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Are Return of Service Bursaries an Effective Investment to Build Health Workforce Capacity? A Qualitative Study of Key South African Policymakers

Sikhumbuzo A. Mabunda (

smabunda@georgeinstitute.org.au)

George Institute for Global Health https://orcid.org/0000-0001-9458-3742

Andrea Durbach

University of New South Wales

Wezile W. Chitha

University of the Witwatersrand

Blake Angell

University of New South Wales

Rohina Joshi

University of New South Wales

Research

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Abstract

Background: Return-of-service schemes or bursaries are used in South Africa and other nations to publicly fund the training of skilled health professionals in return for the beneficiary agreeing to return to serve in their local provinces on a year-for-year basis. This study aimed to understand how these policies operate across different provinces in South Africa to examine whether they achieved their objectives and identify strengths and areas for improvement in the schemes to inform policymakers in South Africa and internationally.

Methods: This research draws on the insights of 15 key South African policymakers from eight of its nine provinces through semi-structured, qualitative interviews. The respondents were interviewed through Microsoft Teams virtual platform, either in pairs (4) or as individuals (7). Data were analysed using inductive, thematic content analysis in NVIVO.

Results: Respondents reported that the schemes had resulted in an increase in the number of skilled health professionals and had provided opportunities for study and employment for previously marginalised groups. Formal evaluations of the impact of the schemes were not reported, however, a number of shortcomings with current schemes were identified that were likely limiting their effectiveness. Respondents reported a lack of foresight in the scheme implementation including a bias in the selection of beneficiaries towards medical professionals at the expense of other health workers. Furthermore, failure to plan for practice location when beneficiaries finished training limited the capacity of the schemes to meet the needs of local populations. Monitoring of recipients was limited by loopholes in contract design, decision-making and, poor coordination between departments. Between 5 and 30% of beneficiaries were reported to default their contracts with some not completing their studies, some not returning after completing their internship and others terminating their services before concluding their contracts.

Conclusions: Return-of-service schemes have helped in overcoming health professional shortages. However, they haven't been formally evaluated. Several planning and implementation shortcomings were identified which can be improved to enhance access to healthcare in South Africa.

Background

Shortage of skilled health professionals is a major barrier to universal health coverage, especially in low- and middle-income countries [1]. These shortages result from underproduction, maldistribution to either urban centres and/or the private sector, and emigration to high-income countries [2-4]. Addressing this shortfall requires substantive and strategic investments in the health workforce, as well as improvements in health workforce-related planning, education, deployment, retention, management and remuneration [1-3, 5-10].

South Africa has for years invested in education of health sciences students to increase the number of health professionals and improve their retention through return-of-service (RoS) schemes [4, 10, 11]. Health sciences students are funded to study either locally or, for some medical students, in Cuba with an agreement that after their training, they will return to serve their provinces for a specified period of time [10, 12]. To date, there is little literature scrutinising the effectiveness or sustainability of these schemes nor whether they represent value-for-money for resource constrained health systems [4, 10, 13-18]. This study seeks to fill this gap through an examination of insights from key policymakers in South African provincial health departments to explore their views on the effectiveness and long-term value of RoS schemes.

Research context

This research was conducted in eight out of nine South African provinces. As South Africa has a devolved system of governance, provinces are responsible for the provision of healthcare through their respective Provincial Department of Health (PDoH). They employ health workers under conditions set out by the national Department of Public Services and Administration.

Methods

Design

We sought to elicit insights of key South African policymakers into the effectiveness and value of return-of-service bursary schemes. This study aims to improve understanding of how the South African government has designed and implemented health professional training policies aimed at improving the delivery of healthcare to underserved populations.

Using qualitative critical theory methodology, we designed the study to enable an assessment and critique of the current situation (i.e. attempting to overcome shortages of health professionals in underserved communities) [19-22]. This strategy allows for assessment of the challenges in the implementation of RoS schemes and thus derive solutions to fix it.

