



Irish Aid

Department of Foreign Affairs
An Roinn Gnóthaí Eachtracha

**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 2008 - June 2009

**Anthony J Cunningham
IRISH EXTERNAL DIRECTOR
July 14th 2009**

2. 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:

1. 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 Wellcome 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

3. Progress

3.1 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.

3.2 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 and Ms Mary Donoghue of the Rose Project. 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.

3.3 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 funding proposal features four components:

3.3.1 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, co-ordinated by the College of Anaesthetists and the College of Medicine Blantyre for a period of three years.

Activities

(a) Establishment of Joint College of Anaesthetists Ireland and College of Medicine Blantyre Faculty.

Output: A strengthened department of Anaesthesia in the College of Medicine in Blantyre

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

College of Anaesthetists:	College of Medicine Blantyre
<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Dr Gregor Pollach• Dr Paul Downie• Mr Cyril Goddia• Dr Amaia Laranana• Dr Baumaester

3.3.2 Education and Training Programme

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.

Saturday 17th – Sunday 18th January 2009

Curriculum and Assessment Workshop; Queen Elizabeth Central Hospital, Blantyre

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 Instruction
- 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 Officer Trainers included	Malawi Anaesthetic Clinical Officer Participants included
<ul style="list-style-type: none"> ➤ Dr. Eugene Egan (Cyprus) ➤ Dr. Paul Fenton (France) ➤ Prof. Michael James (South Africa) ➤ Dr Jeanne Moriarty (Ireland) ➤ Dr Kevin Carson (Ireland) ➤ Dr Ellen O' Sullivan (Ireland) ➤ Prof Anthony Cunningham (Ireland) 	<ul style="list-style-type: none"> ➤ John Gawanika ➤ Kenneth Kapatuka ➤ William Banda ➤ Zenus Ulaya 	<ul style="list-style-type: none"> ➤ Paul Phiri ➤ Charles Suya ➤ Willasa Bitoni ➤ Maxwell Mzumara ➤ Francis Mason

Monday 19th January 2009 – Wednesday 21st January 2009

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

Objectives

To organize and develop a training programme in obstetrical anaesthesia, neonatal resuscitation and care of trauma victim to reduce the maternal mortality rate and perioperative mortality rates in Malawi.

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.

3.3.3 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. 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

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.

Visiting Professor Programme was established and the following faculty will provide teaching:

- | | |
|---------------------------|---|
| ➤ September 2009 | Drs. Tom Schnittger and
Patricija Ecimovic |
| ➤ January 2010 | Drs. Billie Blunnie and Kevin Carson |
| ➤ March/April 2010 | Drs. Jeanne Moriarty, Brian Kinirons and
Ellie O’Leary |

3.3.4 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 proposal 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 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 in May 09. Both hospitals were deemed suitable venues to run training programmes. Meetings were held with the district health officer 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 with participants in programme included:

Chiradzulu

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

Thyolo

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

3.3.5 Project Manager Appointments

- **Dr Paul Downie, Year 1**
- **Dr Tom Schnittger, Year 2**

3.3.6 Year 1 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 faculties 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 - complete
- 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:

- 24 Anaesthetic Officers Midwives clinicians in obstetrics and surgery trained in year 1.
- Faculty from the College of Anaesthetists in Ireland have worked 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.
- Development of the detailed design of the curriculum and assessment methods - completed
- A series of curricular design workshops with inputs from the target groups and stakeholders. Year one workshop 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

(b) Masters in Medical Education running at the College of Medicine in Blantyre by 2012

Activities:

- *Four candidates selected for the Masters in Medical Education Programme – four have been selected. Two have begun training on the programme. It was felt that the department did not feel comfortable to take four new MMed Candidates on at the same time as it would affect patient care. It was agreed that the trainees would be taken on in the following sequence April 09 (1) July 09 (2) September 09 (3) January 10 (4).*
- Faculty from the College of Anaesthetists in Ireland have worked 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
- Accreditation of the Masters in Medical Education – this has been agreed with the College of Anaesthetists.

