

College of Anaesthetists of Ireland / Irish Aid Supported Development Programme in Malawi

CSF Contract Number 0770803

Project Name: Educational Assistance in the Management of Trauma-related Obstetric Emergencies in Malawi with a focus on Thyolo and Chinadzulu District Hospitals

Country: Malawi

Reporting Period: July 2009 – July 2010

Anthony J Cunningham

IRISH EXTERNAL DIRECTOR July 20th 2010

1. Project Description

The project aims to support health care workers in Malawi to better respond to critically Ill obstetric and trauma patients in Malawi. It does this through:

- Capacity-building within the Department of Anaesthesia, Queen Elizabeth Medical Centre and College of Medicine, Blantyre to develop leadership in Anaesthesia in Malawi
- 2. Education and training support from the College of Anaesthetists in Ireland for the Anaesthetic Officer Training Programme based in Blantyre and Lilongwe.
- 3. Partnership and collaboration with the College of Medicine, Blantyre to launch and sustain a Masters in Medical Education (MMed) Degree programme for designated Malawi medical graduates.
- 4. Development of a Trauma Training Programme, based in the Welcome Trust Unit in Queen Elizabeth Medical Centre, Blantyre with monitoring, evaluation and audit to measure impact of training activity in Thyolo and Chinadzulu Hospitals

Partners:

College of Anaesthetists Ireland, working in partnership with Queen Elizabeth Medical Centre, College of Medicine Blantyre

2. Progress Year 2

2.1 Summary of achievements in year 1–July 2008-June 2009

Memorandum of Understanding

The Memorandum of Understanding between the College of Anaesthetists of Ireland and the College of Medicine Blantyre was signed by the President of the College of Anaesthetists of Ireland, Dr John McAdoo and Prof Robin Broadhead, Principal, School of Medicine, Blantyre in Blantyre on the 25th October 2008.

The Memorandum of Understanding was then endorsed by Dr George Mwale, Director of Clinical Services, Ministry of Health, at a meeting in the Ministry in Lilongwe on 26th October 2008.

The Memorandum outlines the partnership, governance arrangements, objectives of the project and the roles and responsibilities of each partner. It was devised with representatives from the College of Medicine, the department of Anaesthesia in Queen Elizabeth Medical Centre and members of the Irish College of Anaesthetists Council and staff. This is believed to have been a worthwhile and important exercise as it established clearly the programme framework and partnership expectations.

Launch of Project

The Joint College of Anaesthetists of Ireland/ Irish Aid Supported Project Educational Assistance in the Management of Trauma-related Obstetric Emergencies in Malawi was launched in the Boardroom, Royal College of Surgeons in Ireland on 19th November 2008 with presentations from Prof Anthony Cunningham on the project, Dr Ellen O' Sullivan on Global Oximetry and Safe Surgery Saves Lives. It was attended by over 40 anaesthetists both trainees and Consultants, members of the College Council and invitees from the College of Surgeons in Ireland and the Royal College of Physicians in Ireland.

Three Year Education and Training Programme

The College of Anaesthetists in partnership with the College of Medicine in Blantyre aims to establish and support a project in the Queen Elizabeth Medical Centre, Blantyre and Kamuzu Central Hospital Lilongwe to develop a group of clinical officer and nurse trainers skilled in assessment, resuscitation and management of mothers and trauma victims in Thyolo and Chinadzulu Hospitals and nearby district. The project has four components:

(a) Capacity building within the Department of Anaesthesia, Queen Elizabeth Medical Centre and the College of Medicine Blantyre to develop leadership in anaesthesia in Malawi.

The project established a committed Joint Faculty, co-ordinated by the College of Anaesthetists and the College of Medicine Blantyre for a period of three years..

(b) Joint Faculty

College of Anaesthetists:

- Dr Jeanne Moriarty
- Dr Kevin Carson
- Dr Ellen O'Sullivan,
- Dr Valerie Donnelly
- Dr Miriam Harnett
- Dr Brian Kinirons
- Dr Ellie O Leary
- Dr William Blunnie
- Dr Brian Marsh
- Dr Moyna Bill
- Dr David O' Toole

College of Medicine Blantyre

- Dr Gregor Pollach
- Dr Paul Downie
- Mr Cyril Goddia
- Dr Amaia Laranana
- Dr Baumaester

The Joint faculty of the Colleges agreed that it would be important to review the existing curriculum and assessment methods for anaesthesia training and education in Malawi. To this end a review workshop was set up in January 2009. This was followed by a Care of the Obstetric Emergency and Trauma Patient Refresher Course. Both programs are outlined below.

© Curriculum and Assessment Workshop; Queen Elizabeth Central Hospital, Blantyre - Saturday 17th - Sunday 18th January 2009

Output: A nationally based standardised Anaesthetic Officer Training Programme

Objective: To strengthen anaesthesia training in Malawi towards safer patient care **Topics** covered included

➤ Anaesthesia Officer Training Programmes – Historical Perspectives

- Anaesthetic Officers Training Training in Malawi the Malawi School of Anaesthesia
- ➤ Delivery of Curriculum Content Approaches to Instructi
- Clinical Competencies in Anaesthesia
- Continuing Professional Development and the GOAL Project
- Assessing Clinical Skills in Anaesthesia
- Performance based Assessment in Malawi
- > Self Directed Learning Distance Learning and the Intern
- Clinical Instruction Techniques in Practice

Faculty included		Malawi Anaesthetic Clinical	Malawi Anaesthetic Clinical
>	Dr. Eugene Egan	Officer Trainers included	Officer Participants included
	(Cyprus)	John Gawanika	Paul Phiri
>	Dr. Paul Fenton	Kenneth Kapatuka	Charles Suya
	(France)	William Banda	Willasa Bitoni
>	Prof. Michael James (Zenus Ulaya	Maxwell Mzumara
	South Africa)		Francis Mason
>	Dr Jeanne Moriarty		
	(Ireland)		
>	Dr Kevin Carson		
	(Ireland)		
>	Dr Ellen O' Sulivan		
	(Ireland)		
>	Prof Anthony		
	Cunningham		
	(Ireland)		

Monday 19th January 2009 – Wednesday 21st January 2009

Course: Care of the Obstetric Emergency and Trauma Patient Refresher Course; Queen Elizabeth Central Hospital, Blantyre

Outcome

24 selected Anaesthetic Officers, Obstetric and Orthopaedic Registrars, ICU Nursing staff and midwives, previous course participants and those with course instructor potential selected by Mr. Cyril Goddia attended the **Refresher Course**. Also represented was staff of District Mission Hospitals.