Sample and Recruitment

We aimed to interview 18 South policymakers from nine provinces. Inclusion criteria were as follows: government officials managing bursaries and responsible for the formulation and monitoring of RoS policies, for budgeting bursary policies or involved with the deployment of RoS beneficiaries. Officials were excluded if employed for less than two years in this role. Recruitment occurred through email advertisements in the PDoH offices. Considering the limited size of this population, both convenience and snowball sampling were used. Through snowball sampling we identified a key policymaker from one Provincial Department of Education. Three participants were excluded because one participant was new in the position and the other two, faced technical challenges during the two times when the interview was scheduled.

Data collection

Due to COVID-19 imposed travel restrictions, Microsoft Teams was used for interviews between January and October 2021. We used interviewer guide-aided open-ended interviews (Appendix 1) to understand the formulation and implementation of RoS policies. Seven participants were interviewed as individuals, and eight were interviewed in pairs. All eleven interviews were conducted by the first author to ensure consistency. The initial transcription was obtained from Microsoft Teams, which was transferred to Microsoft Word and cleaned by the first author who checked all transcripts against the recordings and translated the non-English language phrases used in the interviews (from a total of five languages) to ensure that the transcriptions were verbatim.

Data analysis

Data were analysed manually using inductive, thematic content analysis in NVIVO 12. The first author reviewed all the transcripts, the third and fourth authors independently reviewed half of the transcripts. The three researchers discussed their independently developed codes and the first author synthesised the results. The analysis followed a six-step approach of familiarisation, coding, theme development, review of themes, defining themes and reporting as advised by literature [23]. The results are presented using five themes that emerged from the data to answer our questions.

Ethics approval

Ethics approval was granted by the Human Research Ethics Committees of the University of New South Wales (HC200519) and the Walter Sisulu University, South Africa (065/2020). Research access approval was obtained from all nine Provincial Health Research Committees in South Africa. All participants gave their written informed consent to the audio-recording of interviews through Microsoft Teams and backed up with phone recording. Participant names and provinces were de-identified.

Results

Fifteen out of nineteen (78.9%) policymakers from eight provinces were interviewed for this research. Females accounted for 7/15 (46.7%) of respondents. Respondents' experience of managing RoS schemes at provincial level ranged from 5 to 23 years. Fourteen respondents were from the PDoH and one was from the Provincial Department of Education.

What are return-of-service schemes?

Bursaries, as RoS schemes are known in South Africa, are used to fund the study of beneficiaries on the understanding that they will serve health facilities which find it difficult to recruit health professionals for at least the same number of years as the candidate was funded during their studies. As one respondent described:

...will pay for them for the amount of years that they need to go study, for example, if it's four years or six years in medicine (sic)... and at the end of the qualification they can work for the Department of Health.... they don't pay us back any money, they come back and work for the department and they will still get their full salary.we need their services in our hospitals.

RoS Schemes are managed in each province by the bursary office through the human resource development office. In five of the provinces (Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo and Western Cape), the policy is entirely managed directly by the Department of Health. Funding for study within the country has been shifted to the Office of the Premier in the North West province and to the Department of Education (DoE) in Mpumalanga and Northern Cape provinces. In addition to local universities, all provinces, with the exception of the Western Cape (WC), send students to Cuba for medical studies. The PDoH is responsible for funding and recruitment of students studying in Cuba. Mpumalanga province (MP) also sends students to Russia for medical studies, who are funded by the DoE. Clinical professions trained can include but are not limited to medicine, physiotherapy, nursing, radiography, medical specialty, nursing specialty, etc. Box 1 summarises the themes that emerged from the interviews.

Effectiveness and value for money of RoS schemes.

All provinces reported a positive impact of RoS schemes on training health professionals to deal with the shortages and maldistribution of the health workforce in South Africa. Some also highlighted the social effect of the bursaries for people who otherwise would not have been able to obtain a qualification.

...to support... disadvantaged children from... disadvantaged families.Especially those who pass very well in matric.

While all the provinces contact the students while they are being supported by the bursary, none of the schemes have been systematically evaluated. Respondents also noted the substantial cost of the schemes and specific instances of waste.

... nobody comes back at the end of the year and say: 'Ok, we have generated so many bursaries, how much did it reduce your vacancy rate? What was the impact of this'?

