RCPE
International Development Group

RCPE VISIT TO MALAWI
AUGUST 2015

1. Introduction

1.1 Purpose of visit

Over the last 18 months the IDG has been actively exploring the potential to collaborate with, and support academic and healthcare institutes in Malawi through the creation of formal healthcare links. Focused discussions with a number of healthcare professionals within Malawi over this period have resulted in two key area of potential collaboration emerging:

1. Support and development of local Postgraduate Medical Training programmes within the College of Medicine (COM), University of Malawi (UoM). A proposal for a Health Partnership was agreed and signed by Professor Victor Mwapasa, Dean of Postgraduate studies COM and RCPE in September 2014 (Appendix 1)

2. Support of development and implementation of local clinical protocols to address the growing challenge of Non Communicable Disease (NCD) - in line with the strategy of Malawian Ministry of Health (MoH)

The main aims of the visit were to meet key Malawian healthcare professionals, visit clinical and academic sites and develop a fuller understanding of the how RCPE could usefully support the local teams in these, and other areas.

A project start up grant was obtained from THET in December 2014 to support this visit.

1.2 The Visiting Team

Dr Alan Patrick (RCPE Vice President)
Dr Elizabeth MacDonald
Dr Susan Pound
Supported by Jeanette Stevenson

2. Background Information informing the visit

2.1 Health care burden

Malawi is one of the least developed countries in the world characterised by a heavy burden of disease evidenced by an average life expectancy of 54 years.

- There is a high prevalence of diseases such as tuberculosis, malaria, HIV/AIDS and other tropical diseases. 10.6% of the overall population aged 15-49 years is living with HIV/AIDS
- In addition there is a growing burden of NCDs. It is estimated that 5.6% of adults aged 25-64 are diabetic and 33% have hypertension - the majority unrecognised and untreated at present.
- The ability to meet these health challenges is compounded by the striking lack of health care staff resource at all levels. For example there is <2 doctors /100,000 population in Malawi compared to UK with 277 doctors/100,000 population.

The Malawi Health Sector Strategic Plan (HSSP) (2011-2016) guides health provision in the country, and has directed that an Essential Health Package (EHP) be provided free of charge to all Malawians. The EHP includes Immunisation programmes, maternal and child care and more recently been expanded to recognise the burden of NCD including mental health, hypertension, diabetes and cancer.

The MoH strategy is to deliver these services as close to the community part as possible. There has been significant success in Immunisation Programmes with sustained uptake levels of >90%, but despite guidelines for NCD management being produced by MOH, there is minimal evidence of implementation of these. Barriers appear to include lack of trained staff, lack of equipment and lack of reliable drug supplies.

2.2 Structure of Postgraduate Medical Training

The COM is the only medical school in Malawi and oversees all Undergraduate and Postgraduate medical training. The main base for COM is in Blantyre with campuses in other regions including Lilongwe. The 5-year undergraduate Medical course commenced in 1991 and there are now around 70 medical graduates each year.
Although teaching faculty in COM have been increasing there is still a need to strengthen this capacity. In 2004 the COM commenced 4-year Masters of Medicine (MMED) programmes to deliver specialty Postgraduate training – including in Internal Medicine. At present the second half of this programme is spent in supernumerary training posts in South Africa (SA) where trainees gain a broader clinical experience than is presently available in Malawi. Unfortunately the funding for these posts is no longer available to COM who now require urgently to place these MMED students elsewhere.

3 RCPE team visit

3.1 Visit overview

During the visit, the RCPE team visited a variety of health care facilities within primary, secondary and tertiary levels of health provision, in two different regions of Malawi (Central and South). We had the opportunity to see first hand the clinical needs and present provision of medical care, and to meet and speak with staff responsible for delivering this care. We met with the academic faculty in COM and Malawi Liverpool Welcome Trust (MLWT), and with the Malawi Scottish Partnership (MSP). Full details of sites/staff members interviewed are in appendix 3

3.2 Descriptive summary of site visits and staff interviews

We began the visit in the Lilongwe, the capital city of Malawi, situated in the Central region around 150 miles north of Blantyre.

3.2.1 Day 1

On first morning of the visit we visited 2 rural Health Centres. These are the primary clinical facilities providing first line care to surrounding communities.

