

The Emergency Medicine program in PNG

Annual Report 2006

Chris Curry
December 2006

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Chris Curry
chris@chriscurry.com.au
Visiting Professor, University of PNG
Emergency Physician, Fremantle Hospital, Western Australia
Clinical Associate Professor, University of Western Australia
Tel 61 8 9384 7661, 61 8 9431 3750
Mobile 0416 369 975

1. Summary

2006 was the fifth year of the emergency medicine project in PNG. Major outcomes included the following:

- Twenty six visits were made by 17 contributors. These included 15 emergency physicians, two ACEM trainees and an emergency nurse.
- Fourteen Primary Trauma Care (PTC) courses were conducted in 8 locations. Courses were presented for the first time in Alotau and Wewak.
- Four PNG Emergency Medicine (EM) trainees and one trainee from the Solomon Islands completed the Primary Trauma Care (PTC) Instructors Course.
- Four Snakebite Management courses were conducted, one in Madang and three in Port Moresby.
- A Diploma of Emergency Medicine for postgraduate nurses and health extension officers (HEOs) was launched at Divine Word University in Madang.
- Emergency Medicine was a theme for the Annual Medical Symposium of the PNG Medical Society. Six invited speakers from Australia presented on various aspects of EM development. Four EM trainees presented free papers and were awarded three of the four prizes.
- The first Part 2 Examinations for Master of Medicine, Emergency Medicine (MMed EM) were conducted. Yongoe Kambue passed with a high credit and is the first graduate of the PNG EM program.
- There was one pass of the Part 1 Examinations. One trainee was awarded the Diploma of Child Health, and three were awarded the Diploma of Anaesthesia.
- In 2007 there will be fifteen MMed EM trainees, including two in the Solomon Islands.
- Securing funding for continuity is an ongoing endeavour.
- The progress of the EM project has been the result of substantial input from a large number of people. The program continues to gain momentum. We look forward to the development of internal sustainability over the coming five years.

2. Visits

February	5-18 Feb	David Symmons	POM, Mt Hagen, Goroka
March	26 Feb – 25 Mar	Chris Curry	POM, Rabaul, Wewak, Madang
	11-21 Mar	Chris Hall	Madang
April	26 Mar – 14 April	Marian Lee	POM, Alotau
	27 Mar – 1 May	Brady Tassicker	Madang, Karkar
May	29 April – 28 May	Fay Ferguson	Madang
June	6 – 25 June	Sandra Rennie	Madang
	13 - 30 June	Chris Kruk	Madang
	25 - 29 June	Chris Curry	POM
	9-23 July	Paul Hui	POM
July	20-26 July	Gerard O'Reilly	POM
	24 July – 12 August	Stephen Grainger	POM, Rabaul
	15 Aug – 18 Sept	Simon Jensen	POM, Goroka, Alotau, Madang
	27 Aug – 15 Sept	Chris Curry	POM, Madang, POM
August	28 Aug – 13 Sept	Sandra Rennie	Madang
	2 – 6 Sept	Sally McCarthy	Madang
	1 – 10 Sept	Georgina Phillips	Madang
	2 - 12 Sept	John Kennedy	Madang, Mt Hagen
September	2 – 17 Sept	Paul Spillane	Madang, Kimbe
	2 – 18 Oct	Antony Chenhall	POM, Kutubu
	9 – 20 Oct	David Symmons	POM, Mt Hagen
	29 Oct – 3 Nov	Chris Curry	POM
	30 Oct – 8 Nov	Andrew Dent	POM, Kutubu
November	10 Nov – 3 Dec	Sandra Rennie	Madang, Wewak
	12 Oct – 6 Dec	Paul Hui	Madang, Wewak, POM

3. Primary Trauma Care courses

February	Mt Hagen	David Symmons, Sonny Kibob
	Goroka	David Symmons, Nick Dala, Daryl Robert
March	POM	Chris Curry, Sam Yockopua, Alfred Raka, Moses Lester, Wala Marjen, Desmond Aisi, John Tsieperau, Taita Kila
	Rabaul	Chris Curry, Julius Plinduo
April	Alotau	Marian Lee, Lucas Samof
June	Madang	Noel Yaubihi DMS, W. Seta Surgeon
	POM	Sandra Rennie, Chris Kruk, Vincent Atua
August	Rabaul	Chris Curry, Yongoe Kambue et al.
	Goroka	Stephen Grainger, Julius Plinduo
	Alotau	Simon Jensen, Yongoe Kambue
September	Kimbe	Simon Jensen, Lucas Samof
October	Mt Hagen	Paul Spillane, Moi Seneca
November	Madang	David Symmons, Sonny Kibob
	Wewak	Sandra Rennie, Paul Hui, Vincent Atua
		Sandra Rennie, Paul Hui, Charlie Turharus, Sr Jo

4. Snakebite Management and other courses

Snakebite Management Courses	David Williams, Simon Jensen, Ken Winkel, Chris Barnes,
Madang, x1 Aug 30–Sept 1	Vincent Atua, Gerthruide Didei,
POM, x3 Sept 11-14	Isi Kevau, John Vince, Harry Aigeeleng
Primary Trauma Care Instructors Course	Yongoe Kambue, Vincent Atua, Kenton Sade,
Melbourne May 5	Sam Yockopua, Marcella Seve,
	Antony Chenhall, Georgina Phillips

EMST course	POM	July 20-22	Gerard O'Reilly
CCrISP course	POM	July 24-26	Gerard O'Reilly

5. Diploma of Emergency Medicine

This course was launched in June 2006 by the Faculties of Health Sciences and Flexible Learning at Divine Word University in Madang. It is intended for postgraduate nurses and health extension officers (HEOs). The leader for the Dip EM is Sandra Rennie, senior registrar in EM at Fremantle Hospital WA. She has been supported by Brady Tassicker, Chris Kruk, Paul Hui and Kuria Nemba. See the attached Reports, Appendices 4,5

Diploma of EM	Madang	June 13-17	Sandra Rennie, Chris Kruk, Vincent Atua Sandra Rennie, Paul Hui, Kuria Nemba, Vincent Atua
	Madang	Nov 20-24	

6. Medical Symposium

42nd PNG Annual Medical Symposium
 Themes: Trauma, Emergency Medicine, Occupational Health and Rehabilitation
 Divine Word University, Madang
 3-8 September 2006

Presentations relating to Emergency Medicine.

Guest speakers

Chris Curry. Leader EM program in PNG.

The emergency medicine program in PNG – capacity building for general acute care

Sally McCarthy. Vice President ACEM.

Emergency Medicine, present and future: the ACEM perspective

Ken Winkel. President Australasian College of Tropical Medicine.

Tropical Medicine, dying art or dynamic science?

John Graham. Director EMST in PNG.

Education in Trauma Care in PNG

Trevor Duke. Director International Child Health, University of Melbourne.

Emergency Medicine, a quality of care and public health perspective.

Russel Stitz. President Royal Australasian College of Surgeons.

RACS involvement in medical aid to PNG

Free Papers by EM trainees.

John Tsiperau

Non-accidental injuries presenting to the Emergency Department at PMGH.

Yongoe Kambue

Emergency Department casemix in a regional referral hospital, Angau.

Vincent Atua

Snakebite first aid training in PNG, determining efficacy of training by quantitative assessment of skill retention.

Wala Marjen

Brown snake envenomation in PNG: a new problem.

