



CHAIR OF RURAL HEALTH

ANNUAL REPORT

2006

Introduction

This fourth annual report from the rural health unit covers the period of 1st January to 31st December 2006. The report is intended to inform Faculty and University, donors, collaborators and other stakeholders of our progress in terms of rural health within the ambit of the Wits Faculty of Health Sciences and specifically in terms of the activities of the incipient division of rural health, currently still described as the Chair of Rural Health.

The establishment of the Clinical Associates programme and the inauguration of a 6-week block for final year medical students under the unit have been important developments, which have changed the range and extent of the work of the unit.

Overview

The major foci of the previous years reported have continued, viz. nurturing rural students, undergraduate and postgraduate education, support and training of rural doctors, development of primacy health care in North West province, research, establishing a rural health centre, contributing to policy development and developing the clinical associates programme.

In terms of staff there has been further progress:

- Dr Andrew Truscott, a well known and experienced teacher in primary care nurse training, joined the unit in June 2006, on secondment from Gauteng

- province, to work on the clinical associates programme
- Ms Zuki Tshabalala, a physician assistant trained in the USA, joined the unit in a 50% capacity in October, also to work on the clinical associates programme, initially through faculty funding, to be taken over by the Vice Chancellor's Equity fund, with the long-term expectations of a grant from the National Department of Health
 - Professor Kate Hammond joined us as a part-time consultant for the clinical associates programme, through funding from the Ministerial Task Team for Clinical Associates, to help with curriculum development.
 - Mr Sizwe Dhlamini joined the unit as a secretary, in a 50% capacity, in September, specifically to focus on, and funded by, the WIRHE scholarship programme.
 - Dr Jimmy Akii, a family physician and clinical manager of Zeerust-Lehurutse Hospital complex, and Dr John Musonda, a family physician and clinical manager at Lichtenburg-Thusong Hospital complex, were appointed as honorary lecturers in May 2006.

Now firmly established as a de-facto unit, the team was able to initiate strategic planning and regular academic meetings during the year.

Professor Couper continued to play a major role within North West province, as part of his joint appointment responsibilities. The difficulties in communication with the Chief Director for Health Services Delivery were to some extent resolved by the departure of the incumbent. Subsequent re-structuring of the senior management meant that the chair now falls within the ambit of the new Deputy Director-General for Health Services in the province.

The North West Provincial Family Medicine department continued to meet 6 weekly, and two provincial family medicine fora were held involving between 24 and 30 people.

Professor Couper took a 4 month sabbatical, in Australia and the USA from June to September. (A full report on this is available on request.) His inaugural address,

“Growing our Own – the University and the Rural Health Workforce Challenge”, in October, helped to put rural health firmly on the university map.

The Integrated Primary Care block, an innovative 6-week rotation for final year medical students, was launched. Students spend the period in primary health care centres and district hospitals in Gauteng and North West province, engaging practically with the service and applying the knowledge gained from other disciplines to the primary care context.

The Centre for Rural health proposal was approved by the university Senate and council, and now awaits funding so that it can be launched.

Despite the bombshell dropped by Medical Education for South African Blacks (MESAB) that they could no longer offer the 50% funding for 20 of our scholarship students, as they prepared to close in February 2007, the scholarship programme supported 24 students at Wits, 1 at University of Johannesburg and 4 at University of Limpopo (Medunsa), achieving a 82% pass rate, and agreement was obtained to launch a provincially supported programme throughout North West province.

The African section of the international electronic journal, Rural and Remote Health, was launched with Professor Couper as editor.

(See also Appendix A, assessment of goals for 2006.)

Review of focus areas

The **main developments** over this period fall into the following nine areas:

1. Nurturing rural students: The Wits Initiative Rural Health Education (WIRHE) scholarship scheme

We increased the numbers of students being supported from 10 to 29. These included 4 students at University of Limpopo (Medunsa) and one at University of Johannesburg; the latter became our first graduate, completing her National Diploma

in Medical Technology and returning to work in the NHLS laboratory at Tintswalo Hospital.

