3 July 2013

Trip Report:

Lusaka (Central Province) and Mongu (Western Province), Zambia, 6-17 June, 2013
Nairobi, Kenya, 18 June 2013

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OVERVIEW:

The following report summarizes the key discussions and proposed items for action emerging from this Canadian team's trip to Zambia. It is organized into the following sections:

1. **Objectives of Trip**
2. **Overview of Meetings Held**
3. **Summary of Findings**
4. **Draft Action Plan re "CLU / Model Ward" collaboration (for Input)**

Report appendices:

i. Background and Overview of OkaZHI and UBC-O Engagement in Zambia (*included at end of this document*)
ii. Observations of Changes at Lewanika General Hospital (LGH) over the past 5 years (*included at end of this document*)
iii. Concept Note submitted to the Rockefeller Foundation by CCGHR: African Health Systems Strengthening Leadership Development Program, CCGHR (*separate attachment*)
iv. Interior Health / UBC. *Cultivating Curiosity and Learning through Clinical Learning Units: Concept Note*, March 2013 (*separate attachment*)
v. Dr. Andrew Silumesii (Medical Superintendant, Lewanika General Hospital, Mongu). *Building Leadership Capacity to Improve Work Climate in a Zambian Hospital: An Action Research Approach*. 2012, MPH Thesis, Institute of Tropical Medicine Antwerp, Belgium (*separate attachment*)

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1. OBJECTIVES OF TRIP

In June 2013, a four-person Canadian team traveled to Zambia. Team members included:

- Dr. Bill Nelems, Executive Director and Founding Member, Okanagan Zambia Health Initiative (OkaZHI)
- Jessica Barker (RN), Founding Member of OkaZHI and sessional staff with University of British Columbia Okanagan (UBC-O)
- Nicole de Bosch Kemper (RN), Nursing Instructor, UBC-O
- Rebeccah Nelems, Founding Member of OkaZHI and CCGHR Consultant

The main objectives of the trip were:

- To touch base with UBC-O's, OkaZHI's and CCGHR's colleagues and institutional partners in Lusaka and Mongu to seek their input on upcoming planned activities, future directions and strategic priorities;
- To assess interest in a possible international exchange and collaboration around the development of "model wards" in Lusaka at UNZA/UTH, in Mongu (Western province) at Lewanika General Hospital (LGH), and in the Okanagan with BC Interior Health and UBC-O; and
- To discuss the development of a health system strengthening leadership development program, led by the Zambia Forum for Health Research (ZAMFOHR) and the Canadian Coalition for Global Health Research (CCGHR), and receive specific feedback on a funding proposal prepared for the Rockefeller Foundation.

Additionally, Rebeccah Nelems met with Rockefeller Foundation in Nairobi, Kenya, and the summary of this discussion is provided in this document (as it pertains directly to the items discussed in Zambia with partners).

Please note that Jessica Barker and Nicole de Bosch Kemper stayed on in Zambia, to conduct a hypertension study in Western province for UBC-O. The summary and results of this portion of the trip will be submitted to UBC-O in a separate report.

1. OVERVIEW OF MEETINGS HELD

The team met with a range of key actors in both Lusaka and Mongu. In Lusaka, meetings were held with:

- The Honourable Minister of Health, Dr. Kasonde
- Dean Goma, UNZA School of Medicine
- Dr. Lonia Mwape, Patricia Mukwato and Nursing Sciences team who has led the development of the "Model Ward"

- Dr. Margaret Maimbowla, Executive Director, Zambia Forum for Health Research (ZAMFOHR)
- Clara Mbwili, Lusaka District of Health
- Dr. Munthali, Chief of Surgery, UNZA

In Mongu, meetings were held with:

- Dr. Andrew Silumesii, Medical Superintendant of Lewanika General Hospital (LGH)
- LGH Leadership team, including medical officers (physicians), pharmacist, nurse matrons, and some in-charge nurses (2 meetings)
- LGH Head Nurses, Matrons and Zen School (Nursing school) Clinical Teachers
- Dr. Mayoba Macwani, Vice-Chancellor, University of Barotseland (UBL)

In Nairobi, meetings were held between Rebeccah Nelems (joined by Rhona Mijumbi of Makerere University) with Mwihaki Kimura Muraguri, Associate Director of Health for the Rockefeller Foundation.

