

Issue 4

Summer 2013

# The Faculty of Intensive Care Medicine

### Inside:

Faculty updates
 Trainee ePortfolio
 Defence Intensive Care
 National Recruitment 2013

### Welcome



### Dr Graham Nimmo Clinical Editor

Welcome to the fourth issue – and first ever printed hard copy edition! – of *Critical Eye*. In future our biannual schedule will alternate between printed editions in the Summer and online editions in the Winter. We hope to see copies popping up around the nation's ICUs, the better to keep Fellows and Members updated with the work of the Faculty but also to champion the achievements of the specialty.

The second Faculty Annual Meeting was held in March, with the programme once again packed with eminent speakers delivering thought provoking talks of enormous relevance to both the day-to-day practice of intensive care and to its political development in the UK. Bookings will be opening soon for the third meeting in March 2014 and we would highly recommend to all Fellows, Members and Trainees that they attend. On the subject of meetings, the Faculty also recently hosted the first ever National Conference for Advanced Critical Care Practitioners, which was a great success. Reports on both these events can be found herein.

Alongside our regular Faculty updates on training and standards, this edition of *Critical Eye* features guest articles on topics ranging from Paediatric ICU capacity pressures to intensive care in the Defence Medical Services, from Critical Care Nursing to the new national surveillance programme for infections in ICUs. As ever, the Faculty welcomes suggestions for, and submissions of, future articles. Your feedback is also welcomed – please submit your correspondence to ficm@rcoa.ac.uk.

Clinical Editor Dr Graham Nimmo **Dean** Professor Julian Bion

Managing Editors Mr James Goodwin Mr Daniel Waeland

Vice-Dean Professor Tim Evans

Administered by Miss Anna Ripley

This and back issues available online at www.ficm.ac.uk

### Contents

Dean's Statement	3-4
The Faculty Team	4
FICM Dean and Vice Dean Elections 2013	
Faculty Annual Meeting 2013 Report	6-8
Collaborating for Quality in ICM	9-10
Faculty Events Calendar 2013/2014	10
Special Skills in the ICM CCT	11-12
Pre-Hospital Emergency Medicine (PHEM)	13
Standards for Intensive Care	14
FFICM Examinations Calendar	14
FFICM Examination	15-17
Workforce	18
Infection in Critical Care Quality Improvement Programme (ICCQIP)	19-21
FICM Consultations	22
ICM National Recruitment 2013	23-25
Paediatric Intensive Care: PICU Capacity	26
ePortfolio for Intensive Care Medicine	27-28
Defence Intensive Care	29-30
Regional Advisor Update	31
Trainee Update	32
Critical Care Nursing	33-34
ACCPs First National Conference	35
Simulation in Critical Care	36
Basic Life Support Training	37-38
Joint Intensive Care Symposium	39
Events Application Form	40
ICS Events	41

Please visit the News and Events section of the website for the latest news items at: www.ficm.ac.uk/news-events

### **Dean's Statement**



Professor Julian Bion Dean

My first and most pleasant task is to congratulate Dr Anna Batchelor on her election as the next Dean of the Faculty, and Dr Carl Waldmann as the next Vice Dean. They will assume their roles in October. We are fortunate to have two such experienced and committed individuals to lead the Faculty for the next three years, and I know that they will have the support of all Fellows and Members, and of our profession as a whole.

During the first half of 2013 the Board has been working on a range of important initiatives which will set the scene for our work programme and new leadership over the next few years. In terms of multidisciplinary professional development, we have held two very successful meetings, the Annual Faculty Day and the first national meeting for advanced critical care practitioners, while in September will hold our first joint Symposium with the ICS and the RCoA. We have completed the second annual recruitment round for our new ICM trainees, with a strong field and high quality appointees; we welcome these new recruits to our speciality. We have participated in establishing the new commissioning structures for ICM with the appointment of Dr Bob Winter as National Clinical Director and Dr Jane Eddleston as Chair of the national Clinical Reference group. We have contributed substantially to the creation of the national surveillance programme for infections in intensive care (ICCQIP). And from a strategic point of view, we received the Collaborating for Quality report from our commissioners, Professor Sir John Temple, Dr Judith Hulf, and Professor Jon Cohen, on which we will build the future for ICM over the coming years.

During the second half of this year we will build on these activities as we develop a common national strategy for intensive care. The key to long-term success in this respect is to integrate our efforts across the many partner organisations whose activities touch directly or indirectly on the care of critically ill patients. We will achieve this through the new Critical Care Leadership Forum (CCLF) which holds its first meeting on July 16<sup>th</sup>, with representation from 17 stakeholder organisations as well as from critical care commissioning. The CCLF will allow us to bring the creative strengths of each group to focus on the following areas:

### Standards for intensive care

The Intensive Care Society's excellent first standards document now needs updating. The Faculty and ICS have brought together partner organisations to develop a comprehensive set of quality standards ('Guidance on the Provision of Intensive Care Services', based on the template of the Royal College of Anaesthetists) to create standards which cover commissioning, performance management, quality improvement, peer review, education and research. The first component of this, the service specification for critical care, has been drafted by the Clinical Reference Group and is being circulated for consultation.

#### Workforce planning

Preliminary projects and modelling indicate that the demand for intensive care services and specialist clinical staff will increase over the coming 20 years. We are in discussions with the Centre for Workforce Intelligence and the Deaneries, Health Education England, the GMC and the devolved administrations to ensure that we have sufficient training posts to meet this demand. We have commissioned the Royal College of Physicians to manage the Faculty's workforce database.

### Multidisciplinary training and practice

Building on our reputation for multidisciplinary competency-based training, we held the first national meeting for Advanced Critical Care Practitioners in the UK.

This was very well attended and a great success. We will find a place for ACCPs in the Faculty and will link their training to both physician training and the new nursing competency framework as well. Our new Dean has led this work and made it one of her priorities.

#### Service reconfiguration

The Faculty is closely involved in promoting Seven Day Working, in partnership with the Academy of Medical Royal Colleges and the Royal College of Physicians. Intensive care has a pivotal role in facilitating these developments through multidisciplinary clinical practice.

### Audit, Research and Quality Improvement

We have supported the Critical Care Research Forum, and are contributing to the development of a national strategy for promoting critical care research. We wish to see closer links between the ICNARC Case Mix Programme and the professional organisations so that we can enhance the sense of ownership over quality improvement through linking research, audit, professional standards and multiprofessional training. Responsibility for the Case Mix Programme should be seen as a central component in our core business.

These significant developments represent a substantial workload for the many individuals involved with the Faculty. I want to take this opportunity to thank my Vice Dean, Professor Tim Evans, who has been an outstandingly supportive and innovative colleague, and collectively to acknowledge the support and commitment of all our Fellows and members, of the Regional Advisors and Faculty Tutors, of all my colleagues on the Board, and of our 'civil service'.

### **The Faculty Team**

The Faculty team are responsible for the general management of the Faculty of Intensive Care Medicine. For general ICM related enquiries please contact us on 020 7092 1653 or email ficm@rcoa.ac.uk. The Faculties Department sits within the Education & Research Directorate of the Royal College of Anaesthetists under the Directorship of Ms Sharon Drake.

### Daniel Waeland | Head of Faculties

Daniel is responsible for Faculty budgets, strategy and projects and manages the team. From 2007 to 2009 Daniel was Deputy Head of Quality Assurance at the intercollegiate Joint Committee on Surgical Training. From 2002 to 2006, Daniel worked for the London Deanery in a variety of roles. Daniel's areas of work include Board/ Executive, Finance, Nominations, Quality/Inspections, Public & Patients, Recruitment, Strategy and Workforce.

#### James Goodwin | Faculties Supervisor

James is responsible for supervising the operational work of the team including overseeing the ICM CCT curriculum. From 2008 to 2010 James was administrative lead for the IBTICM and from 2005 to 2008 for the RCoA Training and Equivalence Committees. James's areas of work include Academia, Assessments, the Faculty Board, Curriculum, Critical Eye, ePortfolio, Elections, Revalidation and Training.

#### Anna Ripley | Administrator

Anna joined the department in 2011 after previously working within Fitness to Practise for the General Osteopathic Council. Anna's areas of work include administering Critical Eye and other Faculty publications, Events/Courses and Professional Standards.

#### Maria Burke | Administrator

Maria joined the department in 2013 after previously working within the Faculty of Dental Surgery at the Royal College of Surgeons. Maria's areas of work include General Enquiries, Equivalence/CESR, Examination (General Queries), Examination Tutorials, Simulation, Trainees (Queries, OOPE/T/R, Registration) and Recruitment.

#### Dawn Evans | Administrator

Dawn joined the department in 2013 after previously working within the Joint Royal College of Physicians Training Board (JRCPTB) at the Royal College of Physicians. Dawn's areas of work include Membership, Regional Advisors, Faculty Tutors, Paediatric ICM and the FICM website.

#### mburke@rcoa.ac.uk

aripley@rcoa.ac.uk















### dwaeland@rcoa.ac.uk

jgoodwin@rcoa.ac.uk

### FICM Dean and Vice Dean Elections 2013

Elections were held in June 2013 for the roles of Dean and Vice Dean of the FICM. All full members of the FICM Board were eligible to stand and to vote. The Board congratulates the successful candidates and thanks those Board members who also put themselves forward for election. The new Dean and Vice Dean will assume office at the October 2013 Board meeting.



### Dean - Dr Anna Batchelor

Anna Batchelor has been a consultant in anaesthesia and Intensive Care Medicine at the Royal Victoria Newcastle since 1993. She trained in anaesthesia in Sheffield, Leicester and Newcastle as one of the first JACIT (Joint Accreditation Committee for Intensive Therapy) trainees in the early 1990s. Anna was the ICM Regional Advisor for the Northern Region and chair of the Northern Regional Critical Care Group up until the formation of the networks in 2000.

Anna was elected an ICS Board member 2000 and 2003 and was Society President from 2005-2007. She was elected to the Council of the Royal College Anaesthetists 2008, and nominated to the Faculty of ICM at its formation in 2010. Through the ICS and RCoA she sat on the IBTICM from 2003 until it became part of the Faculty. Her interests are in training, developing our workforce and through these improving our service to patients. Anna was the driving force behind the development of Advanced Critical Care Practitioners; a new sort of worker who will help deliver effective, timely care in the future.

Outside of medicine Anna has one 8 year old son, one husband, two dogs, one cat, five chickens, one cockerel and nine chicks of as yet indeterminate sex. She is hoping for better luck than last year when the family raised one hen and seven cockerels! She has too much garden, a polytunnel and 10 raised beds, and if she ever gets the time, three sailing dinghies and a motorhome.



### Vice Dean - Dr Carl Waldmann

Carl Waldmann has been a consultant in ICM and anaesthesia at the Royal Berkshire Hospital in Reading since joining as Director of ICU in 1986. Apart from his interests in the management of Head Injured patients in a DGH and the procurement and implementation of a Clinical Information System in ICU, his main passion has been the setting up and running of an ICU follow-up clinic in Reading, where he sees around 100 new patients annually.

Carl was a member of ICS Council until May 2006, where his main duties were as Hon. Treasurer and Chair of the Meetings Committee. From May 2007 to May 2009 he was President of the ICS. He was the editor of *Care of the Critically III*. In 2011 he became co-editor of *JICS* with Dr Neil Soni; between themselves and past editors Dr Jane Harper and Dr Bruce Taylor, they hope they have done enough in the development of the journal to warrant listing by PubMed in the very near future. Carl was also was Chair of the section of Technology Assessment and Health Informatics (TAHI) of the European Society of Intensive Care Medicine until 2008 and in 2012 became the UK representative on the ESICM Council. He is a member of the PACT editorial board and recently was editor of the Oxford Desk Reference textbook and also co-editor on the *Law and Ethics in Intensive Care* textbook.

In 2010, Carl was invited to be a founding member of the FICM Board for which he is Chair of the Professional Standards Committee. Carl also has a major interest in sport and is club doctor for Leyton Orient FC.

### Faculty Annual Meeting 2013



Professor Timothy Evans Vice Dean

The second Annual Meeting of the Faculty of Intensive Care Medicine took place on Friday 1<sup>st</sup> March 2013 at the Royal College of Anaesthetists, almost 12 months to the day after the passage of the Health and Social Care Act (2012). Not surprisingly, the consequent changes thereby enacted to the way in which medical services are commissioned, the manner in which the workforce is educated and assessed, and the role of Royal Colleges (and indeed Faculties) in setting standards and helping Members and Fellows to attain and retain them dominated the non-clinical part of the meeting.