The remaining 28 were studying for the following health professions:

Medicine	13 (45%)
Occupational Therapy:	7 (24%)
Pharmacy	4 (14%)
Physiotherapy:	2 (7%)
Nursing	2 (7%)

We had an 82% pass rate, with the greatest success being in the medicine group.

Ten students come from very rural areas of former Limpopo, now Mpumalanga province, in the Bohlabela district. The remainder come from all over North West province, but particularly from our pilot site in Bophirima district (Vryburg, Taung, Bloemhof, Christiana, Schweizer-Reneke and Kudumane).

Twelve students were taken into the programme as part of a new development, yet to be formally launched, in the North West province, where we fund 3 students in each of the 4 districts, with the support of the Swiss South Africa Cooperation Initiative, for the first year of their studies. Thereafter, they are to be taken over by the province, in terms of funding, while we continue to assist and support the students. It is as part of this initiative that we acquired students at Medunsa.

In order to address study and life skills needs of the students, we organised five meetings for our scholarship with a Change and Management Consultant

A new part time secretary, Mr Sizwe Dhlamini, was appointed on 1st September 2006, to assist Nontsikelelo Sondzaba who coordinates the programme.

It has been a challenging year financially. In February, MESAB informed us of its impending withdrawal as one of the major funders, and its inability to live up to the commitments already made, beyond the 50% support for 10 students that were already accepted by them in 2005. This meant that we suddenly had to find support for a cohort of students who had already been admitted in 2006. We are very

grateful to the Swiss South Africa Cooperation Initiative for coming to our rescue, so that we were able to meet the demands of 2006 and, at least for the time being, WIRHE has funds to see existing students through (and take on new students in the North West programme). Efforts to find new partners are ongoing.

On a more positive note, we made great strides in terms of group cohesion and initiative, and there was a major improvement in communication with the students. We also became involved in assisting a number of non-WIRHE students from rural areas

(A separate full report on the programme is available for interested parties.)

2. **Undergraduate Education**

Our major involvement in the graduate entry medical programme (GEMP), both in terms of teaching and in terms of curriculum review, continued.

The rural site visits for students in GEMP 1 and 2 remain an important part of their curriculum with each student visiting four sites over the first two years, each focussing on different issues (viz. primary health care, disability, community based research, and health promotion). Ongoing evaluation is being done on these visits, with improvements being made as needed; changes were particularly made in the programme at Muldersdrift Clinic. Research reports based on the students' activities at one site, Madibeng, where they are engaged in data collection around knowledge of communities on HIV-AIDS, are available.

All students in GEMP 3 undertake a 2-week rural block, coordinated by the School of Public Health, at Tintswalo Hospital, with a focus on community oriented primary care.

The Integrated Primary Care (IPC) Block in GEMP 4 was successfully launched in January 2006, and remained a major activity throughout the year. Students were sent to a total of 12 different sites, which are district hospitals and health centres in Gauteng (8) and North West (5) provinces. Two workshops for local supervisors were

organised, in which they were trained to facilitate, support and assess these students. Students are provided with a detailed logbook and guidebook, and are required to undertake about 30 different activities during their 6 weeks. Included in the activities are a health facility audit and quality improvement project, which have become a vehicle for change in the sites used. Regular meetings were held between the rural health unit and the other key players representing the medicine, paediatrics, psychiatry, surgery, obstetrics and gynaecology, public health and family medicine departments, who are jointly responsible for assessing the students. Ms Sondzaba took on the responsibility of academic coordinator of the block.

In addition to the integrated assessments in the block, we introduced teleconferencing as part of the academic activities of the block, linking Wits-based consultants to students in all sites once a week. Feedback from students and senior staff was very positive. This is also helping to orientate senior faculty staff more to the issues and challenges of rural and underserved health care.

An ongoing evaluation of the Block is being conducted; students are overwhelmingly positive about the experience, both in terms of academic development but also in terms of broader practical and life experience. We organised an end of the year academic review of the IPC Block, in which supervisors spoke enthusiastically of the positive impact of students in their sites.