2. SUMMARY OF FINDINGS

TRIP TO LUSAKA AND MONGU, JUNE 2013

Overall, it was a highly successful trip, which exceeded expectations in terms of the high degree of institutional readiness and enthusiasm by both Canadian and Zambian colleagues to continue building on collaborations to date in the areas of capacity development and health system strengthening.[1] In particular, strong synergies were identified between the ongoing capacity building work of OkaZHI and UBC-O with both the "model ward" concept (in both Lusaka and Mongu) and the potential national leadership development program being elaborated by CCGHR in conjunction with ZAMFOHR – all of which were viewed as mutually reinforcing contributions to the health system strengthening efforts being made currently by the Zambia Ministry of Health (MoH) under the Honorable Minister Kasonde's leadership.

- **"Model Ward" / Clinical Learning Unit (CLU):**

[1] It is important to note that discussions were held not only within the framework of UBC-O and OkaZHI collaborations to date, but also within the context of the work of the broader CCGHR-coordinated "Zam-Can" team. The team frequently referred to the work of other Zam-Can members where relevant and committed to relay the outcomes of this trip to the broader group to advise them of current discussions and to seek their potential collaboration in planned activities.

The concept of the "model ward" as a potential focus of collaboration emerged through a series of different discussions between OkaZHI, UBC-O, the BC Interior Health Authority, UNZA and CCGHR prior to this trip. The team learned that three distinct but similar initiatives have been underway:

- In Lusaka, UNZA/UTH is in the process of establishing "model wards" on two medical wards, with a focus on improving the quality of nursing care. The model was born out of challenges with respect to the quality of nursing care related to poor implementation of the nursing process, including the use of care plans, and the application of theoretical concepts. The model will entail training on best practices and standards of care, and increasing resources and equipment to provide a more optimal environment for both care and learning.
- In Mongu, OkaZHI and UBC-O nurses have been working with the support of the leadership at Lewanika General Hospital for the past four years[2] to strengthen staff and institutional capacity to improve nursing care, using a non-formalized "model ward" approach whereby best practices and standards are modeled and staff are mentored with a focus on the pediatric ward. While this work has been carried out, the Medical Superintendant of the hospital has elaborated a comprehensive and detailed leadership development program, through his Masters in Public Health thesis (appended to this document), which contains many elements that would be highly conducive to the successful formalization of a "model ward" or CLU. Key strategies within this model offer added value to the "model ward" or CLU model, strengthening and making highly explicit the key role that leadership plays in the success and sustainability of such models.
- In the Okanagan, the BC (Canadian provincial) Interior Health Authority (IHA) in conjunction with UBC-O have initiated a "Clinical Learning Unit" or CLU, an adaptation on the "model ward" approach, with a focus on strengthening evidence-based practice, knowledge and the learning experience of both students and staff. The purpose of the CLU is to facilitate engagement of the learner by allowing them to develop a learning plan and working with an RN in order to meet the mutually identified requirements of that learning plan. The staff on the unit are reciprocally engaged as they help the learners identify theory-practice gaps and build upon their skills sets. "Specifically, a Collaborative Learning Unit is a nursing unit where all members of the staff, together with students and faculty, work together to create a positive learning environment and provide high quality nursing care."[3]

2 Please see Background and Overview of UBC-O and OkaZHI's Engagement in Zambia, in the appendices of this report.

[3] Lougheed, M & Galloway, A, 2005, The Collaborative Learning Units © Model of Practice Education for Nursing: A Summary

Recognizing that the different contexts and needs would necessitate a distinct approach and focus within each "model ward" or CLU, there was strong consensus amongst all stakeholders on the value that both inter-provincial and international collaboration on the "model ward" approach would offer. Collaboration between the Lusaka and Mongu teams was identified as highly beneficial to both UNZA/UTH and LGH with respect to team learning and exchange through a peer-to-peer model, the potential sharing or pooling of materials (e.g. training curriculum), and the potential for viewing the "model ward" approach as a potentially replicable model in Zambia, enhanced by the provincial/rural and national/urban comparison that this collaboration would enable.