Indeed, if a tradition can be created in two years the Faculty is gaining a reputation for attracting leaders, opinion formers and strategists from the widest possible range of healthcare providers and regulators to inform its Fellowship, with the aim of encouraging their active participation in the systems and processes that govern their practice. The viewpoint of one of the UK's leading consultancies (KPMG) which is particularly active in healthcare was provided by Professor Hilary Thomas, who until she joined their ranks was in practice as a clinical oncologist and academic. Whilst it is clear that the new Clinical Commissioning Groups and the National Commissioning Board have quality at the heart of their mission statements, there is as yet little indication as to how this will be achieved or improvements attained. However, it is clear that Health Watch England and local authorities are likely to take on an increasing role in determining the way healthcare is provided locally.

Medical education, patient safety and the trainee voice were subjects addressed by Professor David Black, Clinical Vice President of the Royal College of Physicians and a Postgraduate Dean. David also advised Robert Francis QC in his Mid-Staffordshire enquiry, which has clearly influenced his thinking as to how trainees should be engaged in the quality agenda.



Dr Simon Baudouin discusses the development of the ICM CCT

Photos: Anna Ripley & James Goodwin



Dr Peter Nightingale receives his Fellowship by Election from Professor Julian Bion, Dean of the Faculty

Their idealistic and intelligent perception on the way in which services are delivered, and their exposure to clinical leadership and change improvement projects suggests the consultant body should actively seek their views on these subjects, either via central (e.g. GMC) surveys, or through more local engagement (visits of Local Education and Training Boards, LETBs). David's conclusion that we should use our trainees as an improvement tool rather than a transient workforce provided food for thought for the Faculty, which is considering engaging this vital constituency more actively.

economy. It is his view that merging, integrating or at least rendering complimentary, community care and hospital delivered services should represent a priority for NHS planning. Indeed, the effective collapse of 24/7 community care has rendered the provision of acute and emergency services via the traditional A&E almost unmanageable; many of the 18-20 million attendances each year traditionally having been managed in general practice. How critical care will sit within what amounts to a new acute care clinical pathway is a matter of debate in the Faculty, which is very actively engaged in this project. The FHC reports in the autumn of 2013.

secondary care environment in the new health

Professor Black's deliberations segued the conference neatly into the presentation of Terence Stevenson, President of the Academy of Medical Royal Colleges. Where in the post-Francis arena Colleges and Faculties sit in the panoply of regulators, commissioners, professional regulators and leaders remains to be determined. Moreover, their widely dispersed and divergent priorities suggest

that the AoMRC has its work cut out establishing itself as "the voice of UK medicine".

Your Vice Dean and reporter provided an overview of where the Royal College of Physicians' Future Hospital Commission is developing its thoughts as to how healthcare should be delivered in the

The Faculty is acutely aware of the pressures its fellows are under with regard to commencing revalidation Sir Peter Rubin, President of the General Medical Council of the UK finished the morning's presentations by providing an overview of the current state of revalidation. The Faculty is acutely aware of the pressures its fellows are under with regard to commencing this process (which started effectively in December 2012). All should be aware of their

relationship with a responsible body and therefore Responsible Officer, and all registered practitioners in the UK should by now be aware of their revalidation date. Given the extended gestation period of almost a decade, one would hope no Fellow has been taken unawares by the revalidation agenda,

but it clearly remains unfinished work and the means of assessing medical practitioners is accepted by all as being far from perfect.

The first session of the afternoon was entitled 'New Knowledge in Critical Care'. In the view of your reporter the fact that four speakers of such recognised international eminence and authority could be assembled from within the Fellowship to speak on the subjects of sepsis, head and spinal injury, acute lung injury and genomics is ample evidence of how far the specialty has come in the UK over the past decade.

Whether this is due to the influence of the National Institute of Health Research, specialty recognition for Intensive Care Medicine, the prominence of critical care internationally or the influence of the UK science base in the biological sciences is uncertain. Nevertheless the ability of each speaker to inform the Faculty on the very latest advances in their field and the lively and focused discussion that ensued confirmed to all present that this represented continuing professional development of the very highest order.

The Faculty Annual Report was delivered by the Dean. There were also updates provided by Chairs of various sub-committees of the Faculty Board including the Training & Assessment and Professional Standards committees. Distinguished colleagues were then honoured by the award of Fellowships by Election, the highest distinction the Faculty can offer. Dr Peter Nightingale, former President of the Royal College of Anaesthetists and of the Intensive Care Society, and a key figure in the Faculty's foundation; Dr Alasdair Short, who made seminal contributions to all the predecessor bodies of the Faculty stretching back 15 years and more recently to the development of our workforce survey and databases, and Dr Neil Soni, arguably one of the doyens of British Intensive Care Medicine whose educational, academic and clinical commitments to the specialty were honoured. Each received a citation and a much deserved round of applause from those assembled.

Finally, the Annual Faculty Lecture was delivered by Professor the Lord D'Arzi of Denham. A former Health Minister, practicing surgeon and leading academic, his perception on the interface between our profession and politics was both informative and amusing. The ability of clinical leaders of his calibre to influence health policy and his perception on the value of so doing was of great interest to those assembled and provided a fitting end to the day.

Formal feedback was very positive and the Dean and the Vice Dean were unanimous in recognising the quality of speakers we are able to attract and would endorse in the strongest possible terms the desire that the Fellowship render the third day (to be held on 7<sup>th</sup> March 2014) equally successful.



Professor the Lord D'Arzi delivers the 2013 Annual Faculty Lecture

### **Collaborating for Quality in ICM**





Professor Sir John Temple CfQ Steering Group Chair

The discipline of Intensive Care Medicine (ICM) probably owes its origins to the foresight and inspiration of a Respiratory Physician, Dr Sherwood-Jones, at Whiston Hospital on the outskirts of the Liverpool in 1962. He had been very taken with the concept of 'progressive patient care' during a period spent in the USA.

Over the last 50 years many organisations have emerged each developing a legitimate right to claim some involvement in ICM. The result to date has been the emergence of ICM as a specialty in its own right now with a recognised training programme, leading to a certificate of competence, the ICM CCT.

The recent independent review, Collaborating for *Quality in Intensive Care Medicine (CfQ)* which I was asked to chair, seeks to look for ways of encouraging collaboration with the aim of improving further the quality of care provided by this emerging specialty. In order to fully understand the prevailing situation in the United Kingdom I enlisted the assistance of two other well qualified colleagues, Dr Judith Hulf and Professor Jon Cohen. Each of us can claim to have an understanding of the ICM environment without currently having a vested interest. We arranged to interview all those organisations reported to have a legitimate involvement in this branch of the NHS. Perhaps not too surprisingly, representatives of some 15 bodies came forward.

Of all the branches of clinical medicine ICM should be the one *par excellence* which fully embraces a multidisciplinary background. Nowhere else is the necessity for a one-to-one patient to clinician ratio so vital and the intimate equal involvement of doctor, nurse and supporting staff so critical. Following the very recent almost total change in the health care provision in England leading to much more local commissioning processes, it should be apparent particularly in the more specialised branches of hospital care that a single voice acting for and with the mandate of all involved is far more persuasive than many separate voices, each with a slightly different agenda. Herein lies the greatest challenge to advancing the specialty of ICM further at the present time.

*CfQ* has defined a number of possible areas for much closer collaboration, but essentially four main themes emerged:

- Multidisciplinary involvement particularly reflecting the crucial role played by the nursing fraternity needs to be enhanced. At present in many situations, the nurses feel that they are undervalued. The Intensive Care Society (ICS) has attempted to improve this position recently and the FICM, now that it is firmly established, should also embrace a similar approach.
- Paediatric Intensive Care Medicine and general adult ICM should become much more closely associated.
- 3. Audit and research are essential ways for the specialty to monitor its efficacy and develop research and evidence for continuing improvement in patient care and provide academic stimulation for the staff involved. The basic audit process is not at risk, being well organised on a levy basis, trust by trust in England and Wales, and in Scotland supported by the Scottish Executive and organised by SICSAG. A much more transparent way for

pooled data to be available for all involved in seeking to pursue research in ICM must however be achieved. The present apparent restricted access on this for the Case Mix Programme was reported to the review to be a significant source of discontent. In contrast the process in Scotland, through SICSAG, is professionally owned and highly regarded.

4. Some form of more direct access to those responsible for policy and service delivery at the National Commissioning Board and other more central bodies is necessary. Initially this will probably take the form of a stakeholder's forum. In the long term however it would provide a more unified, and therefore effective channel if this could be honed into one or two representative voices from the whole of the ICM participants. The FICM and the ICS should take on more of this role but will need to become truly multidisciplinary bodies with clearly defined but separate roles and responsibilities.

Change in the NHS is always a gradual process and *CfQ* was written to be challenging. But it is meant to encourage debate around enabling much closer collaboration, pooling of resource and removal of reduplication. The recommendations contained in the report are all possible but none are mandatory. Sensible debate in the current unstable climate should allow the specialty to emerge stronger and more cohesive. This will inevitably produce better patient care.



The full Collaborating for Quality in Intensive Care Medicine report is available for download at www.ficm.ac.uk

racuity Events calendar 2013/2014			
September			
	<b>4-5</b> 20 27	<b>EVENT:</b> MEETING: MEETING:	FICM/ICS Joint Intensive Care Symposium FICM Training & Assessment Committee FICM/ICS Joint Professional Standards Committee
October			
	24	MEETING:	FICM Board Meeting
November			
	22 29	MEETING: MEETING:	FICM Training & Assessment Committee FICM/ICS Joint Professional Standards Committee
January			
	13 16	MEETING: MEETING:	FICM/ICS Joint Professional Standards Committee FICM Board Meeting
March			
	<b>7</b> 14	EVENT: MEETING:	FICM Annual Meeting FICM Training & Assessment Committee

### Faculty Events Calendar 2013/2014

### **Special Skills in the ICM CCT**



Dr Simon Baudouin Chair, FICMTAC

The new Intensive Care Medicine CCT contains a special skills year which will be undertaken in Stage 2 (ST5 to 6) of training. The CCT states that "the aim of this attachment is to allow trainees to develop special skills that will add value to the intensive care teams that they will join following completion of their CCT". For a significant number of ICM trainees this year will be spent gaining further experience and competency in their partner CCT programmes. So a dual ICM/anaesthetic trainee will spend this year in anaesthetic attachments gaining further anaesthetic competencies (as well as gaining overlap competencies that are shared between both training programmes). However for the ICM trainee who is participating singly in the new ICM CCT programme there will be a choice of modules that can be taken during this year. We believe that it is important for the trainees to be given some choice in the skills that they acquire during this year and allow them to experience a training programme that is not exclusively competence-based, whilst acknowledging that local capability to deliver each of the special skills modules will be a key factor.

Competency-based training programmes have become an almost universal feature of medical training in the United Kingdom. They have many merits which include the development of well-defined and measurable training outcomes, a clear definition of the skills, knowledge and attributes to be attained, and a method of making medical training programmes both transparent and accountable to the general public. However, they have also been criticised in terms of a narrowing of educational opportunity, an excessive focus on small, discrete tasks rather than the acquisition of high-level skills and the potential to encourage a "just enough" approach to training by the collection of multiple workplacebased assessments and other pieces of evidence. Trainees wish to excel in their chosen discipline but it is difficult to demonstrate such excellence in very rigid competency-based programs. One of the motivations for introducing the special skills year was to allow trainees to demonstrate such excellence in a specialist field.

The special skills options must however be related to Intensive Care Medicine and in general should also allow trainees to increase their clinical skills during the attachments. In order to facilitate the development and approval of these modules FICMTAC is developing a simple template that should help provide a uniformity of structure. For example a module that would equip a trainee to become a critical care CLRN specialty lead might consist of the following principle sections:

### Aims of the module

- To train an individual to lead NIHR portfoliobased research within a critical care unit
- To train an individual to become a Regional Specialty Group lead

#### **Educational objectives**

- To understand the process of obtaining NHS permissions for research
- To understand the principles of GCP
- To understand the principles of good RCT design
- To understand the governance framework of NHS research

### Educational attachments and training scheme

- Attendance at GCP course
- Attachment to Regional clinical trials unit

be referenced to the CoBaTrICE structure of

research event

the curriculum. Each competency must have also have a clearly defined level of expected achievement as measured against the four level training progression scale used in the ICM CCT *Assessment System*. In some cases these will be extensions to the currently listed competencies.

assessment methods, be mapped to GMP and

Attendance at Critical Care CLRN meetings

Attendance at a National Critical care trials

**Competencies and assessment methods** 

The proposed competencies to be gained during the module need to have pre-defined

#### Supervision requirements

One supervisor must be either the lead/deputy/ past lead of a regional critical care CLRN speciality group. Alternative supervision could be provided by the holder of an academic post in a relevant area with experience in research.

