SUMMONS

AN MDDUS PUBLICATION FOR MEMBERS



• Medicine on the edge • Sepsis alert • Unfit to drive •

Oxford University Press is pleased to offer members of the Medical and Dental Defence Union of Scotland a 20% discount on our extensive library of medical books.

OXFORD UNIVERSITY PRESS

■ T MEDIC

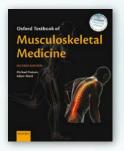
Oxford Medical Handbooks

The Oxford Medical Handbooks are the market-leading series of pocket handbooks for a broad medical readership, from students, junior doctors and specialist trainees, to nurses, dentists, paramedics and allied health professionals.













Oxford Textbooks

An essential component of every physician's book shelf, the Oxford Textbooks distil the knowledge and experience of the world's leading medical scientists to give objective reviews of current knowledge based on the best available evidence and published literature.

Oxford Specialist Handbooks

The Oxford Specialist Handbooks offer specialist trainees and their colleagues access to practical management advice across a multitude of specialties. Portable, succinct, and above all reliable, they have become indispensable guides in difficult and challenging areas of practice.







Order online at www.oup.co.uk/medicine and enter AMFLYIQ at checkout for your 20% discount.

(Offer is valid for individual (non-trade) customers when ordering direct from the Oxford University Press website. Limit is 10 copies per transaction. This offer is exclusive and cannot be redeemed in conjunction with any other promotional discounts).

Join the conversation



Browse books and sign up for information and offers at www.oup.com Email any queries to medicine.books.uk@oup.com



THE problem of increasing demand at a time of constrained resources will be familiar

to everyone working within the NHS. New approaches aimed at tackling this are welcome, and in this issue, Professor Jason Leitch, the Scottish Government's national clinical director, discusses his role in planning greater integration between health and social care, and more patient-centred care (p. 10).

Sepsis is a relatively common, life-threatening condition affecting 150,000 people per year in the UK, resulting in 44,000 deaths. On page 16, Dr Ron Daniels, chief executive of the UK Sepsis Trust, highlights recent NICE guidelines aimed at reducing misdiagnosis and delays in treatment.

On page 14, Jim Killgore talks to consultant Dr Stephen Hearns about his innovative and at times dramatic work with the Scottish Emergency Medical Retrieval Service (EMRS). Rigid protocols are key to reducing the cognitive overload that comes with high-stress emergency situations.

Medical innovation and scientific advances are discussed in a different context by Deborah Bowman on page 9, highlighting the ethical importance of interpretation by clinicians when applying new discoveries to patient care. On page 8, Alan Frame discusses health literacy and its importance in shared decision making and informed consent.

Douglas Hamilton discusses the challenges faced by dentists in adhering to good practice when prescribing antibiotics (p. 18). Doctors accustomed to acting as patient advocates may find themselves in the uncomfortable position of having to act against a patient's wishes and breach confidentiality if someone deemed medically unfit refuses to stop driving. GMC guidance on reporting concerns to the DVLA is reviewed on page 12.

Dr Barry Parker



AN INTEGRATED APPROACH **New MDDUS Board member** Professor Jason Leitch talks to Summons about ongoing reform in Scottish public health and his role

UNFIT TO DRIVE Barry Parker looks at the factors to consider when a medical condition may compromise a patient's fitness to drive

MEDICINE ON THE EDGE Stephen Hearns discusses cognitive overload and other challenges with the Scottish EMRS



Dr Ron Daniels of the UK Sepsis Trust highlights the importance of improved diagnosis and management in this oft-missed condition

RESISTANCE IS FUTILE Doug Hamilton considers

the dilemma faced by dentists in prescribing antibiotic treatment



- 4 Notice Board
- **6** News Digest
- 8 Risk: Health literacy on the information superhighway
- **9** Ethics: Ethics as interpretation
- 20 Case studies: Pressure to prescribe, No prophylactic antibiotics, **Abdominal lump**
- 22 Addenda: Object obscura: Goa stone, Book choice: Being Mortal: Illness, Medicine and What Matters in the End, Crossword and Vignette
- Frank Pantridge, cardiologist and inventor of the portable defibrillator





Cover image: Winter Tree, Mary Paton. Oil on board, 1970.

Born in Ayrshire in 1920, Paton studied at Edinburgh College of Art under McTaggart and Gillies. She spent most of her later life in Aberdeenshire, and was inspired by the surrounding landscape. She died in 1990.