The respondents suggested that it was important to review the strategy for workforce planning and deployment, and utilisation of resources:

...it's time that we... approached our implementation... of plans and utilisation of resources using scientific approaches because many at times we have caught ourselves..., finding that we have been implementing wrong decisions. All of a sudden maybe there is oversupply, or interestingly enough...... we find that the reason why we do not have medical practitioners in our facilities is not (*sic*) that we do not train them, but it's because we are unable to retain them.

All provinces experienced defaulters or individuals who breached their contracts, and this was estimated to range from 5-30% of funded individuals. One province also estimated that about 20% of the defaulters would not have served at all, and only half of the defaulters will settle their debt. Even if money is to be repaid, it's not an easy exercise to quantify and/or replace their loss as suggested by a participant from a rural province:

But we lost a whole doctor!!! Two of them. Because it takes us another six years to produce... Seven...six...seven...eight years to produce a doctor!!!

Even though the two urban provinces (Gauteng and Western Cape) also reported defaulters, this did not seem to impact them as negatively, hence they could be able to say that: "We are still fine, we are working fine for few years now (*sic*), luckily".

What factors impact effectiveness of the policy?

Respondents noted that, while South Africa has shortages of many groups of health workers, bursaries were often skewed towards medical doctors without any assessment of the skills-mix needed in a provincial health system based on assumptions.

Even the... international arrangements that I have mentioned, the Health Sciences students that we send there is medical practitioners and nothing else. So that on its own will tell you that it looks like the bias is on medical practitioners.

Most of the health professional beneficiaries complete their studies because they are "...a group of serious cadres who really go out and pass". However, poor academic progression by a minority, impacts effectiveness of the schemes as not everyone who is funded is able to complete their studies. While the contract mandates the student to pay back the funding if they fail to complete the course, the participants felt that it was challenging to enforce the contractual clause.

According to the contract, the person must pay back the money. Though it's very difficult to say to somebody... who is coming from a poor background to say: 'pay the money'. While the person is failing even... to finish his studies. Where is he going to get the money? That is a challenge which is not easy to practice.

Despite the absence of an opt-out clause in at-least one provincial contract, some beneficiaries choose to opt-out. The opt-out clause gives beneficiaries the option to re-imburse government a pro-rata amount upon early termination of their contracts.

In some provinces, the bursaries are distributed by the Department of Education or Office of the Premier and the jobs are provided by the Department of Health, consequently, the data between the two departments is not integrated. Complexities introduced through splitting responsibility across departments include administrative bungles where the bursary holder is not known due to incomplete records at the funding department, in provinces where the Department of Health is not in control of the entire process. This poor communication and coordination leads to poor effectiveness of the schemes.

...they also give bursaries for things (*qualifications*) which doesn't (*sic*) exist and then the person comes back, and the person say (*sic*): '...I must be employed, I am a bursary holder'. ... But the person is nowhere registered and no Council (*health professionals' regulatory council*). It's not a health profession but it's a nutritionist. He needs to study another three years whilst we employ him. So, now it's our problem.

Another challenge "...is to get people to work where you actually need them", thus needing to strike a balance between the preferences of the individual and the needs of the health system. Urban, peri-urban, and rural health facilities that are in a provincial boundary with urban centres are the most popular choices among beneficiaries.

...it's a very small hospital... It's close enough to Pretoria for you... to do your private practice in Pretoria. ...they are rural hospitals. ...you get a rural allowance... and then they don't pitch up to the hospitals, and they have their private ... surgeries (practices) in town.

In some instances, there are different interpretations of contractual terms as the contract was ambiguous and beneficiaries did not know where they would be placed to serve the contractual period. The bursary contract also doesn't specify the community that the beneficiary will be linked to on completion of their studies, despite this being the stated purpose of having RoS schemes.

I remember with the Cuba one, for example, the initial batch, signed the contract, which was designed by national and at that time the contract was blindly saying: 'You are expected to come back and serve in the country'.