The success of these modules will be highly dependent on the quality of supervision given (as well as trainee commitment). Supervisors need to be experts in the given field and have appropriate higher level training and qualifications. This requirement implies that not all modules can be offered in all regions and the list of possible modules should not be taken as a binding agreement that a given module can be arranged. A degree of flexibility is required and trainees and supervisors will need to meet at an early stage of training in order to successfully manage these modules within the overall CCT training programme. The FICMTAC is developing a number of special skills modules. These include modules in:

- Research methods
- Advanced paediatric critical care
- Advanced cardiothoracic critical care
- Advanced neurological critical care
- Medical education in critical care
- Quality improvement methodology
- Transfer medicine
- Leadership in critical care

It is also possible for trainees to spend a year in a funded and supervised research training post as part of a research training programme (e.g. PhD). Current plans are that each module will last for 12 months. FICMTAC recommends that arrangements are made at a minimum period of 9 months before the start of the module to allow sufficient time for further development, approval and local arrangements.

Most of the special skills modules will be clinically orientated and it is expected the trainees will participate in relevant on-call rotas during their attachments and spend at least 50% of their time in clinical work. Where trainees are undertaking non-clinical modules (e.g. research) it is still expected that they participate and continue with clinical training, for example as part of out of hours rotas. Again some flexibility is required during the attachments as it may be more beneficial for a trainee to do an intense block of special skills training interspersed with more clinically orientated training.

Competence	Assessment Methods	GMP	CoBaTrICE	SSY Target Level
Skills and Behaviours				
To define a focused research question	Project-based Discussion	1, 2	12.15 (Extended)	4
Obtains consent/assent for participation in research studies	I, C, S	1, 3, 4	12.15 (Extended)	4

Example of possible Special Skills module competencies with appropriate mapping and target achievement levels.

### Pre-Hospital Emergency Medicine (PHEM)



Dr Bernard Foëx FICM Representative, IBTPHEM

Pre-Hospital Emergency Medicine (PHEM) delivers appropriate medical care to injured or critically ill patients wherever they may be, attempts to stabilise them, and then transfer them to the most appropriate hospital. This may involve the use of fast cars, ambulances or helicopters and will very often involve close liaison with other Emergency Services. Although this type of work has been going on for many years in a number of other European countries, for example by the SAMU in France, it has never been recognised as a medical specialty in its own right.

However, since July 2011 the General Medical Council has recognised Pre-Hospital Emergency Medicine (PHEM) as a sub-specialty of Anaesthetics and Emergency Medicine. This means that trainees from either of these specialties can, in addition to the training needed to obtain the CCT in their parent specialty, undertake additional training in PHEM, which will be recognised by the GMC, just as Emergency Medicine trainees can have recognised sub-specialty training in Paediatric Emergency Medicine, for example. This training, which takes one year, follows a curriculum developed by the Faculty of Pre-Hospital Care and the Intercollegiate Board for Training in Pre-Hospital Emergency Medicine (IBTPHEM). The curriculum covers working in emergency medical systems, providing pre-hospital emergency medical care, supporting safe patient transfer and using pre-hospital equipment. It also covers less familiar territory, such as, rescue and extrication, and supporting emergency preparedness and response. These areas of practice emphasise the role of the PHEM as one part of a multi-service response to an emergency.

The first Deanery to offer a training post was the East of England, in August 2012. Now, training is

also being offered by the West Midlands, Severn, Northern, and Wales Deaneries. Anaesthetic and Emergency Medicine trainees can apply in their third year of training but will not normally start their PHEM programme until after their fourth year. The programme may run as a 12 month block between two years of parent specialty training or even post-CCT. Alternatively it could be split into two 6 month blocks in 24 months of parent specialty training.

Although these training posts and the sub-specialty recognition are only available to trainees with NTNs in either Anaesthetics or Emergency Medicine, it is hoped that this will be extended in the near future as the IBTPHEM, after liaison and agreement from the FICM, is in the process of submitting an application to the GMC to have PHEM recognised as a sub-specialty of Intensive Care Medicine. Further developments in this area will be reported in future issues of *Critical Eye*.



Models of training in PHEM for Anaesthesia and Emergency Medicine trainees.

For more information please visit the IBTPHEM website at www.ibtphem.org.uk



### **Standards for Intensive Care: current position**



Dr Carl Waldmann Chair, FICMPSC

Two strands of work are being developed at the joint meetings of the Professional Standards committees:

### **Core Standards for Critical Care**

This has the primary purpose of providing a service specification for critical care to inform commissioning. This work is being led by the new Clinical Reference Group for Critical Care, supported by the participating organisations and likely to be supported by the new national Critical Care Leadership Forum (CCLF) representing all professional organisations in ICM. Overall there are 75 Clinical Reference Groups charged with developing specialty-specific commissioning for approval by the Portfolio Board of NHS England this Autumn.

Core standards should either have strong evidence, or strong professional support, and preferably both. Trusts may "derogate" from five standards over the total specialty commissioning portfolio. Commissioning standards/core objectives should be measurable, the metrics contributing to public-domain speciality-specific data dashboards for performance assessment. Contracts will be established with organisations wishing to bid for, and capable of providing, these speciality-specific datasets for national benchmarking. There are likely to be 12 critical care standards (outcome measures) which will map to four of the NHS Outcomes Framework Domains.

#### General Provision of Intensive Care Services (GPICS)

This is a more ambitious and much more long-term initiative led by the Faculty and ICS, with multiprofessional support from all other professional organisations in ICM. It is likely to be supervised by the new Critical Care Leadership Forum, with secondary links to the commissioning structures. Its primary focus is to set standards which will define best practice and improve the care of critically ill patients and their families.

Standards will cover clinical care, audit, research, training and CPD, and may be used for quality improvement, peer review, and benchmarking. We wish to engage the whole critical care community in this initiative, including managers and of course our patient representatives. Further information will be provided following the first meeting of the CCLF on July 16<sup>th</sup>.

		0		
	FICM MCQ Examination		FICM OSCE/SC	DE Examination
Applications and fees not accepted before	Mon 15 April	Mon 14 Oct	Thurs 11 July	Thurs 9 Jan
	2013	2013	2013	2014
Closing date for Exam	Tues 28 May	Tues 26 Nov	Thurs 29 Aug	Thurs 27 Feb
applications	2013	2013	2013	2014
Examination Date	Wed 17 July	Wed 8 Jan	Tues/Weds 8-9	Mon/Tues 14-15
	2013	2014	Oct 2013	April 2014
Examination Fees	£465	£465	Both <b>£555</b> OSCE <b>£300</b> SOE <b>£255</b>	Both <b>£555</b> OSCE <b>£300</b> SOE <b>£255</b>

### Examination Calendar August 2013 - July 2014

### **FFICM Examination**



Professor Nigel Webster Chair, FFICM Examiners

The first sittings of the Fellowship of the Faculty of Intensive Care Medicine Final examination took place in January and March 2013. The preparations and development of this examination have been ongoing for the last 3 years, with the intention to phase out the Diploma of Intensive Care Medicine in the summer of 2012 and replace it with a Fellowship examination that was in line with the methodology of the GMC. To this aim the elements of the FFICM Final examination were chosen carefully to ensure that each component is in compliance with the GMC's *Standards for Curricula and Assessment Systems*. MCQ, OSCE and SOE examinations were agreed upon to meet the testing aims of Miller's pyramid.

### **Court of Examiners**

The existing DICM Examiner Board was restructured into the new FFICM Court of Examiners to meet the requirements of the new examination format, with Chairs and Vice Chairs elected for each component. The remainder of the Examiners then formed into Core Groups. The main focus of the Core Groups over the last 12 months has been on question design and writing, curriculum mapping and standard setting measures.

From a total of 46 examiners from the Faculty Court of Examiners, 36 attended the OSCE/SOE examinations held on 18<sup>th</sup> and 19<sup>th</sup> March 2013 and carried out examining, auditing and question writing duties over the two days of the examination.

### The FFICM MCQ

The MCQ was held on 9<sup>th</sup> January. 79 candidates sat the exam, of whom 62 passed (78.5%). 55 (88.7%) of these went through to take the OSCE/ SOE part of the examination. The MCQ pass mark was 75.78% which was reached by Angoff referencing, carried out by a dedicated MCQ Angoff group. The Angoff score was adjusted by the use of a Standard Error of Measurement to allow for the borderline candidates.

The exam achieved a Kuder-Richardson (KR-20) score of 0.718, which is considered reasonable and comparable to FRCA Final MCQ exams.



The box plot in Figure 1 indicates that candidates scored consistently as a cohort with a standard deviation of 14 marks (3.12%); only two candidates scored low outlying scores (there were no high outliers). The mean score was 77.74% (349.8 out of 450).

The average age of candidates at this sitting was 34.2 years; this was slightly lower for those who passed (34) and slightly higher for those who failed (34.9). Figure 2 shows the distribution of candidates' ages. Figure 3 indicates that the majority of candidates at the exam were of a white ethnic origin (81%); 12% of candidates did not specify their ethnicity.

### The FFICM OSCE/SOE

In order to assist with the standard setting of the SOE exam, Angoff and Ebel standard setting methods were carried out by the SOE Core Group two weeks before the exam using the questions set for the exam. The Linear regression and Hofstee calculations were plotted against exam



data post-exam. All statistical analysis was made available and was discussed by the Court of Examiners; the final pass mark of 26 was reached through a combination of statistical analysis and expert judgement after consideration of borderline candidates. This pass mark matched the score obtained from the Hofstee calculation. Eight candidates failed the SOE, four candidates on each day and therefore failed the examination overall. All fail scores were closely grouped in a range of 22–24; no candidates who failed received a low overall global score with the majority receiving scores below the minimally competent.

Figure 4 indicates that there was not a great deal of correlation between scores achieved in the three exam components. This is reassuring insofar as it suggests that the three components are testing different abilities in the candidates.

Therefore 47/55 (85.45%) passed the SOE component. Of the 47 who passed 20 (42.5%)

achieved maximum marks of 32, which is an indication of the high calibre of candidate attending this exam.

All OSCE questions were Angoff referenced by the OSCE working party in advance and a cumulative pass mark of 146/240 and 147/240 was reached for the questions sets used on each day of the exam. The Court of Examiners looked at various methods of supportive statistical analysis of the exam data post examination but none of the findings were conclusive. It was therefore agreed that the pass marks reached by the working party were set in good faith using the approved Angoff procedures and therefore should stand. All 55 candidates (100%) passed the OSCE component, once again a reflection of the high calibre of the candidate cohort.

Therefore 47/55 (85.45%) achieved a full pass in the Fellowship of the Faculty of Intensive Care Medicine examination.



This chart shows the mean scores for candidates that passed and for those that failed at each exam. We can see that the greatest difference is at the SOE exam, where candidates that passed (overall) scored an average of 21% higher than those who failed. This suggests that the SOE is the most discriminating of the three components

The range of topics covered on both days was considerable. The list below is not fully comprehensive but does give a flavour of the topics covered: Rhabdomyolysis; Diabetic emergencies; Fluid responsiveness; ALI / ARDS; Rehabilitation after ICU; Status epilepticus; Eclampsia; Necrotising fasciitis; Nutrition; Hyponatraemia; Ethylene glycol poisoning; CVC insertion; Anaemia on the ICU; Pancreatitis; Non-invasive ventilation; Endocrine abnormalities on ICU; Ventilator associated pneumonia; Resuscitation; Heparin induced thrombocytopenia; Communication with ICU patient relatives; Plasma exchange; Assessment of delirium; Scoring systems; ECG interpretation; Guillian Barre syndrome; Abnormalities of acid base balance; Tracheostomy; Interpretation of X-rays.

As is evidenced by the high pass rate, the questions were handled well overall. However, the Examiners found that the weakest examination stations were those involving ECG and X-ray interpretation. It would be our intention to continue including such stations in future examinations in an attempt to improve standards in these areas.