In terms of electives, 34 students in GEMP 1/2 and 13 students in GEMP 3/4 chose to do their electives in rural areas, mainly rural district hospitals, under supervision of the unit.

3. Postgraduate Education

The ongoing development of primary care and family medicine within North West province, and elsewhere, through establishing the necessary posts and environment for full-time family medicine training, has been slow. Partly this has been related to the delay in the gazetting of the new regulations for family medicine as a speciality, which will require full time registrar training.

There was continued cooperation in this with the Family Medicine Education Consortium (FaMEC) which represents all 8 departments of family medicine, and the 3 rural health units, in South Africa. The FaMEC project on the development of family medicine in Southern and Eastern Africa was launched during the year.

The Principal Family Physicians in the unit continued to teach actively on the MFamMed programme, assist with assessment and supervise student research. They also provide ongoing supervision of postgraduate family medicine students in their districts regardless of where they are studying. For example, in Bophirima district, Dr Kyeyune supports four such students, one from Stellenbosch and three from Medunsa. In Central district, Dr Njie supports 2 Stellenbosch students in addition to a number of Wits students.

The documents for a new MPH Field of Study in Rural Health were submitted to faculty for approval during the year; it is expected that this will be launched in 2007.

4. **Support and training of rural doctors**

Two **Skills Training Workshops** were held in 2006. (A third course was not held due to Professor Couper's sabbatical.) Due to demand, extra stations were put into these two courses. A total of eighty five (85) doctors attended the course and were trained in a wide range of common procedural skills relevant to primary and secondary care. Formal certificates of attendance recognised by the Faculty are issued to participants. Many of the attendees were again foreign doctors preparing for the HPCSA exam, a number of whom have returned to attend after being successful and commencing practice in rural hospitals. The evaluations continue to be very positive. Support of teachers for this intensive programme, especially from other departments, is much appreciated.

Continued professional development (**CPD**) is an active part of the role of the joint appointment family physicians in North West province. They have nurtured and supported CPD programmes in a number of district hospitals.

Neonatal resuscitation training continued on a regular basis, as did ongoing CPR

training. For example, in Southern district three neonatal resuscitation training workshops were conducted for doctors and nurses, and one CPR workshop. In Bophirima a total of 11 doctors and 119 professional nurses were trained in Neonatal Resuscitation during the year, and 13 health professionals were trained in CPR/Basic Life Support. In Central district, doctors at Mafikeng Provincial hospital were given regular training in CPR.

5. **Development of primary health care in North West**

Having principal specialist family physicians in all 3 Wits-linked districts in place for the whole year meant ongoing input in terms of support and development of district hospitals, quality of care in rural clinics, training of doctors and primary health care nurses, etc. Regular planning meetings were held to discuss developments, coordinate approaches, support one another, etc.; these include the principal family physician in Bojanala who is a University of Limpopo (Medunsa) joint appointment.

In all the districts, the team gave clinical support to district hospital clinical managers and sub-district management teams. In the case of Southern district, Dr van Deventer visited Ventersdorp hospital twice monthly for training, support, meetings and the active management of quite serious problems throughout the year, and visited Nic Bodenstein hospital monthly, giving assistance in OPD due to the severe doctor shortage. Support of community service doctors was important. In the case of Southern district, supervision of interns doing the 4-month family medicine rotation of the new two-year internship became the responsibility of the district family physician. In Central, Dr Njie served as intern coordinator at Mafikeng Provincial Hospital. In Bophirima and Central districts, a clinical managers' forum is facilitated by the family physicians.

The district family physicians established academic training sites in the province for the IPC block students, in Matlosana sub-district (linked to Klerksdorp-Tshepong hospital), Taung, Mafikeng, Lichtenburg-Thusong, and Zeerust-Lehurutse. They coordinate the medical students' programme, support the local supervisors, provide weekly academic supervision and assist with on-site assessment. Feedback from students was very positive. The sites provide a conducive learning environment.

Ongoing challenges are securing reliable internet connections for the students, as the Departmental network is unreliable and very slow, and training of additional supervisors to improve the quality of the day to day supervision of the students.

