physicians in SUFFREN. The primary researcher constructed a list of criteria from the literature<sup>13</sup> and the content and construct of this list were then validated with the network of family physicians through email and a workshop. Each criterion was judged as present, not present or not applicable (Supplementary file A). The criteria selected can also be seen in Tables 3 and 6 of the results section. The data collection tool was piloted prior to use to ensure it was understandable and practical.

A brief questionnaire was also administered face-to-face with each patient on their satisfaction with the referral and feedback (Supplementary file B). The closed and open questions were again designed and validated by the family physicians in SUFFREN. The questionnaire was also piloted prior to use.

### Data analysis

Data was captured on an Excel spreadsheet (Microsoft Corp, Redmond, WA, USA) and checked for errors or omissions.

Data were analysed using the Statistical Package for Social Sciences version 25 (IBM Corp, Armonk, NY, USA). Categorical data were reported as frequencies and percentages, while scale data were reported as means and standard deviations or if not normally distributed as medians and interquartile ranges. Qualitative data, from the questionnaire's open questions, were captured verbatim in Excel, categorised thematically and the frequencies of different categories of response calculated.

A total percentage score was calculated (Yes = 1 and No = 0) for the quality of each referral (19 items) and feedback (12 items) letter and the denominator adjusted if the item was not applicable. The median percentage score for the referral letters was then compared with the district of origin and type of referring practitioner using a non-parametric Kruskal–Wallis test. Similarly, the score for the feedback letter was compared with the level of hospital and type of discipline.

### Ethical considerations

The study was approved by the Health Research Ethics Committee at Stellenbosch University (N18/02/014) and permission was granted by the Department of Health to conduct the study.

### Results

Data were obtained by 7 family physicians from 141 patients, 58 (41.1%) male and 83 (58.9%) female, with a mean age of 51.3 years (SD 15.7). Patients came from a variety of primary care facilities, in different districts, were referred by a variety of practitioners and for different reasons as shown in Table 1. Patients came from both metropolitan (46.1%) and rural areas (53.9%).

**Table 1:** Characteristics of primary care facilities (n = 141)

Variables	n (%)
Location of primary care facility:	
Metropole	65 (46.1)
West Coast	22 (15.6)
Cape Winelands	30 (21.3)
Overberg	0 (0.0)
Garden Route	24 (17.0)
Who made the appointment:	
Family physician	48 (34.0)
Medical officer	50 (35.5)
Community service medical officer	17 (12.3)
Intern	2 (1.4)
Clinical nurse practitioner	2 (1.4)
Referral hospital doctor	16 (11.6)
Private practitioner	3 (2.1)
Unknown	3 (2.1)
Reasons for referral:*	
Not sure of diagnosis	43 (30.5)
Not sure of treatment	29 (20.6)
Need for special investigation	50 (35.5)
Need for additional management	72 (51.1)
Need to access specific medication	18 (12.8)
Patient request	2 (1.4)
Other	4 (2.8)

\*More than one reason can apply per referral.

**Table 2:** Characteristics of referral hospitals (n = 141)

Variables	n (%)
Level of hospital where patient seen:	
District hospital	25 (17.7)
Regional hospital	40 (28.4)
Tertiary hospital	72 (51.1)
Other	4 (2.8)
Type of discipline referred to:	
Internal medicine	37 (26.2)
Medical sub-specialities	35 (24.8)
Surgery	9 (6.4)
Surgical sub-specialities	29 (20.6)
Gynaecology	12 (8.5)
Orthopaedics	9 (6.4)
Psychiatry	2 (1.4)
Paediatrics	2 (1.4)
Family medicine	1 (0.7)
Unknown	5 (3.5)

Patients were referred to different types of hospitals and different disciplines as shown in Table 2. Those referred to district hospitals could have been seeing specialists doing outreach clinics.