Masters in Medicine (M.Med)

It was envisaged that through partnership and collaboration with the College of Medicine, Blantyre, the project would launch and sustain a Masters in Medicine (M.Med.) degree programme for four designated Malawi medical graduates to undertake 4 years postgraduate education and training in Malawi and South Africa to provide leadership for the specialty in Malawi. An interview board was established comprising Prof Michael James (South Africa) Dr Paul Downie (Malawi) Prof Eric Borgstein (Post Graduate Dean, Malawi) and Dr Eugene Egan (Cyprus) in January 2009. The following medical graduates were interviewed and selected for appointment to the M.Ed programme. Four candidates were deemed suitable. Two were prioritised for the first six months of 2009:

- ➤ Dr Sampson Mndolo commenced training April 2009
- Dr Singatiya Stella Chikumbanje-commenced June 2009

College of Medicine Undergraduate Teaching Programme

Drs Moyna Bill (Belfast) and David O' Toole (Galway) participated as Faculty in the annual 4th year medical student 2 week Anaesthesia and Critical Care teaching programme during the weeks of the 23rd March to the 4th April 2009.

Development of a trauma and obstetric emergencies training programme based in the Queen Elizabeth Medical Centre Blantyre with monitoring, evaluation and audit to measure impact of training activity in Thyolo and Chinadzulu Hospitals.

This component of the project aims to produce **practitioners** who are competent to follow best practice in the assessment and management, including resuscitation and transfer, of maternal and trauma emergencies in a variety of settings. In addition it aims to produce **instructors** who will replicate the training programme, with modifications, for impact at health centre and village level. This would imply ongoing training of healthcare staff and traditional birth attendants by trained instructors.

In May 2009 Dr Paul Downie, Project Manager along with Dr Orlaith Mc Caul, Professor Anthony Cunningham and Dr Ellen O'Sullivan made an assessment visit to Chiradzulu and Thyolo hospitals. Both hospitals were deemed suitable venues to run training programmes. Meetings were held with the district health officers and hospital managers at each location for the purpose of identifying suitable timing for such training and suitable trainees. These have now been agreed. Meetings held at each site included the following:

Chiradzulu

Kennedy Kandaya SCO, Elizabeth Mbeta ACO, David Chirwa ACO, Rose Chayackata DNO, Emmie Mbale DHO, Rose Kanyangalazu Safemotherhood, Steven Wandafe SOCO, Prescot Kamtsitei CO,

Thyolo

Catherine Kapepeta ACO, Steady Vinkhumbo CCO, Mary Lukhere DNO, Christina Mslmthi Administrator, Beatrice Mwagomba DHO, Zondire Mwanza Intern DHO, Chanizya Mulambia Intern DHO

Project Manager Appointments

- Dr Paul Downie, Year 1
- 2.2 Achievements in Year 2
- 2.2.1 Capacity building within the Department of Anaesthesia, Queen Elizabeth Medical Centre and the College of Medicine Blantyre to develop leadership in anaesthesia in Malawi.

The Irish Aid commitment envisaged the establishment of a committed Joint Faculty, coordinated by the College of Anaesthetists and the College of Medicine Blantyre for a period of three years. The joint faculty was established in year 1 of the project. In year two 9 members of the joint faculty took part in the programme in Blantyre. Faculty members are listed in appendix 1.

2.2.2 Education and Training Programme

The first set of courses were delivered over the first two weeks of January 2010, the objectives of the course were achieved and the feedback was extremely good.

Faculty

The Faculty comprised of Dr Downie, Drs Blunnie, Dr Ecimovic, from the College of Anaesthetists of Ireland, Drs Mndolo and Singatia (Anaesthesia MMed Students), Mr Goddia, Mr Gawanika, Mr Suya, Mr Phiri, and Mr Chavura— anaesthetic clinical officers from the Malawi School of Anaesthesia. Wyness Gondwe, Kaboni Gondwe from Kamuzu College of nursing. We also invited delegates from the previous courses who were identified as instructor potential, Diverson Mkwapatira, Misozi Phoya, Clement Manda Chiphota, Feliciano Mkomaludzu, Tobias Masina, Richard Chidakwani,

Training Courses

(a) High Dependency Obstetric and Trauma (HOT) Courses

We developed a High Dependency Obstetric and Trauma Course specific for Malawi Clinical Officers using an interactive format and including knowledge refresher, skills training and clinical case management.

We ran 3 HOT courses of 3 -day duration in October 2009 (Appendix 6) and January 2010 (Appendix 7).

A total 78 delegates were trained during the October 2009 and a similar number in January 2010. These comprised 26 from Chiradzulu (a further 6 support staff participated in the major incident drill), 26 from Thyolo, and 26 from Blantyre. Fifteen of the candidates were felt to be of instructor potential by the examiners, these candidates were from nursing, doctor and clinical officer cadres.

The delegates from the Blantyre district were felt to be very strong and this was reflected in the large number of instructor potential candidates – nine. Perhaps more gratifying was the fact that no candidates failed particularly on the Thyolo course as it was felt by the local faculty that the delegates had not been exposed to international courses before. They were considered to be behind by comparison on the first day but with some intensive training they came up to the mark.

(b) College of Medicine Blantyre Undergraduate Medical Programme

The College participated for the third time in the College of Medicine's 2 week Anaesthesia and Critical Care Medicine programme for their 4 th year students.

The training programme took place from 22^{nd} March $2010-1^{st}$ April 2010 in which 41 participants took part. Faculty from the College of Anaesthetists included Dr Jeanne Moriarty, Dr Brian Kinirons and Dr Moyna Bill (Appendix 8) . The Course schedule is available in Appendix 9.