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 – in place

(b) A monitoring, evaluation and audit system to measure impact of training activity established in Thyolo and Chinadzulu Hospitals - underway

© 72 trained resuscitation providers – 24 trained in year 1

Activities: The College of Anaesthetists and the Queen Elizabeth Medical Centre, Blantyre Malawi have collaborated 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.

4 Sustainability

Our programme is primarily aimed at strengthening the department of Anaesthesia in the College of Medicine in Blantyre so that it can attract high quality medical graduates into anaesthesia. It is aimed at strengthening local faculty to implement anaesthesia training into the future. The purpose of the project is to develop local capacity for education, training and the development of standards in anaesthesia and critical care that will continue to exist beyond the life of this project.

5 Lesson Learning

We have been requested by Dr Vincent O'Neill to provide advice to our consultant Colleagues who are establishing a training programme in Malawi as to our lessons learnt to date. This advice will be based on the following important learning

- (1) It is essential to work with a well established local organisation
- (2) It is essential to put significant effort into developing and agreeing a Memorandum of Understanding with the partner which clearly outlines responsibilities and expectations of each partner
- (3) The role of a project manager is important in this type of project
- (4) The support of key personnel in the Ministry of Health for the project has been fundamental to having MMed students released from the district hospitals to the College of Medicine
- (5) The organisation and logistical skills of the lead clinical officer have been central to the success of the training programme

6 Risk Analysis

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

Resources Expended €							
	Prior year	Expenditure	Total	Expenditure	Total	Variance	%
	Total Exp	(insert year)	Expenditure	charged to	Budget		Variation
Budget Item/Area (as approved by Irish Aid)				Irish Aid			
In Country Transport	0	2008/2009	4,000.00	4,000.00	4,000.00	0.00	0
Running Costs	0	2008/2009	3,000.00	3,000.00	3,000.00	0.00	0
Establishment Costs	0	2008/2009	3,900.00	2,925.00	3,900.00	0.00	0
Equipment	0	2009	5,300.00	3,975.00	5,300.00	0.00	0
International Faculty Travel	0	2008/2009	20,193.45	8,000.00	20,000.00	-193.45	1
Faculty Fees	0	2008/2009	20,000.00	0.00	20,000.00	0.00	0
Faculty Accommodation & Subsistence	0	2008/2009	6,426.81	6,440.00	6,440.00	13.19	0.2
Course Participants Travel	0	2009	6,000.00	6,000.00	6,000.00	0.00	0
Course Participants Allowance	0	2009	2,000.00	2,000.00	2,000.00	0.00	0
Local Faculty Travel	0	2008/2009	2,000.00	2,000.00	2,000.00	0.00	0
Visiting Professor Travel	0	2008/2009	10,000.00	4,000.00	10,000.00	0.00	0
Visiting Professor Accom. & Subsistence	0	2008/2009	2,000.00	2,000.00	2,000.00	0.00	0
Visiting Prof Fees	0	2009	20,000.00	0.00	20,000.00	0.00	0
Dev. Support College of Medicine	0	2009	3,000.00	3,000.00	3,000.00	0.00	0
Dev Support Department of Anaesthesia	0	2009	3,000.00	3,000.00	3,000.00	0.00	0
Salary supplement anaesthesia MMed	0	2009	6,000.00	6,000.00	24,000.00	18,000.00	75 ¹
Staff Costs Project Manager	0	2009	35,000.00	20,000.00	50,000.00	15,000.00	30 ²
Organization Development	0	2009	5,000.00	5,000.00	5,000.00	0.00	0
Research	0	2009	1,000.00	1,000.00	1,000.00		0
Administrating College of Anaesthetists	0	2009	12,000.00	12,000.00	12,000.00	0.00	0
	0						
TOTAL	0		169,820.26	94,340.00	202,640.00	32,819.74	16.20

¹ **O McCall:**

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

² **O McCall:**

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