Table 3 presents results on the information given in the referral letter. A copy of the referral letter was available in 99 (70.7%) of patients, not applicable in 19 (13.6%) and not available in 22 (15.7%). Referral letters from primary care providers (> 90%) were legible, respectful, provided patient and provider identifiers and stated the reason for referral as well as the patient's history. In most cases (80–89%) they also stated the provider's assessment, examination findings and the patient's past medical history. They were less (50–79%) likely to describe the

**Table 3:** Quality of the referral letter (n = 99)

Variables	n (%)
Is the whole letter legible and easy to read?	98 (99.0)
Is the letter respectful and collegial?	97 (98.0)
Is the patient's name stated?	97 (98.0)
Is the patient's folder number stated?	96 (97.0)
Is the date the letter was written stated?	96 (97.0)
Is the practitioner's name stated (not just signature)?	89 (89.9)
Is the practitioner's contact number stated?	42 (42.4)
Is the reason for referral clearly stated (what is expected of the OPD)?	90 (90.9)
Is the practitioner's assessment or diagnosis stated?	87 (87.9)
Is the patient's history described?	94 (94.9)
Are the clinical examination findings described?	82 (82.8)
Are the results of side room tests or investigations stated?	79 (79.8)
Is any treatment for the problem described?	68 (68.7)
Is the patient's usual prescription listed?	54 (54.5)
Is the patient's past medical history stated?	88 (88.9)
Is the presence or absence of allergies stated?	11 (11.1)
Are any lifestyle factors noted (e.g. smoking tobacco, alcohol intake)?	31 (31.3)
Does the letter contain any individual information (e.g. what has been said to patient, patient's perspective)?	20 (20.2)
Does the letter contain any other contextual information (e.g. family, household, housing, occupation, income, grants)?	30 (30.3)

**Table 4:** Patients' feedback on their experience of being referred at primary care facility ( $n = 83$ )

Variable	<i>n</i> (%)	Quotations
No problems with process	57 (68.7)	'Everything went very well, the doctor helped me very much.' 'Patient is satisfied with service. His referral letter was done in May and he got an appointment for June.' 'Because they consulted with the family physician, patient got the gastroscopy and respiratory appointment the same day. Very happy about this.'
Improve process of obtaining the appointment date	14 (16.9)	'Took very long to get appointment (6 months). Doctors had to phone multiple times to get an appointment. Would like to be given an appointment on the day of referral for a date appropriate in the future.' 'Was referred multiple times by fax without getting an appointment with a date on the day of referral from primary care.' 'Letter to neurology was send via the clerk. No appointment date in months.' 'Letter done and faxed but she never had appointment. Do not feel fax system awaiting appointments work well.'
Provide appointment date via information technology	6 (7.2)	'Send them SMS on the phone because sometime we lose the card they give us.' 'Use of social media e.g. WhatsApp.' 'Use e-mail.'
Be given an earlier appointment date	4 (4.8)	'The patient is not sure—was told in May 2017 that hospital is fully booked—only got an appointment in May 2018.' 'Long-time waiting for appointment for a 2 year period to hospital. Will take 2 years to get replacement of knees.' 'Initially had an appointment at hospital 10 months from date of seeing the doctor, but was worried to wait so long. Family physician made a sooner appointment.'

results of investigations in primary care, treatment given and the usual prescription. They did not usually (< 50%) state allergies, the provider's contact details, relevant lifestyle and contextual issues, or provide any pertinent information about the patient's perspective on their illness.

**Table 4** categorises patients' feedback on their experience of being referred at the primary care facility. Most patients agreed that the referral was necessary, understood why they were referred and were happy with the administrative process. Some were unhappy with the length of time taken to obtain the appointment date. It appeared that some specialist departments had inefficient systems in place to screen and respond to requests for appointments. A few patients would have liked to receive the appointment date by text message or other electronic means of communication and to have an earlier appointment date.

**Table 5** provides information on the nature of feedback from the referral hospital. Written feedback was available in only 57.4% of patients. In 31.9% of patients, doctors had to spend time obtaining feedback and in over half of cases the patient (52.5%) was

**Table 5:** Nature of feedback from hospital ( $n = 141$ )

Variable	<i>n</i> (%)
Did the hospital provide feedback to the primary care provider?	81 (57.4)
Did the primary care provider spend time obtaining feedback?	45 (31.9)
What was the source of information?	
Letter	55 (39.0)
Telephone	8 (5.7)
Patient	73 (52.5)
Information technology, e.g. ECM, ECCR, email	24 (16.9)
Prescription	21 (14.9)
Copy of hospital notes/folder	8 (5.6)
Results of investigations	2 (1.4)
Did feedback influence the management plan at this visit?	77 (54.6)

the source of information on what happened. Feedback only influenced management in that consultation in 54.6% of patients.

**Table 6** provides information on the quality of written feedback from the referral hospital. Feedback from the hospital (> 90%) was legible, identified the patient and specialist, stated the assessment and recommended management plan. In most cases (80–89%) the feedback was respectful and addressed the reason for referral. They were less likely (50–79%) to provide contact details, give the results of investigations or procedures, clarify what should happen now in primary care or whether the hospital was still involved in the patient's care.

