

End of Placement Report

Good Shepherd Hospital, Lubombo, Swaziland

2nd July – 29th September 2012

Abigail Knight



1. Context



Execution Rock, Mlilwane, Swaziland

Swaziland is a land-locked lower middle-income country situated between South Africa and Mozambique. It has a population of circa. one million. Despite its relative wealth Swaziland suffers from extreme inequalities, with 60% of the population defined as the rural poor, with access to only 1% of the country's water supply. Life expectancy is 49 years (2012), the fourth lowest in the world.

The country's recent drop in life expectancy is attributed to the simultaneous HIV and TB epidemics, as it experiences the highest rates of each in the world. HIV prevalence is 26%, and up to 40% in younger age groups. TB incidence is reported to be 1,257 per 100,000 population and multi-drug resistant TB is found in 8% of new cases and 33% of retreatment cases.

Like many other developing countries, non-communicable diseases are a growing problem in Swaziland. Mortality from NCDs rose from 6% in 2010 to 8% in 2011, and unhealthy lifestyle projections suggest this rise will continue.



Kentucky Fried Chicken sponsors primary education in Swaziland

Good Shepherd Hospital (GSH) is the only hospital serving the Lubombo region (the other regions have two hospitals each). Lubombo is a relatively impoverished, rural region in the east of Swaziland. The region comprises 20% of the population of Swaziland, but 39% of all people facing food/income deficit. People living in Lubombo can therefore be said to be twice as likely to be ultra poor than

those living elsewhere in Swaziland. Forty-seven percent (47%) of the Swazi population is under the age of 15 who therefore form a large percentage of those affected by rural poverty. Sixty-two percent (62%) of children in Lubombo are effective dependents and 36% are orphans, which constitutes a higher rate of OVCs than any other region. Lubombo also has the highest proportion of households with chronically ill members, at 17%.

2. The Role

The Public Health Registrar position is based within the Programmes team (HIV, TB and community services) of GSH. It is, in effect, regarded as a Public Health Consultant post with accountability to the Hospital Administrator, Dumsile Simelane, and the Senior Medical Officer (SMO), Dr. Petros, for work project approval. However, day to day support and planning was available from Dr Mamvura, Head of Programmes, and Matron Futhi, Communities Matron. Educational support and supervision were provided through regular email contact and skype discussions with Johns Walley and Wright in Leeds and Bradford respectively. I was also lucky enough that at the time of my placement my predecessor was on a placement at COMDIS in Leeds so I was able to maintain contact and put questions to her also.

The role itself involves a 50/50 time split between operational research projects with COMDIS at the University of Leeds and capacity building at GSH, including grant management. The actual projects that I worked on are outlined in section 5. However, it is worth noting that these varied significantly from my planned projects at the start of the placement due to the flexibility required of such a changing environment.



The Programme team doctors: Dr Basulwa, Dr Atosha and Dr Mumvura; Communities Matron, Matron Futhi and myself

3. Pre-placement Preparation

I had first heard of the placement in Swaziland from a colleague who had completed the placement previously. I contacted John and John on the off-chance they may have a placement available for a shorter duration. As it happened there was an up-coming three month gap between registrars already recruited to the programme. During this time some of the ongoing research projects would be reaching a critical stage and proposals for new research projects and grant proposals were due in

September. It was therefore agreed that it would be of value to COMDIS for me to take my place in the “Registrar relay” for three months.

Viv Cleary, CCDC at the NENCL HPU served as my educational supervisor, as a member of the London deanery where I am based. We maintained email contact throughout my placement, met for reflection before and after, and I gave a presentation of my placement to the HPU on my return. This felt like adequate supervision to meet the educational requirements of the placement, particularly as I had other means of support and supervision.

John Walley and John Wright acted as my project supervisors. Prior to the placement I met with them to discuss the position and my objectives (see Appendix A). This helped provide satisfactory information to my TPD to approve the placement. I found it useful to take the time to meet, as this made supervision easier and I felt comfortable asking for help thereafter. The objective setting was useful, personally, because it helped me to visualise and understand the work I would be doing, rather than stepping into the complete unknown!