Collaboration between Canadian counterparts with the Zambian institutions engaged in the "model ward" approach was also seen as highly beneficial from the standpoint of team learning and exchange through a peer-to-peer model, a process already started through these meetings through the identification of features present in the Zambia model that may be of value in the Canadian context (e.g. LGH emphasis on leadership component) and vice versa (e.g. IHA/UBC-O emphasis on student-nurse relationship as co-learners). Additionally, potential support from Canadian partners with respect to strategic mentorship (e.g. OkaZHI physicians and nurses modeling best practices and inter-professional collaboration on the ground) and capacity building support (e.g. UBC-O faculty delivering a Train the Trainer (TOT) to UNZA/UTH and LGH with respect to learner-centred teaching approaches and integrating research or an evidence-based approach into ward management and leadership.)

In addition to interest on the part of the UNZA/UTH and LGH teams engaged in the development of the "model wards", there was significant support for the idea by other stakeholders who viewed this as one valuable component of a much broader health systems and capacity strengthening approach to which the government is committed. The evidence-based approach to learning, teaching and inter-professional collaboration, which is characteristic of the Canadian CLU model presented by the Canadian team, generated significant interest from all actors from the standpoint of not only improving quality of care, but also with respect to education, Human Resources for Health and strengthening of the health research system.

With respect to education, Dean Goma commented that wards have not traditionally been ideal teaching wards and a 'model ward' approach would be effective because the education system have been more focused on theory rather than competencies and skills based in evidence, and based on the reality on the ground. The model was seen as holding significant promise in terms of its potential for building greater capacities for critical

thinking, leadership, accountability amongst health students as well as members of the health workforce – leading to better care and health outcomes.

The approach was also seen as a potentially effective strategy for training and retaining human resources for health through the improvement of the work environment both in terms of the physical environment as well as boosting a sense of team morale, engagement, satisfaction, pride and commitment. The approach supports Minister Kasonde's and the MoH's commitment to training and retaining more health workers in rural areas and the provinces, as evident through the expanded number of provincial level schools and universities that will be able to provide accreditation or grant health-related diplomas or degrees.

Additionally, strong synergies exist between the evidence-based approach of the CLU with current priorities and recent successes by the government in strengthening the health research system and building individual and institutional capacities for the production, translation and use of evidence. Dr. Maimbowla of ZAMFOHR identified the possibility of supporting Zambian graduate students to develop research projects related to the model ward approach to support the collection and dissemination of evidence with respect to the effectiveness of the "model ward" approach in improving the quality of care, health outcomes and learning. She also identified the potential role that ZAMFOHR, given its role within the national health and health research system, could play in facilitating and collating the learning and exchange between "model wards" within Zambia and with Canada.

- **Capacity Development**

OkaZHI CNIS Training: With respect to OkaZHI's tentative plans to deliver the Canadian Network for International Surgery (CNIS) Essential Surgical Skills (ESS) Train the Trainer (TOT) and ESS Training Series this fall, Dr. Munthali is strongly supportive of OKaZHI/CNIS skills trainings for medical students, but he recognizes stresses that may lie ahead. Currently the size of the graduating medical class consists of 60 students. Within two years student graduation will be moved up to 100 students. Discussions with Dr. Gary O'Connor and OkaZHI surgeons engaged with Dr. Munthali will be ongoing. Even though OkaZHI has tentative plans to begin teaching surgical skills at UNZA, other factors to take into account in future years include include outreach to other medical schools in Zambia (private school in Lusaka and a public school in Kitwe), reaching practicing physicians who are working across the country, including the many physicians who come from other countries (eg. Congo, Nigeria, elsewhere) where skills trainings is weak or absent.

In conversations with Dr. Maimbolwa following meetings with Dr. Munthali and Dean Goma, Dr. Maimbolwa proposed that the CNIS training be part of the "Continuing Education" training that is currently being initiated and supported in Zambia. Dr. Maimbolwa also noted the national continuing education mandate for physicians. Since this suggestion arose after meetings were held with Dean Goma and Dr. Munthali, it is advised that the OkaZHI Surgical Committee open up a follow-up discussion with them concerning this suggestion before proceeding any further.