2.2.3 Masters in Medicine (M.Med)

It was envisaged that through partnership and collaboration with the College of Medicine, Blantyre, the project would launch and sustain a **Masters in Medicine (M.Med.)** degree programme for four designated Malawi medical graduates to undertake 4 years postgraduate education and training in Malawi and South Africa to provide leadership for the specialty in Malawi. A curriculum for the Masters in Medicine is now in place (see appendix 3) and four Doctors are enrolled on the M. Med programme.

- > Dr Sampson Mndolo (2009)
- > Dr Singatiya Stella Chikumbanje (2009)
- > Dr Delia Mabede (2010)
- > Dr Owen Melema (2010)

In September 2009 Drs Mnoldo and Chikumbanje took part in the 4th All Africa Anaesthesia Congress in Nairobi. This meeting was also attended by members of the joint faculty where detailed planning sessions took place for the 2009-2010 programme.

In July 2010 Drs Mndolo and Chikumbanje took part in a primary revision course in South Africa (programme attached in appendix 4).

2.2.4 Visiting Professor Programme 2009-2010

> October 2009 Drs. Tom Schnittger and Patricija Ecimovic

> **January 2010** Drs. Billy Blunnie Dr Patricija Ecimovic

> March/April 2010 Dr. Jeanne Moriarty
Dr Brian Kinirons

DrMoyna Bill

➤ May 2010

Prof. Anthony Cunningham Dr Ellen O'Sullivan

2.2.5 Project Manager Appointments

> Dr Tom Schnittger, Consultant Anaesthetist, St james Hospital, Dublin -Year 2

2.2.6 Year 2 Objectives and Outcomes

Objective 1: To enable medical workers in Malawi to respond to obstetrical, trauma and other anaesthesia related emergencies.

Results: A strengthened Department of Anaesthesia in the College of Medicine in Blantyre with six faculty by 2010

Activities:

- Establishment of a committed Faculty coordinated by the College of Anaesthetists and College of Medicine Blantyre (COMB) (complete)
- Development of a joint capacity building programme (ongoing)
- Personnel and material support to the Department of Anaesthesia, College of Medicine in Blantyre. The development of curricula and staff development plans. (complete)

Objective 2: To strengthen anaesthesia training in Malawi towards safer patient care Results: A nationally based standardised Anaesthetic Officer Training Programme in place by 2011

Activities:

- **30** Anaesthetic Officers, 120 Midwives and 50 clinicians in obstetrics and surgery will have been trained per year. (123 clinicians were trained in year 2 of the programme)
- Faculty from the College of Anaesthetists in Ireland will work with faculty from the College of Medicine in Blantyre and academic staff of the Department of Anaesthesia, Kamuzu Central Hospital to further develop the Anaesthetic Officer Training Programme. (complete)
- Development of the detailed design of the curriculum and assessment methods (complete)
- A series of curricular design workshops with inputs from the target groups and stakeholders. (complete)

Objective 3: To develop a Cadre of Medical Educators capable of continuing to develop the education and training of anaesthetists in Malawi

Results:

- (a) Four candidates having completed a Masters in Medical Education by 2012 (four candidates registered on the MMed Programme)
- (b) Masters in Medical Education running at the College of Medicine in Blantyre by 2012 (curriculum developed, M. Med Programme running)

Activities:

- Four candidates selected for the Masters in Medical Education Programme (completed)
- Faculty from the College of Anaesthetists in Ireland will work with faculty from the College of Medicine in Blantyre and academic staff of the Department of Anaesthesia, Kamuzu Central Hospital to further develop the Masters in Medical Education Curriculum (complete)
- Accreditation of the Masters in Medical Education (complete)

Objective 4: To ensure that Medical workers in Malawi can respond to trauma and related emergencies

Result:

- (a) A Trauma Training Programme, based in the Welcome Trust Unit in Queen Elizabeth Medical Centre, Blantyre (complete)
- (b) A monitoring, evaluation and audit system to measure impact of training activity established in Thyolo and Chinadzulu Hospitals (two audits have been undertaken one in year one and one in year 2). Statistics are available in appendix 5.
- © 72 trained resuscitation providers (complete)

Activities: The College of Anaesthetists and the Queen Elizabeth Medical Centre, Blantyre Malawi will collaborate with the District Health Management team towards reducing maternal, perinatal and trauma mortality and morbidity in Thyolo and Chinadzulu Districts by a joint program of educational support for first responder trainers in assessment transport and resuscitation of emergency and trauma patients. (complete)

- 3 Sustainability
- 4 (a) MMed Programmes in Eastern and Central Africa

4TH ALL AFRICA ANAESTHESIA CONGRESS - Nairobi 12th – 16th September 2009

College of Anaesthetists Representatives

- > Prof. Anthony Cunningham, Irish External Director
- Dr Ellen O'Sullivan

Strategy

College of Anaesthetists of Ireland, working in partnership with Queen Elizabeth Medical Centre, College of Medicine Blantyre.

1. M.Med in Anaesthesia Programme – to develop a uniform, structured and accreditation M.Med training programme based in Central and Eastern Africa

Countries involved:

- Zambia
- Uganda
- Kenya
- ➤ Malawi
- > Tanzania
- Zimbabwe

Current Status

- ➤ No critical mass of M.Med candidates
- > No central Examining Board
- > No uniform curriculum
- > No standard assessment
- > No mutual recognition of training and qualifications

Meetings

- > Prof. Michael James, Cape Town, South Africa
- > Dr Arthur Rantalone, Pretoria, South Africa

Proposal

➤ College of Anaesthetists to facilitate the establishment of a single secretariat to promote standard entry, curriculum and assessment criteria.

Organization

> Central and Eastern African College of Anaesthetists (CEACA)

(b) College of Surgeons Central Eastern and Southern Africa (COSESCA)

11th Annual General Meeting/Scientific Congress 1st/3rd December, 2010 Kampala, Uganda

Dr. Fred Mutyaba, President of COSECSA Organiser Dr. Edward Naddumba, Deputy Secretary General COSECSA Prof. Steve Ogendo Dear Dr. Mutyaba/Dr. Ogendo/Dr. Naddumba invited the College to present an outline of its project entitled:

"Education Assistance in the Management of Trauma Related and Obstetric Emergencies in Malawi"

during their Annual Scientific Congress in Kampala 1-3 rd December 2010.