4. Initial Impressions

Arrival in Swaziland was pretty overwhelming, with the combination of new surroundings, new culture, new job and severe jetlag! The things that are important to people locally, such as Siswati greetings and local politics, are very country-specific and it took a while to become familiar them, though the effort paid dividends in relationship building and my overall experience.

Thankfully I had a ten day handover with Merav, the previous registrar, on arrival. I really did feel that this handover period was essential. For a short placement like mine it was important that I “hit the ground running” to make the most of my time there. I also got the impression that the PH Registrar role is highly regarded both within the Programmes department and the hospital as a whole, and ensuring continuity through robust handovers and preparation is key to preserving this.

In my first few weeks I took time to visit different parts of the hospital and talked to staff about what it is they do. I spent a day shadowing the home based care team and a second with the team at Possible Dreams International (PDI), the community development charity next door to the hospital, (my reflections of the latter are in Appendix B). These trips were invaluable to my public health understanding, by experiencing the living conditions of some of the local population and seeing the unmet need within the region. The strategy of the Programmes department is to decentralise care as much as possible. Visiting communities really helped me to clarify exactly why this is needed and to touch on some of the considerations that are included in this strategy.

5. Summary and Reflections on Areas of Work

5.1 European Commission grant proposal

Within my first week of arrival at GSH Dr Mamvura approached me with a call for proposals on poverty reduction in Swaziland. His interest lay in the fact that many patients who attended GSH had needs beyond the medical that would cause them to keep getting ill or have difficulty adhering to or benefitting from their medication. However it was not within the hospital’s gift to address all these issues so we approached two local community development charities to see whether we could collaborate on this grant, of which one (PDI) responded positively. Through liaison with the

Programmes department, PDI, the SMO, the Administrator and Leeds University, I developed a four-page concept note. This was accepted in mid-August, allowing six weeks to submit the full proposal.

The full submission consisted of the following elements:

- A detailed description of the activities and supporting evidence
- Project plan
- Budget breakdown
- Logical framework for measuring the outcomes and success criteria of the project.

There were three core elements to the proposal consisting of an emergency package of food relief, hospital fees and transport for those in acute need; an empowerment package involving provision of housing, a water tank, gardening skills and income generation projects for families in greatest long term need; and a community development package that involved working with communities through coproduction and training community champions in skills that will help others in the community.

This proposal was one of three that were approved, providing 850,000euros over a 42 month period.

5.2 Management of an outbreak of MDR TB among health care staff at GSH

Prior to my arrival at GSH two members of staff within a period of two months had been diagnosed with TB. Two further staff were diagnosed during my time at the hospital. Due to two of these cases being MDR TB, one being suspected MDR TB and the fact that this rate of reporting was higher than normal it was agreed to declare an outbreak and act accordingly. I led the management of this case, involving the following actions:

- Compile an outbreak committee, consisting of hospital doctors and matrons
- Held 3 outbreak meetings, co-chaired by the SMO and myself
- Conduct case note review and descriptive epidemiology
- Support IPC team to conduct TB IPC baseline audit of all departments
- Compile recommendations with input of the outbreak committee, and present to management team
- Raise awareness of need for ward renovations within GSH and present case to National Director of TB
- Work with Wellness Centre lead to draft an HIV and TB health care workers policy, and establish a staff screening programme (discussed as separate projects)

5.3 Developing a HIV and TB in health care workers policy

A HIV policy for health care workers was already in place in the hospital, but was overdue for review. During the course of the outbreak investigation, it became clear that staff were not always reporting if they were diagnosed with TB for institutional and cultural reasons including stigma and the association of TB and HIV, concerns about loss of pay, lack of confidentiality within the hospital, and not wanting to be treated by colleagues. Each of these issues, among others, would need to be addressed to reassure staff that the hospital had their interests at heart and they would not be penalised or discriminated against for their diagnosis. The investigation had also uncovered some discrepancies in the diagnostic process and return to work arrangements for staff that would need

to be resolved through this policy. To ensure the new policy was as robust as possible, and would be fully implemented I took the following steps:

- Literature review for exiting HIV and TB HCW policies
- Visit to the national TB hospital to discuss their policy
- Review and update existing HIV policy with Wellness Centre lead
- Discussed the new policy with the outbreak committee
- Presented the new policy to the management team
- Discussed next steps for implementation with HR Director

5.4 HIV and TB screening programme for health care workers

WHO guidelines recommend that people who work in high risk health care settings should be screened for TB on a six-monthly basis and for HIV on an annual basis. Screening at GSH was on a purely voluntary basis and was not standardly included in pre-employment checks. GSH had previously prioritised its stock of IPT for health care staff and the screening programme offered an opportunity to distribute this. At the same time, the National Wellness Centre was having a large drive to promote HIV and TB checks. I met with the national team to agree timescales and to secure their resource in publicising and delivering the screening programme at GSH. The matrons at GSH were also engaged to draw up a timetable for the educational sessions and screening appointments for all staff members. The GSH Wellness Centre lead supported the development of the screening algorithm. Delivery took place after I left so I ensured there was a robust handover with James and we attended the planning meetings together.

WHO guidelines also noted a gap in research evidence for the implementation of HIV and TB screening programmes in developing countries. I therefore decided to write this up for publication in a peer reviewed journal to meet this gap in evidence. I established data collection tools and submitted an ethics application for the study, which was approved.

5.5 PEPFAR grant resubmission

GSH had been awarded a grant from PEPFAR to decentralise HIV and TB services to community clinics across Lubumbo in September 2011. There was opportunity to refresh and revise strategy after the first year of funding. GSH had exceeded its targets in the first year so we had the option of increasing these for the second year, or to refocus on harder to reach groups. We chose the latter. Funding had been cut in the second year so we were not able to do everything we wanted. Therefore we discussed this with the PACT team who linked the two organisations, and submitted two revisions – one with the same funding and one with the reduced funding to show what else could be achieved if funding was increased to its formal level. A decision was pending when I left.

To develop the revised strategy we met as a project team on three separate occasions: one to brainstorm, one to put into a strategy and develop the budget and finally to revise the plan and budget taking into account the new funding allowance. The process was confused by two key staff members leaving the day after the proposal was due to be submitted. We therefore negotiated that handover notes and sessions took place, and negotiated for one staff member to return for a few days once their replacement was in post.

5.6 Student projects

There were a large number of medical students who were on an elective placement at GSH over the summer period. I offered to provide some public health experience by offering shadowing opportunities at meetings I attended in Manzini and Mbabane and by setting short projects for those who were interested. Two students took up the latter opportunity one of whom designed and conducted an audit of TB registers to see whether patients who screened positive for TB were recorded as a suspect and followed up appropriately. The second conducted a literature review of teen club evaluations and wrote a protocol for evaluating the new teen club programme that was being established through the programmes department. I took time to meet with each student to discuss the project initially and make sure they understood what was required. I would then schedule catch up sessions, and finally review and feedback on the final output. Each project took the equivalent of one week's full time work.

5.7 Data Management Standard Operating Procedure (SOP)

During the compilation of the previous year's annual public health report, some of the datasets collected were not included as the management team did not have sufficient confidence in their quality. It had been recommended that a data management SOP to address this issue and improve data collection for the following year. I met with the quality assurance officer, Maxwell, to agree how best to proceed with this. We listed out all of the departments that would require their own SOP. We then decided to develop the first SOP jointly, and then divide up the remaining one that we would each lead on but hold regular meetings to update and review progress with each other. Essentially the format was to have a monthly and annual set of metrics that were agreed with the department lead. To complement this template we tailored a SOP for each department covering areas such as data collection and reporting processes, confidentiality and storage protocols. After drawing up the SOP we would discuss it again with the departmental lead. We piloted this initially in the NCD clinic to ensure that it was workable before rolling it out to other departments. Due to time constraints and competing commitments, we only managed to complete seven departmental SOPs. However, the process was established and would be replicable thereafter.