Metendre Kampatha Health centre is a Government funded and managed facility sited just off the main road, about 20km from Lilongwe. We arrived on a day when child vaccination programme was underway - a Health Surveillance Officer supervising the process. We were taken around the facility by the nurse in charge, Phebeh, who clearly had knowledge and interest in the services the Health Centre provided.

The main focus was on woman and child care, and we saw evidence of antenatal care, postnatal care and education, and of the colposcopy /cervical screening programme (a successful outcome of a NHS Lothian/ Malawi project funded by Scottish Malawian Partnership). There were a small number inpatient beds mainly for deliveries. Patients waited patiently to be seen at Out-Patient clinics to receive their regular supply of drug regimes for HIV/Tb treatment. Patients also present to the centre with broad range of medical problems (often fevers, respiratory illness) and staff will assess and prescribe antibiotics using what seems to be a protocol led syndromic approach. Like the majority of Health Centres Mtendere is nurse led with no medical presence - patients who need increased level of care will be transferred to Nkhoma Hospital., the nearest secondary care facility.

It was noticeable that there was predominance of female patients and, as we learnt throughout the trip, there is relatively poor uptake of preventative health care by male population. Supplies of Anti-retroviral Therapies (ART), TB regimes and basic antibiotics appeared fairly robust. There were facilities for Malaria testing, sputum staining but no biochemistry or heamatology.

While we observed models of healthcare delivery that seemed to work well, the infrastructure of the centre was poor. The buildings, clinic and ward areas were rudimentary, and equipment limited. There were issues with sanitation and water supply - toilets were pit latrines behind the building and we were told the water supply frequently failed.

Kasina Health Centre was the second health centre we visited. This is a catholic church funded and run facility - with Service Level Agreement (SLA) to provide the government funded essential maternal/ child services. This facility was far off the main road about 10km down a rough dirt track in a rather isolated area with surrounding scattered villages.

We initially arrived at what turned out to be a community education area where Sister Stella (a catholic nurse) was completing a cookery class with girls from the surrounding areas. She showed us some basic classrooms - one of which had computers used to teach IT skills to local people.

The main health centre was nearby and had more robust buildings and facilities than Mtendere. While predominately nurse run, Kasina also has one trained doctor funded through the church. We were shown ward areas, a nutrition facility for screening and feeding malnourished children, maternity units, a small pharmacy with basic stocks -but no electricity that day -and a small lab area with hand operated centrifuge with ability to screen for malaria, and perform BM. Outpatient facilities included clinics for Diabetes and Hypertension with a reasonably robust supply of hydrochlorthiazide & propranolol - the main anti-hypertensive drugs available. Reliance on external funding here was apparent for maintenance of infrastructure and for staff/drug resource.

Our next visit was to **Nkhoma Hospital**, a 260 bedded District General Hospital funded and run by Christian Hospital Association of Malawi (CHAM). CHAM is a 'not for profit' private health service provider and is the biggest partner for the MoH, with SLA in place for delivery of the EHP free at point of contact.

On arrival we were kindly provided with lunch by Rob Jones – a UK trained pharmacist - and his wife Ritu in their home in the hills above the hospital, before being taken on a tour around the hospital. Of all the subsequent hospital facilities we visited this was the one which appeared best organized, with fairly robust infrastructure and a clear vision for development of services and quality of care.

Medical care in Nkhoma is delivered predominately by clinical assistants and clinical officers supported by 6 medical staff, by occasional international medical volunteers and fairly frequent student electives. During the visit we met a UK trainee doctor who had been granted approval by Tayside Deanery to spend a 4 month block of her academic Foundation Programme at Nkhoma.

We had interesting discussions with the Dr Reyneir Ter Haar (medical director) and Dr Dave Morton (Deputy Medical director) around their vision to develop protocol driven clinics for NCD management within the local health centres. They shared protocols prepared for Hypertension, Diabetes, asthma and epilepsy and we discussed a potential role for RCPE support in implementing, embedding and monitoring these. The offer of RCPE educational material (in DVD format) was also welcomed to support their local training programmes.