**Table 7** provides feedback from patients on their experience of the OPD visit at the referral hospital. Less than half of the patients were satisfied with their hospital visit and had problems with transport to the hospital, the time spent waiting and queuing as well as the organisation of the visit. A few patients

**Table 6:** Quality of written feedback from referral hospital ( $n = 81$ )

Variables	<i>n</i> (%)
Is all the written feedback legible and easy to read?	80 (98.8)
Is the feedback respectful and collegial?	65 (80.2)
Is the patient's identity clearly stated?	81 (100.0)
Is the date on which they were seen clearly stated?	81 (100.0)
Is the hospital practitioner's identity stated (not just signature)?	75 (92.6)
Are the hospital practitioner's contact details stated?	50 (61.7)
Has the reason(s) for referral been addressed?	69 (85.2)
Is the hospital's assessment or diagnosis stated?	80 (98.8)
Is the hospital's recommended management or prescription stated?	81 (100.0)
Are the results of any investigations or procedures stated?	48 (59.2)
Are instructions given regarding ongoing primary care (i.e. what the primary care provider should do going forward)?	56 (69.1)
Is the further role of the hospital clear (i.e. patient discharged, to be seen again)?	51 (62.9)

**Table 7:** Patients’ feedback on their visit to OPD at the referral hospital (n= 89)

Variable	n (%)	Quotations
Was satisfied with the OPD visit	37 (41.6)	‘Patient is satisfied. Staff explained everything to him.’ ‘Felt happy with management at hospital. Many patients helped before him.’ ‘At hospital, felt they were friendly and helpful.’
Shorter and fairer queues with shorter waiting times	24 (27.0)	‘Should pre-draw folder. Waits in very long queue to get folder to get to right place. Queued many times.’ ‘Specialist arrived at 12h00, waiting at OPD since 08h00.’ ‘Fitting in patients within specific time slot to reduce the waiting time at the hospital.’
Better and more respectful communication from doctors	6 (6.7)	‘I did not understand everything the doctor was saying. Looked like she was in a hurry.’ ‘The doctors do not listen to the patient or speak to them so one can understand.’ ‘Was there from 6 am. Dr came 08:30 and there was no assistant to help. When he went in the patient felt doctor were in a hurry. Told him that he did not have to come here.’ ‘He felt like he was just a number and it was not considered that his condition is serious. Waited very long to get appointment and when he got there he was not taken seriously. Feels he is not being explained exactly what is going on.’ ‘Hospital staff can at least be a little more sensitive and compassionate towards patients despite fatigue.’ ‘They always say they will send information to the doctor and do not tell you as the patient what is wrong.’
Better and cheaper forms of transport	15 (16.9)	‘Transport from home clinic to hospital could be arranged. No money for taxi.’ ‘Provide patient with transport.’ ‘Having my own transport.’ ‘Transport had a stretcher in bus, limited seats, patients had to sit on floor of bus.’
Better organisation of visit	7 (7.8)	‘The people by reception must tell you which clinic to go, because sometimes you go wait long by the wrong clinic and the hospital is very big.’ ‘They did not give me the correct instructions for the tests done before the appointment and then blamed me for this.’ ‘Reminder in form of SMS [text message].’

struggled to understand the consultant and felt that the doctor was rushed, disinterested or insensitive.

Table 8 presents the patients’ perspective on key aspects of their visit to the OPD. Patients reported that the reason for referral was not addressed in 26% of visits and their questions were not answered in 29% of visits. Although the commonest source of feedback in primary care was the patients themselves, many did not know what the hospital doctor thought was wrong (36%), and did not know what treatment was recommended (27%) or the results of tests (33%) and procedures (29%).