### **Examination Fees**

Following the sitting of the MCQ various candidates made comments on both the standard and the overall conduct of that part of the examination. First, the examination should be regarded as a whole rather than just its parts. The Examiners have attempted to broadly cover the curriculum but clearly this cannot be accomplished in just one of the three parts of the examination process. Second, the FFICM fee is set to cover the costs of running the whole examination. It does not make a profit and once overheads are factored into the budget, currently runs at an overall loss for the Faculty and is subsidised by Faculty subscriptions. This means we are able to keep the examination considerably cheaper than other Colleges and Faculties, even without the benefits of saving by economy of scale. It is important to note that although the MCQ may seem a simpler examination to organise when compared to the SOE/OSCE, with a room full of papers and desks as opposed to rooms full of Examiners and actors, the same amount of work goes into producing both parts of the examination. Each diet (whether MCQ or SOE/OSCE) requires many days of question writing, question re-evaluation, criterion referencing and standard setting. The cost of the examinations is set with this in mind.

Examinations can seem to be simple enterprises to run, but that is a deceptive by-product of trying to make the examination days themselves as efficient and pain free as possible for the applicants. Each examination paper required hundreds of hours of question writing, question review, structural planning, database development, curriculum mapping, statistical analysis and standard setting to get it right and to get it better with each new sitting. With this in mind I would like to thank the Examinations Department of the Royal College of Anaesthetists without whose considerable help and expertise we would not have been able to progress this far in such a relatively short time. I would also like to thank Andrew Cohen (Deputy Chair), the chairs of the various Core Groups – Mike Clapham (Audit), Gary Mills (SOE), Julian Millo (OSCE) and Alison Pittard (MCQ) – as well as all of the Court of Examiners – for all their hard work to see this first examination come to fruition.

### Workforce



Dr Alison Pittard Chair, FICM Workforce Advisory Group

Now the independent nature of our specialty is established it is time to re-focus on workforce planning. The Faculty of Intensive Care (FICM) Workforce Advisory Group (WAG) was initially set up to coordinate a two phase census. The group was co-chaired by Drs Alasdair Short and Bob Winter and, having moved on to other things, I would like to take this opportunity to thank them for laying down the foundations upon which I hope to build. The reformed group held its first meeting in April and all members were tasked with gathering or consolidating data to inform a submission feeding into the Centre for Workforce Intelligence's (CfWI) In-Depth Review of anaesthesia and Intensive Care Medicine.

The group included information from a review of the literature, (though there has been very little workforce data published in the UK), both phases of the census, recruitment data and key demographics supplied by ICNARC. It is hoped that, having provided the CfWI with accurate information, we will have a much clearer idea of how we should move forward. Now the independent nature of our specialty is established it is time to re-focus on workforce planning ??

at a time, 36.2% undertake blocks of days and the rest work single days on ICU. The average number of DCC PAs in ICM per consultant is 4.24 and DCC PAs in other areas is 3.82. The average number of SPAs per consultant is 2.89. Where there is a differential allocation of these, the average number for ICM is 1.19 and non-ICM is 1.69. Out of hours work is undertaken in a variety of ways. Where there is an on-call pattern the majority (74%) of consultants are on a frequency of 1 in 10 or more. 29.4% cover other areas including ICM when on call and 36.5% of hospitals have their out of hours cover for ICM provided by non-intensivists. Some out of hours work is classified as scheduled and there is an average allocation of 1.37 PAs for this type of work.

> There is an average of 0.85 PAs per consultant allocated for non-scheduled work out of hours. This variability makes planning very difficult and single specialty status will add another layer of complexity. Of the respondents in Phase II, 91.1% have sessions in anaesthesia and ICM, 5.3% work solely in ICM and 16.9% were female. 32% of current trainees in either

the Joint, single or dual programmes are female meaning the demographic of the specialty has the potential to change dramatically.

The CfWI's review is already in progress but it will be some time before we see the results. I don't think anyone would dispute the fact that consultant numbers need to be increased, we just don't know by how many. The review will hopefully both give us the answer to this and encourage an expansion in training numbers.

Phase I of the census focused on hospitals via Faculty Tutors and results were reported in the August 2012 issue of *Critical Eye*. The majority (31.1%) of hospitals have between 6 and 10 beds, 24.2% between 11 and 20, 14.9% between 16 and 20 and the remainder have 21+ beds. Only 6 hospitals have fewer than 5 funded beds. Phase II went to all fellows and revealed a wide variety of work patterns both in and out of hours. 35.6% of consultants cover ICU a week

### Infection in Critical Care Quality Improvement Programme (ICCQIP)



Professor Peter Wilson Chair, ICCQIP

Healthcare acquired infection in critical care is potentially preventable and has a high economic impact. Considerable success has been achieved in reducing rates of central venous catheter infections through surveillance and feedback combined with a package of evidence-based infection prevention measures. The success of programmes in the USA<sup>1</sup> and the subsequent 'Matching Michigan' programme in the UK<sup>2</sup> gained widespread attention. The Department of Health (England) wanted to build on this success and encourage the development of a surveillance system capable of audit and feedback of a variety of acquired intensive care infections.

In 2012, a multiprofessional group (ICCQIP) representing the major stakeholders was established under the auspices of Public Health England (PHE) with the intention of creating a voluntary national reporting and quality improvement programme for healthcare associated infections in intensive care in England. A national survey of intensive care units was conducted to identify staff opinion with regard to the priority targets and methods to be used and this will inform a new online reporting system.

### **Reducing Health care infections in ICU patients**

Two recently published scientific papers<sup>3,4</sup> have reported the outcomes of efforts to reduce blood stream infections from central venous catheters (CVC-BSIs) in critically ill patients. The Matching Michigan project<sup>3</sup> was funded by the Department of Health, led by the National Patient Safety Agency (NPSA), and undertaken in 196 adult and 19 paediatric ICUs across England. 'What Counts'<sup>4</sup> was an independent parallel ethnographic study



Professor Julian Bion Deputy Chair, ICCQIP

funded by the Health Foundation and led by the University of Leicester; it was undertaken in 19 ICUs, 17 of which participated in Matching Michigan. The MM interventions were based on earlier research from the USA<sup>5</sup> which reported a substantial reduction in CVC-BSIs following introduction of a programme of technical measures to prevent infection combined with nontechnical (behavioural) interventions focused on patient safety.

Matching Michigan reported a reduction in CVC-BSI rates overall from 4.4 to 1.7 per 1000 CVCpatient days. The reduction was more marked for adult than paediatric ICUs. Self-reported infection control practices varied widely (for example, daily clinical-microbiology ward rounds), as did the frequency of blood culture sampling (ten-fold variation). The study design allowed detection of two important and novel findings. First, infections acquired before ICU admission declined in parallel with those acquired in the ICUs. Second, each cluster of ICUs joining the project at successive time points had an entry-level infection rate close to the post-intervention level of the preceding cluster. Taken together, this strongly suggests a common (systems-wide) cause for improvement rather than an effect which could specifically be attributed to the technical and non-technical interventions focused on and located in the ICUs.

What Counts provided unique insights into the way in which a patient safety programme actually operated in a sample of 19 ICUs. Although infection control practices and staff focus were largely good, the non-technical interventions were poorly adopted. There was concern that the

definitions for CVC-BSIs did not fairly represent local circumstances and case mix. Three models of reporting CVC-BSIs were identified, but there was such wide variation within and between ICUs in approaches to the detection, diagnosis and reporting of possible or confirmed CVC-BSIs that the metrics as currently constructed cannot be regarded as secure, particularly the surveillance definition (catheter-associated BSIs). These findings are consistent with studies from the USA which report substantial variation in reporting CVC-BSIs <sup>6-9</sup>. A further analysis of the ethnographic findings currently in press will show that both local context and perceptions of top-down imposition of quality improvement programmes strongly influence engagement and compliance.

Matching Michigan and What Counts therefore inform future quality improvement projects. If performance measures are to have professional support, the numerator (the variable being measured) must have clinical validity, be consistently applied, and minimise opportunities for bias; and the denominator (the population being studied) must capture case mix fairly. A standardised approach to detection and reporting is needed, with clinicians harmonising practice and organisations investing in data collection, and with the entire process having strong professional ownership and leadership. Unexplained process variation (for example in infection control practices) should be evaluated in relation to outcomes. If these conditions are satisfied, a national surveillance and feedback system would be expected to have a significant impact on infection rates.10

### The Work of ICCQIP

The guiding principles of the project were first established. Each participating centre/ICU will own the data it submits, but will be asked to allow for its use in aggregated analyses (to include centrallyaccessed patient-level data) under a trusteeship arrangement. Data collection tools, data preparation and governance, and linkage to other NHS databases will be provided by the PHE. There will be close links to current national intensive care case mix programmes such as ICNARC. Data will be owned by the providers and analysis of the aggregated database will be under the direction of a Board consisting of representatives of the professions and patients.

The National Survey was sent out earlier this year to all interested groups in the UK via the Faculty of Intensive Care Medicine, the Paediatric Intensive Care Society, the British Association of Perinatal Medicine, the Infection Prevention Society and the Healthcare Infection Society. Neonatal units already have an extensive network for reporting infections but their views were also sought. A total of 763 replies were received. The majority were from adult ICU with a general case mix and a median number of beds of 11 per unit. Almost 80% of respondents were ICU physicians and 8% were nurses. The majority (94%) agreed that surveillance should be performed and indeed probably be mandatory. There was agreement (89%) that data on antimicrobial use should be collected and that screening, clinical and imaging results be included. Linkage to patient outcomes through NHS information systems was favoured by 79%. Individual patient data should be used to allow risk adjustment (67%). Central venous catheter associated infections and multiresistant infections were thought to be the highest priority (Figure 1).

The current work of ICCQIP involves a sub-group examining the definitions of healthcare acquired infection that are available and which should be used. In particular, existing CDC and European definitions will be used. Both central venous catheter (CVC)-associated and CVC-related blood stream infection have been widely used but the latter requires greater microbiological laboratory input and may not be available in many hospitals at present. The group has decided to focus initially on all-cause bacteraemia, as this will also capture CVC-bacteraemias, the rates of which are already low in many centres. A computer interface is now being developed by PHE alongside a new system to be used for MRSA and Clostridium difficile reporting for the wider hospital community. This will allow centres to link their infection surveillance data to quality benchmarks currently being developed by a multiprofessional collaboration led by the Faculty and the Intensive Care Society, linked to commissioning and the Critical Care Clinical Reference Group.

ICCQIP is a major step forward for Intensive Care Medicine. It provides our new specialty with a voluntary system for comparing and minimising infection rates, with the data owned

by the participating ICUs, and the central dataset managed by a multiprofessional group representing adult, paediatric and neonatal Intensive Care Medicine, nursing, microbiology, and infection control. We hope to be able to launch the programme this autumn, and strongly encourage all units to participate. The authors will welcome views and comments on the future of the project.

### References

- Wise ME, Scott RD, Baggs JM, Edwards JR, Ellingson KD, Fridkin SK, McDonald LC, Jernigan JA. National Estimates of Central Line–Associated Bloodstream Infections in Critical Care Patients. *Infection Control Hospital Epidemiology* 2013;34(6):547-554
- The Matching Michigan Collaboration. 'Matching Michigan': a two-year stepped interventional programme to minimise central venous catheterblood stream infections in intensive care units in England. BMJ Quality & Safety 2012; BMJ Qual Saf doi:10.1136/bmjqs-2012-001325
- The Matching Michigan Collaboration. 'Matching Michigan': a two-year stepped interventional programme to minimise central venous catheterblood stream infections in intensive care units in England. *BMJ Quality & Safety* 2012; BMJ Qual Saf doi:10.1136/bmjqs-2012-001325
- Dixon-Woods M, Leslie M, Bion J, Tarrant C. What Counts? An Ethnographic Study of Infection Data

Reported to a Patient Safety Program. Milbank Quarterly 2012; 90(3): 548–591

- Pronovost, P, Needham, D, Berenholtz, S, et al. An intervention to decrease catheter-related bloodstream infections in the ICU. N Engl J Med 2006; 355; 2725-2732.
- Niedner MF; 2008 National Association of Children's Hospitals and Related Institutions Pediatric Intensive Care Unit Patient Care FOCUS Group. The harder you look, the more you find: Catheter-associated bloodstream infection surveillance variability. *Am J Infect Control.* 2010 Oct;38(8):585-95.
- Lin MY, Hota B, Khan YM, Woeltje KF, Borlawsky TB, Doherty JA, Stevenson KB, Weinstein RA, Trick WE; CDC Prevention Epicenter Program. Quality of traditional surveillance for public reporting of nosocomial bloodstream infection rates. *JAMA*. 2010 Nov 10;304(18):2035-41.
- California Department of Public Health Reports on Healthcare Associated Infection. Number PH12-036. August 9th 2012. http://www.cdph.ca.gov/Pages/NR12-036.aspx
- 9. http://centerforhealthreporting.org/article/stateinfection-accounting-faces-daunting-challenges965
- Dixon-Woods M, Bosk CL, Aveling EL, Goeschel CA, Pronovost PJ. Explaining Michigan: developing an ex post theory of a quality improvement program. *Milbank Quarterly* 2011; 89(2): 167-205. doi: 10.1111/j.1468-0009.2011.00625.x.