OkaZHI GP Training: The Canadian team also distributed 34 World Health Organization (WHO) Mental Health Gap Action Programme (mhGAP) Intervention Guides to Dr. Sitali at Lewanika General Hospital (LGH), on behalf of the OkaZHI GP Group. The OkaZHI GP group has been meeting weekly via skype with Clinical Officers at LGH through a pilot program to provide low cost, accessible primary care health teaching. Using teaching resources provided by WHO through Jodi (WHO mhGAP Manual + WHO companion Power Point teaching slides), they are offering a primary care mental health course based on mhGAP manual on those topics requested by the COs. Teaching is not confined to mental health, and related medical teaching is also offered (eg: treatment of alcoholism). The group sends teaching slides in advance of each session. Sending the Guides was another planned component for providing this capacity support.

The team also distributed a one-page hard copy course evaluation form to Mongu on behalf of the OkaZHI GP group – seeking feedback on the effectiveness, relevance of teaching, and asking for suggestions from COs for how the program could be improved. Unfortunately, the team was not able to retrieve the complete forms prior to leaving, so the forms are with the COs now and the GP Group will discuss with COs how best to retrieve them from them.

University of Barotseland: The University of Barotseland is a newly established private university in Mongu, opened in January 2013. The team were joined by Dr. Andrew Silumesii and the Head Nurse of LGH to meet with the university Vice-Chancellor Dr. Mayoba Macwani and have a tour of the campus while in Mongu. Since opening its doors, the university has enrolled 45 students in the Social Sciences, Environmental Sciences and Information Communications Technology (ICT) fields. In August, the university will be opening up a health sciences program, which will include a RN degree credential. Enrolment is strong at the moment (approximately 50 students enrolled), however, the university faces some significant capacity needs at present – most significantly, the lack of teaching faculty and the lack of resources (from books to financial resources as the ability for students to pay for education in the province is very limited). Despite this, the university board of directors is committed to supporting students through bursaries and scholarships wherever possible and keeping tuition fees as low as possible. Additionally,

many of the current faculty are volunteering their time to successfully support the launch of the university but they are working to put a more sustainable long-term strategy in place. In terms of infrastructure, they have access to several properties and are leasing the campus the team visited – and have 24 hour internet access, multiple classrooms, a board room, an allocated library with some books donated by UNZA, student dormitory rooms and a cafeteria for student use. Dr. Silumesii and Dr. Macwani started discussions about the possibility of working together to both provide practicums at LGH for University of Barotseland students, as well as approach LGH staff as potential teachers at the university. One of the university's key strategies for addressing the resource and capacity shortage is by reaching out to, and establishing linkages/partnerships with international universities. There was significant interest by Dr. Macwani in potentially partnering with OkaZHI and UBC-O – as well as other Canadian institutions – to seek out potential areas of collaboration or future support.

Other Capacity Building: The Canadian team was briefed by Zambian colleagues in Lusaka on local priorities to increase the numbers and the quality of students, recent graduates and workforce – particularly supporting the training and retention of competent health workers in rural areas in order to address the shortage and lack of quality HRH in rural areas, which negatively impacts upon access to quality care by the population. The key strategy being pursued at present is to increase opportunities for gaining credentials at different levels in rural areas. Other objectives identified in discussions included strengthening public health through primary care interventions.

The potential role of Canadian partners in supporting this capacity development both individually (through Train the Trainer modules such as OkaZHI's CNIS training) and institutionally (through supporting the development of educational institutions and their professors, such as the newly founded University of Barotseland in Mongu, Western province, which admits its first cohort of nursing students in August 2013) was highlighted across discussions. In particular, Zambian stakeholders emphasized the need to build capacity in a sustainable way – to reduce dependence on external funds or resources in the long-term.

Potential outcomes or results of such capacity development support (including the "model ward" strategy) identified by actors in meetings included:

- Increased engagement and retention of HRH at all levels
- Improved quality of care
- Improved health outcomes
- More skilled and knowledgeable HRH
- More effective management of health delivery

- Strengthened coordination between aspects of health delivery
- Strengthened capacity of educational institutions
- Improved evidence-based care

- **Leadership and Health System Strengthening:**

Another major theme explored in each of the meetings held (except for those with medical staff at LGH) was that of Leadership development as a key entry point or strategy for achieving sustainable "Health System Strengthening" in Zambia.