In other instances, the contracts may be open to different interpretations which can lead to possibilities for abuse:

We consulted some... learned lawyers and they told us: 'No, there is no way you will win this one in court'.

Other challenges included using paper-based records and non-sophisticated excel spreadsheets to track beneficiaries some of which have been inaccurate in the past. In addition, some departments were reported to have lost some records and have a poor monitoring system. Even though the database of all the provinces is electronic now, the contracts are still paper based which makes monitoring the system cumbersome. Other systemic challenges such as corruption and maladministration have created barriers in the implementation of the program. For example, there have been instances where students from rich families who were not eligible for the RoS scheme have benefitted from the educational initiatives.

You know friends will be just walking to the office: 'I want a bursary' and it's given. When you look at the list of bursars compared to the ones... approved, it was a different number.

Sometimes, beneficiaries of the educational bursaries have not been able to fulfil their contractual agreements due to changing personal circumstances and ambitions.

'I might come from a poor village, but I'm not destined to be poor, or I'm not destined to live in a poor village'. ... you already are acclimatised to urban life. If you have already started a family, your children are attending some, well, fancy..., well-developed schools there, and you know that 'if I go back to my province, there's a huge likelihood that they will put me in a rural facility' and then all of a sudden you lose all the privileges of being in an urban area. So, you will find that the bursary holders will always try to find a way of not coming back...

However, the policy implementors believe that beneficiaries should fulfil their obligations regardless of the changing circumstances as highlighted by a respondent:

'I have now got children and my husband is here or my wife is here. I can't go there anymore because I have all these responsibilities'. ...but those responsibilities are secondary because your first responsibility was your bursary.

Notwithstanding, there are structural constraints of the departments including lack of expertise for health workforce planning.

we are not having qualified HR (Human Resource) practitioners...

4. Unintended consequences

Government bursaries come with the advantage of guaranteeing a government job for beneficiaries. However, at times this is to the disadvantage of non-bursary beneficiaries, some of whom would have studied using bank loans. As one respondent said:

...in these years, three years now, we do not take the non-bursary holders at all because we don't have budget (sic).

Some defaulting RoS beneficiaries have tried to return to the public health sector after being dismissed for misconduct in the private sector:

Then you've got the other side of the coin; the person leaves, she gets fired outside and then she wants to return, which we are not allowing. We don't allow you to return once you've gone because you make trouble outside. Then you want to come to our patients which can't choose a doctor

Another challenge is that the obligatory period of service could delay specialisation and professional development for those who have such intentions. For some beneficiaries, this obligatory period could be as long as eight or more years for medical students who studied in Cuba.

5. Sustainability

Poor economic conditions have led to conflict between a prior government undertaking to employ beneficiaries post-completion of their studies and the need to finance these posts. This in turn has led to a lack of funded posts for RoS graduates in some situations.

...it was sustainable but now ...with this sudden change... with... issue of funding...we are not even sure whether this section is going to (*laughs*)... to be here for a long time. Because now...like even Cuba, we stopped sending the students to Cubans (*sic*).... We sent ten in 2015 and then we stopped from there.

We actually cannot even afford to appoint them because we still have a lot sitting at home unemployed.

There has also been a recent change in policy to support the education of economically disadvantaged students throughout the country. All students who are assessed as being poor, now qualify for free tertiary education through support from the National Students Financial Aid Scheme (NSFAS), in a way rendering the RoS schemes redundant for poor students.

...the budget which was used for bursaries, were taken from the department... and... were given to the tertiary institutions to strengthen up the NSFAS (*National Students Financial Aid Scheme*). So, the minister of finance, view it: 'If you are health, let us deal with health issues...let Minister of Higher Education deal with development of skills'...

However, NSFAS funding also has a quota of students that it can fund in a year. This inevitably leads to the exclusion of other needy students who have academic potential. Hence one respondent could confidently say of government bursaries:

...I don't see this programme discontinuing anytime soon.