Quality assurance has been another important area of involvement. A number of quality improvement projects were initiated, including usage of laboratory tests (Nic Bodenstein), appropriateness of patients at Tshepong epilepsy clinic, clinics chronic illness and medication usage (2 clinics), doctors' notes (Ventersdorp and Nic Bodenstein hospitals), after hour patients (Ventersdorp casualty), and referrals of maternity patients from health centre to hospital. Such audits have been presented at the district quarterly reviews. In Bophirima, Dr Kyeyune participated in the Bophirima Roving Management programme whereby all six district hospitals and all community health centres were audited using the tool developed by Health Systems Trust. In Central districts, monthly perinatal audits are conducted at each of the 5 hospitals, and a quality improvement project was conducted to increase PMTCT uptake in 2 clinics.

The Provincial Pharmaceuticals and Therapeutics Committee (PTC) is attended regularly by team members, as well as district PTC's, where they give input on clinical matters. The team supports and contributes to district and sub-district patient safety committees, and assists with interventions that arise, including workshops, development of protocols and disciplinary measures. In Southern district, 24 "cases" were discussed at Matlosana sub-district and 5 at Potchefstroom.

Numerous clinical protocols have been drawn up and distributed to clinics.

Dr van Deventer is active as a trainer for the Integrated Management of Childhood Illness programme, assisting with three IMCI courses for nurses during the year. She also has been doing ongoing (3 sessions) research training for Excelsius Nursing College tutors and PHC students.

Dr Njie conducted a provincial workshop on the use of computerised perinatal audit tools and assisted the provincial Mother, Child and Women's Health (MCWH) coordinator in establishing a perinatal mortality (PPIP)

data base. Dr Njie also played a leading role in Central District during the Tumbu fly outbreak, supporting awareness campaigns, liaising with NHLS and training doctors in diagnosis and management.

Apart from training mentioned above, other training activities in the province included a PMTCT workshop, regular in-service training sessions for doctors and facility managers, and clinic-to-clinic training on issues like Mantoux, fluconazole usage etc.

The family physicians are all active in HIV-AIDS management, assisting in Wellness clinics and supporting the down-referral of patients to primary care and the roll out of antiretroviral treatment, as well as facilitating training of staff.

Two provincial family medicine fora, including other family physicians and postgraduate family medicine students, were held in the province, in Rustenburg in February and Lichtenburg in September, hosted by the local District Departments of Health, and organised by the principal specialists.

The Guidebook for District Hospital Managers, produced by HST, was piloted in 4 districts in the province, with the provincial family medicine team playing an active role in assisting this process.

Senior family physician posts were advertised for all 4 districts in the province. Unfortunately no suitable candidates were found. Subsequent head hunting produced some possibilities, but none were appointed by year's end, largely because of problems in the human resources section of the provincial Department of Health.

6. Rural Health Centre

The proposal for a Centre for Rural Health was approved by Senate and the Council. It is to be a virtual centre, with a focus on rural health development at a district level, particularly in terms of human resources, with possible hubs in North West and Limpopo provinces. A funding proposal has been submitted to key funders, with a view to launching this in 2007.

7. Research

The link with the Madibeng Centre for Research in Brits, in terms of students visiting there, and in terms of ongoing research activities, was maintained.

Members of the unit conducted an evaluation of primary mental health care in North West province in collaboration with the Madibeng Centre. Members are also active in the North West Provincial Research committee and contributed to the annual research conferences within the districts as well as the provincial research conference.

An evaluation of chronic illness care at clinic level in the Southern district of the province was commenced.

The national Collaboration for Health Equity through Education and Research (CHEER), which involves representatives from all health science faculties, continued to do some exciting work together, with Professor Couper representing Wits in the grouping. The second phase of a qualitative research project on understanding the influences on where health care professionals choose to practice was completed, under his leadership, and a case control study arising from this is nearing completion. Professor Couper also led a review of community based education at Stellenbosch University as part of this project.

8. Policy

Professor Couper, Dr Truscott and Ms Tshabalala played an active role as members of the Ministerial Task Team on the Clinical Associate, guiding development of this programme in the country.