The College of Anaesthetists of Ireland will explore the possibility of collaborating with COSECSA in on-going curriculum and syllabus development and training for non-physician surgical trainee courses in Zambia and Malawi. In addition, the College of Anaesthetists of Ireland, hopes to develop additional MMed programmess to advance education, training, standards, research and practice in anaesthetic care in central and southern Africa.

5 Lesson Learning

A mid term review of the project was carried out from 26th -30th April 2010. The review team included:

- Prof. Anthony Cunningham, Extern Director
- Dr. Orlaith McCaul, CEO/Registrar, College of Anaesthetists of Ireland
- Dr. Ellen O'Sullivan, Chairman, Education Committee, College of Anaesthetists of Ireland

AGENDA

Monday 26 th April 2010

Arrival in Blantyre p.m. via London/Johannesburg/Lilongwe

Meetings with Dr. Gregor Pollach, Chairman, Department of Anaesthesia, Queen Elizabeth Central Hospital and the College of Medicine Blantyre Mr. Cyril Goddia, Director of Anaesthetic Officer Training Programme

Tuesday, 27th April, 2010.

a.m. Meeting in Postgraduate Dean Office – Dr Kamija Phiri, MB, MSC, PhD Meetings – MMed trainees

Dr. Sampson Mndolo Dr. Stella Chikumbanje

p.m. Structured Questionnaire Review / Focus Group - Clinical History presentations in Blantyre

8 High Dependency Obstetric Trauma (HOT) course participants course January 2010.

Wednesday, 28th April, 2010

a.m. Visit Chiradzulu District Hospital

Meeting with District Medical Officer

Structured Questionnaire Review / Focus Group - Clinical History

presentations

5 participants October 2009 HOT course

p.m. Visit to Thyolo District Hospital

Structured Questionnaire Review / Focus Group - Clinical History

presentations

8 participants October 2009 HOT course

Thursday, 29th April, 2010

a.m. Travel Blantyre to Lilongwe

p.m. Meeting with Dr. Vincent O'Neill, Irish Aid Director, Malawi in Irish

Embassy

Dinner Dr. Vincent O'Neill and visiting Trinity College Dublin Public Health

Faculty

Friday, 30th April, 2010

a.m. Meeting Dr. Delia Mabedi - MMed trainee due to commence training 1st July,

2010 in the Queen Elizabeth Central Hospital, Blantyre

p.m. Meeting Dr. George Chithope-Mwale, Director of Clinical Services, Ministry

for Health Lilongwe

Project Review:

(a) Partnership and Collaboration with the College of Medicine, Blantyre to launch and sustain a Master in Medical Education (MMed) (degree programme) for designated Malawi medical graduates.

Progress to date

MMed trainee no. 1 – Dr. Sampson Mndolo - 2006 College of Medicine Malawi graduate and previous District Medical Officer Kasungu District. Commenced anaesthesia training 1st April, 2009.

Interview with Dr. Mndolo included:

- Review of curriculum vitae
- Review of log book and clinical training to date
- Plans for structured modular rotations July 2010

 Review of education programme to date and plan for education activities July 2010 to June 2011

The Faculty reported that Dr. Sampson made steady progress during his first year of training with rotations in general surgery, orthopaedics and obstetrics and gynaecology.

He presented a poster at the Fourth All African Congress of Anaesthesia meeting in Nairobi September 2009. He is due to participate in a Primary Fellowship course undertaken by Prof. James in Cape Town July 2010 and a Difficult Airway Management Workshop in Kampala October 2010.

Dr. Mndolo was successful in completing a competency assessment undertaken by Dr. Paul Downie in January 2010. It is envisaged that he will sit the Primary MMed examination in March 2011

MMed 2nd Trainee Dr. Stella Chikumbanje - 2007 graduate University of Malawi, College of Medicine.

Dr. Chikumbanja was appointed to the MMed training programme 1st July, 2009 following an internship in Kamazulu Central Hospital, Lilongwe.

Her first six months of training included ICU modular experience in Queen Elizabeth Central Hospital. She undertook subsequently three months anaesthesia rotation and was successful in a competency test in March 2010.

The Review Team undertook:

- Review of Dr. Chikumbanje's curriculum vitae
- Review of her clinical log book
- Structured programme organization July 2010 to June 2011
- Review of education programme

Follow-up Activity

Dr. Chikumbanje will enroll in the Primary Fellowship course Cape Town July 2010 and will participate in the Difficult Airway Management Workshop in Kampala, Uganda October 2010.

In addition she will participate in the Masterclass October 2010 programme. It is envisaged that she will sit the Primary MMed examination in March 2011.

She will teach in the Faculty of the Fourth Year Undergraduate programme March 2011 and the October 2010, January 2011 courses.

3rd Trainee Dr. Delia Mabedi

The Project Review Team met with Dr. Mabedi on Friday, 30th April, in Lilongwe. The interview consisted of:

- Review of curriculum vitae
- Review activities District Medical Officer
- Review of structured education programme beginning July 2010

Limitations of Programme:

• Dr. Sampson Mndolo highlighted the limited didactic teaching since Dr. Paul Downie, Project Manager left the programme at the end of January 2010.

Interim Measures:

- Dr. Mndolo will email to Professor Cunningham a "clinical case of the week" relating to his clinical practice.
- A set of learning objectives will be developed and he and Dr. Chikumbanje will
 participate in this electronic tutorial format between May, June 2010 pending the
 arrival of Dr. Tom Schnittger.

Discussions Relating to MMed Programme

Dr. Gregor Pollach, Chairman, Department of Anaesthesia Queen Elizabeth Central Hospital/College of Medicine University of Malawi outlined the teaching and training responsibilities of Dr. Paul Downie, Project Manager and his understanding of Dr. Tom Schnittger's plans for the clinical activities in support of the educational programme and the clinical training of the MMed trainees.

Dr. Pollach highlighted the limitations of the programme relating to consultants/specialists anaesthetists.