Prizes Awarded for Free Papers

Four prizes were awarded. EM trainees received three:

Dean's Prize for best presentation:	John Tsiperau
Dean's Prize for best paper:	Yongoe Kambue
President's Prize for best new scientist:	Vincent Atua

Emergency Medicine Specialty Meeting

Thursday 7 September

ACEM visitors:	Chris Curry, Simon Jensen, John Kennedy, Georgina Phillips, Paul Spillane, Sandra Rennie
Other visitors:	Kaii Dagam, Director of Curative Health Services, NDOH. James McCarthy, Ken Winkel, Chris Barnes
EM trainees	Yongoe Kambue, Vincent Atua, Sam Yockopua, Alfred Raka, Desmond Aisi, Julius Plinduo, Wala Marjen, John Tsiperau, Taita Kila, Daryl Robert. Apologies Sonny Kibob (paeds meeting), Moses Lester (PMGH), Marcella Seve (QLD), Kenton Sade (Honiara)
Attendees	Thirty doctors, nurses, HEOs

Presentations

Yongoe Kambue	Opening
Vincent Atua	Opening
Chris Curry	Synopsis of the EM program
James McCarthy	Artesunate in malaria treatment Antiretroviral post exposure prophylaxis (PEP) for HIV
Kaii Dagam	The National Department of Health and EM training
Ken Winkel	Marine envenomations
Simon Jensen	Asthma management in the ED
Wala Marjen	Morbidity and mortality from snakebite at PMGH
Julius Plinduo	Performance in Rural Health
Vincent Atua	Triage at Modilon Hospital
Yongoe Kambue	Access block at Angau Hospital, Lae
Daryl Robert	ED casemix at Goroka Hospital
Tim Haina	Doctor and nurse roles in resuscitation

Panel Discussion

Resolutions: - to develop a standard ED data collection form.
- to update the Government standard AOPD form.

Action Group: Yongoe Kambue, Vincent Atua, Sam Yockopua.

2nd AGM of the SPSEM

President Kambue, vice president Atua, secretary Yockopua, treasurer Tsiperau.

There was discussion about raising funds for the 2007 Symposium (theme: Head and Neck).

Emergency Medicine/Anaesthesia Specialty Meeting

Friday 8th September

Free papers and extensive discussions

Wala Marjen	Avoidable deaths from snakebite: is it only the venom?
Desmond Aisi	Eisenmenger syndrome and Caesarian section.
Gertrude Didei	Re-using disposable endotracheal tubes.
Wayne Morris	Everything you wanted to know about passing the DA exams.

7. Examination passes

Part 2, Master of Medicine, Emergency Medicine Visiting examiner Andrew Dent	Yongoe Kambue
Part 1	John Tsiperau
Diploma of Child Health	Sonny Kibob
Diploma of Anaesthesia	Moses Lester, Desmond Aisi, Wala Marjen

8. Trainees 2006

Year 4	Yongoe Kambue	Med, Paeds POM
Year 3	Sam Yockopua Marcella Seve Vincent Atua Alfred Raka Moses Lester	Med POM, QLD, Paeds POM QLD Med ENT, Paeds POM Dip Anaesth POM
Year 2	Julius Plinduo Desmond Aisi Wala Marjen Sonny Kibob	Paeds, O&G Rabaul Dip Anaesth POM Dip Anaesth POM Dip Child Health Mt Hagen
Year 1	John Tsiperau Taita Kila Daryl Robert Kenton Sade	Surg POM Surg POM Surg Goroka Surg Honiara

Trainees 2007

Year 4	Sam Yockopua Marcella Seve Vincent Atua Alfred Raka	O&G, ED POM QLD
Year 3	Moses Lester Julius Plinduo Desmond Aisi Wala Marjen Sonny Kibob	ENT, oph, ED POM Med, O&G POM Dip O&G, Lae
Year 2	John Tsiperau	Dip Anaesth
Year 1	Taita Kila Daryl Robert Manna Ario Kenton Sade Fletcher Kakai	Surg POM Surg Goroka Surg Lae Surg Honiara Surg Honiara

9. Funding

- MSSP. The major contributor to the program is the Medical School Support Project (MSSP) of AusAID.
- ACEM. The Australasian College for Emergency Medicine (ACEM) has contributed directly for four consecutive years, and has supported trainees to conferences and PTC instructors course.
- MONAHP Trust Fund. This AusAID and RACP fund contributed in 2004, 2005 and part of 2006.
- OilSearch. This PNG company is a major sponsor of the Snakebite Management courses.
- THS. The Tertiary Health Services project of AusAID is contributing one visit in 2006 and one in 2007.
- SPSEM. Subscriptions to the South Pacific Society for Emergency Medicine contributed to attendance at the Medical Symposium and to providing learning resources.
- ASA. The Australasian Society of Anaesthetists contributed to the PTC Instructors Course.

10. Acknowledgements

The EM project in PNG is progressing through the efforts of many people. Particular mention is made of: School of Medicine and Health Sciences, UPG: Sir Isi Kevau, John Vince, Glen Mola, Sydney Chung,

Harry Aigeeleng, Paulus Ripa, Mathias Sapuri,

MSSP: Claire Matainaho, Jerome Solon, Jill Wearne

Hospitals: Simon Mete, James Kintwa, Jethro Usurup, Joe Apa, Lucas Samof, Sister Joseph, Moi Seneca,

Divine Word University: Jan Czuba, Billy Selve

PTC course: Rob McDougall

Acknowledgment is made of the many visitors who have made substantial contributions of their own time, energy and financial resources.

11. The Future

PNG now has its first specialist emergency physician. It is expected that there will be two or more graduates annually. It is likely to take five years for doctors with MMed EM to reach numbers sufficient to provide the main input to sustaining the EM program. Over the next several years they will be increasingly active, as PTC course instructors, with the Snakebite Management course and with the Diploma of EM. Plans are in progress to develop an Emergency Life Support course designed for PNG conditions.

A new funding source is the Capacity Building Service Centre (CBSC), an agency of AusAID established in 2006. Applications for funding towards supporting PTC courses and the Diploma of EM are under consideration. Other sources of funding will be needed.

The graduation of the first PNG national doctor with M.Med EM is a milestone and the beginning of the next phase in establishing a specialty, which is the development of a workforce sufficient to sustain itself independently. Ongoing support will be needed for this capacity building process.

The Emergency Medicine program in PNG – capacity building for general acute care

Chris Curry

Clinical Associate Professor, University of Western Australia

Visiting Professor in Emergency Medicine, UPNG

Presented to the 42nd Medical Symposium, Divine Word University, Madang
September 4-8 2006.

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History

The M.Med EM program

1. Teaching Primary Trauma Care
2. Snakebite courses
3. Diploma of Emergency Medicine

The Future

History

The Postgraduate Committee of the School of Medicine and Health Sciences decided in 1996 that there was a need for the development of an enhanced capacity to care for the acutely ill and injured in PNG. The Master of Medicine program for Emergency Medicine was established that year.

Emergency Medicine had been recognized only recently elsewhere, by Australia in 1993 and by New Zealand in 1995. So in 1996 this was a prescient decision, with foresight, and I think a bold one.

The proposed program then lay dormant because there was no-one in PNG to lead it. Meanwhile, the Ministry and Department of Health were preparing a National Plan for 2001-2010, and emergency medicine was identified as a priority for development.

So AusAID, through the agency Medical Officer, Nurse, Allied Health Project (MONAHP), supported a visit by two emergency physicians from Townsville, Niall Small and Peter Aitken, to advise on how the M.Med EM could be mobilized. They recommended the funding of an emergency physician in residence. In 2002 Carolyn Annerud, who had been working in Townsville, took on this challenge. She was supported by Kate Porges, and seven other visiting emergency physicians. The engine was started.