E MacDonald 09/15

3.2.2 Day 2

Day 2 was spent in Lilongwe with a morning visit to **Kamuzu Central Hospital (KCH)** - a Government funded and run tertiary hospital which is affiliated with COM, UoM

On arrival we joined the Department of Medicine morning clinical meeting where recent deaths were presented –an early insight to the limited diagnostic and therapeutic options available to the team . Dr Jonathan Ngoma (Hospital Director) and Dr Lilian Chundwa (Head of Medicine) took us around wards which were extremely overcrowded, many patients lying on floor and verandahs being utilised as ward space. We visited the 'HDU' area which had minimal evidence of monitoring or enhanced care, and while dialysis was being performed in another area we were told renal function monitoring not consistently available. It quickly became clear that the hospital was overwhelmed in terms of clinical need, in a setting with poor infrastructure, basic clinical services, limited health care staff and minimal support services. We were informed that staffing levels and resource had not increased for many years despite increasing activity.

In discussion with Dr Ngoma and Dr Chundwa it was apparent that they felt somewhat distant from the main COM campus with limited access to education/training facilities and inadequate resource for clinical service provision.

They were keen to discuss any support RCPE could provide in terms of educational materials to enhance their local training programme - internet access is unreliable but DVD would be helpful, and in possibility of visiting UK physicians to deliver targeted teaching sessions. There was clear frustration about the inadequate resource available to run their hospital based Diabetic clinic and they expressed interest in any potential to engage in pilot projects to develop NCD management programmes within Health Centre settings. We left KCH with the promise to make available any RCPE educational resource that would be of help to them.

From KCH we meet with **Dr Isaac Chirwa,** a Malawian trained Physician who completed an RCPE MTI (based in Dundee in Diabetes/Endocrinology) placement in 2014.

Isaac now works predominately in a small private health care facility within Lilongwe, which he took us round - a complete contrast to KCH. The facility provides both inpatient and outpatient services including DM and HBP clinics. With the backing of private funding there is a small efficient on-site laboratory providing basic tests, and drug supply is robust. Isaac also provides a voluntary service to Nkhoma and KCH diabetic clinics and was able to share his understanding and insight to the complexity of Malawian health care system. He is keen to support any RCPE partnership in the area of NCD management and would be a useful link with both KCH and Nkhoma Hospital

Our final visit on day 2 was to introduce RCPE to the **Malawi Scottish Partnership** (MSP)- the sister organisation of the Scottish Malawi Partnership. We met with the National MSP Coordinator, Happy Edward Makala who described the role of MSP and was keen to offer support to any partnerships that the RCPE should progress, including facilitating links with MoH. Unfortunately a meeting arranged with Dr Rabson Kachala – the MoH link with MSP - did not occur as Dr Kachala was unexpectedly out of town.

3.2.3 Day 3/4

Over the weekend we travelled from Lilongwe in the Central region to Blantyre in the South taking the opportunity to see some of the country en route - including walking in the Zomba Plateau and a visit to Liwonde safari game reserve.

3.2.4 Day 5

Our first visit in Blantyre was to **Queen Elizabeth Central Hospital (QECH), Department of Medicine** where our morning was hosted by Dr Jane Mallewa (Head of Medicine – Academic). After attending the morning clinical meeting (well structured with greater numbers of clinical staff present than in KCH) we joined the medical ward round. The infra structure of the building was basic and ward was crowded with some patients on the floor. A small area off the ward was utilised as an HDU but only seemed to have oxygen as enhanced care. The ward round gave us insight to the nature of clinical disease here, and the diagnostic and therapeutic challenges in a setting with limited access to investigations. We noted very high utilisation of ceftriaxone, limit on monthly number of basic blood tests, variable drug supplies (other than ART/TB regimes), and over 75% HIV rate within the inpatient group. Clinical Officers appeared to be key team members, and despite the busy clinical load there were efforts to include aspects of teaching for them and students on the rounds.

Late morning we met with Professor Stephen Gordon - director of **MLWT** – who treated us to lunch in the mango café in the grounds of the MLWT facility next to QECH. MLWT presently supports COM by offering research opportunities to trainees, through education and training sessions and the MLWT fellows provide 30% working time to clinical duties within QECH. Professor Gordon is keen to support any RCPE ventures and has offered assistance with local grant administration and procurement if this should be needed. Of immediate interest is his offer of the use of MLWT lecture theatre facilities that can support web-streaming if COM wish to utilise this.

In the afternoon we had a formal meeting on the **COM** campus, with Professor Victor Mwapasa (Professor of Postgraduate studies) and Dr Jane Mallewa.