He highlighted the appointment of:

- Dr. Ingo Stoehmel (Germany)
- Dr. Gregory Vovohov (Russia)

Dr. Pollach indicated that **Dr. Felix Namboya** will finish anaesthesia training in South Africa in October and that his appointment in Blantyre could facilitate the MMed programme. He suggested that if the College could consider an educational support for the "funding deficit" relating to Dr. Namboya then the Department of Anaesthesia would have the clinical capacity to commence training Dr. Delia Mabedi on 1st July, 2010 and **Dr. Owen Malema** on the 1st October, 2010.

The College very much appreciates the generous input provided by Dr Roy Miller into the MMed Training Programme

Part 2 – Capacity Building within the Department of Anaesthesia Queen Elizabeth Central Hospital Blantyre and training activities in Thyolo and Chiradzulu District Hospital

The Project Team provided a questionnaire for course participants in the Blantyre, Chiradzulu and Thyolo courses provided under the direction of Dr. Paul Downie in October 2009 and January 2010 respectfully. This included:-

- Participant questionnaire
- Focused participant interviews in Blantyre/Chiradzulu and Thyolo.
- Case History reviews

32 participants took part in the questionnaire and focus group discussions: In summary the results were as follows:

Average results for satisfaction with:

Presentation 4.1/5 Content 4.4/5 Relevance5/5 Teaching 4.2/5 Applicability 4.1/5

Improvements in Practice in the following areas reported:

- (1) Airways Management
- (2) Sepsis Management
- (3) Neonatal Recusitation
- (4) Trauma Management
- (5) Emergency Management
- (6) Obstetric Emergencies
- (7) Neonates
- (8) Eclampsia Management
- (9) Placenta Removal
- (10)Haemorrages
- (11)Stabalising PPH
- (12) Dealing with Road Traffic Accidents
- (13)Spinal stabalisation
- (14)Recusitation
- (15)Mass casualty
- (16)Organisational prioritization
- (17)Team work

All participants recorded improvements in their work practice both in obstetrics and trauma. These improvements were presented by way of case studies in the case of each participant.

6 Risk Analysis

There are no new risks identified beyond those originally stated in the logical framework of the CSF application.

Name of the Organisation: College of Anaesthetists of Ireland

Irish Aid CSF Contract Number

Period Covered by this report First Year August 2008 to August 2009

Incoming Resources	Year 1: €	Year 2: €	Year 3: €
Grant Funding received from CSF-Irish Aid	€110,340.00	€117,140.00	€195,140.00

Other Funding

Own Resources	€92,300.00	€88,000.00	€88,000.00
Other Sources			
Total Funding Other Sources	€92,300.00	€88,000.00	€88,000.00

Total Incoming Resources €202,640.00 €205,140.00 €283,140.00

Description	Budget	Budget	Total	Expenditure
	Irish Aid	College		Todate
In Country Transport	€4,000.00	€0.00	€4,000.00	€4,000.00
Running Costs	€3,000.00	€0.00	€3,000.00	€3,000.00
Establishment Costs	€900.00	€300.00	€1,200.00	€1,200.00
Equipment	€1,875.00	€625.00	€2,500.00	€2,500.00
International Faculty Travel	€8,000.00	€12,000.00	€12,000.00 €20,000.00	
Faculty Fees	€0.00	€20,000.00 €20,000.00		€20,000.00
Faculty accommodation & Subsistence	€6,440.00	€0.00	€0.00 €6,440.00	
Course Participants Travel	€6,000.00	€0.00	€6,000.00	€6,000.00
Course Participants Allowance	€2,000.00	€0.00	€2,000.00	€2,000.00
Local Faculty Travel, subsistence & allowance	€2,000.00	€0.00	€2,000.00	€2,000.00
Visiting Professor Travel	€4,000.00	€6,000.00	€10,000.00	€4,501.31
Visiting Professor Accommodation &				
Subsistence	€2,000.00	€0.00	€2,000.00	€1,489.61
Visiting Professor Fees	€0.00	€20,000.00	€20,000.00	€20,000.00

Development support conege of Medicine $ $	Development support College of Medicine	€3,000.00	€0.00	€3,000.00	€3,000.00
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Resources Expended €

Development support Department of				
Anaesthesia	€3,000.00	€0.00	€3,000.00	€3,000.00
Salary supplement Anaesthesia MMEd				
Candidates	€24,000.00	€0.00	€24,000.00	€12,000.00
Staff Costs Project Manager	€50,000.00	€0.00	€50,000.00	€0.00
Programme quality costs	€5,000.00	€0.00	€5,000.00	€5,000.00
Research & Documentation	€1,000.00	€0.00	€1,000.00	€1,000.00
Monitoring & Evaluation	€8,000.00	€0.00	€8,000.00	€3,063.43
Administration	€12,000.00	€0.00	€12,000.00	€12,000.00
Totals:	€146,215.00	€58,925.00	€205,140.00	€132,674.91

	Prior						
	year	Expenditure	Total	Expenditure	Total	Variance	%
	Total	(insert					
	Ехр	year)	Expenditure	charged to	Budget		Variation
Budget Item/Area (as							
approved by Irish Aid				Irish Aid			
In Country Transport	0	2009/2010	4,000.00	4,000.00	4,000.00	0.00	0
Running Costs	0	2009/2010	3,000.00	3,000.00	3,000.00	0.00	0
Establishment Costs	0	2009/2010	1,200.00	1200.00	1,200.00	0.00	0
Equipment	0	2009	2,500.00	2500.00	2,500.00	0.00	0
International Faculty							
Travel	0	2009/2010	20,000.00	8,000.00	20,000.00	0.00	0
Faculty Fees	0	2009/2010	20,000.00	0.00	20,000.00	0.00	0
Faculty Accommodation &							
Subsistence	0	2009/2010	6,440.00	6,440.00	6,440.00	0.00	0
Course Participants Travel	0	2009/2010	6,000.00	6,000.00	6,000.00	0.00	0
Course Participants							
Allowance	0	2009/2010	2,000.00	2,000.00	2,000.00	0.00	0
Local Faculty Travel	0	2009/2010	2,000.00	2,000.00	2,000.00	0.00	0
Visiting Professor Travel	0	2009/2010	10,000.00	4,000.00	10,000.00	0.00	0
Visiting Professor Accom.							
& Subsistence	0	2009/2010	2,000.00	2,000.00	2,000.00	0.00	0
Visiting Prof Fees	0	2010	20,000.00	0.00	20,000.00	0.00	0
Dev. Support College of							
Medicine	0	2010	3,000.00	3,000.00	3,000.00	0.00	0
Dev Support Department							
of Anaesthesia	0	2010	3,000.00	3,000.00	3,000.00	0.00	0
Salary supplement							
anaesthesia MMEd	0	2010	12,000.00	24,000.00	24,000.00	12,000.00	75 ¹
Staff Costs Project							
Manager	0	2009/2010	50,000.00	20,000.00	50,000.00	0	0
Organization Development	0	2010	5,000.00	5,000.00	5,000.00	0.00	0
Research	0	2010	1,000.00	1,000.00	1,000.00		0
Monitoring & Evaluation	0	2010	8,000.00	8,000.00	8000.00	0	
Administrating College of							
Anaesthetists	0	2010	12,000.00	12,000.00	12,000.00	0.00	0
	0						
TOTAL	0		193,140.00	117,140.00	205,140.00	12,000.00	