Input provided on CCGHR's Health Systems Strengthening Leadership Development Program proposal submitted to the Rockefeller Foundation (see appendix 3) was overwhelmingly positive with respect to the need and gap that this program would address. The Honorable Minister of Health Dr. Kasonde stated that he believed this approach is the "way forward," indicating that the government of Zambia would be "keen" to collaborate and that "the ground is fertile" for such an approach. In the context of the recent multilateral Health Assembly held in May 2013, in which the Honorable Minister had participated, Dr. Kasonde highlighted the resolution passed with respect to the centrality of human resources to the goal of Universal Health Coverage (UHC) in the context of the MDG/post-2015 development agenda. He stated that he believed that this leadership program would directly contribute towards this goal.

Dean Goma stated that there has been a significant gap within Africa as a whole, whereby training for health professionals does not incorporate leadership training: "Africa has taken a clinical approach to health strengthening…but hasn't trained people to look after the system or take leadership within the system." As such, he suggests that we are not building on something that is already there – it has not been there. He suggests capacity for change leadership will be essential, to start building these components into the health education system, and broader health system itself. Dr. Maimbowla referred to the lack of "vocabulary" around health systems itself within Zambia, identifying that without a vision of the health system it is hard to have effective leadership and management. Dr. Silumesii concurred from his own experience of being appointed Medical Superintendant of a provincial hospital without any prior leadership or management training – that there is not only a dearth of leadership within Zambia's health system, but a lack of vision or planning to develop this leadership.

In terms of methodology, there was also strong support. Dr. Silumesii, Medical Superintendant of LGH in Mongu, has just completed a MPH thesis on the topic of leadership in the health system (see appendices) in which he proposes a similar model –

only focused on the institutional level – using action research as a key methodology for leadership development. Dean Goma views starting with a 2-year pilot project as the right approach that would permit us to test, improve and demonstrate the value of the model and approach to governments. In this context, he identified that increasingly, African governments are looking to evidence to guide their policies and so having the evidence of a model such as this would help gain support and momentum for this program across the continent. Dr. Maimbowla concurred, especially given the Zambian government's recent prioritization of health research through the foundation of the National Health Research Authority of Zambia (NHRAZ). She also added that leadership support must be critically provided across the regions of the country, not just centrally in Lusaka, while supporting an overall shift in organizational culture towards leadership at all levels – from the point of care through to the senior leadership of health institutions.

TRIP TO NAIROBI, JUNE 2013

On June 18, 2013, Rebeccah Nelems and Rhona Mijumbi of Makerere University met with Mwihaki Kimura Muraguri, Associate Director of Health for the Rockefeller Foundation in Nairobi, to discuss the CCGHR-submitted proposal. It was a good meeting and she was engaged in the concept and agreed on its importance and timeliness. We shared sample policy briefs by both CDBPH and ZAMFOHR as well as a copy of Dr. Silumesii's thesis as an example of a potential project that could be supported through this program - all of which she happily received. She advised us that the Board is meeting the week of 24 June to discuss whether or not it will be continuing to fund health systems, putting this process on hold until that time. She explained the process we would follow should the Board decide to continue this funding, however, she cautioned that Zambia and Cameroon are not countries of focus for them. We are still waiting for an update on their funding discussions.

She suggested the possibility of approaching the International Development Research Centre (IDRC) with this proposal, and since returning to Canada, Rebeccah and Vic Neufeld (CCGHR) are discussing the possibility of approaching IDRC's Governance for Equity in Health Systems (GEHS) program[4], and potentially submitting a revised version of the proposal to the Round 6 (Phase 1) for Grand Challenges Canada's Stars in Global Health call for proposals, closing 30 July[5].

[4] http://www.idrc.ca/EN/Documents/GEHS-Program-Overview-2012-2016.pdf
[5] http://www.grandchallenges.ca/wordpress/wp-content/uploads/stars-rfp-r6-2013May06-EN.pdf

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DRAFT ACTION PLAN RE "CLU / MODEL WARD" FOR INPUT

In meetings in Zambia, the Canadian team agreed to draft an initial "Action Plan" to circulate for input by Zambian and Canadian partners for their input and feedback – in support of moving collaborations around the CLU / Model Ward forward. The following chart represents the first draft of this Plan. Institutions with a proposed responsibility for a given action item are identified. Actions that have been completed are indicated with a green "X".

The team looks forward to receiving feedback from all stakeholders on the plan and is committed to furthering and putting this plan into action in the coming months.