5.8 Buzzing study

A new 'buzzing' technology was being piloted in the HIV voluntary testing and counselling (VTC) service which would send a missed call message to people who were due to attend GSH to collect their results. A before and after study, or evaluation, was underway to determine whether this technology increased the number of people collecting their results from the service. My role was to complete the data collection for the study, seek advice on whether ethics approval was required (which it was) and comment on the research paper produced by the lead author.

5.9 TB Contact Tracing study

A TB Contact tracing programme and research study had been established 9 months previously. My role was to continue the data collection process and work with the team to evaluate and improve the service on an ongoing basis. The process had changed twice during the 9 month pilot due to capacity constraints. I collected data up to an agreed review point when I analysed the data. It appeared that the process that had been agreed upon was working well. However over 50% of screens took place over the phone but none resulted in a positive screen. I requested that we test this with some ad hoc home visits to rescreen contacts. In all three instances at least one contact was found to screen positive at the home visit, when they had previously screened negative over the

phone. I therefore revised the protocol in discussion with the TB team, focussing the limited resource of home visits on high risk households. The selection of high risk groups was arrived at in consultation with COMDIS following a literature review. Data collection then recommenced following adaption for the new protocol.

Having also identified that while a significant proportion of contacts screened positive, few were diagnosed with TB. I then established an audit of the TB suspects register with one of the medical students at GSH to try to improve that process independently of the study.

5.10 Male Circumcision study implementation

A study proposal had received approval from the UK ethics committee to implement a male circumcision service at GSH. A Sexual Health organisation in Swaziland, PSI, had been approached to share best practice and some resource in the implementation of this service. However, there were a number of necessary steps before the service could begin. These included:

- Submit in country ethics application
- Seek management approval for the service to go ahead
- Get approval for land to be used for the pre-fabricated building site
- Oversee arrangements to level the land and install the pre-fabricated building
- Develop a training plan and schedule for staff
- Develop a service rota and plans for review as needed

The research study involved a comparison with the stand alone clinic in the capital that was being run by PSI. There was a sub-study proposed comparing the GSH clinic with the previous model of care in Lubombo. I met with the research officer at PSI to go through this proposal in detail as we needed to ensure that the data collection was in place, that processes were comparable and that population types were comparable to improve the chances of the ethics submission being approved.

There was some resistance by management to the service being established as there were concerns over staff capacity. I therefore arranged and chaired a meeting between PSI and the management team so that all concerns could be shared and solutions reached. This worked well and anyone who had outstanding concerns I met with separately to discuss and review the proposal.

5.11 MDR TB study and NCD study proposals

The following registrar(s) were due to come to Swaziland for 12 months following my placement. However, proposals for the studies they would be leading were due in September and concept notes were due in August. To meet the deadlines we therefore agreed that they would be developed by myself in Swaziland and Merav in COMDIS. Merav led the literature reviews and I met with appropriate stakeholders and initiated discussions in Swaziland.

The national TB Programme was in the process of establishing a MDR TB study, with funding available for staff in each region. We agreed that we could have access to datasets for each of the regions for comparison purposes and could help establish reporting metrics. I also met with the Programmes team to develop the model of care that we would propose for the Lubombo region.

The NCD proposal involved merging two teams at GSH and decentralising services to community clinics. The national programme needed to be informed of any changes but were not in a position to

lend support themselves. The key measures were to discuss the proposal with the teams at GSH, and with the SMO. I also set up data collection methods so that the two teams could more easily be merged into one.

