



April - June 2006

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# Epworth Disc Replacement Research Group

Dramatic advances in technology have made spinal surgery one of the most exciting and complex specialties in medical practice. Parallel developments in computing, medical imaging, minimal access surgery, prosthetic devices and electronics are converging to rapidly change clinical practice. Motion preservation in spinal surgery has become a new focus of development. In particular disc replacement technology has become a controversial option for both the cervical and lumbar spine.

The EDRG has been established as a joint venture between Epworth, Victorian Neuroscience Centre at Epworth (VNCE), Neurosurgeons, Orthopaedic Surgeons and Industry partners. The group aims to scientifically compile clinical data over a two year period. Information from participating surgeons and patients will assist in the critical evaluation of the utility and safety of existing and emerging technologies. It is hoped that the experience of the group will be used to train surgeons in the use of new technologies and techniques and develop clinical pathways.

parameters to assess surgical outcomes. Meetings will be held on a three monthly basis to allow the group's progress to be communicated to interested parties. Industry partners will also be given the opportunity to report to surgeons regarding product development. It is hoped that scientific presentation and publication will occur to communicate the groups findings to the broader community.



*Cervical disc prosthesis*



*2 level cervical disc replacement*

Funding has been raised to employ a research coordinator who will be located in office space at 62 Erin Street. A computer database will be established. Guidelines for the indications and consenting process for surgery will be established. Post operative outcome instruments will be applied to assess patient recovery. Post operative imaging protocols will be established and used in conjunction with clinical

### Committee Members are:

Paul D'Urso	Neurosurgeon & Chairperson
Noel Armstrong	Epworth Hospital
Vincent Borg	Epworth Hospital
Graeme Brazenor	Neurosurgeon
Melissa Carfax-Foster	Epworth Hospital
Peter Dohrmann	Neurosurgeon
Suzy Goodman	Epworth Hospital
Denis Hogg	Epworth Hospital
Michael Johnson	Orthopaedic surgeon
Greg Malham	Neurosurgeon
Richard O'Sullivan	Neuroradiologist
Peter Wilde	Orthopaedic Surgeon
Owen Williamson	Orthopaedic Surgeon

### Industry Partners are:

Medtronic  
Synthese  
Orthotech  
Taylor Bryant

The EDRG welcomes participation from interested surgeons practising at the Epworth Hospital and from Industry, Insurance and Government sectors.

### Please contact Mr Paul D'Urso

T: 03 9421 5844

F 03 9421 4186

E: paul@pauldurso.com

### Disclaimer

The views expressed on Epworth Clinicians Gazette are not necessarily those of the Editor or Epworth.

### Epworth Hospital

89 Bridge Road  
Richmond VIC 3121  
Tel: 9426 8622  
Email: jodie.bristow@epworth.org.au  
Web: www.epworth.org.au

## From My Desk

### DHS Tender for Surgical Services

Recently, two of the Epworth campuses were successful in their bid for the Department of Human Services Tender for the "Provision of Private Hospital Elective Surgery Services for Public Patients". Epworth Richmond was awarded a group of orthopaedic patients where as Epworth Eastern was offered a mixed group of surgical cases. DHS hope the take up with private hospitals will alleviate the excessive demand on the public hospital system where large numbers of patients have accrued on public waiting lists.

DHS have negotiated deals with the public hospital networks and appointed a review panel of private hospitals who are geographically aligned to these networks.

A huge amount of work has gone into the tendering and quoting process. The final result is somewhat disappointing with the offer of 110 bunion cases to Epworth Richmond.

### GP Communication

Communication with general practitioners is obviously not only a common courtesy but is also part of good patient care. Epworth has not always done as well as it could and we not infrequently receive feedback from frustrated family doctors who have received little or no useful information from Epworth or its specialists. In a series of changes we plan to stop the current practice of sending automated non-clinical faxes to GP's when a patient is admitted or discharged. We will continue to work on increasing our discharge summary rate, with a copy of the completed summary to go to designated family doctors. We will also be working on our GP database and trying to improve our GP communication from the emergency department.

You can do your bit by completing the discharge summary and noting the names of any doctors who should be copied - we will do the rest.