Discussion

In this study, policymakers highlighted the role of RoS schemes in increasing the pool of skilled health professionals. They indicated that RoS schemes improved the prospects of rural and disadvantaged South Africans in securing academic qualifications and jobs in the health sector. These benefits, however, were undermined by a lack of long-term planning, lack of transparency in the selection of some recipients, poor monitoring and coordination, and deliberate breaches of contract for up to 30% of recipients. No formal evaluations of the impact of RoS schemes was reported despite the high costs of bursaries.

A number of factors were found that encouraged beneficiaries to not return to serve out their contracts. The majority of these issues were due to structural and systemic challenges such as lack of collaboration between departments, maladministration or outright corrupt practices, poor record keeping, lack of specificity in the contracts and poor planning and inadequate monitoring of the scheme [17, 18]. Our work identified several challenges that resulted due to poor intersectoral collaboration between the departments of health, education and Office of the Premier [7]. This resulted in incomplete records and financial waste. However, if RoS schemes are to be a reliable health workforce planning tool, implementation and monitoring should be driven by health planners in close collaboration with the funding ministry/or department. Systems to allow close collaboration and communication between these groups need to be developed to overcome these shortcomings. Clearly delineating roles and responsibilities between different departments will also reduce the complexity of the operation of these schemes. The RoS schemes lack planning and do not consider the ideal skills-mix required to address the health needs of the population and consideration of economic realities [5-7]. Beneficiaries were found to not only serve their obligations in underserved communities but also in facilities servicing affluent communities undermining the credibility of the schemes which are supposed to benefit disadvantaged areas.

Other reasons included changed personal circumstances for the beneficiaries on completing their studies. Even though the rural origin medical students targeted by these RoS schemes have previously been found to be three times more likely to return to rural practice [2, 3, 8, 24-28], a large number were found to prefer urban job placements following their training. Personal circumstances were found to often change during training, as beneficiaries could find a spouse who might not be able to relocate with them due to their personal commitments including RoS obligations with another province.

The implementation of the allocation process and the structural issues (e.g. unqualified human resource for health staff) need strengthening to enable beneficiaries to serve their obligations. This could be enhanced with evidence-based planning of health workforce, better monitoring and enforcing the fines when contracts are broken. Policies to better support beneficiaries to fulfil their contracts may also improve the functioning, effectiveness, and value of these schemes. Initiatives to include flexible arrangements between provinces to allow exchanges or sabbaticals

where they pay back their debt serving another underserved community, for example, might improve retention and health system functioning and should be further explored.

The impact of defaulting on contracts (ranging between 5-30% of bursary recipients) was felt differentially across the provinces. Urbanised provinces which had access to medical schools did not seem to be as negatively impacted by beneficiaries who defaulted their contracts. On the other hand, less urbanised provinces highlighted that losing even one health professional had large implications for the health system. This, therefore, shows that whilst RoS schemes might not be needed in urban provinces, they are essential for less urbanised provinces and need to be enhanced and restructured.

RoS schemes cost a significant proportion of health budgets. For instance, in the 2019/2020 financial year, Gauteng PDoH spent 2.06% of their budget on health sciences and training, of which 25% was devoted to bursaries [29]. This compares to 0.73% on healthcare support services, 2.92% on administration, 3.04% on emergency medical services, 4.05% on health facilities management, 31.37% on district health services, and 55.83% on tertiary and quaternary health services [29]. This represents a substantial investment for resource-constrained health systems, yet our work suggests that significant questions remain as to whether these schemes represent the most efficient use of these resources. It is imperative that the impact of these investments are evaluated systematically. At the very least, such an evaluation should assess the impact of the scheme on the distribution and retention of health professionals, especially in underserved areas [6, 13, 18].