But MONAHP was scheduled for closure at the end of the year. The engine was running, but we weren't going to be given wheels. I was asked by the Executive Dean, Mathias Sapuri, if I could get the machine moving. The momentum was picked up by the School of Medicine with a Senior Lecturer position, with support from a much smaller agency established by AusAID, the Medical School Support Project. A core group of myself, Carolyn Annerud, Simon Jensen, David Symmons and Marian Lee, committed to the project. The main thrusts were:

- launching the M.Med EM
- teaching medical students
- consulting and teaching in the Emergency Department at PMGH,
- launching research
- supporting nurses training

Where are we in 2006, four years after those initial discussions in the Executive Dean's Office ?

The M.Med EM program

The M.Med EM program has been developed.

The program is entered in PGY 5, is a minimum of four years, and must be completed within six years:

Year 1	Surgery, Common Core Curriculum, Part 1 in Surgery
4 months	Medicine, Anaesthesia, Paediatrics, Obstetrics and Gynaecology,
1 month	Ophthalmology, ENT
Diplomas	Anaesthesia, Child Health, Gynae and Obstetrics
Rotations	Townsville Public Health, Administration, Others, eg research, subject to PGC approval
Research	Project submission
Final	Examinations, written and clinical, across surgery, medicine, anaesthesia, paed, O&G

M.Med EM trainees

There are now 14 trainees on the program:

Year 4	Yongoe Kambue DA (PMGH)
Year 3	Sam Yockopua DA, Marcella Seve DA (QLD) Vincent Atua DA (Madang) Alfred Raka DA, Moses Lester (PMGH)
Year 2	Desmond Aisi, Wala Marjen (PMGH) Sonny Kibob (Mt Hagen) Julius Plinduo (Rabaul)
Year 1	John Tsiperau, Taita Kila (PMGH) Daryl Robert (Goroka) Kenton Sade (Honiara)

The main goal of building capacity to provide acute care has driven developments in teaching trauma care and snakebite management, and in providing training for HEOs and nurses.

1. Teaching Primary Trauma Care

This is the first major plank in building capacity to provide acute care. The EMST course has provided a foundation for this. Contributing emergency physicians include Andrew Dent, David Eddey, Gerard O'Reilly, David Symmons

The PTC course

The PTC course was prepared by EMST/ATLS instructors who appreciated that there was a need for a basic course for wide distribution. In 1996 the primary authors, Douglas Wilkinson (UK) and Marcus Skinner (Aust.), wrote:

“The PTC team works in conjunction with local medical health educational systems to train doctors, nurses and health care providers to treat the severely injured patient quickly and systematically using what equipment is available to improve the early management of trauma at the district hospital”

It is now conducted in 35 countries. In 2005 there were courses in Samoa, India, Pakistan, Iran, Lesotho, Rwanda, Malawi, Mozambique, Chile.

www.primarytraumacare.org

In PNG course participants include Health Centre workers, HEOs, ED nurses, ATOs, interns and RMOs. Most Health Centre providers have not previously received any ongoing training. In many hospitals ATOs provide all airway management.

Primary Trauma Care courses 2005

February	Mt Hagen	<i>Lester, Kibob, Jensen,</i>
March	Madang	<i>Atua, Didei, Curry,</i>
May	Goroka	<i>Lester, Kibob, Dala, Symmons,</i>
May	Lae	<i>Kambue, Symmons,</i>
June	Mt Hagen	<i>Lester, Kibob, Hodge,</i>
June	Rabaul	<i>Plinduo, Todhunter,</i>
July	Madang	<i>Atua, Didei, Gunja,</i>
July	Kimbe	<i>Kambue</i>
August	Port Moresby	<i>Yockopua, Raka, Aisi, Marjen, Inglis, Rennie,</i>
September	Goroka	<i>Kambue, Yockopua, Atua, Lester, Kibob, Rennie,</i>
November	Lae	<i>Kambue, Chenhall,</i>
November	Rabaul	<i>Plinduo, Chenhall,</i>

Primary Trauma Care courses 2006

February	Mt Hagen	<i>Kibob, Symmons</i>
	Goroka	<i>Dala, Robert, Symmons</i>
March	POM	<i>Yockopua, Raka, Lester, Marjen, Aisi, Tsiperau, Kila, Curry</i>
	Rabaul	<i>Plinduo, Curry</i>
April	Alotau	<i>Samof, Yaubih, Seta, Lee</i>
June	Madang	<i>Atua, Rennie, Kruk</i>
	POM	<i>Kambue, Raka, Lester, Aisi, Marjen, Kila, Curry</i>
	Rabaul	<i>Plinduo, Grainger</i>
August	Goroka	<i>Kambue, Jensen</i>
	Alotau	<i>Samof, Yaubih, Seta, Tokwabilula, Jensen</i>
	Kimbe	<i>Seneca, Spillane</i>

PTC Instructor course

In May 2006, five M.Med EM trainees undertook the PTC Instructor course in Melbourne. They were Yongoe Kambue, Vincent Atua, Kenton Sade, Sam Yockopua, Marcella Seve. The next step will be an Instructors Course in PNG, we hope in 2007. In June and August 2006, Yongoe Kambue directed PTC courses in Port Moresby and Goroka. He is the first PNG national to direct an international medical course.

2. Snakebite Course

The second major plank in capacity building to provide acute care is the Snakebite course.

This is extremely important. There are places in PNG where more people die from snakebite than from malaria. So far courses have been conducted in POM and Madang. In 2006 courses were conducted in Madang in August and in Port Moresby in September.

These courses are the product of a huge amount of work by David Williams and Simon Jensen in particular. The training provided is specific to PNG snakes and circumstances. It is aimed at providers at all levels of care, from First Aid to Aid Post, Health Centre, District Hospital, Provincial Hospital and Tertiary Centre. The hope is that the distribution of this course will be expanded.

Snakebite Book

So substantial is the work that the authors have written a book. The authors are David Williams, Simon Jensen, Bill Nimorakiotakis and Ken Winkel.

3. Diploma of Emergency Medicine

The third and most recent plank in capacity building to provide acute care is the Diploma of Emergency Medicine at Divine Word University and Modilon Hospital. This is the brainchild of Billy Selve, Dean of the Faculty of Health Sciences.

It contains Units in Management of

- Trauma,
- Medical and Surgical Emergencies,
- Paediatric Emergencies,
- Reproductive Emergencies

It includes residential sessions and workplace directed study and application

Sandra Rennie, a senior registrar in emergency medicine in Western Australia, is the major contributor to course development. The first residential week was conducted in June 2006. Chris Kruk, emergency medicine educator from Fremantle, assisted in the first residential week on trauma.

PNG visitors

Visitors to PNG in support of the emergency medicine program and its courses now number more than thirty:

- 2000 Peter Aitken, Niall Small
- 2002 Carolyn Annerud, Mike Galvin, Greg Treston, Simon Young, Peter Barnett, Aled Williams, Steve Dunjey, Chris Curry, Kate Porges
- 2003 Chris Curry, Carolyn Annerud, Simon Jensen, Andrew Dent, David Symmons, Marian Lee, Bryan Walpole
- 2004 Chris Curry, Carolyn Annerud, Simon Jensen, David Symmons, David Eddey, Gerard O'Reilly, Jack Hodge, Marian Lee, Chris Hall
- 2005 Chris Hall, Rachel Hoyle, Simon Jensen, Chris Curry, Carolyn Annerud, David Symmons, Gerard O'Reilly, Jack Hodge, Ric Todhunter, Antony Chenhall, Bill Nimo, Naren Gunja, Sandy Inglis, Paul Spillane, Sandra Rennie, Basia Lis
- 2006 David Symmons, Chris Curry, Chris Hall, Brady Tassicker, Marian Lee, Fay Ferguson, Sandra Rennie, Chris Kruk, Paul Hui, Gerard O'Reilly, Stephen Grainger, Simon Jensen, Bill Nimo, Paul Spillane, Sally McCarthy,

The Future

Building

The establishment of a specialty training program takes at least ten years. The emergence of the first graduate (hopefully this year) will be a milestone, and a beginning for the second phase, which is the generation of more graduates, until there are sufficient numbers for the program to be self sustaining.