### Clinical Governance Manual/By-Laws

As you may know, our long-awaited Clinical Governance Manual and our new By-Laws for medical practitioners are both now essentially complete, having been reviewed by the Medical Advisory Council and now have been referred to the Board of Management. Subject to final review by the Board, these two documents will form the basis of the relationship between Epworth's specialists and the various hospitals now

making up the group. Once final sign off is complete, all new accreditations and future re-accreditations will be based upon these important documents. You should receive your copy in the coming months. Your feedback would be most welcome.

### New Role for Clinical Governance Council

Following a decision by the Medical Advisory Council in February, the smaller Clinical Governance Council is expanding its role to include the monthly review of applications by doctors for accreditation and re-accreditation. This means that the Clinical Governance Council will take on the role of a Credentials Committee, common in many hospitals. The Medical Advisory Council will continue to review the recommendations and to convey its advice to the Board of Management through the chairman, Dr Ron Dick. This change should improve the efficiency (as well as adding another safety layer) of accreditation. With the number of doctors accredited at Epworth's hospitals now approaching 2000, efficiencies are clearly needed.

The Clinical Governance Council, which reports to the Medical Advisory Council, will soon be expanded to include medical representation from other campuses.

### Accreditation of Registrars

Sorry to be repetitious, but it is necessary to remind you again of the need to ensure your surgical assistants are properly accredited to engage in patient care at any of Epworth's campuses. Not only is it in the interests of good clinical risk management, but it is a condition of Epworth's own indemnity insurance that all doctors coming into clinical contact with any patient are properly accredited.

It has been a tradition for many years to invite a registrar to "give a hand" for a private case or list. We don't want that tradition to change, but Epworth does insist that it know precisely who is involved in the care of its patients at all times. This means that your registrar needs to complete a simple accreditation process before he or she can be permitted to assist. This process can be completed on a same-day basis in most cases. Please call me if you wish to discuss this.

**Peter J Dohrmann**

*Executive Medical Director*

# Fluid balance for cardiac surgical patients: Do they measure up?

There is often debate and conjecture over the accuracy of fluid balance charts to reflect physiological change in patients. Epworth Hospital researchers recently investigated the accuracy of conventional fluid balance charting in cardiac surgical patients. From the study, recently published in *Heart & Lung*<sup>1</sup>, Epworth's Glenn Eastwood and his colleagues investigated (1) change in body weight of patients undergoing cardiac surgery for the perioperative period? and (2) if there is a difference between recorded fluid balance and body weight change in patients undergoing cardiac surgery during the perioperative period? The 'perioperative period' was defined as the time between the night before surgery and discharge from ICU.

The researchers used a descriptive study that compared conventional recorded fluid balance and measured body weight in 32 adult patients (26 male), mean age 67 years (range 36-84) who underwent cardiac surgery (CABG ± heart valve) between December 2003 and May 2004. Patients were prospectively weighed on three occasions (night before surgery; discharge from ICU; day 7 post-operative). A retrospective medical history audit was conducted to collect recorded fluid balance data following patient discharge from hospital. Descriptive and inferential statistical tests were then used to analyse the data.

Findings showed that 30 patients increased their body weight from the night before surgery until discharge from the ICU. The mean weight gain was 3.34 kg (SD 1.17, 95% CI 2.70 – 3.98, P < 0.001). Twenty-six patients had returned to or were below, their preoperative weight by their 7th post-operative day. The average recorded fluid balance during the perioperative period was +1.56 L (SD 2.59 L, P < 0.001) with a difference of 1.39 kg between the recorded fluid balance and measure body weight change.

The researchers concluded that the body weight of patients who undergo cardiac surgery was found to fluctuate over the period of hospitalisation. Use of recorded fluid balance to approximate body weight change for the perioperative period was deemed unreliable. Consequently, further investigation of body weight change and scrutiny of conventional recorded fluid balance charting methods for cardiac surgical patients was recommended.

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1. Eastwood, G. (2006) *Evaluating the reliability of recorded fluid balance to approximate body weight change in patients undergoing cardiac surgery*, *Heart & Lung*, 35 (1) 27-32.