Year 1

It was anticipated that in year 1, four M Med students would be recruited. At interview four were deemed suitable however the department wished to take them on in a staggered matter so as not to affect service. Candidate 1 started in April 09, candidate 2 in July 09. Two additional candidates will join the course before the end of the year.

2 Dr Paul Downie, Consultant Anaesthetist was appointed to the Project Manager Post. He agreed to an annual salary of €35,000.00.

JOINT IRISH AID/COLLEGE OF ANAESTHETISTS EDUCATION PROGRAMME IN MALAWI

MID-TERM PROJECT REVIEW

PARTICIPANTS' QUESTIONNAIRE

1, DEMOGRAPH	IC DATA	
NAME:		
AGE:YEA	RS	
LOCATION:	BLANTYRE THYOLO CHINADZULU	↑ ↑
CADRE:	REGISTRAR INTERN ANAESTHETIC OFFICER MIDWIFE ICU NURSE	† † † †
COURSE ATTENDED	YEAR	
PREVIOUS COURSES	YES ↑ NO ↑	
IF YES,	YEAR:	
DETAILS:		
WORK DETAILS:	GENERAL SURGERY ↑ INTENSIVE CARE ↑ OBSTETRICS ↑ TRAUMA ↑	

2. EVALUATION OF COURSE

YOUR RATING OF COURSE CONTENT

	 5 Excellent 4 Good 3 Satisfactory 2 Fair 1 Poor 	
A.	Presentation of course material	
В.	Educational value of course content	
C.	Relevance to your daily work	
D.	Quality of teaching and instruction	
E.	Scope and applicability of practical teaching	
WERE Y	OU INVITED TO BECOME AN INSTRUCTOR Yes ↑ No ↑	
3.	IMPACT ON YOUR PROFESSIONAL DEVELOPMENT	
A.	DID THE COURSE HAVE AN EFFECT ON YOUR WORK PRACTICE Yes ↑ No ↑	
F YES, I	PLEASE GIVE DETAILS:	
		-
В.	DID THE COURSE HELP YOU MANAGE OBSTETRIC PATIENTS?	-
	Yes † No †	
F YES, I	PLEASE GIVE DETAILS:	
		-
C.	DID THE COURSE HELP YOU MANAGE TRAUMA PATIENTS?	-

Yes ↑ No ↑	
IF YES, PLEASE GIVE DETAILS:	
D. DID ANY ASPECT OF THE COURSE IMPROVE PATIENT OUTCOM	E?
Yes ↑ No ↑	
IF YES, PLEASE GIVE DETAILS:	

AGENDA

Monday 26 th April 2010

Arrival in Blantyre p.m. via London/Johannesburg/Lilongwe

Meetings with Dr. Gregor Pollach, Chairman, Department of Anaesthesia, Queen Elizabeth Central Hospital and the College of Medicine Blantyre Mr. Cyril Goddia, Director of Anaesthetic Officer Training Programme

Tuesday, 27th April, 2010.

a.m. Meeting in Postgraduate Dean Office – Dr Kamija Phiri, MB, MSC, PhD

Meetings – MMed trainees Dr. Sampson Mndolo Dr. Stella Chikumbanje

p.m. Structured Questionnaire Review / Focus Group - Clinical History

presentations in Blantyre

8 High Dependency Obstetric Trauma (HOT) course participants course

January 2010.

Wednesday, 28th April, 2010

a.m. Visit Chiradzulu District Hospital

Meeting with District Medical Officer

Structured Questionnaire Review / Focus Group - Clinical History

presentations

5 participants October 2009 HOT course

p.m. Visit to Thyolo District Hospital

Structured Questionnaire Review / Focus Group - Clinical History

presentations

8 participants October 2009 HOT course

Thursday, 29th April, 2010

a.m. Travel Blantyre to Lilongwe

p.m. Meeting with Dr. Vincent O'Neill, Irish Aid Director, Malawi in Irish

Embassy

Dinner Dr. Vincent O'Neill and visiting Trinity College Dublin Public

Health Faculty

Friday, 30th April, 2010

a.m. Meeting Dr. Delia Mabedi - MMed trainee due to commence training 1st

July, 2010 in the Queen Elizabeth Central Hospital, Blantyre

p.m. Meeting Dr. George Chithope-Mwale, Director of Clinical Services,

Ministry for Health Lilongwe

ProfessorCunningham
ExternalExaminer
College
Dublin
Tuesday, 16 February 2010

Anaesthetists

Dear Anthony,

RE: HOT Courses 4th -15th January 2010

I am glad to inform you that the courses were delivered over the first two weeks of January and all our objectives were achieved and feedback was extremely good.

of

The faculty comprised of Dr Downie, Drs Blunnie, Dr Ecimovic, from the College of Anaesthetists of Ireland, Drs Mndolo and Singatia (Anaesthesia MMed Students), Mr Goddia, Mr Gawanika, Mr Suya, Mr Phiri, and Mr Chavura— anaesthetic clinical officers from the Malawi School of Anaesthesia. Wyness Gondwe, Kaboni Gondwe from Kamuzu College of nursing. We also invited delegates from the previous courses who were identified as instructor potential, Diverson Mkwapatira, Misozi Phoya, Clement Manda Chiphota, Feliciano Mkomaludzu, Tobias Masina, Richard Chidakwani,

We repeated the major incident drill this time at Chiradzulu and we also commissioned their new HDU by using it as part of the major incident drill.