I know something about this process. In 1989 I was the first graduate in New Zealand from the new Australasian College for Emergency Medicine (ACEM) program. I had not had mentors. I then had to start building the specialty. It was another four years before the next New Zealander completed the program. It was only when I had worked on this development for ten years that I felt it would be self sustaining. Now, ten years after that, there are more than 75 emergency medicine graduates in New Zealand.

The potential is for PNG to proceed more rapidly than that, with trainees on schedule to graduate every year from 2006 onwards.

I need to emphasise the value of support and guidance in this process. It is extremely difficult to develop your own specialty on your own. The continuation of input from visiting emergency physicians will impact substantially on how well the program does in the future. The now established specialties (surgery, medicine, paediatrics, O&G etc) had full time support for many years.

Funding and support

One of the ongoing challenges for the EM program is funding. MONAHP funding lasted one year, UPNG funding 18 months. The Medical School Support Project of AusAID funding has been limited and is declining. The Australasian College for Emergency Medicine (ACEM) has provided funding for four years, and is now changing the way it supports International Emergency Medicine. MONAHP Trust Fund support has been concluded. The visitors themselves make substantial personal contributions. Further funding is needed to ensure continuity and hence survival of this program.

A key to the future is the support of provincial hospitals. Trainees need moral support; they also need jobs and funded training opportunities. The future of the program lies with the Chief Executive Officers (CEOs) and Directors of Medical Services (DMS) of provincial hospitals as well as with the Department of Health.

We have learned from experience elsewhere that capacity building for acute care is fundamental to a health system. We know also that it takes conviction, commitment and perseverance to build it. With those qualities in the trainees, they will succeed.

Where will graduates go?

The first intention for the M.Med EM program, from ten years ago, was to produce doctors equipped to improve the delivery of care to the acutely ill and injured primarily in emergency departments. In 2002 a Five Year Plan was prepared for the program, authored by the resident emergency physician Carolyn Annerud, and Sir Isi Kevau. The Plan identified 14 hospitals as needing an emergency doctor. Those with development now in progress are Moresby, Lae, Mt Hagen, Goroka, Madang and Rabaul. There are beginnings in Alotau, Kimbe, Wewak. Those yet to become involved are Vanimo, Daru, Manus, Buka, and Kavieng.

S. M.Med EM Graduates, numbers and years

	2002	2003	2004	2005	2006	2007	2008	2009	2010
PORT MORESBY Expatriates/rotations/visitors					1	3	3	3	3
LAE					1	1	1	1	1
MT HAGEN						1	1	1	1
MADANG						1	1	1	1
GOROKA							1	1	1
RABAU							1	1	1
ALOTAU							1	1	1
WEWAK								1	1
VANIMO								1	1
DARU								1	1
MANUS									1
BUKA									1
KIMBE									1
KAVIENG									1

What will graduates do?

They will do more than provide leadership to emergency departments. They will:

- provide leadership for undergraduate and postgraduate emergency medicine training, at the School of Medicine and at Divine Word University.
- contribute to
 - disaster preparedness and response
 - pre-hospital training and care,
 - research,
 - administration,
 - prevention (prevention is included in the International Federation for Emergency Medicine (IFEM) definition of EM)
 - public health (in Australia an increasing number of emergency physicians are training in public health. Much acute illness and injury arises because of failures in public health)

Hospital Generalists

This leads to the concept of 'generalists' in the PNG Health System. Currently there is no active vocational training program for hospital generalists. In the past expat. specialists developed specialty training programs, but the generalists who were the District Medical Officers and Medical Superintendents of district and provincial hospitals did not establish training programs. Now PNG specialists are training specialists, but there are no trained generalists training generalists. This has produced a workforce pyramid that is top-heavy (that is, specialist-heavy) and loaded on Port Moresby. With 85% of the population rural, the majority of people need generalists to meet their basic health care needs.

The M.Med EM program provides the basis for a generalist program. It includes rotations through all the major disciplines, so trainees learn something of the entirety of each discipline. With additional training in administration and public health, graduates would be well equipped for a hospital generalist role. There are many hospitals in PNG that will not get the full hand of major specialists. These hospitals, including many on the list of 14, could be well served by vocationally trained generalists. And from the M.Med EM base these doctors could also become well equipped to serve as Directors of Medical Services and as Chief Executive Officers.

International Leadership

The M.Med EM is already attracting interest internationally. There is a trainee in Honiara, Kenton Sade. Further afield, the PNG model is contributing directly to developments in Nepal and there is interest from as far as South Africa. The Diploma in Emergency Medicine is also gaining attention. Billy Selve has been

invited to present at a Conference in South Africa in 2007 on Emergency Medicine in the Developing World. There is genuine potential for PNG to provide an improved service to its people, and to gain international recognition in doing so.

In Summary:

M.Med EM graduates will contribute widely:

- major emergency departments
- University of PNG, School of Medicine
- generalists in provincial and district hospitals
- Divine Word University, Diploma of EM
- directors and instructors of courses,

HEOs and Nurses with Diploma of Emergency Medicine will provide improved 'grassroots' delivery of acute care

Those who say 'it cant be done' don't get things done. Those who say 'it can be done' can achieve the unexpected. This program needs to happen, and I believe there are people in PNG who can make it happen.

Chris Curry
4 September 2006
chris@chriscurry.com.au

The Primary Trauma Care Course in Papua New Guinea

Chris Curry
22 May 2006

Primary Trauma Care (PTC) courses were launched in Papua New Guinea (PNG) in 2002, during the first year of the emergency medicine program there. Since then there have been an increasing number of courses and sites hosting them. There has been increasing local input from the Master of Medicine Emergency Medicine (M.Med EM) trainees as they have undertaken the Early Management of Severe Trauma (EMST) course in Port Moresby, have progressed in their training program and have developed as PTC instructors.

PTC Instructors Course, Melbourne in May 2006

Four PNG trainees on the M.Med EM and one from the Solomon Islands attended an Instructors Course at the Royal Childrens Hospital in Melbourne in May 2006. They were Sam Yockopua and Marcella Seve from Townsville, Yongoe Kambue from Port Moresby, Vincent Atua from Madang and Kenton Sade from Honiara.

Those attending from their rotation in Townsville were funded and supported by the PTC Foundation and the Australian Society of Anaesthetists. Thanks to Rob McDougall from the Royal Childrens.

Those attending from PNG and Honiara were funded and supported by the Australasian College for Emergency Medicine and St Vincents Hospital in Melbourne. Thanks to Georgina Phillips and Antony Chenhall from St Vincents.

The Instructors Course was facilitated by

- Diane Wilkinson from the UK,
- Stephen Swallow and Wayne Morriss from New Zealand,
- Marcus Skinner from Tasmania,
- Tim Gray FACEM and Rob McDougall from Melbourne.

A background to the PTC course

(Derived from the PTC Instructor's Manual)

“Mission statement

The PTC team works in conjunction with local medical and health educational systems to train doctors, nurses and health care providers to treat the severely injured patient quickly and systematically using what equipment is available to improve the early management of trauma at the district hospital.

Objectives

1. Understand the priorities of trauma management
2. Be able to rapidly and accurately assess trauma patient needs
3. Be able to resuscitate and stabilise trauma patients.
4. Know how to organise basic trauma care in your hospital

The PTC is intended to provide basic knowledge and skills necessary to identify and treat those traumatised patients who require rapid assessment, resuscitation, and stabilisation of their injuries. This course will particularly highlight the need for early recognition and timely intervention in specific life-threatening conditions.