# Colorectal Workshops at Epworth - the Asia Pacific Centre for Laparoscopic Colorectal Surgery and Pelvic Floor Surgery

A second International workshop on Laparoscopic Colorectal Surgery was held on April 7-9 at the Epworth Hospital. This follows from a highly successful International Laparoscopic Colorectal Workshop that was held in July 2005 and attended by 150 delegates. This is part of the initiative of the Asia-Pacific Centre for Laparoscopic Colorectal Surgery at Epworth. Together in partnership with Johnson & Johnson Medical and other industries, Epworth Hospital will hold three such International workshops a year. This 3-day workshop comprises a day of lecture/videos, a day of live surgery performed by Associate Professor Joe Tjandra and a final day of hands-on workshop by registrants on cadavers in the Department of Anatomy, University of Melbourne. Following the workshop, a small group of surgeons will join a clinical attachment to Associate Professor Tjandra for 1 week for more in-depth teaching.

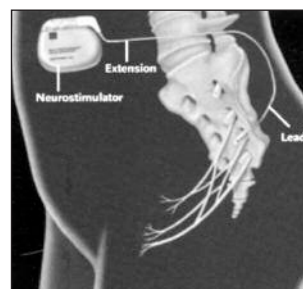
This past meeting was very well attended by surgeons from Australia, New Zealand and Asia. The international faculty has included Dr Peter Marcello from the Lahey Clinic, Boston, USA. The main benefits of laparoscopic colorectal surgery include a faster postoperative recovery, with a shorter hospital stay, less wound infection and superior cosmesis. The purpose of the Epworth course is to propagate surgical techniques that are both fast and safe. In partnership with Olympus Australia, the Epworth Hospital now has two state-of-the-art alpha-OR for minimal access surgery. Such excellent facilities have facilitated complex laparoscopic surgery, as in colorectal surgery, and greatly enhanced live transmission not only locally but also across the globe.

In conjunction with the laparoscopic workshops, Epworth Hospital

also conducts pelvic floor workshops with similar format as for laparoscopic surgery. Indeed Medtronic Australasia has used the Epworth Pelvic Floor Workshop as the core curriculum for accreditation to perform sacral nerve stimulation in Australia and New Zealand. Sacral nerve stimulation involves insertion of a pacemaker to the pelvic floor for patients with severe faecal incontinence, and is preceded by a testing phase for 2 weeks, prior to a full-stage implantation. New innovative treatment has also included injectable therapy performed under guidance of endoanal ultrasound with PTQ implant to augment the anal sphincters. Currently Epworth Hospital has the world's largest experience in injectable PTQ implant in the world, and the largest experience in sacral nerve stimulation in Asia-Pacific.



A/Professor Joe Tjandra



Sacral Nerve Stimulation: SNS (Pacemaker of Pelvic Floor)



Epworth

# Human Research Ethics Committee

The Epworth Hospital Human Research Ethics Committee provides guidance to the hospital on recognised ethical principles and research conduct, and makes recommendations to the Board of Management regarding all new research projects involving hospital staff, accredited doctors and other allied health professionals and students, patients or volunteers.

During February, March, April and May 2006 the following projects were submitted and approved:

Prospective comparison of the immunological response following robotic-assisted and open retropubic prostatectomy for organ-confined prostate carcinoma.	Professor Anthony Costello Dr Paddy O'Malley Dr Frank Bruyere Dr Christopher Hovens Ms Helen Crowe
Correlation between plasma levels of endothelial cells and prostate cancer initial stratification.	Professor Anthony Costello Dr Frank Bruyere Dr Christopher Hovens Ms Helen Crowe
Patient outcomes after open and minimally invasive surgery for prostate cancer.	Professor Mari Botti Professor Anthony Costello Ms Libby Beale Ms Helen Crowe Professor Beverly O'Connell Mr Justin Peters Professor Sing Kai Lo Dr Rosemary Watts
Patients' communication of pain in acute care contexts.	Professor Mari Botti Associate Professor Maxine Duke Associate Professor Tracey Bucknall Ms Elizabeth Manias
Cangrelor for high-risk advanced modern percutaneous intervention (CHAMPION).	Dr Ronald Dick Dr Ernesto Oqueli Mr Shane Sugg
Determinants of mortality following myocardial infarction - a comparison between rheumatoid arthritis patients and the general population.	Dr Sharon Van Doornum Dr Caroline Brand Dr Vijaya Sundararajan Professor Ian Wicks Dr Andrew Ajani
Proteomic Analysis of the Epithelial Compartment in Eutopic and Ectopic Endometrium	Dr L Rombauts Prof L Salamonsen Prof D Robertson
A Study to Determine Effects of a Short Term Diet and Exercise Program Compared to a Normal Nutritional Intake on Infertility Treatment in Overweight/Obese Women	Professor R Norman Dr V Tsagareli Dr G Brinkworth
Proteomic Analysis of the Receptive Endometrium: Identification of Discriminative Markers	Dr L Rombauts Prof D Robertson Prof L Salamonsen Prof J Findlay Dr L Kilpatrick Dr E Dimitriadis Dr G Nie Ms N Hannan
Three Dimensional Motion Analysis of High Level Mobility following Traumatic Brain Injury	Mr G Williams
Development of a Scale to Measure Family Outcomes after Traumatic Brain Injury	Dr G Simpson Dr J Winstanley Ms G Hanna
"Regenerate: A Strength-Training Program to enhance the Physical and Mental Health of Chronic Post-stroke Patients with Depression	Dr J Sims Dr N Taylor Dr L Joubert Ms R Brett
Prefer MVP	Mr R Gelder Ms A Lee
Role of Tumour Stoma in Prostate Carcinogenesis	Prof G Risbridger Dr R Taylor Mr L Harewood Dr J Pedersen Ms C Bamford
Randomised Double-Blind Placebo-controlled, Five Parallel Group Study Investigating the Efficacy & Safety of B1 1356 B5 over 12 weeks in Drug Naïve & Treat Patients with Type 2 Diabetes with Insufficient Glycemic Control	Dr R Simpson Ms J Phillips



# Save Money Save Lives. We're off and running!

The official launch of the Save Money Save Lives Project took place in the Operating Suite on 8 March. It's now nearly 12 weeks into the project and it is time to update the progress we have made!

First of all, what is "Save Money. Save Lives." all about?

"SMSL" is an organisation-wide effort to reduce operating costs so we can invest more in patient services and staff. We're starting off with a widespread review of what we buy and why.

We have a goal of saving \$1.5 million this year.

We've only just got started, but items looked at already have included the purchase of surgical masks and surgical gowns.

You may have notice the surgical masks in the Operating Suite have changed in the last couple of weeks. We are now being supplied a range of surgical masks by one supplier. On the whole the introduction of the new masks has been well received and all of those who have been willing to discuss their concerns and who have embraced the change should be thanked! This initiative will provide

an annual saving of approximately \$40,000.

We are also close to finalising changes to our ordering of surgical gowns. This initiative has incorporated a number of issues including the use of linen gowns, the rationalisation of our existing disposable gowns and the choice of a product range that meets our needs and provides the quality and service we were looking for. Measurement of savings in relation to this product line included not only a possible financial saving of another \$70,000 annually but also the ability to have a positive impact in the CSSD.

So by instituting these simple changes our annual savings are already adding up nicely. This will enable us to bring forward the purchase of equipment like the Brain Lab Navigation System, the Stryker Navigation System and the Leica Microscope.

If you see an opportunity to "Save Money. Save Lives." we urge you to let us know! And, er, meanwhile, is that a light that could safely be turned off? Or a door that could be shut to keep the heat in? Every little helps.