5.12 COMDIS Finance submissions

All of the research studies and proposals I worked on involved putting together a detailed budget as part of it, and timing spend by the quarter. I worked closely with the Director of Finance to compile these and ensure they were locally appropriate and had factored in all relevant costs and tax criteria. A similar process was required of the COMDIS proposals. There were a number of research studies underway and at different stages of implementing. The COMDIS budget amalgamates these project budget lines. The budget needs to be set at the start of the financial year, and at the end of each quarter an expenditure report needed to be submitted, along with an invoice for payments to be made directly to GSH. I was required to submit two quarterly reports and an annual budget during my stay. I also answered any queries about these reports following my return.

6. Overall Reflections

It was a real privilege to spend three months at GSH. I definitely worked my socks off in that time, met some amazing people and got to see lots of the country too. Three months is a difficult amount of time to spend anywhere as once you've adjusted to the new job and environment it doesn't leave a lot of time to employ that understanding. However, three months was enough time to get an understanding of global health work and I decided that it was an area that I would like to gain more experience in, and I redirected my following placement towards international work as a result of this. Thanks to the timing of my placement I was also pleased that I managed to achieve some significant accomplishments, not least securing the EU grant on poverty reduction, as well as a BMA-funded book grant for the hospital.

The role gave me valuable experience of a leadership role within an organisation. I had opportunity to exercise a combination of expert, positional and personal power, flexing it to suit the situation. I made time each week to go and visit different departments that I was working with just to have a catch up and primarily to relationship-build. The capacity-building aspect of the role meant that it was important to work through others and influence and direct their work, in which case it was really important to have built trust beforehand. In an environment where reports and scheduled meetings are less common than in the UK, I had to adjust working practices by, for instance, orchestrating regular unofficial or informal meetings with key work colleagues and in providing short 1-page summaries of work alongside a more detailed verbal explanation.

I also gained experience of negotiating in a multi-agency setting. Working with the National TB Programme, I would schedule meetings to discuss some of our work and how this could inform national strategy alongside requests for funding for renovations. I made sure that I managed this relationship closely as I knew it was critical to hospital improvements in the longer term.

The public health workload was considerable. Priorities changed rapidly and it was important to manage several projects at the same time. Generally projects would reach an important stage at different times, which helped in their management. I know that personally I am prone to taking a lot on myself, so exercising boundaries was crucial to helping me manage this workload and different people's competing priorities.

There were many skills that I was able to exercise that it is more difficult to in UK-based placements, particularly leadership, management and control over programme direction. I really valued this leadership opportunity and would like to seek similar opportunities in the future as it most closely emulates my future role as a Public Health Consultant. Swaziland was a fantastic place to live and work in, and I'm very grateful to all of the staff at GSH for their generosity with their time, warm welcome and ongoing commitment to improving public health in their community.

Appendix A

Placement: COMDIS Programme, Good Shepherd Hospital, Swaziland

Abigail Knight. 3rd July – 30th September 2012

Project Supervisors: John Walley, University of Leeds & John Wright, Bradford Institute for Health Research: COMDIS / Health Service Delivery Research Programme

Educational Supervisor: Viv Cleary, Health Protection Agency

Arrangements for supervision:

- **Liaison with programme directors in Good Shepherd Hospital for each workstream**
 - **Fortnightly Skype supervisory sessions with John Walley / John Wright**
 - **Completion and return of quarterly reports for funded programmes to COMDIS**
 - **End of placement report to John Walley, John Wright and Viv Cleary**
 - **Presentation to Health Protection Unit on study findings**
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Anticipated competencies (contributions towards):

Phase 2: EMS1-18, 2.1, 2.2, 2.3, 2.8, 2.9, 2.10, 2.17, 3.4, 3.5, 4.2, 4.9, 4.13, 4.15, 7.1, 7.2, 8.3, 8.4, 8.7, 8.8, 9.9, 9.10

Phase 3: 1.3, 1.4, 1.5, 2.18, 2.19, 2.20, 3.6, 3.7, 3.8, 3.9, 4.4, 4.8, 4.10, 4.11, 4.12, 4.14, 4.17, 4.19, 5.11, 5.12, 6.13, 6.16, 6.19, 6.20, 6.24, 6.25, 6.26, 6.28, 7.8, 7.10, 7.11, 8.5, 8.6, 8.9, 9.2, 9.4, 9.6