The course is intended to provide material by lectures and practical skill stations that represents an acceptable method of management for trauma. It provides a very basic foundation on which doctors and health workers can build the necessary knowledge and skills for trauma management with minimal equipment and without sophisticated technological requirements.

The ATLS/EMST course is directed to medical personnel in well equipped hospitals with oxygen, communication and transport, etc. and offers a comprehensive syllabus. The PTC course is not a substitute for this and other courses, but uses similar basic principles and emphasises basic trauma care with minimal resources.”

A brief history of the PTC course

Primary Trauma Care arose in 1996 initially out of the activities of three individuals:

Douglas Wilkinson, a South African anaesthetist/intensivist working in Oxford UK, made a submission to the World Health Organisation that he would like to develop a World Federation of Societies of Anaesthetists (WFSA) backed initiative to reduce morbidity and mortality from trauma worldwide. This would be done by organising courses at which doctors, nurses and health officers in developing countries could be trained in the practice of good trauma management.

Marcus Skinner is an anaesthetist previously at Fremantle and now in Tasmania. Once with the Royal Australian Air Force, he has a strong interest in trauma and retrieval medicine. As a senior instructor on the RACS Early Management of Severe Trauma (EMST) program, he encouraged the EMST Committee to expand its program in neighbouring developing countries, but with little success.

Haydn Perndt, an anaesthetist in Hobart Tasmania, has a long and dedicated history of work in developing countries. In 1996 as Chairman of the Education Committee of WFSA, Haydn knew both Douglas Wilkinson and Marcus Skinner. Realising that they both had common aims to teach trauma care in developing countries, he introduced them to each other.”

These three formed the core group to establish, write and promote the PTC course. It is now presented in developing countries worldwide.

In 2005 courses were presented in Samoa, Pakistan, India, Iran, Lesotho and Rwanda. Consultations commenced in Mozambique.

In 2006 (to May), courses have been run in:

PNG: Port Moresby, Mt Hagen, Goroka, Rabaul, Alotau

Pakistan: Peshawar, Sindh, Jacobabad

India, Malawi, Mozambique, Chile, Melbourne

PTC in the Australasian, SE Asian and Pacific region

Rob McDougall is the Australian Director, and is on the PTC Executive Committee. He is a paediatric anaesthetist at the Royal Children’s Hospital, Melbourne Victoria. Involved with PTC since 1999, he has taught in the Pacific, Indonesia and Vietnam and is currently working towards the introduction of PTC to Mongolia. He has been on the Education Committee of WFSA since 2000.

Contact details

Primary Trauma Care Foundation

313 Woodstock Road, Oxford, England OX2 7NY

Tel: +44 (0)1865 220621, Fax: +44 (0)1865 220846

Email: admin@primarytraumacare.org

Web: www.primarytraumacare.org

Rob McDougall: Email: rob.mcdougall@rch.org.au

BOOK REVIEW**Venomous Bites and Stings in Papua New Guinea –
A Guide to Treatment for Health Workers and Doctors**

Williams D, Jensen S, Nimorakiotakis B and Winkel K, eds.
Australian Venom Research Unit, University of Melbourne,

2005, 358 pages, soft cover, RRP \$A77.00,
ISBN 0 975 7937 0 5 (paperback); 0 975 7937 1 3 (CD-ROM).

Distributed by Australian Venom Research Unit,
telephone: +61 3 8344 7753 or website: <http://www.avru.org>

Chris Curry

BMedSci(Hons), FACEM, DTM&H

Clinical Associate Professor, University of Western Australia, Crawley,

Emergency Physician, Fremantle Hospital, Fremantle, Western Australia, Australia

Visiting Professor, University of Papua New Guinea, Port Moresby, Papua New Guinea

Envenomation by snakebite presents a huge but largely unmeasured problem in Papua New Guinea (PNG). In the intensive care unit at Port Moresby General Hospital (PMGH), snakebite contributed 73 ventilated patients and four deaths in 2003, 95 ventilated patients and nine deaths in 2004. One quarter of ventilated patients were there because of snakebite. PMGH serves only the National Capital District and environs for acute care. In total, 85% of the people of PNG live in rural areas remote from an intensive care unit. Taipans and death adders are the dominant envenomers. Fatality rates can only be guessed at but in some regions are known to be 100% for paralysis. The human cost is beyond estimation.

David Williams is an unusually dedicated individual who is making this one cause his life's work. He has already committed years to studying (and handling) PNG snakes and is the world's foremost authority on them. He is now establishing a snake house and venom unit in the School of Medicine and Health Sciences at the University of PNG and is undertaking a PhD with the Australian Venom Research Unit at the University of Melbourne. Collaborators from Australian Venom Research Unit include Bill Nimorakiotakis ('Nimo'), emergency physician and Deputy Director, and Ken Winkel, Director. Simon Jensen is an emergency physician who has contributed substantially to the Master of Medicine, Emergency Medicine, programme at the School of Medicine and Health Sciences since 2003. His practical clinical involvement at PMGH has triggered an intense interest in improving the management of envenomation.

From these editors comes a book of 358 pages that is a world leader. Contributing authors number a further 16 and include national practitioners and international experts. It provides a wealth of information for the interested. The book is extensively illustrated both with

photographs and with drawings that are of practical use. Much of the scientific detail is beyond practical use by care providers in PNG, who in rural areas are predominantly

health extension officers and nurses in aid posts and health centres. However, the chapters on management

are presented with this audience in mind and are clear, concise and comprehensive. The emphasis is on first-aid and care in the absence of laboratory resources and the sophisticated technologies of hospital and intensive care unit. Major points, myths and traps are highlighted, and there is a 'tool-box' utility about the format of what to do. These chapters will have wide practical application. To promote this, the authors have run two courses, the first at PMGH in 2004 and the second in Madang in 2005. It is hoped to expand the dissemination of the book's contents by running a 3 day course twice each year.

The last two of the 20 chapters deal with bites and stings of some of PNG's other animals, including spiders, scorpions, bees and wasps, and marine envenomers such as stonefish, stingrays and jellyfish.

The book is written for PNG and is intended primarily for care providers there. It will be of use to the visiting Australasian emergency doctors, who at time of writing numbered 26 and are increasing. However, the book will also appeal to a wider audience, in particular to those with an interest in the science of venoms and toxins, and in the practical management of envenomations.

Many of the creatures described are encountered in Australia as well.

Australia could well use such a book for its own envenomation challenges, even though they impact on vastly fewer people.

Diploma of Emergency Medicine

Faculty of Health Sciences and Faculty of Flexible Learning

Divine Word University

Madang, Papua New Guinea

Background

Initial contact with Divine Word University (DWU) was made by Chris Hall in early 2005. Billy Selve, Dean of the Faculty of Health Sciences, expressed an interest in developing a Diploma in Emergency Medicine for the postgraduate Health Extension Officers (HEOs) who had been trained at DWU. Once graduated there were very limited opportunities for further development. Discussions were taken further by Chris Curry. Sandra Rennie, an advanced trainee from Fremantle Hospital in Western Australia, then spent three months at DWU in the second part of 2005 working with Billy Selve to develop the structure and curriculum for the programme. Brady Tassicker, another advanced trainee at Fremantle Hospital, contributed further work in April 2006.

The Diploma will be launched in June 2006 with assistance from Sandra Rennie and Chris Kruk, who is Director of Clinical Training for junior doctors at Fremantle Hospital.