### FICM Consultations: Revision of the EU Clinical Trails Directive 2001/20



Professor Julian Bion Dean

In 2001 the European Clinical Trials Directive 2001/20 brought emergency research to a halt in the UK and many other EU countries. In the UK it took two years and the efforts of many before UK legislation was amended to permit research once again to be conducted in emergency circumstances, primarily through the mechanism of appointing a professional legal representative to provide consent on behalf of the patient.

The European Commission has now proposed a Regulation to replace Directive 2001/20. The aim of the regulation (which must be adopted by all member states without modification) is to provide a single point of application via a European Portal in order to obtain authorisation and governance approval for all clinical trials involving medicines. Ethics reviews would remain at national level.

The proposed Regulation also recognises the difficulties of performing research in emergency circumstances, and acknowledges that deferred consent may be necessary. However, Article 32 proposes that deferred consent may only be used where "the clinical trial poses a minimal risk to, and imposes a minimal burden on, the subject". This could only apply to research using licensed drugs, not new compounds in Phase II or Phase III trials.

In addition to this issue of minimal burden, Article 32 also requires that loss of capacity is a consequence of disease (and not, for example, sedation for mechanical ventilation), and that deferred consent can be used only when no legal representative is available. This second requirement is problematic because in emergency



Dr Carl Waldmann Chair, FICMPSC

situations where starting treatment is time-critical (e.g. in cardiac arrest) delaying treatment to obtain consent would be harmful and therefore unethical.

Finally, the article requires that "the research relates directly to a medical condition which causes the impossibility to obtain prior informed consent". A strict interpretation of this proposal might prevent research into the secondary consequences of the primary disease.

The MHRA has collated consultation responses to which the Faculty and our partners have responded. However, the MHRA has focused its summary on the research bureaucracy components of the Regulation, not on the issues surrounding emergency research. The Faculty has therefore joined a European initiative to engage the support of Mrs Glenis Willmot MEP, who is a member of the Environment, Public Health and Food Safety Committee in the European Parliament considering the Regulation, and who will advise the European Council when it considers the legislation on May 29<sup>th</sup>. Her support has been most helpful. In the meantime we will continue to encourage the MHRA to recommend modifications to the Regulation, and have drawn to their attention the experience of the CRASH investigators of how well-intentioned but misguided legislation can produce unintended consequences which harm patients<sup>1</sup>.

#### References

Roberts I, Prieto-Merino D, Shakur H, Chalmers I, Nicholl
J. Effect of consent rituals on mortality in emergency
care research. *Lancet* 2011; 377(9771): 1071-2.

### ICM National Recruitment 2013



Dr Tom Gallacher ICM National Recruitment Lead

In Recruitment Round 2013 there were 240 applications to Intensive Care Medicine for a total of 88 available posts. Applicants completed a bespoke CVQ online and these were initially screened to remove any candidates who did not meet the essential criteria, leaving 229 to be forwarded for shortlisting for the 160 available interview slots.

These were shortlisted against a pre-determined template which had been made available on the West Midlands Deanery ICM recruitment website beforehand. Each application was scored by two independent assessors and their scores were aggregated to give a final total score.

Some trainers have fed back to the Recruitment Sub-Committee that they felt trainees who they

recognised as very competent in the clinical environment and with good credentials on paper failed to be shortlisted. Having looked into this, it is apparent that some applicants who fail to be shortlisted do so because of a poor standard of completion of the application form. We would strongly recommend that for future recruitment rounds trainers review the trainees' applications prior to submission, taking into account the shortlisting template. In particular, they should ensure the trainee is providing the information which has been requested as per the scoring template. No marks are awarded other than as stated on the template.

160 applicants were invited for interview on 1<sup>st</sup> and 2<sup>nd</sup> May and 155 candidates attended over two days at Birmingham City Football Club.



Candidates were given 10 minutes to prepare their presentations

Photos: James Goodwin

23



Assessors discussing the final pass mark

88 posts were available in England, Wales and, for the first time, Northern Ireland who offered 1 post. Scotland remain keen to join the National Recruitment process but due to different manpower requirements set by the Scottish Government were unable to offer any posts for recruitment this year. However, the Scottish Regional Advisors took an active part in all aspects of the national process and remain closely involved. In return, the Faculty sent representation to the Scottish recruitment exercise to maintain the necessary close links. It is hoped that Scotland will be able to participate in future national recruitment exercises.

The interviews themselves consisted of five stations: two OSCE style (task prioritisation and reflective practice) and three manned stations (clinical, presentation and portfolio review). A minimum score to be appointable was predetermined by Dr Alison Pittard's group – who devised all assessment centre material – as the sum of the minimum acceptable scores at each of the five stations.

It was decided prior to the interviews that any candidate who achieved the minimum score to be appointable but whose performance in a single station gave cause for concern would be discussed at the end of the day. The concerns were then explained to the entire cohort of assessors and a group decision was made as to whether the candidate was appointable or not. At the conclusion of the selection process 124 candidates were deemed suitable for appointment. This then translated into the fill rates by Deanery shown in the table below with a total fill rate of 90%.

Of those interviewed in 2013, 47% came with a partner specialty national training number - largely from ST3 and ST4 - and 53% came directly from core training. Feedback from Regional Advisors in ICM suggests that an upper limit to the point in training where an individual could be appointed

Deanery	Posts Offered	Posts Filled	Fill rate %
East Midlands North	2	2	100
East of England	5	3	60
KSS	4	4	100
London	19	19	100
Mersey	4	4	100
North Western	12	8	67
Northern	6	6	100
Northern Ireland	1	1	100
Oxford	6	6	100
Severn	5	5	100
South West	4	4	100
Wales	4	3	75
Wessex	6	6	100
West Midlands	6	6	100
Yorkshire & Humber	4	2	50

Recruitment data for 2013 Single & Dual Appointments		
Future training intention	% intending	
Intending to Dual ICM with Anaesthetics	72	
Intending to Dual ICM with Medicine	17	
Intending to Dual ICM with Emergency Medicine	4	
Intending to remain Single ICM	7	

to a dual training programme is desirable. We are therefore in the process of further discussion with our partner Colleges with regard to this issue.

Following interview we asked candidates anonymously about their career intentions. Only a minority of trainees wish to pursue a career solely in intensive care with the vast majority intending to dual train. This shows that the profile of specialties with which trainees wish to dual accredit with intensive care has not altered from that seen with the old Joint CCT. Further work has been done this year to assess the feasibility of simultaneous recruitment to ICM and a partner specialty in the same recruitment round. Representatives of the FICM met with representatives of the UK Offers System (UKOFFS) on behalf of our partner Colleges; the complexities of simultaneous recruitment involving 5 partner specialties, who may have national and/or regional recruitment, round 1 and possibly round 2 across 14 deaneries with some trainees being eligible for appointment to any deanery and some only appointable to a single deanery make this an unrealistic proposition. UKOFFS was designed specifically to allow a trainee to hold or accept only a single post at a time.

However, the 2013 recruitment has demonstrated the successful approach of sequential recruitment and we will monitor the development of the first dual CCTs programmes formed from August 2013 to see what issues, if any, there are.



Professor Julian Bion meets with trainees who have just completed the interview process



West Midlands Deanery staff ensure that trainees have brought the correct paperwork to their interview

### Paediatric Intensive Care: PICU capacity pressures over Winter 2012/13



Dr Kevin Morris President, Paediatric Intensive Care Society

Every year the seasonal increase in respiratory viruses poses a challenge for PICUs across the UK to meet the increased demands on their services. RSV infection, which affects young infants, is the virus that causes much of the problem. This past winter was no exception and led to a shortage of PICU beds in some parts of the country. As a community we were very grateful for the support shown by colleagues working in general ICUs, through FICM and ICS, in agreeing to do what they could to help their paediatric colleagues. Although few children were placed outside of PICUs the dialogue and collaboration was helpful for future 'surge' planning. Collectively we have since met up with representatives from DH and senior commissioners to plan better for future Winter pressures.

Understandably some general ICU staff expressed concern about being asked to potentially look after a critically ill child, something outside their normal scope of work. It is important this is recognised by employers and critical care networks, and that in the future robust educational and training opportunities are established across networks to allow staff to refresh knowledge and skills. The PICS *Standards for the Care of Critically Ill Children* (2010) make specific reference to the situation of staff acting outside their area of competence if this is in the best interests of the child (Standard 21).

### High dependency care for children

PICS is currently working on a project with RCPCH which aims to improve the care offered to critically ill children outside of PICU by establishing clearer criteria for different levels of critical care support, designation of paediatric critical care units in DGHs, and clearer staff training and definition of competency requirements for paediatric nurses and doctors providing this care. It is anticipated that the document will go out to consultation within the next 2 months. Strengthening and improving critical care provision outside of PICU could reduce demands on PICM services and allow care to be delivered closer to home in many situations.

#### **Establishing Paediatric Critical Care Networks**

In distinction from adult and neonatal critical care, paediatric critical care has not historically had a formal network structure in place, though there are some excellent regional models in existence. Paediatric critical care is not going forward as an Operational Delivery Network in 2013/14 but we hope will be able to offer a similar network model to neonatal and adult critical care in 2014/15 and beyond. Much of what we want to achieve to improve delivery of critical care outside of PICU and reduce winter demands will only be possible with a robust network in place.

### **Closer working with FICM and ICS**

ICS is keen to work closely with FICM and ICS, in the coming years and has the support of the RCPCH in taking this forward. We anticipate that closer integration of our intercollegiate training committee (ICTPICM) would be an excellent place to start, alongside attendance at respective Council meetings which has already started. PICS is also keen to ensure that a voice for children is maintained as the new sub-specialty of Pre-Hospital Emergency Medicine (PHEM) grows. Together we must ensure that doctors working in the pre-hospital environment are appropriately trained and competent to be able to triage and treat a child as capably as they would an adult patient.

### ePortfolio for Intensive Care Medicine



Dr Louie Plenderleith e-Portfolio Lead

While many trainees and trainers see an ePortfolio as yet another hurdle in training, the quantity and complexity of paperwork required to monitor progress through the ICM curriculum has increased greatly. The Faculty therefore felt that we needed an ePortfolio to ease both the collection and collation of the evidence required for training progression.

### How did we decide on the provider?

The process started at the end of 2011 and, after looking at several options and providers, the FICM decided to use NES, which promised to deliver a functional ePortfolio at a reasonable cost. The NES system is used by Foundation and several of our partner specialties (but not Anaesthetics). This means that most of our trainees will have some familiarity with the structure of the ePortfolio, though of course it will be tailored to our requirements.

Since the provider had been chosen, the small group which developed the original specification has been working to customise it to the requirements of ICM. In doing this we have tried to stick to the underlying principles that the ePortfolio must enable the collection and, just as importantly, collation of training information in a way which minimises data entry and provides views of the information in relevant layouts.

### When will it be ready?

We originally planned for it to be available by August 2013 for new trainees starting. This did seem an achievable goal initially, however we now must make the rather unoriginal excuse that forces outside our control have delayed this. We hope to have a system available in August, however it will not have been tested and it is likely that we may need to make some changes before we can recommend its use. However we expect it to functional by Autumn.

#### What will it look like?

There are three areas the ePortfolio needs to cover:

- General progress through the curriculum including assessments
- 2. Educational planning and agreements
- Formal Assessments Educational Supervisor's Report and ARCP

#### General progress through the curriculum

This is based on the competence progression described in the curriculum for ICM, *Part II – Assessment System*. To complete each stage of training trainees must achieve the level of competence defined in this document for each sub-domain. As they progress through each Stage trainees need to provide and link evidence to each sub-domain. Once sufficient evidence is acquired, the sub-domain can be signed off by their Educational Supervisor. We hope to have a traffic light system at each stage of training (red – no evidence, amber – some evidence, green – signed off) to allow easy visualisation of progression.