Input was also given to the development of proposals on midlevel workers' training in other professional fields. Dr Truscott and Professor Hammond were invited to assist with the development of a curriculum for emergency care personnel.

Professor Couper was invited to address the UK-SA Health Liaison commission on

human resource challenges in rural areas.

Contributions were also made, through the Committee for Family Medicine of the Medical and Dental Professional Board, to developing policies and regulations for family medicine training in South Africa.

9. Clinical associates

In June 2006, Dr Andrew Truscott was appointed to a part time honorary post in the unit, on secondment from the Gauteng Department of Health, while awaiting an appointment by the National Department of Health to a full time post as coordinator of the Clinical Associate programme at Wits. At the same time, the Department of Family Medicine and the Rural Health Unit made an office and computer available to assist with the development of the Clinical Associate curriculum at Wits.

In October, Ms Zuki Tshabalala, a Physician Assistant trained at Emory University, USA was appointed to a 50% Wits post as a lecturer

In September Professor Kate Hammond, a biochemist with extensive experience in medical research, teaching and curriculum development was appointed as a part-time consultant to the Clinical Associate team, paid by FaMEC, especially to assist with curriculum development. Her appointment greatly accelerated the development of the curriculum and the programme.

Apart from national planning meetings and collegial collaboration within South Africa, Professor Couper explored the development of this course during his sabbatical visit to Australia and in a conference in the USA, and obtained more detailed guidelines on teaching and curriculum development from the Medex Physicians Assistants programme at the University of Washington. Ms Tshabalala obtained details of the Physician Assistants programme at Emory University, USA.

Visits were conducted to district learning sites in Gauteng and at Lehurutse, North West Province.

Visits were also conducted on behalf of the National Clinical Associate Task team to Free State, KwaZuluNatal, and Eastern Cape to visit sites and to liaise with local staff involved in the development of the course.

By the end of the year a detailed curriculum had been developed to provide teaching and skills development for this course in a district hospital learning environment. This made use of innovative teaching methods and computer software.

All the necessary course forms, business plan, budget have been submitted to the Faculty and the University authorities. The Health Sciences Faculty gave qualified support to the new degree. The University's Academic Planning and Development Committee (APDC) raised concerns about the level of the bachelors' degree, staffing and resources to support the programme, requesting further discussion at a faculty level, which will be done in early 2007.

At the same time, funding for posts and equipment to launch this programme is awaited from the National Department of Health. Until this happens further development of the course will be severely limited, and implementation will not be attempted. If funding is made available, it is hoped to start with the first group of 12 students in 2008, rather than 2007 as was originally planned.

The newly developed teaching methods and materials have been successfully tested with student primary health care nurses at Lillian Ngoyi training unit, Soweto.

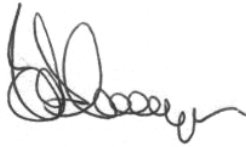
The Clinical Associate team have been meeting and corresponding with staff involved in the development of this course at University of Pretoria, Walter Sisulu University, and University of the Free State, who are also developing similar programmes.

The way forward

There has been steady progress during 2006, despite some setbacks, and we have made ambitious goals for 2007 (see Appendix B). Major developments expected in 2007 include preparation for fulltime family medicine training in North West province,

launch of the North West provincial Scholarship scheme, further development of the integrated primary care block in GEMP 4, approval of the degree for the clinical associates programme and launch of the Centre for Rural Health.

At least now there are more members of the rural health team in place to take this forward.



Ian Couper
Professor of Rural Health
March 2007.