The 'Introduction to the Diploma' and the 'Needs Analysis' reproduced below were written by Sandra Rennie and Billy Selve for the Programme Specification Documents. The Course Description on the following two pages is available on the DWU website, www.dwu.ac.pg

Introduction to the Diploma

The Emergency Medicine Diploma is a program to be offered in Partnership between the Faculty of Health Sciences and the Faculty of Flexible Learning at Divine Word University and the Modilon Hospital Campus.

It will address the specific needs of health care workers in Papua New Guinea, who often face issues of extreme isolation and remoteness, together with a high rate of emergency situations accompanying illness, injury, reproduction and childhood. Sources of injury include motor vehicle crashes, domestic violence, falling from trees, natural disasters (volcano's, tsunamis), and clan violence.

This program has been designed to enhance established skills and develop new skills in the management of medical, surgical, obstetric, paediatric and psychiatric emergencies. Topics will include personal protection in emergency situations, adequate preparation for emergencies, triage in large-scale emergencies and natural disasters, and appropriate evacuation of patients to centres of definitive care. Students will gain confidence in their ability to anticipate, assess and manage emergency situations, improve individual patient outcomes and community wellbeing.

In order to be effective, the training offered by the diploma will need to address issues of resources and transportation, which often contribute to poor outcomes in emergency situations.

The course will be offered to HEOs, nurses and doctors. The knowledge and skills are relevant to all of these disciplines as they represent the front line of health care provision in many areas, often in isolation.

Needs analysis

The Health Services Support Program (HSSP) of AusAID has produced a paper entitled "Madang Province Situational Analysis 2005". This has identified major issues in health care provision in the region, and has been sourced to ensure that the emergency diploma focuses on relevant local issues. While primary health care is the major focus for long term improvement in the health of the region, improvements in essential and basic emergency care will aim to reduce the morbidity and mortality from the common acute conditions specified in the report.

HEOs and nurses have identified their own needs in response to a questionnaire.

FACULTY OF HEALTH SCIENCES, FACULTY OF FLEXIBLE LEARNING

DIPLOMA OF EMERGENCY MEDICINE

DIPLOMA OF EMERGENCY MEDICINE

This program is offered by Divine Word University's Tertiary Distance Education Centre (TDEC) in liaison with the Faculty of Health Sciences.

It is a flexible learning program comprising of residential sessions that comprise of residential learning with directed workplace study and application.

The program is designed for people working in government and private sectors who wish to enrich their working knowledge and skills in order to become highly successful Health workers in the service of their country in the diagnosis stabilization, treatments and or referral of patients.

Program:

The Diploma program consists of four semesters with four major residential Units that include practical sessions. Students are required to gain do all to gain competency.

Students will discuss with the course facilitator and choose a workplace directed study that is appropriate to the student's occupation.

Christian principles underpin all programs offered at Divine Word University

Structure

The program will be conducted through a flexible-learning mode using well-established principles of adult learning applied to our Papua New Guinea context.

Students are required to attend an intensive two-week residential component in Madang during each semester. Initially in 2006, it being a new program, it will commence with a one week in June and another week in November for the residential component.

Directed and practical assignments relating to workplace applications must then be completed in the student's own time.

The introduction of a Learning Contract will facilitate sound support structures between the student, the workplace and the University.

Facilities

Divine Word University offers modern excellent residential and teaching facilities in a secure and peaceful environment.

Admission Requirements

Students will be required to have completed a minimum of a Diploma in General nursing or Health Extension and must be recommended by sponsoring organization.

Commencing Date:

This Diploma program will be offered for the first time on the 13th of June 2006.

Costs:

K100 non-refundable Application Fee.

K1440 per semester for all-inclusive course costs.

For Application Forms and further information contact:

Ms Leah Usurup
Enrolment Officer, Tertiary Distance Education Centre
Divine Word University
P.O. Box 483, Madang
Papua New Guinea.

Ph: (675) 854-1871
Fax (675) 852-1312
Email: lusurup@dwu.ac.pg

Check our Website www.dwu.ac.pg

UNITS IN THE PROGRAM

Units 1 Management of Trauma

This unit covers the following subjects; Initial Assessment and Management of Trauma Patients, Airways and Ventilatory Management, shock, Thoracic Trauma, Abdominal Trauma, Head Trauma, spine and Spinal Chord Trauma, Musculoskeletal Trauma, Burns, Paediatric Trauma, Trauma in Women, Transfer to definitive care, and injury prevention. Psychiatric emergencies taken as a specific second week block.

Unit 2 Management of Medical and Surgical Emergencies

This unit covers the following subjects; Medical Conditions affecting the airway, Acute Medical Conditions affecting breathing, Medical conditions affecting circulation, Gastrointestinal Emergencies, Renal Failure, medical conditions affecting neurological status, musculoskeletal emergencies, Endocrine emergencies, Toxicology, ocular Emergencies, and ENT emergencies

Unit 3 Management of Paediatric Emergencies

This unit covers the following subjects; Why children are treated differently, Structural approach to emergency paediatrics, basic life support of a collapsed child, Structured approach to the seriously ill child – IMCI 10 step protocol, Advanced support of the airway and ventilation, Causes of airways and difficult breathing, Shock, Management of Shock, Primary assessment of disability, Management of the semiconscious, the seriously injured, triage, prevention of injury, Fluid management, use of drugs and When a child dies.

Unit 4 Management of Reproductive Emergencies

This unit covers the following subjects; Emergencies in Early Pregnancy, Infectious Diseases in Pregnancy, Emergencies in mild – late pregnancy, Premature labour, premature rupture of membrane, complications of the first and Second stages of Labour, Specific Identification and management of labour related problems, complication of the third stages of labour, puerperal psychosis, neonatal resuscitation, when a baby dies, gynaecology, Severe pelvic inflammatory disease, and rape.

Note: These units initially in 2006 are offered as a one-week residential learning in commencing on the 12th of June. It is very likely that units are adjusted from time to time to fit in with the availability of facilitators, and the teaching and learning resources.

Check our web site www.dwu.ac.pg and follow the prompts from [Faculties](#) to [Flexible learning](#) where you will find the Unit descriptors.

Last updated 050506

Report

Semester 2, Diploma of Emergency Medicine – Paediatric Emergencies,

Divine Word University, Madang PNG
Monday 20th – Friday 24th November 2006

Sandra Rennie

Venue: TDEC Department of Flexible Learning, DWU Madang

Instructors: Dr Sandra Rennie, Emergency Registrar, Course Coordinator, Perth WA
Dr Paul Hui, Emergency Consultant Newcastle NSW
Dr Kuria Nemba, Paediatric SMO Derby WA

Participants: Barry Kalisa, HEO Vanimo
Loncie Lautu, HEO Kainantu
Catherine Anis, HEO Madang
Valentina Kupe, Nurse Madang
Margaret Bauelua, Nurse Port Moresby
Lulu Pwaka, Nurse Port Moresby
Ben Ganeke, HEO trainer DWU Madang

Teaching Materials and Resources:

WHO ‘Hospital Care for Children’ hand book
WHO CD Rom “Hospital Care for Children”
ETAT (Emergency triage and assessment) workbooks
IMCI (Immediate management of childhood illness)
Paediatrics for Doctors J Vince DWU press 2002
Standard treatment manual J Vince
Basic and Advanced Life Support

Printing was provided by the Dept of Health Science DWU

Delivery Methodology: PowerPoint Presentations
Scenarios with Mannequins and equipment
Video Case Presentations
Workbooks (Participant manuals) with self assessment

Assessment Strategy Written exam post course
Self assessment questions marked each day
Scenario examination
Procedure checklist

Evaluation forms

Commentary:

Overall the participants were very satisfied with the content and delivery of the course. The small number of students involved allowed for one on one supervision and instruction during the practical sessions. . There was opportunity for repeated triage drills, both on mannequins and using the video cases on the CD Rom. The ETAT course manuals are concise and easy to follow, and relate well to the Hospital Care for Children Handbook. Homework consisted of reading each chapter and completing assessment questions. Review of the questions each morning was very useful to clarify and reinforce the material covered each day.