Evidence may be of quite varied types. It can either be collected directly on the system using forms, i.e. Workplace Based Assessments, professional activities etc, or can be uploaded in electronic form i.e. certificates (e.g. ALS), logbook, ICU profiles. In common with other ePortfolios one piece of evidence can be linked to several sub domains. The ePortfolio will not have a built in logbook. The Faculty has defined a log book report, but expects that programmes for



collecting the required data will be developed by others and benefit from that bespoke approach.

As many of our trainees will be dual training, we investigated the possibility of directly linking with other ePortfolios to reduce duplication; however this is not currently possible, even for other NES ePortfolios. Trainees will therefore have to download WPBAs from one ePortfolio and upload to another. To help with this process we plan to have the ability to tag uploaded documents so the FICM ePortfolio can identify them correctly.

In addition to assessment documents, the ePortfolio will allow trainees to record professional activities (courses, meetings, audit, research etc.) with reflection as appropriate.

#### Educational planning and agreements

The ePortfolio will contain forms such as Educational Agreements and Personal Development Plans. These can be signed agreements with assessment on completion.

#### Formal Assessments

Finally the ePortfolio will enable the production of an Educational Supervisor's report and ARCP documentation. For these we are trying to ensure that the relevant information in the ePortfolio can be easily identified.

#### Conclusion

We expect the system to help both trainees and trainers document training. While the ePortfolio is designed to complement the curriculum we appreciate that it cannot and should not completely mirror existing paper systems. Once we have a working system, we will make it available for comments and will be able to make some changes, especially to the content of forms. As each deanery uses a different paper system, the move to ePortfolio will require some changes in ways of working but hopefully everyone will find it helpful.

### **Defence Intensive Care: A personal perspective**



Group Captain Neil McGuire FICM Co-Opted Board Member

Intensive care in the Defence Medical Services (DMS) has changed immeasurably over the past 20 years. As little as 10 years ago, questions were still being asked as to the relevance of intensive care in the treatment of the wounded and sick in wartime. The effectiveness of the present capability is a tribute to the vision and determination of a number of remarkable, dedicated and resourceful individuals. To appreciate the scale of progress, we must first understand the UK Defence view of field medical care, and how this has changed over time.

The direction of field medical care was originally driven by the concepts of the Cold War battlefield. This, in essence, involved a vast Soviet military invasion from the east. This would be done using overwhelming numbers of troops and armour, supported by attack helicopters and massive air power. The West's response to this initial conventional attack would be conventional in the hopes of stalling the advance long enough for reserves to be mobilised and NATO formations deployed. It was, however, recognised that in the face of such an onslaught, early recourse to tactical battlefield nuclear weapons would be necessary, and the use of intercontinental nuclear strikes would be inevitable.

Casualty estimates from the initial conflict were expected to be in the thousands to tens of thousands. It was clear that any medical effort would be quickly overwhelmed and the use of reverse triage would be necessary from the outset. The number of casualty's labelled "expectant" (going to die) would be high, with the major medical effort being returning troops to fighting and "doing the best for the most". This view remained entrenched in the minds of planners and any thought of critical care provision was confined to mass ventilation of those troops who had been the victim of nerve agent poisoning. This fanciful notion was given credence by the production of basic, air powered, constant flow generator ventilators, set up in multiple banks powered by large compressors. There was no thought given to who would run this capability and what other care might be required for these critically ill patients!

Nonetheless this type of capability was deployed in the first Gulf War and I recall being one of two registrar anaesthetists under the supervision of a senior registrar (there were no consultants deployed in anaesthesia in my unit). The field hospitals of that time had an area called 'ITU', but it was in reality a recovery room with primitive ventilators. It was, therefore with great trepidation that we responded to the first air raid sirens.

That war, thankfully, produced relatively few casualties and should have been a medical turning point, but somehow the opportunity was lost and it was not until after the initial entry into Afghanistan in 2001 that the situation began to change. There had been conflicts in the Former Republic of Yugoslavia, Kosovo and Sierra Leone, but again casualties had been light and intensive care was not properly considered.

The only area of critical care to have developed significantly up to that point had been in the air evacuation of the critically ill, by the RAF Medical Service (RAFMS). The ability of the RAFMS', consultant-led Critical Care Air Support Teams (CCAST) to reduce the

impact of critically ill patients on deployed field units' resources by early evacuation had been anticipated. The plan also considered the necessity to transfer very sick patients over extended periods of time and distances.

Development of the capability had been rapid and CCAST were able to support the sparse resources of the field hospitals of the time. The CCAST concept was so successful due to forward planning, innovative training and state of the art ICU transfer equipment. There was no better example of this in action than in 2002 when a "mystery illness" resulted in the closure of a field hospital in Afghanistan, as large numbers of hospital staff became ill. CCAST supported a mass evacuation of the unwell, which included multiple ventilated patients. The lessons learned from this event prompted a review of field

unit 'ITU' capability and requirement.

The invasion of Iraq in March of 2003, and the possibility of the use of biological and chemical weapons prompted another look at ICU capability with the potential development of a biohazard-ICU. This also led to the reinvigoration of the ability to transfer highly infectious or contaminated patients

by using an Air Transportable Isolator (ATI). The RAFMS had procured and maintained this capability since the 1980s in partnership with the Department of Health. Over the years the ATI has been used to transfer a number of patients with suspected viral haemorrhagic fevers to secure isolation facilities in the UK for investigation and treatment.

During the early campaign in Afghanistan, and into the second Gulf War, DMS critical care provision continued to develop further. At first consultant anaesthetists were always the lead medical clinicians, supported by a mix of qualified ICU nurses and nurses with experience of ICU. Necessity also drove the requirement to use anaesthetists just out of training as the lead in ICU. This was because they had up-to-date ICU training and experience as an integral part of their anaesthesia training programme.

Units in
 Afghanistan have
 been re-equipped
 with state of the
 art ventilators as
 well as other
 equipment

In 2007 development of ICU stepped up a gear with the formation of Defence Anaesthesia Special Interest Groups (SIGs). One of the most crucial was the Critical Care SIG led and staffed by key ICM personalities in the DMS. Anaesthesia remained the lead, because of the capability to multi-task across clinical boundaries when the limiting of numbers of personnel was critical to the mission, but the increasing number of physicians was very welcomed.

Innovations in care of the critically ill war wounded advanced exponentially as the campaign in Afghanistan progressed. The injured, who had sustained trauma of severity un-recordable by any civilian scoring system, were emerging as "unexpected survivors". ICM was a key element of this remarkable effect.

> In the past few years a cohort of ICM trained clinicians from anaesthesia and medicine has emerged to take up the challenge, very much in line with the national changes in ICM. They are now supported by much greater numbers of ICU trained nurses. At the same time the units in Afghanistan have been re-equipped with the state of the art ventilators as well as other equipment. Renal

replacement has even been undertaken and in international collaboration, so has ECMO.

It has been said that the maximum effect of a field unit is measured by the ability to provide appropriate intensive care. The reality is that it is a vital, indispensable component of the evacuation chain stretching from care under fire, through the field unit and to air transfer. Intensive care takes its place in delivering massive transfusion, damage limitation surgery, damage control surgery and haemostatic resuscitation without which the critically ill war wounded would not survive.

The DMS ICM has developed and progressed hugely during recent conflicts, but it still looks to the FICM, RCoA, AAGBI, ICS, BACCN, NIAA and other national organisations for support and inspiration as it moves forward in partnership into the future of critical care in the UK.

### **Regional Advisor Update**



Dr Chris Thorpe Lead RA in ICM

Following the successful introduction of the single CCT in ICM last year, we held the first interviews for single and dual CCTs in April. We had a selection of extremely good candidates – a total of 240 applicants for 88 jobs. The next step is to integrate the successful dual trainees into their two programmes. The Training Programme Directors in the two specialties will sit down and organise the programme, which will need to be individually tailored to each trainee. The two programmes will be within the same deanery, and once underway the trainee should find the flow of the programmes seamless – although there may be a fair amount of organisation needed in the background!

In order to fit the timescale that both programmes can

be completed within 8.5 years, there are some differences between simply adding the two programmes together – for example Anaesthetics and ICM would take a total of 14 years in this circumstance. Some aspects are simply dual counted because they are present in both curricula in an identical fashion.

Training
 Programme Directors
 in the two specialties
 will sit down
 and organise the
 programme )

This is the case in Stage 1 of training, where ICM trainees have to complete one year in the partner specialty anyway, and an anaesthetic trainee, for example, would have to spend at least 6 months within ICM. There are however parts of the curriculum which differ depending on whether the trainee is pursuing a single CCT or dual CCTs. This is the case at Stage 2, where the two years can differ markedly depending on the trainee's background. The first difference is found in the specialist year where, depending on the partner specialty, the

trainee will undertake different attachments. ICM trainees dualling with Anaesthetics will for the main part achieve their competencies while in anaesthetic attachments for cardiac, paediatric and neuro-anaesthesia. Single CCT trainees, and those dualling with medicine and Emergency Medicine will spend these attachments on the specialist ICUs. Next, within the Special Skills year single CCT trainees will spend the year developing a skill related to ICM, whereas those undertaking a dual CCTs programme will spend the year in their partner specialty. The Special Skills year for the single CCT trainee could involve, for example, teaching and training, research or further experience in a specialty intensive care unit.

> In what other ways will dual trainees differ from single trainees? Well firstly, there is the extra exam of course. There will also need to be ARCPs for both specialties, and there are two portfolios to be filled in. The trainee will have to get used to being at different stages in their different specialties – for example they may have completed Stage

1 ICM (ST4) but be ST3 in their partner specialty. They could potentially get an Outcome 3 for one specialty ARCP but sail though the partner specialty, for example if an exam is particularly troublesome. In extreme circumstances, a trainee could even leave one programme but continue with the other.

What of the future for dual training? In August it will be up and running - we will have a much better feel for how the programmes will dovetail together and we will also see if there are any nuances requiring adjustment. Hwyl Fawr!

### **Trainee Update**



Dr Mike McAlindon FICM Trainee Representative

It is nearly a year since our new cohort of ICM CCT trainees began their journey and we will soon be collating feedback from their training surveys. This will help the Faculty further develop the new training programme. Lack of familiarity with the programme, from both a trainee and Regional Advisor perspective, has required a close working relationship and lessons learnt this time round will help us move forward into the new academic year.

As anticipated, ICM recruitment stepped up a gear this year with a greater number of applications for the single CCT programme. In addition to this, trainees applied to ICM from within the partner specialties in order to form dual CCTs programmes. Congratulations to all those successfully appointed and welcome to the greatest specialty in medicine!

Shape of Training will guide postgraduate medical training and will have an impact on our future working lives

available for piloting in the Autumn. We hope that familiarity with the platform will facilitate its use. Features such as the ability to link assessments to the curriculum will hopefully be useful for trainees tracking their progress.

Training has been under the spotlight with the GMC Shape of Training review occurring this year. This review is important as it will guide postgraduate medical training over the next 30 years and will have an impact on our future

working lives. The FICM has contributed to this work with close involvement from ICM trainees.

In addition to this review, we have been working closely with the Centre for Workforce Intelligence to highlight the key issues surrounding ICM within the evolving NHS. Changes in work-life balance, reduction

The inaugural FFICM Final Examination occurred earlier this year. Congratulations must also go the 47 new Fellows by Examination. Feedback from candidates has been positive and the exam was widely regarded as a fair process and a valuable learning opportunity. Unfortunately the next OSCE/SOE will clash with the ESICM meeting this October. The FICM apologise for this sadly unavoidable clash. It is to be noted that from 2014 the written examination will also include 30 Single Best Answer (SBA) questions.

The ePortfolio, in association with NHS Education for Scotland (NES), is expected to be in training time, increasing demand on services, feminisation of the workforce and 24/7 consultant-delivered care are just some of the challenges facing intensivists in the near future.

Our FICM Trainee Membership continues to expand and is now in excess of 300! I endeavour to provide as much relevant information as possible to you but please contact me with any queries or comments you may have.

Finally, may I recommend the trainee sessions at the ICS State of the Art meeting in December 2013. We have an exciting programme in store and look forward to seeing you all there.