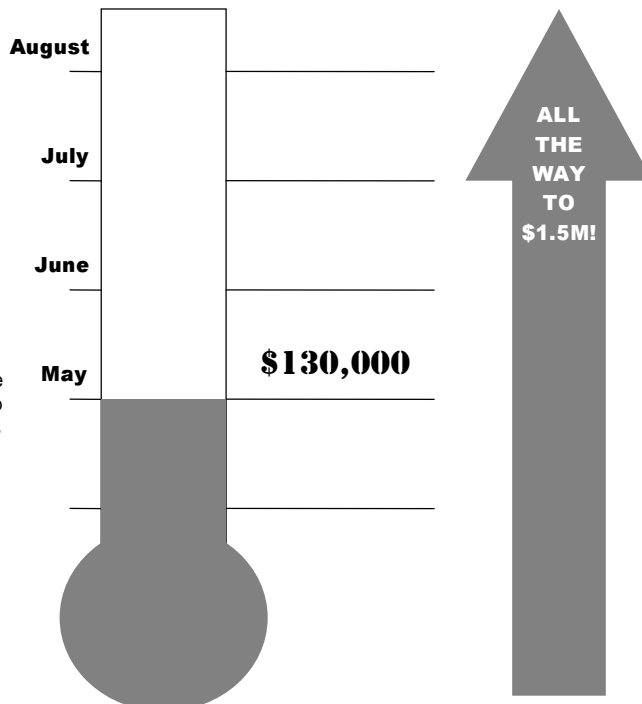
## "SAVE MONEY. SAVE LIVES." STARTS TO PAY OFF ALREADY!



Thanks to changes in the ordering of masks and gowns, we have already saved about \$130,000 in Richmond OR!

Thanks for all the ideas people have come up with – and keep them coming! We can't do this without your help!

Call Robyn Scott on 9426 6271 with ideas and feedback.  
Or please email [robyn.scott@epworth.org.au](mailto:robyn.scott@epworth.org.au)



### Every cent we save goes back into people & equipment!

# Changes in Resuscitation

In September 2005, The International Liaison Committee on Resuscitation (ILCOR) issued new recommendations for basic and advanced resuscitation.

These changes are significant, and are based on the results of a workshop involving 380 international participants focussing on the few factors known to have the greatest impact on outcome, examining and evaluating evidence rigorously.

## Should sudden cardiac arrest (SCA) due to ventricular fibrillation (VF) be treated first with compression or DC shock?

While there was evidence that 3-4 minutes of cardiopulmonary resuscitation (CPR) before attempted defibrillation in out-of-hospital cardiac arrest (CA) may improve outcome, there was insufficient data to determine whether this is so for in-hospital CA.

The Australian Resuscitation Council (ARC) has decided to retain the praecordial thump for witnessed/monitored arrest, and to proceed immediately to one defibrillation shock for VF or pulseless ventricular tachycardia (VT).

## What is the best compression-ventilation ratio?

This was controversial. Evidence is largely based on animal studies.

There is evidence that the current practice of CPR provides too much ventilation to victims of CA. Hyperventilation is associated with excessive intrathoracic pressure, decreased coronary and cerebral perfusion pressures and decreased rates of survival.

### The new recommendations are

- a universal compression-ventilation ratio of 30:2 for lone rescuers of victims from infancy (excluding neonates) through to adulthood
- where there are two rescuers, in children, a compression-ventilation ratio of 15:2 is recommended
- the 3:1 compression-ventilation is retained for neonates, as oxygen and ventilation are vital in this group.
- compressions must not be interrupted during ventilation.

## One shock or three shocks for attempted defibrillation?

A three shock sequence involves a prolonged interruption to effective CPR.

The best overall strategy is to deliver one shock with immediate resumption of CPR, beginning with chest compressions, with no check needed on rhythm or pulse until after a period of CPR (two minutes).

## What shock dose is best?

The initial shock should be 200J for a biphasic, and 360J for a monophasic defibrillator.

## What is the role of adrenaline/vasopressin in CA?

No placebo-controlled study shows that administration of any vasopressor at any stage during human CA increases rates of survival to hospital discharge. Animal studies seem to show vasopressin as being superior to adrenaline, but this has not been confirmed in humans, and the ARC has decided to retain adrenaline as the vasopressor of choice in a dose of 1 mg every 3 minutes.

## What other therapeutic agents help?

While lignocaine, amiodarone, magnesium, potassium, bicarbonate and atropine have been used extensively, there is no solid evidence that any of them improve outcome. However, the ARC says these drugs should be considered. Pacing is obviously important when bradycardia is significant.

## What post-resuscitation care is beneficial?

A study performed here in Melbourne (Bernard et al) has achieved worldwide acclaim, proving that therapeutic hypothermia has improved neurological outcome among initially comatose survivors from out-of-hospital VF CA.