**Table 8:** Agreement of patients with statements regarding key aspects of their OPD visit

Variable	Fully agree n (%)
I needed to be referred to the hospital outpatients (n = 98)	95 (96.9)
I know why I was referred to the hospital outpatients (n = 98)	92 (93.9)
At the end of the visit I knew what the hospital doctor thought was wrong with me (n= 98)	63 (64.3)
The hospital doctor addressed the reason for my referral (n = 96)	71 (74.0)
I know what treatment the hospital doctor recommended (n = 97)	71 (73.2)
I know the results of my tests at the hospital (n = 87)	58 (66.7)
I know what operations or procedures were done at the hospital (n = 59)	42 (71.2)
I know if I need to go back to the hospital (n = 97)	79 (81.4)
The hospital doctor answered any questions that I had (n = 92)	65 (70.7)
The hospital doctor explained what the clinic needs to do now (n = 96)	51 (53.1)

Table 9 looks at the relationship between the quality of the referral or feedback letters and key factors. There was a significant difference between districts and types of practitioners making the referral. Family physicians wrote the best referrals, followed by junior medical officers, established medical officers and lastly nurses. There was also a significant difference between feedback from different levels of hospital, with district hospitals providing a higher quality of feedback. Tertiary hospitals also appeared to

**Table 9:** Factors related to the quality of written referrals and feedback.

Variable	Median percentage score Median % (95% CI)	p-value
District responsible for the referral letter:		
Cape Winelands	70.6 (47.4–93.7)	< 0.001
Garden Route	89.5 (89.5–94.7)	
West Coast	61.1 (57.9–68.4)	
Metropole	68.4 (68.4–73.7)	
Practitioner responsible for the referral letter:		
Nurses	57.9 (–)	< 0.001
Junior medical officers	68.4 (68.4–79.0)	
Medical officers	63.2 (61.1–68.4)	
Family physicians	84.2 (84.2–89.5)	
Level of hospital giving feedback:		
District hospital	91.7 (91.7–100.0)	0.004
Regional hospital	75.0 (72.7–91.0)	
Tertiary hospital	87.1 (75.0–91.7)	
Type of discipline giving feedback:		
Medicine	90.9 (83.3–91.7)	0.206
Surgery	75.0 (72.7–91.7)	
Obstetrics and gynaecology	90.0 (75.0–100.0)	
Psychiatry	80.0 (–)	
Other	82.6 (81.8–83.3)	

provide better feedback than regional hospitals. There was no difference in the quality of feedback between hospital specialists.

### Discussion

The findings of this study are discussed in terms of barriers to care, communication, coordination and relationships as suggested by a recent systematic review of the primary–secondary care interface.<sup>14</sup>

#### Barriers to care

Barriers to care included problems with the system for obtaining appointments and long waiting times at the referral hospital. The complexity of appointment systems and bureaucracy involved can make patients feel disempowered and stressed.<sup>14</sup> The public sector primary care services in South Africa are meant to act as gatekeepers to the hospital specialists. In other countries with gatekeeping, patients have found that access to their PCPs and the knowledge of their PCPs were barriers to care.<sup>14</sup> Although not noted in this study, first contact access to PCPs and their expertise have been identified as issues elsewhere.<sup>7,15</sup> Transport came through as a major barrier to care in this study, but was not mentioned in the systematic review.

#### Communication issues

Poor communication was an issue for some patients and language barriers, poor staff attitudes and lack of time were seen as contributing factors. Referrals demonstrated a lack of a patient-centred and holistic approach in primary care, which has been recognised elsewhere.<sup>13</sup> Improving patient-centredness is a key goal of our health services and is also seen as a key issue for the primary–secondary care interface.<sup>14</sup> Other studies have noted that poor communication can lead to passivity, anxiety and uncertainty in the patient or attempts to be more proactive through involving family members, making lists of questions or arguing with the healthcare staff.<sup>14</sup> One had the impression from the study findings that our patients tend to be more passive and mostly suffer in silence.

Transfer of information across the primary–secondary interface was an issue with no referral letter found in 16% of patients and no written feedback found in 61% of patients. Family physicians with postgraduate training and recently qualified junior medical officers wrote the best referrals. It was not possible to determine why districts differed in the quality of referrals, although the Garden Route was a pilot district for national health insurance and had strong outreach, with family medicine, from the hospitals to the primary care services.

Older primary care doctors may be more likely to write a referral letter,<sup>13</sup> while hospital specialists are more likely to reply if they receive the referral letter, know or trust the primary care doctor, and if they recognise the coordinating role of primary care. This could explain why district hospitals, which were closer to the PCPs, gave better feedback. Patients may fail to deliver both the referral letter and the feedback. Other reasons for poor transfer of information include a negative attitude that ‘doesn’t think it is necessary, lacks interest or can’t be bothered’ and a lack of time.<sup>13</sup> Hospital specialists may also defer giving feedback if they are going to see the patient again, although this creates uncertainty for the primary care provider and thus suboptimal coordination and continuity of care. High workload and insufficient resources in both primary and secondary care can act as a barrier to communication<sup>16</sup> and these issues are widespread

within the South African health system and were mentioned in the qualitative data.