We ran the 3 day course three times at the College of Medicine. In total 78 delegates were trained. 26 from Chiradzulu (a further 6 support staff participated in the major incident drill), 26 from Thyolo, and 26 from Blantyre.

Fifteen of the candidates were felt to be of instructor potential by the examiners, these candidates were from nursing, doctor and clinical officer cadres. The delegates from the Blantyre district were felt to be very strong and this was reflected in the large number of instructor potential candidates — nine. Perhaps more gratifying was the fact that no candidates failed particularly on the Thyolo course as it was felt by the local faculty that the delegates had not been exposed to international courses before. They were obviously way behind on the first day but with some intensive training they came up to the mark.

The next course will be 22^{nd} March to 1^{st} April 2010. This will be an Introduction to Anaesthesia course for the undergraduate medical students.

I hope this fits with your over arching strategy on maternal and reproductive health.

Best wishes,

6

Paul Downie Project Manger

HOT 2010

BLANTYRE DELEGATES

Date.....

Appendix 4 DELEGATE	GROUP	NAME	CADRE	CELL	MCQ	MOULAGE
*1	Α	Stanley Daudi	ACO		<mark>46</mark>	<mark>19</mark>
2	Α		СО			
3*	Α	Alinafe Nyambi	СО		<mark>43</mark>	17
4	Α	Grace Kamenya	MA		38	16
5	Α	Prisca Chipao	NM		<mark>40</mark>	16
6	А	Ruth Macheka	NMT		33	16
7	А		Nurse			
8*	В	Bernard Thondoya	ACO		<mark>42</mark>	17
9	В	Caster Bondo	СО		36	17
10*	В	Eddie Manda	MA		<mark>40</mark>	18
11	В	Ezelia Munyenyembe	MA		36	18
12*	В	Vera Betha Nyirenda	NM		<mark>44</mark>	18
13	В	Sainab Banda	NMT		37	18
14	В	Chrissy Pindani	Nurse		<mark>44</mark>	14
15	С	Lockie Chanyuka	ACO		33	14
16	С	Medson Boti	СО		<mark>40</mark>	14
17	С	Catherine Chibwana	MA		33	14
18	С	Suzgo Saka	NM		38	18
19	С	Louis Jailosi	NMT		33	18
20	С	Stevelia Maulana	Nurse		35	15
21	С	Ronald Nachipo Mlera	RN		<mark>43</mark>	15
22*	С	Fanny Nhlane	RNM		<mark>43</mark>	18
23	D		ACO			
24	D	Yusuf Bhamu	СО		39	18
25	D	Agnes Phokeya	MA		38	17
26*	D	Olive Kadawati	NM		<mark>43</mark>	<mark>17</mark>
27*	D	Chikondi Macheso	NMT		<mark>43</mark>	19
28	D	Rhobina Shema	Nurse		38	19
29*	D	Wezzie Mwafulirwa	RNM		<mark>41</mark>	<mark>19</mark>

CHIRADZULU DELEGATES

Date.....

DELEGATE NUMBER	GROUP	NAME	CADRE	Sex	CELL NO	MCQ	MOULAGE
1	Α	Felix Mbalale	СО	М		39	16
2	Α	Zindawa Chipofya	MA	F		37	16
3*	Α	Ausborne Kasengere	MA	М		40	17
4*	Α	Syndie Kalya	Nurse	F		42	17
5	Α	Mtisunge Banda	Nurse	F		39	17
6	Α	Flossie	Nurse	F		37	17
7	Α	Steven Wandale	осо	М		33	18
8	В	Winnie Joloza	MA	F		36	18
9**	В	Racheal Kanjere	СО	F		46	17
10	В	Chikondi Kaminga	MA	М		39	17
11	В	Haxon Jere	Nurse	М		41	15
12	В	Guta Epulo	Nurse	М		36	15
13	В	Justice Mapondo	Nurse	М		32	15
15	С	Anthony Chipanda	СО	М		38	13
16	С	Masautso Makiyoni	MA	М		39	13
17	С	Joyce Chimtengo	Nurse	F		39	18
18	С	Ellina Kaliwa	Nurse	F		39	18
19*	С	Fanny Chewale	Nurse	F		40	17
20	С	Mercy Nandolo	Nurse	F		32	17
21	D	Peter Mihowa	СО	М		40	14
22	D	McDonald Kunjirima	MA	М		41	14
23	D	Thoko Upindi Kulale	Nurse	F		39	14
24	D	Esther Kamanga	Nurse	F		34	14
25	D	Samuel Fombe	nurse	М		38	16
26	D	Ellen Musa	Nurse	F		37	16

THYOLO DELEGATES

Date 5th Jan 2010

DELE GATE	GRO	NAME	CADRE	Sex	CELL NO	мсо	MOU
NUM BER	UP	NAME	CADILE		CLLLINO	IVICQ	LAGE
1	Α	Mickson Kambalanje	clinical officer	male		43	15
			medical	femal		33	14
2	Α	Aisha Selemani	assistant	е			
				femal		34	15
3	Α	Ruth Makhambera	nurse midwife	е			
				femal		36	14
4	Α	Joyce Milandu	nurse midwife	е			
			medical			37	17
5	Α	Kumbukani Masonga	assistant	male			
6	Α	Wales Mvona	clinical officer	male		41	13
				femal		41	17
7*	Α	Omega Saizi	nurse midwife	е			
				femal		42	13
8	В	Anne Zimpita	nurse midwife	е			
9	В	Andrew Chamdula	clinical officer	male		38	<mark>20</mark>
			medical			35	15
10	В	Brown Chiwandira	assistant	male			
				femal		36	<mark>20</mark>
11	В	Getrude Siyani	nurse midwife	е			
				femal		34	15
13	В	Elizabeth Mwangala	nurse midwife	е			
			medical			37	13
14	В	Innocent Thadzi	assistant	male			
				femal		33	13
16	С	Delia Kenala	nurse midwife	е			
17	С	Victor Ngwalangwa	clinical officer	male		41	14
18*				femal		44	17
	С	Debra Chita	clinical officer	е			
19	С	Lembani Undi	nurse midwife	male		35	16
				femal		38	16
20	С	Evelyn Pasulani	nurse midwife	е			
21	С	Rosalia Dambe	nurse midwife	femal		<mark>41</mark>	14