Present challenges with Postgraduate training Programmes within COM were discussed, in particular the urgent need to provide training posts for postgraduates in the later years of the MMED (Internal Medicine) programme. At present these trainees are placed in SA posts which provide experience of similar disease profiles in a setting richer in diagnostic resource. Unfortunately the sponsorship for these SA posts has ceased. COM are therefore seeking opportunities to place MMED trainees within UK training posts. A Memorandum Of Understanding (MOU) has recently been signed with RCP (London) to provide posts within their Medical Training Initiative (MTI) scheme but the COM remains interested in exploring similar opportunities with RCPE - they are clearly concerned to ensure their trainees are linked to high standard training posts which we were able to reassure would be the case.

Professor Mwapasa asked if RCPE could provide input to quality control and standard setting for the MMED postgraduate examinations and Dr Mallewa expressed a wish to explore possibility of visiting UK physicians to deliver targeted education – one area suggested was Advanced Life Support workshops. We offered access to RCPE educational materials to enhance their local training programmes - internet access remains somewhat unreliable but they would welcome material in DVD format and were interested to consider the option for web-streaming symposia, facilitated through MLWT. Having seen first hand the breadth of clinical pathology in QECH, we expressed interest in the option of UK trainees spending attachments within QECH where they could develop the core clinical diagnostic skills required in a resource poor setting. COM would be supportive of any such initiative.

3.2.5 Day 6

Our final day was spent back in **QECH** meeting key staff members from other clinical areas.
Our morning started in the Oncology department where we met with Dr Leo Masamba. Leo is the Head of Medicine (government appointed post), and one of only two Oncologists in Malawi. Cancer is now an area receiving funding from the Malawian Government, and the developing service in QECH is presently supported by Scottish Government funded partnership with NHS Lothian. Leo is also a recipient of a RCPE scholarship to study MSc (Int Med), Edinburgh University. Leo introduced us to Dr Andrew Gonani (Hospital Director) who was welcoming of the RCPE visit and supportive of any future partnerships.

We next met with Dr Jane Bates a UK trained physician who leads Palliative Care services in QECH and is part of the COM faculty of Family Medicine. Opportunities to support the Family Medicine faculty in NCD management were briefly discussed and there is interesting potential for RCPE to collaborate in Undergraduate and Postgraduate projects particularly within Mangochi MoH Health facility. Jane has subsequently put us in touch with the Director of the Family Medicine Faculty and these opportunities will be followed up.

Our final meeting of the visit was with Professor Elizabeth Molyneux who has worked for over 30 years within Paediatrics in Malawi and was happy to share with us her considerable first hand knowledge of developing healthcare services in this setting. She described her experiences around staff development, training and with exchange programmes between UK hospitals/QECH, providing us with a deeper insight into both the potential, and the challenges of partnership working within Malawi.

4. Summary of key observations during the visit

Having visited a broad spectrum of healthcare facilities we were impressed at the success of some models of care (Immunisation Programmes, maternal, child services, Tb/HIV screening and therapeutic programmes), while being struck by the overwhelming demands seen in the inpatient medical wards in the tertiary hospitals. These demands were compounded by inadequate infrastructure, minimal healthcare staffing and inconsistent availability of diagnostics and therapies. Despite the considerable challenges the health care staff we met appeared motivated to strengthen and improve both the educational environment and delivery of clinical care.

In all visits we were received with courtesy, and there was clear interest in potential areas of collaboration. Consistent themes emerged around support of internal training, targeted educational visits, engagement with RCPE MTI scheme and around the support of the development of NCD screening and management programmes. All these areas are in line with the strategies outlined by the MoH, with the underpinning goal being to build resilience and sustainability within the Malawian Healthcare system.

5. Action Plan

4.1 A Memorandum of Understanding will be discussed with COM to cement the partnership proposal already agreed

4.2 A small steering group will be set up to direct the next stage of RCPE /Malawi Healthcare link

Main areas of potential collaboration to be progressed/further explored by a steering group to include:

- Provision of RCPE Educational resources to the hospital sites visited in appropriate format
- Co-ordination of occasional visits by RCPE members for targeted teaching/workshops /clinical skills training on request
- Facilitation of training opportunities in UK for Malawian Doctors undertaking MMED (Internal medicine) at COM, through adapted and targeted RCPE MTI scheme
- Promotion of opportunities for UK trainees and medical students to undertake periods of training/ electives within Malawi
- Collaboration between RCPE and COM around medical student community projects
- Support of locally driven development of pilot programmes to identify and manage NCDs within heath centre settings