Though minimal, variation strategies should be considered for beneficiaries who fail to complete their studies. Such strategies could include more careful selection of beneficiaries, proactive personal and extra academic support, negotiations with local tertiary institutions to consider the beneficiaries for another health sciences programme to minimise financial waste. If all else fails, forgiving the debt could possibly work out better for all parties. Figure 1 summarises policy implications of the programme. While our work was conducted in South Africa, similar programs operate across the world. Our findings may help to inform the operation of these schemes, while they too may provide important lessons to improve for the South African schemes studied here. In Australia, for example, RoS beneficiaries of the Medical Rural Bonded Scholarships scheme are able to reduce their obligatory period by serving remote areas [30-32]. Changes affecting beneficiaries are also discussed by beneficiaries and health planners [30-32]. In Sri Lanka, 87% of medical specialists trained (either in urban centres of the country or foreign trained), serve their obligatory period [33]. This is partly attributed to the associated incentives such as priority school admissions of their children and low interest rate loans [33]. A RoS contract for medical studies offered by one of India's States (Tamil Nadu), specifies that beneficiaries should serve their obligatory period in a rural area that is determined by government [34]. Likewise, in Canada, RoS schemes have been used for retention of medical doctors since at least 1969 [17]. The Canadian system discusses the practice location with the beneficiary before contracting [17].

Strategies to address shortages and maldistribution of human resources for health need to address the underlying, and sometimes complex, drivers of these problems. To have a lasting impact, strategies need to be non-sporadic, long-term and continuous in nature, with ongoing monitoring and evaluation to ensure they are contributing to these objectives and guard against unintended consequences [5-7, 9, 10]. Planning and managing a successful RoS scheme should also be based on current and forecast health needs, sufficient allocation of resources for future salary needs, efficient monitoring mechanisms to ensure compliance and the integrity of beneficiaries and policy custodians.

Strengths and limitations

Our study has some limitations. We interviewed stakeholders from eight of South Africa's nine provinces. While the excluded province is not systematically different from those included in the study, there may have been some distinctions which were not captured. Second, whilst we ensured the inclusion of all the key policymakers across the eight provinces, unfortunately, we missed some representatives from the DoE and Office of the Premier and Human Resource management. Having responses from key stakeholders from the DoH of eight provinces and DoE of one province has provided valuable insights into the planning and implementation of RoS Schemes.

Conclusion

Return-of-service schemes have been used by South African provinces with the aim of building health capacity in underserved areas. These schemes have been socially responsive in helping people from disadvantaged backgrounds who would not have been able to obtain an educational qualification in the health sector without the bursaries. They have helped in overcoming health professional shortages. However, these policies are poorly planned, coordinated and monitored and have not been formally evaluated. They have at times been implemented with opportunity costs of not employing other deserving citizens and at times employing incompetent beneficiaries, thus rendering them non-sustainable. For these strategies to be effective, health planners need to collaborate and RoS schemes need evidence-based planning, implementation and monitoring strategies so that communities in South Africa have access to good quality health care through trained and motivated health workforce.

Abbreviations

DoE Department of Education

DoH Department of Health

HR Human Resource(s)

HRD Human Resource Development

MP Mpumalanga Province

NHI National Health Insurance

NSFAS National Student Financial Aid Scheme

PDoH Provincial Department of Health

RoS Return of Service

WC Western Cape province

Declarations

Ethics approval and consent to participate

Ethics approval was granted by the Human Research Ethics Committees of the University of New South Wales (HC200519) and the Walter Sisulu University, South Africa (reference: 065/2020).

Consent for publication

Granted.

Availability of data and materials

All data used in this study is available from the corresponding author upon reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

SAM conceived the research, liaised with stakeholders, sought ethical approval from South Africa, sought research access approval from all South African provinces, recruited participants and conducted the interviews, transcribed and analysed data, completed the first draft of the manuscript, incorporated and addressed feedback from the co-authors. AD commented on versions of the manuscript, edited versions of the manuscript and signed off on the final version. WWC edited versions of the manuscript. BA co-senior author, peer reviewed four of the transcripts, reviewed codes and edited, and commented on versions of the manuscript. RJ co-senior author led ethics application processes at the University of New South Wales, peer reviewed three of the transcripts, reviewed codes, commented on versions of the manuscript, edited versions of the manuscript and signed off on the final version. All authors read and approved the final manuscript.