				е		
			medical		44	20
22*	D	Mtabeni Jemu	doctor	male		
23	D	Kelvin Jobo	clinical officer	male	35	16
				femal	35	14
24	D	Memory Mbotwa	nurse midwife	е		
				femal	31	14
25	D	Jane Mkulichi	nurse midwife	е		
				femal	34	19
26	D	Loveness Mackie	nurse midwife	е		
27	D	Justice Mtayisi	clinical officer	male	38	<mark>19</mark>



1. Audit data – Thyolo Hospital 2006-2008 (enclosed)

	2008		2007		2006	
	District TOTAL	Hospital	District TOTAL	Hospital	District TOTAL	Hospital
Deliveries by trained staff		4417		3154		2502
C Section		509		446		357
Live Births		4233		2998		2340
Maternal Deaths (dir&indir)		20		14		15
Neonatal Death		129		123		88
Fresh Still Birth		64		89		71

2. Audit data – Chiradzulu Hospital – 2006-2008 (enclosed)

	2008		2007		2006	
	District TOTAL	Hospital	District TOTAL	Hospital	District TOTAL	Hospital
Deliveries by trained staff	8,906	2369	8338	2333	6491	2034
Obst Comp at OCF	894	582	830	466	695	349
C Section	835	508	683	2365	458	295
Live Births	8767	2360	8,167	2206	6640	1928
Maternal Deaths	9	8	15	13	24	21
Newborn Complications	142	51	150	105	87	45
Traffic accidents	580		554		536	
Traffic inp Death	7	1	0	2	3	2

2009-2010 Training Programmes

Visiting Professors – October 2009:

- > Dr Tom Schnittger
- > Dr Patricija Ecimovic

October 2009 Programme

- ➤ Chinadzulu -14-16 October 2009. 3 -day obstetrics course 26 trainees 13 Health Centres / 13 anaesthetic clinical officers (ACOs), midwives and nurses
- ➤ **Thyolo 18-20 October 2009** 3-day trauma course major incident triage 16 Health Centres / 16 District Medical Officers, ACO's and nurses
- Blantyre 21-23 October 2009 3 -day HDU course/ simulation/ Problem-based Learning Maternal and Trauma Care Advanced Life Support and Obstetrics (ALSO) 24 ACO's, ICU nurses and midwives

Visiting Professors – January 2010:

- > Dr William Blunnie
- > Dr Kevin Carson

January 2010 Programme

- ➤ Chinadzulu 3 -day obstetrics course 26 trainees 13 Health Centres / 13 anaesthetic clinical officers (ACOs), midwives and nurses
- ➤ **Thyolo** 3-day trauma course major incident triage 16 Health Centres / 16 District Medical Officers, ACO's and nurses
- ▶ Blantyre 3 -day HDU course/ simulation/ Problem-based Learning - Maternal and Trauma Care Advanced Life Support and Obstetrics (ALSO) 24

Visiting Professors – March – April 2010:

- > Dr Jeanne Moriarty
- > Dr Brian Kinirons
- > Dr Moyna Bill

Preparation for 4th year teaching - Undergraduate Medical School programme March 2010

2. Programme Managers

Dr Paul Downie July 2009/ June 2010 Dr Tom Schnittger July 2010/ June 2011

Anthony J Cunningham
IRISH EXTERNAL DIRECTOR

londay 26 th			Tuesday 27 th	Wednesday 28 th	Thursday 29 th	Friday 30 th	
	08:00) –	Principles of pharmacology	Serotonergic receptors	Local anaesthetic agents	Statistics	
	08:45		Dr Ivan Joubert	Dr Rose Mulder	Dr Natasha Dulin	Prof Mi Dr Sylvia He	
	08:45	ı	Volatile pharmacology	Phospho-diesterase inhibitors	Pharmacogenetics	Statistics	
	09:30		Dr Jorge Cardoso	Dr Revyl Haylett	Dr Dominique van Dyk	Prof Mi Dr Sylvia He	
	00.20		Reflexes	GIT drugs	Respiratory physiology	Elementary mathematic	
C I STRATION	09:30 10:15	-	Dr Jenna piercy	Dr Owen Porrill	Dr Richard von Rahden	Dr Sylvia He	
EGISTRATION	40.45		_				
2:15 - Welcome oagulation physiology	10:15		TEA & TRADE			I	
rof Mike James	11:00	_	Transducers and damping	Maternal physiology	Exercise physiology	Display of potentials	
.,	11:45		Dr Cornel van West	Prof Rob Dyer	Dr Ricky Raine	Dr Dirk van	
hysics of temperature			Di comervan west			DI DIIK VUII	
nonitoring Ir Ivan Joubert	11:45		Defibrillators and pacemakers	Oxytocic drugs	Cardiovascular physiology	Physiology conduction	
EA	12:30	_	Dr Martin Nejthardt	Prof Rob Dyer	Dr Richard von Rahden	contraction Dr Rebecca	
NS physiology							
r Ant Reed	12:30	_	LUNCH			T	
	13:30	-	Pain physiology	Low-flow anaesthesia	HIV drugs	Inflamatory	
NS pharmacology	14:15		Prof Jenny Thomas	Dr Graeme Wilson	Dr Jenna Piercy	Dr Debbie R	
r Gareth Davies	14:15	_	Chronic pain pharmacology	Filters and breathing systems	Electricity	Physiology circulation	
Mechanisms of action fanaesthetics	15:00		Dr Janieke van Nugteren	Dr Rob Nieuwveld	Dr Ivan Joubert	Dr Malcolm	
r Ant reed	15:00	_	Opioids	The anaesthesia machine	Principles of doppler and ultrasound	Catecholam	
OCKTAIL PARTY	15:45		Dr Richard von Rahden	Prof Pete Gordon	Dr Kotie Bester	Dr Richard v 15 :45 - Clos	