10th Floor
Wits Medical School
7 York Road
Parktown
2193. Johannesburg
South Africa
Tel.: 011 7172602
Cell: 082 8010188
Fax: 011 7172558
Email: couperid@medicine.wits.ac.za

APPENDIX A

RURAL HEALTH UNIT

GOALS FOR 2006: ASSESSMENT

1. Successful IPC Block

Achievements of the block included:

- Completely new block
- Sending students into multiple sites
- Integrating a range of disciplines into one rotation
- Involving supervisors outside of the faculty in a significant role
- Giving learning responsibility to students
- Demanding a range of activities from students
- Pioneered teaching teleconferences
- Assessing observed consultations
- Impacted on local hospitals/health centres through QI projects
- Integrated exam
- Trained students in primary care in appropriate public facilities
- HPCSA accreditors singled out the IPC block as an important innovation

2. WIRHE - further support for students and financial stability

There are currently 28 students under the WIRHE Scholarship. Twenty four students are based in Wits Medical School and four are based in Medunsa. They are studying Medicine, Occupational Therapy, Physiotherapy, and Pharmacy. One student has graduated, namely Miss LG Mashabane, who was doing biomedical technology.

MESAB has pulled out of the programme, leaving the Scholarship in financial difficulties. However SSACI has increased their funding of joined the programme, and other donors are being approached.

3. Launch North West scholarship programmes

The scholarship programme was due to be launched in conjunction with North West Department of Health. The scholarship programme was to take students from all 4 districts in the Northwest Province. The launch of the Scholarship programmes was delayed by the changes in the provincial executive, but students were admitted.

4. Develop District Centres in North West

These were also hampered by the changes in the North West provincial Department of Health.

6. Launch of Centre for Rural health

The Centre was approved by the university Senate and council during the year, but the Centre cannot be formally launched until there is funding for it.

7. Launch of the Foundation for Health Care Certificate

This has been submitted to faculty for approval.

8. To obtain approval for the MPH in Rural health

This has also been submitted to faculty for approval.

9. To sign up over 60 students for electives

The unit managed to sign up close to 60 students although some of those could not go on the elective because of having to write the final exam in GEMP 1 (students scoring more than 60% during the year are exempted). As a result about 50 students completed rural electives.

10. To launch the African section of Rural and Remote health

This was successfully achieved. Go to www.rrh.org.au.

APPENDIX A

RURAL HEALTH UNIT

GOALS FOR 2007

1. **IPC Block for 2007:**
 - Complete evaluation of 2006 programme.
 - Write up experiences
 - Train supervisors
2. **WIRHE Scholarship**
 - Achieve financial stability
 - Launch NW Scholarships
 - Support students to achieve 80 percent pass rate
 - Ensure all documents up to date
3. **Clinical Associates**
 - Obtain university and national approval for B.CMP. degree
 - Develop workbooks for the Clin A Academic programme.
 - Develop a stable team.
4. **Development of District training sites**
 - Facilitate development of two sites in North West and two sites in Gauteng
5. **Launch of the Centre for Rural Health, with funding, Board, goals, etc.**
6. **Knowledge generation and sharing of information**
 - Complete existing projects and generate two new projects.
 - At least 5 presentations at National and international conferences during 2007
 - At least 5 publications
7. **MPH Rural Health**
 - Obtain approval of MPH in rural health
 - Start the development of modules
8. **Foundation for Health Care Certificate.**
 - Obtain approval
 - Plan implementation
9. **Rural electives: sign up at least 65 students**
10. **Clinical Skills Courses.**
 - Run 3 skills courses for 2007
 - Run 1 of these in the North West province
11. **Define Rural/Rural Medicine/Rural Health for our context**