#### Coordination of care

Feedback did not seem to recognise the important role of primary care in coordination and continuity of care. Poor feedback and using the patient him/herself as a major source of information is likely to lead to delays in care, inaccurate care and frustration for the patient and primary care provider. Primary care providers have a high patient load<sup>17</sup> and cannot afford to spend time searching for feedback. Primary care in South Africa does not yet use electronic medical records, which have been recognised elsewhere as an important contributor to effective coordination of care.<sup>16</sup>

South African primary care is weak in terms of relational continuity of care,<sup>15</sup> which itself is important for ongoing coordination of care for individual patients. One suspects that neither the hospital specialists nor the primary care providers conceptualise primary care providers as formally taking responsibility for such continuity and coordination. Some individual providers spent time trying to improve coordination of care, but still relied mostly on the patient when communication was absent. More informal communication channels between practitioners may improve coordination (for example email or WhatsApp),<sup>16</sup> but such contact details were largely absent from written communication. Again, patients may play a role in coordinating care and their roles have been described as largely passive or proactive.<sup>14</sup> There was little evidence of patients proactively improving coordination in this study.

#### Relationships

Three relationships were seen as important. The patient’s relationship with (a) the primary care provider and (b) the hospital specialist, and the relationship between the primary care provider and hospital specialist. A lack of continuity in the relationship with the primary care provider may reduce patients’ confidence and trust.<sup>14</sup> At the hospital some patients felt lost in the system and not being valued may increase a sense of powerlessness and frustration. The relationship across the primary–secondary interface has been characterised as one of professional tribalism.<sup>14</sup> Such tribalism can lead to something of a disrespectful and confrontational relationship, although a commitment to professionalism and better patient care can overcome the divide.

Very few referrals were made by nurse practitioners as they tend to refer internally to primary care doctors and these doctors then make referrals to hospital specialists. The majority of referrals (51%) were to internal medicine and its subspecialties. This could represent the burden of disease, but consideration should be given as to whether this reflects learning needs for primary care doctors.

#### Limitations

Patients were selected for the study by the family physician and this may have introduced a selection bias towards patients referred by them. Patients were selected across the whole of the Western Cape and from all districts apart from the Overberg. The family physicians in the Overberg did not participate in SUFFREN and this could have impacted the results. Overberg shares similar characteristics and referral pathways, however, to the Cape Winelands.

Family physicians working in secondary-level hospitals struggled to recruit patients from the primary care platform and this limited the sample size. The sample size was much smaller than expected (141/385, 37%) and this will have increased the margin of error around the measurements. The sample of 141 was sufficient to measure a proportion of 70% with 95% confidence intervals and 7.5% margin of error.

### Recommendations

Recommendations that can be made from this study relate to the four areas discussed above:

- Systems issues that act as barriers to care should be addressed. In particular the screening of referrals and provision of an appointment date should be streamlined, and cell phone technology rather than fax could be used to improve communication. While partly outside the control of health services there is a need to improve transport to referral hospitals.
- Transfer of information should be improved, particularly feedback from the referral hospitals that not only provides information on the visit but supports ongoing and further coordination of care by the primary care provider. Again, there is an opportunity for information technology to streamline both referral and feedback. The Vula app has shown what is possible in terms of emergency referrals across the primary–secondary interface.
- PCPs should be trained and capacitated to take on a more formal role of coordinating patient care across the primary–secondary interface and all the role players should support this important function. A commitment to improved relational continuity of primary care should also improve coordination.
- Efforts should continue among all health professionals to improve patient-centred relationships. Interaction between primary and secondary level practitioners should break down any sense of tribalism and foster mutual respect, sharing of information, professionalism and a shared vision of improving patient care. Forums can be created at the district or substructure level to enable interaction between practitioners. Relationships may be better with the district hospital than with the more distant regional and tertiary hospitals. Educational interventions using small groups of primary and secondary care practitioners have shown promise in changing behaviour and improving communication.<sup>18</sup>

### Conclusion

Most patients had an appropriate referral letter, although these were biomedical and lacked a holistic description of the patient. Written feedback was available in less than half of patients and the patient was the main source of information on the hospital visit. The issues identified regarding the primary–secondary care interface for outpatient referrals can be categorised into barriers to care, communication, coordination and relationship issues. Recommendations are made to improve performance in each of these areas.

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