In the evaluation students requested more practice scenarios and triage drills. It was very evident that the hands on training with close supervision reinforced the skills learned.

We were fortunate to have Dr Kuria Nemba, a PNG national from the Highlands, and paediatric SMO from Derby WA. He was able to ensure the material was presented in a practical and culturally appropriate

manner – (particularly issues such as child abuse and resuscitation which differ from our experience in developed countries). He has committed to future involvement in delivery of this course.

Attendance:

Unfortunately there were 2 participants from unit 1 of the diploma who were unable to attend due to funding issues. (The course costs 1400 Kina and flights are an additional cost. Hospital CEO's can apply for funding from the CPSP – Capacity Building Support Programme AUSAID but this process can be difficult!)

There was no advertising for new entrants to the programme. This problem will be addressed by Billy Selve of the Faculty of Health Science

Recommendations for the future and equipment:

Currently, all mannequins and equipment are borrowed from hospitals in Perth WA and contribute to excess baggage fees. Ideally, the diploma for emergency medicine should have an adult intubating mannequin, a PALS baby (intubatable) and a child intubatable mannequin. These could be safely stored at the Divine Word University, and be available for both the diploma course and PTC courses around PNG.

If possible, a regular supply of bag and masks, Guedel airways and laryngoscopes, so students who have no access to these can take them back to their place of work.

The intensive nature of the teaching requires at least one tutor to 5 students. I anticipate that 3 staff members will be needed for each session, with a PNG national at each course to ensure future sustainability and true capacity building. I have committed to 6 years of delivery – with 2 residential weeks each year.

M.Med EM Part 2 Examinations

October/November 2006

Written examinations.

Monday 30th October

SAQ. – Short Answer Questions

9 questions in 3 hours = 20 minutes each question

Two questions for each of surgery, medicine, paediatrics, O&G; one question for anaesthesia.

VAQ. – Visually Aided Questions

9 questions in 2 hours = 13 minutes each question

Two questions for each of surgery, medicine, paediatrics, O&G; one question for anaesthesia.

VAQs are questions based upon a visual aid, eg ECG, XRay, laboratory results, photograph.

Specific questions will be marked by the specialty examiners on Tuesday 31 October (Sydney Chung, Isi Kevau, John Vince, Glen Mola, Harry Aigeeleng).

All questions will then be marked by the visiting examiner on Wednesday 1 November (Andrew Dent).

Clinical examinations.

Thursday 2nd and Friday 3rd November

Thursday:	09.00 – 10.30.	Surgery. Clinical cases 40 minutes, viva exam 20 minutes.
	11.00 – 12.30.	Medicine. Clinical cases 40 minutes, viva exam 20 minutes.
	14.00 – 14.30	Anaesthesia. Viva exam.

Friday:	09.00 – 10.30.	Paediatrics. Clinical cases 40 minutes, viva exam 20 mins.
	11.00 – 12.30.	O&G. Clinical cases 40 minutes, viva exam 20 minutes.

Reporting.

Comments and scoring by each specialty for each exam will be recorded on a pro-forma sheet. The visiting examiner will prepare a written Report for submission to the Examiners Meeting on Wednesday 8th November.

(prepared by Chris Curry, 14 Sept 2006)

Master of Medicine, Emergency Medicine, Part 2 Examinations, 30 October -3 November 2006

Subject	Question	SAQ (-/10 per Q)			VAO (-/10 per Q)			Short cases (-/20)	Vivas (-/20)	Aggregate per subject
		<i>Ex 1</i>	<i>Ex 2</i>	<i>Agreed</i>	<i>Ex 1</i>	<i>Ex 2</i>	<i>Agreed</i>			
Surg	1									/80
	2									
Paeds	3									/80
	4									
O&G	5									/80
	6									
Med	7									/80
	8									
Anaesth	9						NONE			/40
				/90			/80	/100		

M.Med Emergency Medicine

Part 2 Examinations

Short Answer Questions (SAQ)

Nine questions

All questions must be answered

Each answer must be in a separate booklet

Reading time 10 minutes

Examination time 3 hours

Question 1.

You are the director of the Emergency Department at the Port Moresby General Hospital. You are informed by telephone that a utility vehicle with more than 20 passengers overturned on the Poreporena Highway 10 minutes ago. It is 9:30 on Monday morning.

Describe your response to this situation.

Question 2.

A 9 year old boy presents with a 3 day history of pain around his right knee.

- a) What are the differential diagnoses?
- b) Describe how you would assess and investigate this patient.

Question 3.

An 8 month old child is brought to the Emergency Department at 10pm about 45 minutes after an episode of going blue, shaking, and having abnormal eye movements. The baby is lethargic but irritable when moved.

Describe, with reasons, your response to this presentation.

Question 4.

A 12 month old child is brought to the Emergency Department because the parents have noted her to be weak. She has had profuse watery diarrhoea for the last 2 days.

Describe, with reasons, your response to this presentation.

Question 5.

A 25 year old woman presents with severe RIF pain. Periods have been regular and the LNMP was 2 weeks ago.

Discuss the history that you would take to help you discern whether she is suffering from common gynaecological or other causes of her abdominal pain.,

Question 6.

A 16 year old girl presents with heavy vaginal bleeding following 2 months of amenorrhoea. There has been passage of clots associated with cramping lower abdominal pains.

- a) List further history points that you would elicit.

- b) Describe your initial management of this patient, including what you would do on vaginal speculum examination if you saw profuse bleeding from the cervical os.
- c) The bleeding and uterine cramps subside. Describe your follow up management of this patient if she is going home from the Emergency Department because of a bed shortage in Gynaecology.

Question 7.

A 48 year old man presents with an hour of crushing central chest pain and pain going down the left arm. He is sweating, pulse 88/min, BP 160/95, respirations 18/min.

- a) Describe your initial assessment of this man.
- b) Describe the indications and contra-indications for thrombolysis.

Question 8.

A 24 year old woman is brought in with severe shortness of breath. She is distressed and anxious, pulse 135/min, BP 125/75, respirations 28/min. She has had previous presentations with asthma.

- a) Describe your initial assessment of this woman.
- b) Describe your initial management of severe asthma.

Question 9

A 5 year old child has sustained a clean 6cm laceration to the back of the hand an hour ago. You decide it is appropriate to repair it in the Emergency Department.

Discuss, with pros and cons, the options for analgesia, sedation, and anaesthesia

Visual Aided Questions (VAQ)

Nine questions. All questions must be answered
Reading time 10 minutes. Examination time 2 hours.

Question 1. Photo abdomen (*omentum on show*)

This patient was stabbed in the abdomen by his wife 2 hours ago. His vital signs are: pulse 110/ minute, blood pressure 120/80, and respiratory rate 15/min.

Describe how you would manage him.

Question 2. Xray pelvis (*dislocated hip*)

This 2 year old girl was unable to walk after falling from a height of 2 metres.

- a) What is the diagnosis?
b) How would you manage her?

Question 3. Photo child legs (*rash*)

This child is brought to the Emergency Department in the early hours of the morning.

Give a reasoned account of your approach to

- (a) investigation and
(b) management of this child.

Question 4. Chest XRay (*right basal pathology*)

A 2 year old child is brought to the Emergency Department in the late evening because of shortness of breath. His oxygen saturation is 90% on room air.

- Describe the CXR.
- How would you manage this child?