However, its role for in-hospital CA is inconclusive.

## CONCLUSION

### The main changes to current recommendations are

- the increase in compression-ventilation ratio to 30:2, with compressions at a rate of 100-120.
- just one DC shock initially for VF/VT, followed by CPR
- no interruption to compressions during ventilation.

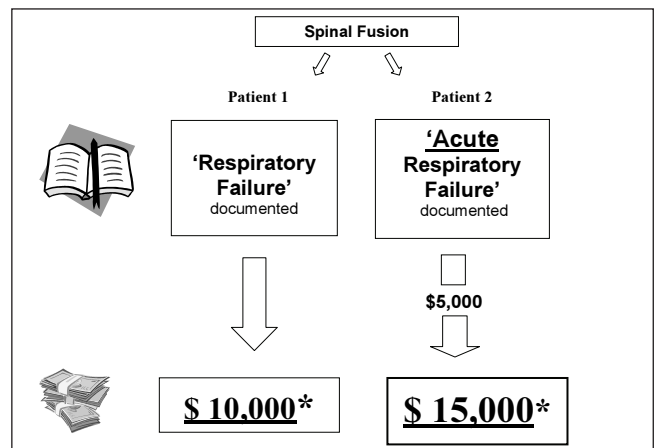
# Did you know?

...that Epworth is becoming increasingly reliant on your documentation for correct reimbursement from the Health Funds.

Only by complete and specific documentation of all medical conditions and complications, during an inpatient episode of care, is the hospital able to receive the full funding entitlement from the private Health Funds.

### Example: Acute Respiratory Failure

When '**Acute Respiratory Failure**' is documented as opposed to unspecified '**respiratory failure**' for a patient whom undergoes spinal fusion, for example, it can attract additional reimbursement of approximately **\$5,000**.



\*The dollar values used are indicative figures only for the purpose of example illustration.

Lack of documentation in the medical record results in the hospital being underpaid for the work it does.

For more information, contact Karinne Daley, Coding Co-Ordinator, Health Information Services on 9426-8757.

# Epworth Hospital in the Home 2005 Annual Clinical Report

## Activity

There has been a striking consistency in the activity of Epworth HIH from 2004 to 2005. The gains made over the last 6 years have resulted in a unit with a stable throughput, due to a maturing role within the hospital community. However, the unit strives for ongoing growth on the understanding that there is further unfulfilled demand for Hospital in the Home, and this aim has not been achieved in 2005.

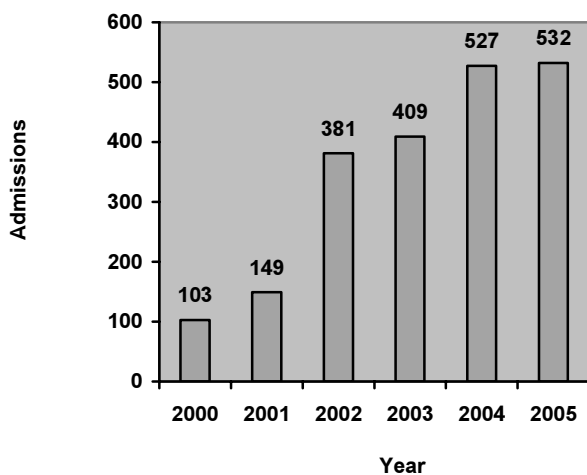
HIH admitted 532 patients during 2006. Of these, 245 (or 46%) were female and 297 (54%) were male.

The youngest patient admitted into HIH was 5 years of age, and the eldest was 99. The mean age for HIH patients was 56 years.

Total bed days of care delivered in HIH in 2005 was 4098, with a mean LOS of 7.7 days. The total days in spent in hospital by patients subsequently admitted into HIH was 4700 bed days, an average LOS of 8.8 days.

This annual caseload required the delivery of 1840 doctors' visits and 4279 nursing visits.