APPENDIX C

CHAIR OF RURAL HEALTH ADDENDUM TO ANNUAL REPORT 2005

Summary of scholarly activities

1. Research, Publications and Related:

1.1 Publication: Journal articles

- Hugo JFM, Couper ID. Teaching consultation skills using juggling as a metaphor. SA Fam Pract 2006; 48(5): 5-7
- Tumbo JM, Hugo JFM, Couper ID. The involvement of private general practitioners in visiting primary healthcare clinics. SA Fam Pract 2006; 48(7): 16a-d
- Couper ID, Worley PS. Health and information in Africa: the role of the journal *Rural and Remote Health*. Rural and Remote Health 2006; 6: 644 (online). Available from: <http://rrh.deakin.edu.au>
- Kotzee TJ, Couper ID. What interventions do South African qualified doctors think will retain them in rural hospitals of the Limpopo province of South Africa? Rural and Remote Health 2006; 6: 581 (online). Available from: <http://rrh.deakin.edu.au>
- Ikealumba NV, Couper ID. Suicide and attempted suicide: the Rehoboth experience. Rural and Remote Health 6 (online), 2006: 535. Available from: <http://rrh.deakin.edu.au>
- Portwig GH, Couper ID. A qualitative study of the reasons why PTB patients at clinics in the Wellington area stop their treatment. SA Fam Pract 2006;48(9):17
- Mash B, Couper I, Hugo J. Building consensus on clinical procedural skills for South African family medicine training using the Delphi technique. SA Fam Pract 2006; 48(10): 14

1.2 Publication: Chapters in books

- Couper I. The Rural Doctor. In: Bob Mash (Ed) Handbook of Family Medicine. Second Edition. Cape Town: Oxford University Press, 2006
- In Mash B and Blitz-Lindeque J. (Eds) South African Family Practice Manual. Second edition. Pretoria: van Schaik Publishers; 2006.
 - Couper J, Jacklin L, Couper I. Chapter 1: How to do a developmental assessment (p 2-3).
 - Saloojee H, Couper I. Chapter 2:How to assess growth and classify malnutrition in children (p 4- 18)
 - Saloojee H, Couper I. Chapter 3: How to do childhood immunisation (p 19-21)
 - Saloojee H, Couper I. Chapter 4: How to administer an intramuscular injection to a child. (p 22 – 23)
 - Saloojee H, Couper I. Chapter 5: How to do a suprapubic bladder aspiration in an infant. (p 24 – 25)
 - Saloojee H, Couper I. Chapter 6: How to get intravenous access in a child. (p 26 – 28)
 - Saloojee H, Couper I. Chapter 7: How to establish an intraosseous

- infusion in a child. (p 29 – 30)
- Saloojee H, Couper I. Chapter 8: How to perform a lumbar puncture in a child. (p 31-32)
- Saloojee H, Couper I. Chapter 10: How to do a skin test for tuberculosis in a child. (p 36 – 37)
- Couper I, Saloojee H. Chapter 77: How to assess gestational age at birth (p 235 – 236)
- Saloojee H, Couper I. Chapter 79: How to insert an umbilical vein catheter. (p 242 – 243)
- Saloojee H, Couper I. Chapter 80: How to establish kangaroo mother care for preterm infants. (p 244 – 245)
- Van Deventer C, Makinde M. Chapter 96: How to take a Papanicolaou smear. (p 286 – 287)
- Van Deventer C, Makinde M. Chapter 97: How to insert an intrauterine contraceptive device. (p 288 – 289)
- Van Deventer C, Makinde M. Chapter 98; How to do a mini-laparotomy tubal ligation. (p 290 – 291)
- Van Deventer C, Makinde M. Chapter 99: How to do a laparoscopic tubal ligation. (p 292 – 293)
- Van Deventer C, Makinde M. Chapter 101: How to do a manual vacuum aspiration. (p 295 – 297)
- Van Deventer C, Makinde M. Chapter 102: How to do a laparotomy for an ectopic pregnancy. (p 298 – 299)
- Van Deventer C, Makinde M. Chapter 103: How to do a fine-needle aspiration of a breast cyst or nodule. (pg 300)
- Van Deventer C, Makinde M. Chapter 104: How to do culdocentesis. (p 301)
- Couper I. Chapter 142: How to cope with stress and avoid burnout. (p 379 – 380)
- Couper I. Chapter 154: How to deal with a medical mistake. (p 409 – 410)

1.3 Research reports

- Couper I. Evaluation of the Parallel Rural Community Curriculum at Flinders University of South Australia, in the Context of the GEMP Year 3. Final Report. December 2006
- Couper I, Wright A, Van Deventer C, Kyeyune C, Tumbo J, Musonda J, Njie A, Roos W. Evaluation of primary mental health care in North West Province. Final Report. December 2006. Available at <http://www.madibeng.org.za/reports.htm>

1.4 Guidebooks

- De Villiers M, Couper I, Conradie H, Hugo J, Shaw V. The Guidebook for District Hospital Managers. Durban: Health Systems Trust; 2006.