Objectives:

1. Family Planning

- Review and update of ICAP survey into service provision in local health clinics
- Produce information leaflets re. FP services for distribution by GSH
- Add FP counselling and information into TB/HIV/Maternity counselling sessions

2. HIV counselling and testing

- Audit of current content of HIV counselling sessions
- Produce revised SOP
- Monitor, evaluate and revise as per clinical audit cycle
- Consider 'action research' paper, inc. qualitative interviews

3. Decentralisation of HIV/TB service

- Develop overarching strategic plan to address variation across health centres
- Review of progress with programme leads
- Development of SOPs for testing in clinics
- Define standards for guidance and implementation

4. Male circumcision programme

- Oversee implementation following final ethics approval, inc. training plans and SOPs
- Collect and assure pre-implementation data (consider comparison data)
- Contribute towards paper?

5. TB case-finding programme

- Oversee recommendations from June interim data collection
- 6 month data collection due to finish September 2012
- Contribute towards paper?

6. NCDs

- Develop research proposal with Ekta
- Ensure registers in place and up to date for NCDs

7. Additional activities if time/opportunity

- Linking with regional health team and other networks re. intersectoral work
- Investigate current procedures and sensitivity testing for MDR TB
- Development of data tools in inpatients and outpatients

Appendix B

Reflections on community visit with PDI

Abigail Knight, Specialty Registrar in Public Health, Good Shepherd Hospital

27th July 2012

I spent four hours with the PDI team, during which time we visited five homesteads to meet the family, understand the work that has happened with them, work underway and next steps.

1. Takhona and her five children in Makhewu

PDI has been working with Takhona for a few years now. When her husband died she was left alone with five children and no means of income and she struggled to cope. The Matron at PDI sat with her for a number of days and talked to her about grief and about looking after her family. It was agreed that they would first build her a new house, with water irrigation in place and a toilet to improve sanitation. They worked on income generation, looking at planting maize which she could sell, and also at keeping chickens. She also built a small shop at the homestead where she has been selling sweets.

When we visited, Takhona was not at home but we met four of her children and walked around the homestead. The house where they used to sleep is still there, made of stick and mud, and the new two-room house has been built next door to it. Since this time, on her own initiative Takhona has built a number of other shelters on her plot of her own initiative: kitchen, storage, chicken coup, maize pen, and shop. PDI do not offer material support anymore to the family, but as with all households they maintain contact as they know they are vulnerable. People are also encouraged to contribute towards a 'pay forward' scheme. In this case, a woman in the same community has found herself in the same situation as Takhona who is now mentoring her.



The shop was empty when we visited, and the children said that she is no longer selling sweets as she ran out of stock and did not have the money to buy more supplies. It was agreed that PDI would return to help her to write a business plan for the shop and income generation projects.

2. Homestead in Makhewu

When PDI first met this family, they were living in a shelter that was falling apart and a black mamba lived in the wall and would attack them when they were asleep at night. PDI has helped them to

build a house where they now sleep, and is working towards helping them with an income generation project.

The mother was not at home when we visited but we spoke to the older daughter who is 14 years old who was looking after two babies. She has been going to school in Big Bend but has stopped in recent weeks because they could no longer afford the bus fare. She is currently left alone at home for long periods of time, which is a risk to her safety.

The area is incredibly arid and the nearest water source is a river several miles away, which is currently dry. They agreed that priorities for the family were to provide a 5000L water tank, and set up an irrigation system, and to establish an income generation project. As the homestead is far away from other places it would not be feasible to set up a shop here. The plan was for the community to be engaged in order that they can find a market for any produce and to determine where the current demand is.



3. Nceni

We next visited a Gogo-led family. The grandmother is HIV positive and her children have died of AIDS. She now looks after four grandchildren, after one died due to renal failure, and others need medical attention.