### **Critical Care Nursing: An optimistic future**



Annette Richardson Critical Care Nurse Consultant

Critical care nursing is in some ways no different to any other type of nursing. All nurses must treat patients with concern and respect; provide high standards of individualised and dignified care; work with others and act with integrity in a professional manner. Failure to comply with this brings nurses' registration to practice into question and devalues the trust we have from patients.

Consequently, the recent shocking and unacceptable shortcomings identified by Richard Francis in the Mid-Staffordshire inquiry have brought into doubt this strong professional nursing code. This situation has arisen from specific nursing deficiencies which included neglect for basic elements of care, chronic shortage of nursing staff, a lack of compassion towards patients and a fear of speaking out about concerns. These failings have highlighted crucial messages for nurses delivering care at the front line, such as the importance of providing fundamental care; for example washing patients and changing sheets, and the need for compassionate communication – these messages have now been elevated to an important position.

As a critical care nurse I've reviewed the Mid-Staffordshire reports to assess if these nursing shortcomings were occurring in critical care. Not totally unscathed, but it was reassuring to detect one of the few areas to be praised for good practice was the critical care unit. In fact critical care nurses received praise for their dedication, politeness and professional attitude. Plus the care, hygiene and treatment were described as "second to none".

So why did critical care nursing escape the serious and undesirable criticisms in Mid-Staffordshire?

This is likely to be due to the well-established nursing standards for critical care. Firstly, there is the nationally recognised and widely adopted safe levels of critical care nurse staffing, with a ratio of one critical care nurse to one level 3 intensive care patient, and one critical care nurse to two level 2 high dependency patients. Secondly, there is the widely adopted presence of strong nursing leadership and clinical coordination provided by highly trained, empowered and experienced critical care nurses in charge of critical care units on a shift by shift basis. This clinical coordinator role provides junior nurses with immediate and close supervision, clear direction, guidance and support to deliver high standards of compassionate care to the critically ill. The third important factor is the level of training and education provided to critical care nurses. This has always and continues to be undertaken in a very structured and coordinated approach supported by comprehensive packages and systems based on essential competencies to be achieved and assessed throughout a critical care nurse's career. The fourth factor is the critical care team work approach. This team work includes many health professionals but specifically involves the close collaboration between nurses and doctors. These respected relationships supported by regular communication and a varied skill-set offer an effective safety net to deliver safe quality care and prevent or quickly rectify shortcomings in care in the future.

Despite the multi-factorial causes and the many staff involved in Mid-Staffordshire, there were clear messages to put right what went wrong and prevent it from happening again. These included the requirement for stronger nursing leadership and an urgent need to focus on ensuring that

nursing standards are put in place. In critical care the well-known nurse staffing levels, strong nursing leadership and team work offer very important lessons for the prevention of this situation occurring in other areas of nursing and healthcare settings.

A national critical care initiative offering compelling support for the continuation and refinement of critical care standards is with the newly formed NHS National Commissioning Board Clinical Reference Group (CRG) for adult critical care. A key role of the CRG is to set service specifications for critical care and my involvement in establishing safe service specifications for nurse staffing levels on this group will hopefully be beneficial. Another development aimed at enhancing critical care standards involving nursing is laid out in the Collaborating for Quality review, which offers a fresh and needed approach to improve quality for the critically ill. It identified the importance of cooperation of the many critical care organisations and how this could lead to enhanced professional standards, research, audit

and education. The review reported that morale and enthusiasm were judged to be high, a finding which offers an exciting prospect for further advancement of critical care.

Finally, a development which allows critical care nurses to utilise their skills, knowledge and experience to enhance patient care at the bedside is with the Advanced Critical Care Practitioner role. A role developed not just for nurses but one which allows nurses to progress and demonstrate their capability and competence as a team member within the critical care workforce. Robust training and a comprehensive set of competencies are essential elements of this role's development and the national standardisation of this by the FICM, to be in-line with junior doctor competencies, is a vital move to ensure these new roles are quality assured, transferrable and that national variations in patient care minimised.

Lessons from Mid-Staffordshire and developments to maintain and improve critical care nursing standards offer important steps towards an optimistic future for critical care nursing.



### **Advanced Critical Care Practitioners** First National Conference for ACCPs

Michael Tait and Jane Poynter ACCPs, Newcastle-Upon-Tyne Hospitals NHS Foundation Trust



Wednesday 19<sup>th</sup> June 2013 saw the first National Conference for Advanced Critical Care Practitioners. The event, held at the Royal College of Anaesthetists in London, was extremely well attended by a good cross section of stakeholders in critical care from all around the UK, including qualified ACCPs, trainee ACCPs, Intensivists, Educators and Hospital Managers.

The day was well structured, catering for the requirements of all who attended. Dr Anna Batchelor (Dean Elect of the Faculty of ICM and ICM consultant at Newcastle-Upon-Tyne Foundation Trust) began by setting the scene, discussing the drivers for the ACCP programme including the development of ACCP pilot programmes, and the subsequent production of the DH ACCP framework/curriculum. Following this, Dr Batchelor and Dr Simon Gardner (consultant in ICM at Middlesbrough's James Cook University Hospital) presented the development and implementation of the ACCP training programmes in each of their respective Trusts. Both were extremely positive about the significant impact the ACCPs had had on service provision, and detailed their Trust's ongoing commitment to the programmes with plans for further recruitment and training of ACCPs.

Carole Boulanger (longest serving ACCP in the UK and widely recognised Godmother of national ACCP development) and Pete Thomson (qualified ACCP from Edinburgh) shared their own experiences of training and working as ACCPs. Following this, a very useful presentation on how to support an ACCP through educational supervision was given by Dr Nicola Barham (consultant in ICM at Middlesbrough's James Cook University Hospital). The morning sessions generated a great deal of discussion from the audience, perhaps most notably from prospective NHS Trust managers seeking to learn from the experiences of the established training Trusts/ACCPs, in order to explore how they may integrate ACCPs into their own critical care service provision.

The afternoon started with ACCPs attending their inaugural Annual General Meeting, where Carole Boulanger was unanimously elected as Chair. Following the AGM, Professor Harold Thimbleby (Professor of Computer Science, Swansea University) gave an extremely thought provoking lecture on the safety of electronic medical equipment, and as a result we will no longer trust our "trusty" calculators!

ACCPs and Managers/Trainers then divided into groups for the afternoon workshops. The ACCPs attended workshops on neurological emergencies and cardiological emergencies/resuscitation, whilst the Managers/Trainers partook in workshops regarding the setting up and delivery of an ACCP programme – preparing a business case, and how to work with an HEI to deliver the education and integration of clinical experience with academic teaching.

The meeting was closed by Professor Julian Bion (Dean of the Faculty of ICM) who outlined the future challenges facing intensive care in the UK in the coming decades. He identified the development of the ACCP training programme as being pivotal to produce clinicians who will form an essential part of the medical staffing of ICUs nationally.

In summary, the first National Conference for ACCPs was stimulating, informative and thought provoking. It provided an excellent educational opportunity to all stakeholders in intensive care. It was also a chance for ACCPs to network with others who work in this new and challenging role.

### Simulation in Intensive Care



Dr Graham Nimmo Dr Sara Catrin Cook Dr Sid Khan FICM/ICS Simulation Development Group and ASPiH SIG members

Over the last 18 months a joint Faculty of Intensive Care Medicine/Intensive Care Society Simulation short life Development Group has met in order to help coordinate the development of simulation training and education within UK intensive care.

### Background

The proposal to set up a FICM Simulation Development Group (SDG) was agreed in principal at the FICM Board meeting on 17<sup>th</sup> October 2011. It was recognised at this time that the ICS was developing a similar group and it was felt

### Simulation is of major relevance to ICM training

The group participated in the ICS seminar on <sup>4<sup>th</sup></sup> April. 'Critical Care Simulation at the Point of Care', highlighting running simulation within the intensive care unit with the multi-professional team involved. The group met again on 11<sup>th</sup> July and started planning for live simulation to be delivered at the December ICS State of the Art meeting in London. Dr Sid Khan and Dr Ben

> Shippey have written an article on Human Patient Simulation in Intensive Care Medicine Training which was published in Issue 2 of Critical Eye in Summer 2012.

Dr Sara Catrin Cook and Dr Matt

appropriate that these two groups join forces.

The inaugural meeting including teleconferencing was held at Churchill House on January 12<sup>th</sup> 2012. The remit of the group was discussed and initial thoughts included the following:

- Simulation is of major relevance to ICM . training
- Some competencies are difficult to evidence • without the use of simulation
- It is useful for educational diagnostics ٠
- It should be multidisciplinary, embedded in . units
- There needs to be a scenario bank based on the ICM curriculum's 'Top 30' cases
- There needs to be a mechanism for sharing information, ideas and materials

### Progress

Following this initial meeting, Terms of Reference for the joint group were developed and then refined at the SDG meeting on 3<sup>rd</sup> April 2012.

Thomas led the development of a Critical Care Special Interest Group at the Association for Simulated Practice in Healthcare (ASPiH) meeting in Oxford in November 2012. The final SDG group meeting was held during the ICS SoA meeting in December 2012.

### Plans for 2013

Development of simulation cases based on the FICM 'Top 30' will be the main work for this year. Dr Niamh Feely and colleagues have developed a scenario template which will be utilised for this development. Members of the ICS simulation group and the ASPiH group are working on this. If you are interested in helping please contact Sid Khan. We would also encourage all who are interested in simulation in intensive care to join ASPiH and sign up to the Critical Care Simulation Special Interest Group (chaired by Sara Catrin Cook).

#### Resources

sara.c.cook@wales.nhs.uk www.aspih.org.uk

### Basic Life Support Training: Resuscitation for Medical Disciplines, Birmingham

#### Chris Jones Kate Ainslev

Basic Life Support Committee, Resuscitation for Medical Disciplines, Birmingham

The General Medical Council (GMC) stipulates within *Tomorrow's Doctors* that medical school graduates must be able to "provide immediate care in medical emergencies"<sup>1</sup>; an expectation shared by the Royal College of Physicians<sup>2</sup>. However, despite the obligation of their respective universities to provide effective life support training, UK medical students have recently reported feeling underprepared for managing acutely unwell patients<sup>3</sup>.

At the University of Birmingham, acute care training begins from healthcare students' very first semester as part of a renowned student-led Basic Life Support (BLS) course which the GMC has itself described as "innovative". Overseen by Resuscitation for Medical Disciplines (RMD) and accredited by the European Resuscitation Council (ERC), the Birmingham BLS course is the largest of its kind in Europe<sup>4.5</sup>. Its unique peer-led approach has seen senior healthcare students tutor over 600 of their more junior colleagues annually. Additional support has been provided by the British Heart Foundation (BHF).

### **Course development**

Born out of students' frustration with didactic lecturebased life support training, the Birmingham BLS course was founded 18 years ago by three medical students. Favouring a hands-on teaching approach, they proposed a peer-instructor model which, they forecast, would overcome resource limitations to permit favourable student/teacher ratios and extensive exposure to practical skills.

The organisation they formed, RMD, began by recruiting members of the University life-saving society to teach first-year medical students, the most promising of whom were subsequently selected to train as instructors. Once established, student instructors were shown to deliver life support training that was of comparable, if not superior, quality to that provided by clinical staff, whilst providing additional advantages in terms of greater reliability<sup>6</sup>. Assessments, on the other hand, were initially conducted by external

examiners from the Royal Life Saving Society (RLSS) UK. However, in 2007 an evaluation of the use of peer assessors concluded that students could assess their peers as reliably and effectively as external examiners<sup>7</sup>. The subsequent introduction of student assessors has led to the concomitant evidence-based development of a novel examiner training course, the Birmingham Assessor Training Programme (BATP)<sup>8</sup>.

### The course today

Nine senior medical students currently oversee the provision of BLS training for 600 of their more junior peers annually. These nine members of the organising committee are supervised and supported by a wider faculty of resuscitation specialist instructors and doctors, many of whom were previously involved in running the BLS course as students. Together, the committee and faculty currently coordinate the activities of 48 student instructors and 20 student assessors over four courses split into 16 three hour evening sessions. Teaching meets European Resuscitation Council (ERC) standards and students are provided with ERC BLS provider certification on successful completion of each four session course<sup>9</sup>. To date, over 9000 students have completed in excess of 70 courses, whilst an additional 600 students have been involved in RMD as instructors, assessors and members of the organising committee.

### The curriculum and teaching practice

In accordance with ERC guidelines, students are taught assessment and management of an unconscious casualty, cardiopulmonary resuscitation (CPR) and the use of an Automated External Defibrillator (AED)<sup>9</sup>. They are also taught basic first aid as part of an additional Universityspecific component. The course structure has been described in detail in several published articles<sup>4,5</sup>.