1.5 Presentations:

- Couper I. Managing District Hospitals - Exploring Success (Invited presentation) Transforming Public Hospitals conference, Sandton, March 2006

- Couper I. Challenges of health care in South Africa. Flinders University Rural Health Society dinner, July 2006.
- Couper I. Challenges of health care in South Africa: an educational response. Mount Isa Centre for Rural and Remote Health, Mount Isa, Queensland, Australia, August 2006
- Couper I. Background to health care in South Africa and the development of the new Clinical Associates curriculum. James Cook University School of Medicine, Townsville, Australia, August 2006.
- Couper I. Challenges of medical student training in South Africa. Medical educators workshop, James Cook University Department of General Practice and Rural Medicine, Youngaburra, Queensland, Australia, August 2006
- Couper I. Evaluation of the Parallel Rural Community Curriculum at Flinders University of South Australia, in the Context of the GEMP Year 3: Preliminary results. Presentation to School of Medicine, Flinders University, August 2006
- Couper I. Attracting Future Rural Practitioners to Health Care: An African Perspective (Invited plenary address) Wonca World Rural Health Conference, Seattle, USA September 2006
- Truscott A. B.CMP Curriculum plan. Academic workshop of the National Clinical Associate Task team and involved universities. Pretoria, November 2006
- Truscott A. B.CMP Curriculum plan. National task team for the development of Emergency care workers. Pretoria, November 2006.
- Ian Couper, Charles Kyeyune, John Musonda, Alhagi Njie, Wilma Roos, John Tumbo, Claire van Deventer, Anne Wright. Evaluation of Primary Care Mental Health Care in North West Province. Oral presentation. Bojanala district research conference, North West Province.
- Ian Couper, Charles Kyeyune, John Musonda, Alhagi Njie, Wilma Roos, John Tumbo, Claire van Deventer, Anne Wright. Mental Health Care in North West Province. (Poster) Wits Faculty of Health Sciences Research Day, August 2006
- Sondzaba NO, Couper ID. Teleconferencing in the IPC Block: Lessons Learnt. Free paper presentation. 10th Annual RUDASA Conference, Empangeni, KwaZuluNatal, August 2006.
- Couper I. Growing our Own: The University and the Rural Health Workforce Challenge. Inaugural address. Wits University, October 2006.
- Kyeyune C. Management of Emergency Obstetric Care Services in Bophirima District. Bophirima District Research conference, October 2006.
- Sondzaba NO, Couper ID. Teleconferencing in the IPC Block: Lessons Learnt. (Poster) 11th ISfTeH International Conference, Cape Town, November 2006
- Couper I. Creating conducive working conditions in an environment that is resource constrained. Presentation to UK – SA Seminar: Improving Working Lives, Boksburg, November 2006.

2. Conferences attended

- 2.1 Prof ID Couper
 - 7th Wonca Rural Health Conference, Seattle, USA, September 2006
 - Train the Trainer Assessment Workshop, Sultan Qaboos University, Oman, January 2006

- 2.2 Dr C Kyeyune
 - The Network: Towards Unity for Health International Conference, Gent, Belgium September 2006.
 - Health Information SA conference, Mafikeng, May 2006

- 2.3 Ms NO Sondzaba
 - 10th Annual RUDASA Conference, Empangeni, KwaZuluNatal, August 2006
 - 11th ISfTeH International Conference, Cape Town, November 2006

- 2.4 Dr A Truscott
 - National workshop on the development of midlevel workers in Health, (on behalf of Wits Faculty of Health Sciences)

3. Courses attended

- 3.1 Prof ID Couper
 - Train the Trainer Assessment Workshop, Sultan Qaboos University, Oman, January 2006
 - Basic Life Support Update, Resuscitation Council of Southern Africa, May 2006

- 3.2 Dr A Njie
 - Research Supervision Workshop, Wits, May 2006