## Epworth HHU admissions 2000-2005



## Referral Sources

Table 2: Referral sources for Epworth HIH admissions in 2005

Referral Source	2004 Number (% of Total)	2005 Number (% total)	Referral Source	2004 Number (% of Total)	2005 Number (% total)
Epworth Emergency	226 (42.8 %)	237 (44.5)	• Non Epworth Referrals	172 (32.6 %)	171 (32.1)
Epworth Wards		112 (23.3)	• Outside Emergency	27 (5.12%)	23 (4.3)
Epworth Eastern	129 (24.47 %)	11	• Outside Wards	68 (12.90%)	82 (15.4)
Brighton Rehab		1	• Direct Referrals	72 (13.66%)	66 (12.4)

In 2005, the opening of Epworth Eastern also saw the extension of Epworth Hospital in the Home services to patients initially admitted to Epworth Eastern.

## Research and Publications

- Letters
- Leff B Montalto M 'Home hospital - towards a tighter definition' J Am Geriatr Soc 2004 (Dec): 52 (12) 2141
- Treating Pulmonary Embolism in Hospital in the Home
- During 2005, Epworth and Royal Melbourne Hospital in the Home collaborated on a study examining the safety of treating a patient with pulmonary embolism who has spent less than 24 hours in hospital emergency department. This study was approved by Epworth Human Research and Ethics Committee. The study was completed in December 2005, and a paper was written. The paper is under review with a journal.
- Pain management in HIH Nursing study
- Epworth has collaborated with Dr Maxine Duke from Latrobe University on a study into the effectiveness of pain management in Hospital in the Home. The study was completed in 2005, and we await results of data analysis.

## Visits

Epworth Hospital in the Home receives many visitors from within Australia. In October 2005, we were honored to receive a visit from Dr Vittoria Tibaldi and Dr Benedetta Bardelli, from University of Torino's S. Giovanni Battista Hospital in Torino Italy. S. Giovanni Battista run the only acute medical/geriatric Hospital in the Home in Italy.

## Hospital in the Home Fellow

Dr Benjamin Lui, a senior trainee with ACEM, was appointed to the position of Hospital in the Home fellow in February 2005. He has made an outstanding contribution to the delivery of medical care to our Hospital in the Home patients. Further, he has decided to continue with HHU for 2006.

*Dr. Michael Montalto,*  
Director HHU

# IMgateway – an information source for doctors on complementary medicines, including herbs

The Emergency Department has been keen to have this web-based resource, since over two-thirds of the population now use complementary and alternative medicines (CAMs), and it is well known that some of these have interactions with conventional medicines, as well as having other effects which may influence the continuing management of patients. IMgateway is a comprehensive website on this topic, and is based on scientific evidence and includes new data from research in the fields of integrative and complementary medicines.

The consulting Committee for UnityHealth includes international experts, including Prof Marc Cohen from RMIT and Prof Avni Sali from Swinburne University.

After review and approval by our Therapeutics Committee, Epworth has obtained access for a 12-month trial period to this information and education reference source, kindly sponsored by UnityHealth and Biological Therapies which are integrative medicine companies.

This resource will also be available through the library computers and on the Intranet. It should be useful for any doctor treating patients who are using alternative medicines.

The links are easily identified on the Intranet home page.

**Dr Allen Yuen**  
Director of Emergency Medicine

## Newly Accredited Doctors December 2005–April 2006

### Anaesthetics

ACHESON, Matthew William Keith  
ALLEN, Richard Donald  
BAR, Mirjam  
BEALE, David Arthur  
BROWELL, Derek Raymond  
CHARLESWORTH, Scott Ross  
CINCOTTA, Maria Veronica  
CLARKE, Julia Victoria  
CLUNIES-ROSS, Penelope Jane  
DIMADIS, Steven  
GROSSI, Antonio  
HILL, Alison Margaret  
HUI, Raymond  
JANSEN, Nicholas Andrew  
NUTTER, Stephen James  
OLIVE, David James  
PATEL, Manash  
PLATT, Hugh Charles Richard  
RAMASAMY, Dayalan  
RATHBOURNE, Ross Alexander  
REES, Kim Adele  
ROYSE, Colin Forbes  
SCHNEIDER, Andrew Carl  
SOH, Michelle Li-Ching  
TURNER, Benjamin Robert  
VATS, Praveen  
WATERFIELD, Michael John  
WEBB, Timothy George  
WONG, Maggie Yuet Mei  
WOODS, Arthur Federick  
ZAFIROPOULOS, Tasoula