She has also received a two-room house and has a water tank installed. The community helped her to build a large chicken coup in her homestead with freely available materials. She also has a large maize field and a vegetable plot. She has found the vegetable plot not to be very successful as chickens are flying in and eating the crops. She was advised to clip their wings to stop them flying, and PDI will try to find someone who can help her do this.



4. Nceni (2)

We went to another Gogo-headed family. The grandmother here had a house built and had been taught how to tend a vegetable crop. The vegetable crop was looking good, in parts, despite very dry conditions. She spent 25 rand at a time to buy water as there was no other supply.

At the time of visiting PDI were building a toilet as the drop-toilet she had was considered unsanitary. She was also concerned that her brother had said he was going to come and take the corrugated iron from her roof, as it was his. She had started to stockpile cut grass that she could replace it with as a temporary solution. PDI would consider whether they could assist in this case, and it would need to go to committee to determine whether she received priority intervention.



5. Nceni (3)

We finished the day by going to visit another of PDI's success stories. This was an elderly couple who lived in a homestead a long way from any other households. They had previously lived in a building they had built themselves that was made of corrugated iron, and would get very hot, and was falling apart. It was reported that they had been very sullen and unhappy.

When we visited the couple they were sat on a bench outside their new house listening to the radio and were a picture of happiness. They had a very large maize field that had yielded well over 65kilos of maize for them, as well as a lovingly tended vegetable plot.

The husband was concerned that he could not continue to garden as he had considerable swelling to his hands, feet and knees. Maithri, Director of PDI and A&E Consultant, diagnosed him with arthritis and recommended that they return with some anti-inflammatories for him. It was fortunate that we had called in at this time to have that conversation, otherwise it's possible he would have just stopped tending his crops and they would have lost their source of food and income. It would be good to set up a system of medical support to avoid this, with the two organisations working more closely.



Discussions with Maithri about the potential EU grant and ideas for joint working

- There is possibility to strengthen the role of community leaders and umphakatsi in providing sufficient means for all community members to access the services they need and to provide a market for any goods they have grown. Community leaders could be engaged to ask them what they think the community would benefit from, which would then be considered a common good, eg. children's care home, market to sell goods at, bus and trained drivers.
- Spending of the grant (minus administration costs) could be allocated in accordance with the evidence for impact on health lies (i.e. 1/3 amenable to health care, 2/3 lies outside the field of health care, UN Summit 2011).
- We could create an 'Empowerment Package' to households identified as vulnerable, consisting of all or a combination of the following:
 - 2 room house
 - Water tank and irrigation
 - Garden (fence, seeds, training)
 - Chicken coup and chickens
 - Discuss income generation and business plans
 - Health advocate (lifestyle advice and how to access support)
 - Become a member of the pay it forward scheme

- There could be champions for each of the skills above, particularly gardening, who like RHMs would then support and teach others in their community
- There needs to be links with the health system to refer people in need back into the system when need, promoting early intervention. If days of visits to each community were standardised (MAOs, HBC, NCD nurses, MDR drs) in order that they can call in when needed to these families. There could also be community advocates to help people to get appointments at their nearest clinic, and support them with access to the clinic (could this be an extension of the Basiti role, or a new person)
- RHMs could be given additional support to strengthen their existing and important role. They should act as role models for the empowerment package and the impact this can have of well-being. They could also lead the team of champions suggested above.
- Need to embed and develop referrals from hospitals and community clinics. There needs to be a mechanism for filtering people according to greatest need.
- By employing a dietician for this project they could promote healthy lifestyles and could work with gardeners to promote healthy gardens given what can be easily grown in the region. They could also have a link to the maternity department around healthy eating in early years.
- An initial investment in more trucks and a community space, where PDI and the project team could be based. This would also act as a resource for the clinics – somewhere where the champions could meet, where training sessions could take place, and communities could use and be provided with transport.
- We anticipated a project team split between the 2 organisations.