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Table

Box 1: Summary box on return-of-service schemes in selected South African provinces

Theme	Example
Underlying objectives of return-of-service schemes.	"the Province is a rural provinceit was difficult to recruit health professionals to serve in our rural areas".
	"we thought that the bursary system will assist to be able to get those skills that we don't have as a province"
	"the bursary came in as a means of ensuring that we always have a constant supply of skills, in various Health Sciences fields".
Effectiveness and value for money of RoS schemes.	we had 59 million [Rands (~4.2 million USD)] (spent on bursaries) in 2016/17, then it went to 61 million [Rands (~4.4 million USD)], 2019it was 212 [million Rands (~15.1 million USD)] and then last year it was 228 million [Rands (~16.3 million USD)], and then this year it is even doubled, so it's a lot of money. "
	"No, I don't know any formal evaluation".
	"We are short of those researchers who are serioussomebody must evaluate your work"."the only evaluation that we do now is when we speak to the students, four times a year, quarterly, and that's the only evaluation that we do at the moment".
What factors affect	"it's very difficult for another department to plan on our behalf".
effectiveness of the policy	"it just says you will work back. It doesn't say where you will work back or that you're going to be linked to where you come from or something like that".
	"it really pains us a lotwhen a person just leaves just like that and some of them are quite intransigent one was claiming marriageto say that the boyfriend is from (another province)"
	"after you've allocated these people pop up and they say: 'But I'm a bursary holder', and they are nowhere on the list to be found".
	"But now the problem is once these children (<i>beneficiaries</i>) go to university they will come back, and they will tell you: 'But my circumstances have changed. I've now got married'now we want to be humane and we want to accommodate these people and that sort of makes it to mewhy do we give a bursary?"
	"both of them just went and they took out a loan and paid back the amount which they got for the bursary. Because remember that is an interest free loanthere is no way what they pay to us and what we lose because now like I said, those two doctors paid each 350,000 Rands (~25,000 USD*)"
	"there are instances where you don't need a doctor, but you need a physiotherapistwe have scarcity. You need a psychologist, we have scarcity. So, there are those professions that are also as important as having a medical practitioner but, because I think the view is that you know if there is a doctor, it can address a number of conditions"
Unintended consequences	"I have got now children (<i>graduate health professionals</i>) that studied with actual loans from banks. Which need to pay it back and that loan every year accumulate interest. And that child actually wants a job, but we now are prioritising these ones. It doesn't matter if they are good or bad. We prioritise them and they don't even want to come back".
	"We've got so many children (health professionals) that's unemployed".
Sustainability	"we were just verbally informed to say that look guys, the Department is going through some challenges and because of cost containment and then austerity measures that we were going through please don't again advertise (sic)".
	"if we are going to shrink the budget and not putting those youngsters that want to further their studiesthey are going to have a revolution. So, the country is going to become unmanageable".
*Exchange rate used is 1 USD = 14 South African Rands	

Figures

Clarity on policy intentions

Evidence based planning

- Epidemiologic and health economics information to forecast skill needs and gaps
- · Early identification of service area
- Service area should be underserved areas with demonstrable difficulty to recruit or retain health professionals

Address structural deficiencies

- Employ qualified human resource planners and administrators.
- Employ health planners for selection, implementation and monitoring.

Clarifying the contract

- · Inclusion of service area in contract.
- Leave no room for ambiguities in contracts to eliminate misinterpretations.

Improvement in systems

- Interoperable information systems that monitor beneficiaries from contracting to completion of obligatory service.
- Evaluate impact of scheme regularly.

Beneficiary oriented

Improve policy effectiveness

- · Careful selection of beneficiaries.
- Support beneficiaries who face challenging circumstances during their studies.
- Identify and manage any changes in beneficiary circumstances.
- Consideration of negotiations between provinces to enable swaps of beneficiaries.
- Means for personal support and professional development (e.g. specialisation pathways) should be introduced.
- Non-bursary holders to be included in planning process to avoid having unemployed graduates

Recruit non-bursary holders in underserved areas to allow for flexibility in planning Integrate RoS schemes into the framework of human resource for health recruitment and retention strategies.

Detailed economic evaluation of schemes.

Consideration of public-private collaborations where the private sector supports with financing of the schemes.

Sustainability

or of

Figure 1

Policy implications for return-of-service schemes