### Cardiology

CALAFIORE, Paul  
DORTIMER, Anthony Charles  
FONG, Lance Vivian  
KERR, Geoffrey Donald  
SRIVASTAVA, Piyush Mohan  
STRATHMORE, Neil Frederick

### Cardio-Thoracic Surgery

ANTIPPA, Phillip Nicholas

### Emergency Medicine

GEORGAKAS, Con  
MATTHESSON, Mark Anthony  
WELSH, Justin Dean

### Gastroenterology

GORDON, Adam  
JAMES, Sally Liang  
MURPHY, Craig Andrew  
TAN, Victoria Ping Yi

### General Medicine

BATE, Katherine Louise  
CASSANO, Anne-Marie Terese  
CHEN, Danny (Hui-Fu)  
CONNELLY, Nathan John  
CONRON, Matthew  
GANGOPADHYAY, Himangsu  
HEDLEY, Adam James  
KAN, Kathleen Pooi-Yoke  
LEE, Lee Yen  
LIM-TIO, Sylvia Su-Wei  
MILLER, Belinda Rose  
ONG, Emerald  
SASSE, Anthony Corry  
SIMPSON, Richard Walker  
STANDISH, Hugo Geoffrey  
TRAN, Jane  
YOUNG, Alan Charles

### General Practice

MARSH, David Gregory

### General Surgery

CHENG, Michael Shian Par  
CHANG, Stanley Fa Min  
COX, Colin John  
HAYES, Ian Paul  
MURPHY, Craig Andrew  
SHERSON, Noel Desmond  
SKELLY, Roderick Thomas

### Gynaecology

GORDON, Simon John  
ROME, Robert Malcolm  
TSOCANOS, Stan  
VOLLENHOVEN, Beverley Janine

### Nephrology

HEDLEY, Adam James  
TOUSSAINT, Nigel David

### Neurology

McCRORY, Paul Robert

### Neurosurgery

CHAN, Chow Huat (Patrick)  
D'URSO, Paul Steven

### Oncology

CHUA, Susan Li Ling  
COUGHLIN, Paul Bernard  
GEDYE, Craig Alastair  
JOHN, Thomas  
NEWNHAM, Genni Michelle  
ROME, Robert Malcolm  
SHWARER, Anthony Peter

### Ophthalmology

GALE, David Peter  
STELMACH, Maryla Zbigniewa

### Oral and Maxillofacial Surgery

NASTRÌ, Alf Luca

### Orthopaedic Surgery

ADAIR, Andrew Ian  
BEDI, Harvinder Singh  
JOHNSON, Michael Arthur  
KONDOGIANNIS, Christos Michael  
POWELL, Gerard John  
WILLIAMSON, Owen Douglas

### Plastic Surgery

HOUSEMAN, Nicholas David  
HOLTEN, Ian William Richard  
WU, Terry Tai-I

### Psychiatry

ELLIMS, Lolita Laimdota

### Radiation Oncology

BOWDEN, Patrick John  
FEIGEN, Malcolm  
LIM JOON, Daryl Adrian  
WADA, Morikatsu

### Diagnostic Services – Radiology

PTASZNIK, Jack  
RICHTER, Joseph  
TAURO, Andrew John  
WARD, Stephen James

### Rehabilitation

TEH, Jason

### Surgical Assistant

BOLZONELLO, David Gino  
BUTLER, Melissa Joanne  
CHEN, Christine Yi Chin  
ESNOUF, Stuart Philip  
GETT, Rohan Maurice  
GIAGOUDAKIS, George  
MACKAY, John Andrew  
MULDER, Annegien Meike  
NAMDIARIAN, Benjamin  
NEWCOMB, Andrew Evan  
NEILSON, Wendell M R  
RASMUSSEN, Lisa Kae  
ROBERTS, Marnie Jane  
THOMAS, Michelle Liza

### Urology

CHANG, Christopher Matthew

### Vascular Surgery

CLAYDON, Matthew Harbury