Whilst waiting to be transferred to the Paediatric Ward the child suddenly becomes more distressed and his oxygen saturations drop to 80%.

- What are the possible explanations for the deterioration, and which is the most likely of these?

Question 5. Photo of tissue (*mole*)

A 32 year old para 5 village woman is brought into the Emergency Department bleeding heavily following 4 months of amenorrhoea. There are clots of blood and some vesicular tissue between her legs that have been passed vaginally. She looks shocked and pale.

- What is your diagnosis?
- Describe your immediate management of this patient.
- What are the management options if she continues to bleed heavily from the uterus?

Question 6. Photo of woman

A 17 year old woman is brought to the Emergency Department because of a seizure. She is drowsy and hyperflexic. Observations are pulse 88/min, BP 150/90mmHg, respirations 28/min and somewhat labored, temperature 37.4C. She appears to be generally edematous. Her abdomen is distended with what feels like a 3rd trimester pregnancy. Her relatives claim not to know that she is pregnant.

- What is your working diagnosis?
- Describe your immediate management of this patient
- What advice will you give to the accompanying parents?

Question 7. ECG (*atrial flutter, 2:1*)

A fifty year old man is brought in because of sudden palpitations. He feels faint. He has never had anything like this before.

- Describe the ECG
- Discuss the management options, with pros and cons.

Question 8. Lumbar puncture

CSF

microscopy		leucocyte count	172
		erythrocyte count	<1
		neutrophils	54%
		mononucleated cells	46%
glucose	2.7	(2.8 – 4.4 mmol/l)	
protein	0.66	(0.15 - 0.45g/l)	

A 30 year old very thin man presents because of two weeks of increasing headache and unwellness.

- Describe your interpretation of the CSF findings.
- Outline your management of this patient.

Question 9. Photo face

An elderly woman presents in the afternoon with swelling of tongue and lips. She was well in the morning.

- Describe the main points of your initial assessment of this patient.
- Describe the options in managing her airway should she deteriorate.

M.Med EM Part 2 Clinical Exams, 2006

Summary Chris Curry, observer.

Examiners

Visiting Examiner:	Andrew Dent
Surgery:	Sydney Chung
Medicine:	Isi Kevau
Anaesthesia:	Harry Aigeeleng
Paediatrics	John Vince
Obstetrics & Gynae	Mathias Sapuri

Thursday 2nd November

Surgery

08.20	Surgery Examiners Meeting Selection of cases, discussion of exam
08.35	Case 1
08.55	Case 2
09.15	Meeting examiners Agreed mark for cases. Discussion of Vivas
09.25	Vivas
09.45	Agreed mark for Vivas. Discussion SAQ and VAQ, agreed marks. Aggregate marks
10.00.	Close

Medicine

10.30	Medicine Examiners Meeting Selection of cases, discussion. Selection of Vivas, discussion.
11.00	Case 1
11.20	Case 2
11.40	Meeting examiners Agreed mark for cases. Discussion Vivas
11.45	Vivas
12.05	Agreed mark for Vivas. Discussion SAQ and VAQ, agreed marks. Aggregate marks
12.15	Close

Anaesthesia

13.50	Anaesthesia Examiners Meeting Selection of Vivas, discussion
14.00.	Vivas
14.20	Meeting examiners.
14.30	Close

Surgery

Case 1

18year old female, RIF pain.

Candidate given a brief history, invited to take a brief history, examine and present.

Questions: management in ED, investigations, significance of results, ED treatment, consultation process, treatment of sepsis.

Case 2

30year old male policeman, shot in low left back.

Candidate given brief history, invited to take brief history, examine and present.

Questions: initial response in ED, assess plain XRays, discussion of rifle injury vs shotgun injury.

Comments: Exam requires proper conventional formal systems examination. Shotgun injury requires examination for injury at a distance from entry wound.

Vivas

Burns. Candidate presented with a scenario and pictures on a laptop computer.

Questions: assessing thickness, IV access, fluid resuscitation, monitoring of resusc., Complications of burns, escharotomy, management of 75% burns, disposition (relatives want to take him home)

Knife injury to wrist. Candidate shown a photo.

Questions: assessment of integrity of arteries, nerves, tendons.

Comments: examiners expected a comprehensive knowledge of the functional anatomy at the wrist.

Medicine

Case 1

16year old female from Highlands, weight loss, SOB, right sided chest pain.

Questions: assessment and investigation in ED, discussion of CXR before and after aspiration, differential diagnosis of effusion, causes of effusions, treatment of TB.

Case 2

75 year old female, needing interpreter, weakness left side.

Questions: explanation of findings, causes of CVA, management of hypertensive emergency with CVA.

Comments: Medical examinations should be conducted in the formal manner expected of M.Med Medicine candidates.

Vivas

18year old OD antimalarial, x50 tabs, 30 minutes ago.

Questions: initial response.

Develops hypotension, tachy, dizziness. ECG.

Questions: ECG diagnosis (VT), management, antiarrhythmic drugs.

Patient c/o loss of vision

Q: why

Patient requests don't tell parents, teacher wants to tell parents.

Q: how will you respond.

56 year old expat with chest pain.

Questions: clinical features of AMI, initial assessment.

Patient loses consciousness. ECG

Q: ECG? = VT. Management.

Anaesthesia

Vivas

ETT: indications, conditions for intubation, assessing for difficult intubation.

Severe burns: airway issues in fixed wing retrieval.

Laryngeal mask: explain its use

Defibrillator: explain its use to a medical student.

Friday 3rd November

Paediatrics

08.30 Examiners meeting, selection of cases, discussion of vivas

08.50 Case 1. .

09.00 Case 2.

09.15 Case 3.

09.25 Examiners meeting, agreed marks, preparation vivas.

09.40 Viva 1

09.55 Viva 2

10.05 Examiners agreed marks

Obstetrics and Gynaecology

11.0 Examiners meeting, case and viva discussion.

11.15 Case 1, obstetrics

11.35 Meeting Case 2

11.45 Case 2, gynaecology

12.0 Examiners meeting, agreed mark.

12.05 Viva 1

12.15 Viva 2

12.25 Examiners meeting, agreed marks.

12.35 Close

Paediatrics.

Case 1. Baby with bronchiolitis complicated by pneumonia.

Questions: assess first CXR, assess second CXR,

Comments: Respiratory examination of infant needs to be comprehensive

Case 2. 6 year old girl with hot swollen painful lower leg near ankle. T 39. Osteomyelitis not evident on XR.

Questions: assess XR, management of presentation, management, surgical intervention, analgesia.

Case 3. Baby with swollen legs, abdo distension, severe wasting upper limbs and chest = malnutrition.

Questions: malnutrition, kwashiorkor, marasmus, infection in malnutrition.

Viva 1. Snakebite in 4 year old child. Picture

Questions: father wont allow removal of tourniquet, management, antivenom, ventilation

Viva 2. Sever dehydration, drowsy, unwell (=DKA). Picture

Questions: Assess dehydration, gain IV access, manage hydration, investigations

Obstetrics and Gynaecology

Case1. 24 year old woman, Twins, 37 weeks, anaemia, oedema

Questions: investigation of fever, of anaemia, management of anaemia, treatment malaria, goes into labour, has PPH.

Case 2. 50 year old woman, mass in right mid abdomen.

Questions: differential, investigation, management of complications

Viva 1. 14 year old raped by uncle

Qs: priorities in assessment, dealing with angry relatives wanting reprisal, follow-up care, STIs.

Viva 2. 15 year old intellectually challenged, abdo pain in ED is second stage. Delivery in ED.

Qs: response to presentation, delivery, apnoeic newborn, retained placenta, PPH, further management.

(End)