### Students' perceptions of the course and assessment performance

The course and its unique peer-led model are both effective and well received. Feedback from students

is exceptionally positive, with 98% of the past year's cohort stating that they enjoyed the course, and 99.5% stipulating that they preferred being taught by peers. In contrast to the relatively poor confidence of students studied in other medical schools<sup>3</sup>, 99.5% of students completing the Birmingham BLS course reported that they felt confident delivering BLS and using an AED. This is most pertinently reflected by students' performance at assessment, with 85% passing at their first sit and an additional 13% completing the course after one resit.

### Development of students' non-technical skills

Deficiencies of non-technical skills are considered to underlie a significant proportion of errors made within a number of hospital specialties, including anaesthesia and acute care<sup>10</sup>. Advantageously, the unique peer-led model utilised by the Birmingham BLS course provides students with training and experience in a number of these skills.

### Student-led research

Students involved in RMD are encouraged to participate in research. Many projects focus on pedagogical aspects of either peer-led or specific BLS teaching techniques<sup>11</sup>. The course has also provided a large study population for studies concerning technical aspects of contemporary BLS guidelines<sup>12,13</sup>, or seeking to evaluate the effects and potential efficacy of guideline changes<sup>14-16</sup>. Over recent years members of the organising committee have published their findings and presented them at national and international conferences.

### **Expanding Community Teaching Remit**

Serving the dual purpose of raising awareness of BLS in the community and promoting the University, RMD has in the past year introduced student-led BLS demonstrations at University open days for prospective students and the local community. RMD has recently successfully secured grant funding from the BHF, providing instructors with the opportunity to teach local secondary school children as part of the Heartstart initiative, which provides basic training in emergency life support skills.

### Conclusion

The peer-led, self-perpetuating design of the University of Birmingham's BLS course provides an enviable model for an effective practical course which overcomes many of the obstacles created by resource constraints. It provides a multitude of benefits for students, from an early introduction to inter-professional learning to the development of invaluable leadership skills for instructors. The recent introduction of community BLS-teaching projects are increasing awareness of essential life-saving skills within the West Midlands area whilst providing additional opportunities for students to broaden their leadership, teaching and assessment skills.

#### References

- General Medical Council. *Tomorrow's Doctors*. London: General Medical Council, 2009. Royal College of Physicians of London. Resuscitation from cardiopulmonary arrest. *J R Coll Physicians Lond* 1987;21:175-82.
- Tallentire VR, Smith SE, Skinner J, Cameron HS. The preparedness of UK graduates in acute care: a systematic literature review. *Postgraduate Medical Journal* 2012;88(1041):365-71.
- Harvey PR, Higenbottam CV, Owen A, Hulme J, Bion JF. Peer-led training and assessment in basic life support for healthcare students: synthesis of literature review and fifteen years practical experience. *Resuscitation* 2012;83(7):894-9.
- Perkins GD, Hulme J, Shore H, Bion JF. Basic life support training for healthcare students. *Resuscitation* 1999;41:19-23.
- Perkins GD, Hulme J, Bion JF. Peer-led resuscitation training for healthcare students: a randomised controlled study. *Intensive Care Medicine* 2002;28:698-700.
- Bucknall V, Sobic EM, Wood HL, Howlett SC, Taylor R, Perkins GD. Peer assessment of resuscitation skills. *Resuscitation* 2008;77:211-215.
- Thorne CJ, Jones CM, Harvey P, Hulme J, Owen A. An analysis of the introduction and efficacy of a novel training programme for ERC basic life support assessors. *Resuscitation* 2013;84(4):526-529.
- Thorne CJ, Jones CM, Harvey P, Hulme J, Owen A. An analysis of the introduction and efficacy of a novel training programme for ERC basic life support assessors. *Resuscitation* 2013;84(4):526-529.
- European Resuscitation Council. ERC Course Rules v1.0. Available online at https://www.erc.edu/index.php/docLibrary/ en/viewDoc/1760/3/. Last accessed 7<sup>th</sup> June 2013.
- Fletcher GC, McGeorge P, Flin RH, Glavin RJ, Maran NJ. The role of non-technical skills in anaesthesia: a review of current literature. *British Journal of Anaesthesia* 2002;88:418-429.
- Macrae AL, Brown G, Harvey PR, Hulme J. Benefits and perceptions of the BLS/AED peer-assessment role. *Resuscitation* 2010;81(SUppl):S109.
- Jones CM, Thorne CJ, Hulme J. Effect of a rescuer's side of approach on their performance of cardiopulmonary resuscitation. *Resuscitation* 2012;83(12):e235.
- Jones CM, Thorne CJ, Colter PS, Macrae A, Brown GA, Hulme J. Rescuers may vary their side of approach to a casualty without impact on cardiopulmonary resuscitation performance. *Emergency Medicine Journal* 2013;30(1):74-75.
- Owen A, Harvey P, Kocierz L, Lewis A, Walters J, Hulme J. A randomised control trial comparing two techniques for locating chest compression hand position in adult Basic Life Support. *Resuscitation* 2011;82(7):944-946.
- McDonald CH, Heggie J, Jones CM, Thorne CJ, Hulme J. Rescuer fatigue under the 2010 ERC guidelines, and its effect on cardiopulmonary resuscitation (CPR) performance. *Emergency Medicine Journal* 2012 Jul 31 [Epub ahead of print].
- Jones CM, Owen A, Thorne CJ, Hulme J. Comparison of the quality of basic life support provided by rescuers trained using either the 2005 or 2010 ERC guidelines. Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine 2012;20:53.

Further information via lifesupport@rmdbirmingham.org or call +44(0)1214143771





## JOINT INTENSIVE CARE SYMPOSIUM

4 - 5 September 2013 Churchill House, London

### Wednesday 4<sup>th</sup> September

### **Cardiology Update**

Grown up congenital heart disease: How to manage an unstable patient? Do we fail the failing heart? Dysrhythmias: dispelling the myths

### **Changing times - changing ICM**

An ageing popluation Major surgery: When do we need ICU? Obesity and ICM: problems with extremes of body habitus

### How I....

Manage resistant infections in ICU Manage the injured spinal cord Investigate brain injury on the ICU

Burnout in ICU Burnout - what burnout? Sources of occupational stress in ICM A suitable job for a woman?

### Thursday 5<sup>th</sup> September

### Do we still need to worry about

Tight glycemic control Low tidal volume ventilation Surviving sepsis What fluid to use

### A Career in ICM

The role of the Faculty (education and training) Career advice Trainees Survey

### What's new in ICU

In renal medicine In imaging In paediatrics The national ECMO service

### Law and Ethics

Reliability of the expert witness An acute legal service for ICM

Organisers: Dr Jonathan Goodall and Professor Timothy Evans

### **10 CPD credits**

Location: RCoA, Churchill House, London WC1R 4SG Fee: 2 days £445, £335 for trainees, £225 for nurses 1 day £290, £215 for trainees, £145 for nurses Code: C55 Further details can be found on the FICM and ICS websites: www.ficm.ac.uk www.ics.ac.uk





### SYMPOSIUM APPLICATION FORM

Payments will be processed by the Royal College of Anaesthetists Finance Department Please complete this form in BLOCK CAPITALS and return to Churchill House, 35 Red Lion Square, London, WC1R 4SG or via fax (020 7092 1730).

#### Your details

Full name: \*Faculty Reference Number: GMC: Address: Postcode: Please ensure you complete your full postal address Is this your main mailing address? Telephone: Email: Hospital: Event details Date: Code: Event title: Registration fee: Payment details (please use BLOCK CAPITALS) A cheque is enclosed made payable to the Royal

A cheque is enclosed made payable to the Royal College of Anaesthetists

I wish to pay by the following debit/credit card: (please tick)

VISA	
Cardholder's name:	
Signature:	
Card Number:	
Valid from:	Expiry date:
Issue number:	Security code:

#### Terms and conditions

- Additional copies of this form can be downloaded from www.ficm.ac.uk and www.ics.ac.uk
- Please be aware that programmes are subject to change and you should check the Faculty website for regular updates.
- Our events are open to all grades, unless specifically stated otherwise.
- When an event is full, this will be publicised on the website. To be placed on a waiting list, please contact the Faculty of Intensive Care on 020 7092 1746. We will then contact you as soon as a place becomes available.
- Lunch is included in the registration fee unless otherwise indicated.
- Delegate information will be shared between the Intensive Care Society and Faculty if Intensive Care Medicine for the purposes of this event but will not be shared with third parties unless previously agreed.

#### **Booking and payment**

- Bookings will be accepted by post or fax only on a first come, first served basis.
- Bookings will not be accepted unless the appropriate fee and application are received together.
- Please note that places are not reserved until payment is received.
- Confirmation of a place will be sent to you within 14 days of payment being received. If you do not receive this, please contact the Faculty.

#### **Cancellation policy**

- Notice of cancellation must be given in writing to the Faculty of Intensive Care or by email to: ficm@rcoa.ac.uk at least ten working days prior to the event to qualify for a refund.
- All refunds are made at the discretion of the RCoA Finance Department and are subject to the deduction of an administration fee.
- Delegates cancelling less than ten days before the event will not be entitled to a refund.
- Name changes for attendees will be accepted; please inform the Faculty of Intensive Care seven days prior to the event.



\* If you are a member of the RCoA, this is the same as your college reference number. If you do not know your Faulty number, please contact us.

### The Intensive Care Society

### **Forthcoming Events**



### State of the Art Meeting 2013

Mon 16 to Wed 18 December 2013

### The ICC, East ExCeL, London

### The UK's largest meeting for Intensive Care Professionals

### **Confirmed Key Note Speakers**

Dr Jeremy Kahn, USA Prof. Pat Croskerry, Canada Ms Kathleen Vollman, USA Prof. Charles Sprung, Jerusalem Prof. Daniel De Backer, Belgium Prof. Jan De Waele, Belgium Prof. Monty Mythen, UK Prof. Mervyn Singer, UK Prof. Arthur Slutsky, Canada Prof. Jukka Takala, Switzerland Prof. Roger Watson, UK Prof. Ingeborg Welters, UK, Germany

#### Topics:

Expert Centres or Everywhere?, The Heart of the Matter, Interactive Case Studies, Traumatic Times, Endpoints for Resuscitation, Optimal Staffing, Ventilation, Patients and Relatives, Thinking About Thinking- Better Decisions To Improve Intensive Care Quality, Surgical Intensive Care, Controversies in Critical Care, Understanding The Basics, Acute Kidney Injury, Organ donation & End of Life, Joint ICS/ International Sepsis Forum Session, Trainee Sessions: The Cauldron- The Intensive Care Units of the Future are the ICUs of the Mind and The David Bennett Award- An audience with Professor Arthur Slutsky

#### Also featuring:

State of the Art Exhibition, Industry Symposiums, UK's first medical Pecha Kucha session, Research Presentations, Research Poster Presentations, Multi Professional Research Workshops and Intensive Care Foundation James Lind Alliance Project

Rates frozen from 2012 Early Bird registration available before the 30/09/13\*

CPD Acreditation: 15 Points Pending

\*full fee breakdown available on the ICS website



The Intensive Care Society Churchill House, 35 Red Lion Square London WC1R 4SG T: 020 7280 4350 F: 020 7280 4369 E: events@ics.ac.uk www.ics.ac.uk www.intensivecarefoundation.org



### AUGUST

19 Curriculum Blaster Day Churchill House, London

### SEPTEMBER

- 4-5 FICM & ICS Joint Intensive Care Symposium Churchill House, London
- 11-12 BASIC Assessment and Support in Intensive Care Course Churchill House, London
- 25 Core Topics for Training and Revalidation in ICM Churchill House, London

### OCTOBER

23

11

21

ICS Seminar -Microbiology for Intensivists Churchill House, London

### **NOVEMBER**

- Core Topics for Training and Revalidation in ICM Churchill House, London
- ICM Career Day South Churchill House, London

### DECEMBER

16-18 The State of the Art Meeting ICC East ExCeL, London

### JANUARY

16

ICM Career Day - North Mayo Building, Salford Royal

intensive care society care when it matters

# The Faculty of Intensive Care Medicine

Churchill House | 35 Red Lion Square | London | WC1R 4SG tel 020 7092 1653 | email ficm@rcoa.ac.uk

www.ficm.ac.uk