Art in Healthcare (formerly Paintings in Hospitals Scotland) works with hospitals and healthcare communities across Scotland to encourage patients, visitors and staff to enjoy and engage with the visual arts. For more information visit www.artinhealthcare.org.uk Scottish Charity No SC 036222

Editor: Dr Barry Parker Managing editor: Jim Killaore **Associate editor:** Joanne Curran Editorial departments: MEDICAL Dr Richard Brittain DENTAL Mr Aubrey Craig Simon Dinnick LEGAL

Please address correspondence to:

Summons Editor MDDUS Mackintosh House 120 Blythswood Street Glasgow G2 4EA

jkillgore@mddus.com

Design and production: **Connect Communications** 0131 561 0020 www.connectmedia.cc



Printing and distribution: L&S Litho

MDDUS Summons is published quarterly by The Medical and Dental Defence Union of Scotland, registered in Scotland No 5093 at Mackintosh House,

120 Blythswood Street, Glasgow G2 4EA. • Tel: 0333 043 4444 • Fax: 0141 228 1208

Email: General: info@mddus.com • Membership services: membership@mddus.com • Marketing: marketing@mddus.com • Website: www.mddus.com

The MDDUS is not an insurance company. All the benefits of membership of MDDUS are discretionary as set out in the Articles of Association.

The opinions, beliefs and viewpoints expressed by the various authors in Summons are those of the authors alone and do not necessarily reflect the opinions or policies of The Medical and Dental Defence Union of Scotland.

3 **WINTER 2016**

Survey highlights quality

A RECENT survey of MDDUS members contacting our advisory service found that a majority highly rated the experience – with 80 per cent scoring it a 5 or above on a scale of 1 to 6 from 'disappointing' to 'excellent'. Members contacting the team in regard to a claim or complaint were even more positive about the experience, with 94 per cent rating it a 5 or above.

Nearly 200 members responded to the survey which also asked how satisfied members were with the assistance provided by MDDUS rated on a scale of 1 (disappointed) to 6 (delighted) over four categories: timely manner, informative, professional and empathetic. The average rating in all these categories was 5 or above.

The survey also found that 99 per cent of members who had been assisted with a claim/complaint said they would recommend MDDUS to a colleague.

Another separate survey found that among 1,849 respondents using our online application form, the top factor attracting them to MDDUS membership was our competitive subscription rates (60 per cent) followed by recommendations from colleagues (51 per cent).

These encouraging results correspond to a continued strong growth in our membership, with an 11 per cent increase in total active membership in 2015 as reported in the latest *MDDUS Annual Report and Accounts*, published in September of this year.

MDDUS CEO Chris Kenny said: "Our



NHS England Winter Indemnity Scheme

NHS England has launched a scheme to meet the costs of indemnifying any additional out-of-hours (OOH) work undertaken by GPs this winter.

The scheme has been developed in conjunction with UK medical defence organisations, including MDDUS, and runs between 1 October 2016 and 31 March 2017. It is designed to meet the costs of indemnifying additional OOH work this winter and does not apply to pre-existing indemnity arrangements.

GP members interested in accessing the scheme should initially make contact with their local OOH provider to check on likely availability of additional vacant shifts. The OOH provider will then be able to advise whether pre-existing corporate indemnity would cover such work or if additional personal indemnity would be required through the NHS England Winter Indemnity Scheme via MDDUS.

GP members should agree with an OOH provider the likely number of sessions to be worked over the period of the scheme (up until 31/3/17). GPs will then be able to add these additional sessions to their current membership with payment being made directly to MDDUS by NHS England.

Go to www.mddus.com/forms/winter for an application to add additional OOH sessions funded by the scheme.

partners who are members of MDDUS can look to us for assistance, including indemnity for claims that might be brought by a patient. Any indemnity is given through the vicarious liability of MDDUS GP partners and as such, any payments made by MDDUS will be proportionate to a head count of MDDUS members amongst the partners.

It should be noted that MDDUS would not indemnify individual students per se. It is possible that the student could be sued in his or her own right and may need to consider obtaining personal indemnity for complete peace of mind. Similarly, the university or employing Trust is likely to retain a degree of vicarious liability for the student nurse and MDDUS reserves the right to pursue any third party for a contribution if we consider this to be appropriate.

Chris Godeseth, head of underwriting, MDDUS

members rely on us to deliver our services with the utmost professionalism. They rely on us to be responsive – quick, flexible and empathetic. They rely on us to provide good value. We have done all three and will continue to do so. I believe these results demonstrate just how much we have achieved."

Indemnity for healthcare students

MDDUS recognises that GP practices provide a rich learning environment for a wide range of student healthcare professionals, including medical students, student nurses and physician associate students.

Where a student on placement within a practice is acting in accordance with duties delegated to him or her, the GP partners may be held vicariously liable for negligent harm caused to patients. GP

IN BRIEF

• NEW MDDUS TELEPHONE NUMBERS New contact numbers make it easier for members to get in touch. Contact our main switchboard on 0333 043 4444 and our membership team on 0333 043 0000. The new numbers are not linked to a specific geographical area but are charged at the same rate as normal local or national landline numbers (beginning '01' or '02'). Mobile users whose phone tariff includes free landline calls/inclusive minutes

should not be charged extra for calling our '0333' numbers.

• STUDENT FACEBOOK COMPETITION Calling all medical and dental students – 'like' our MDDUS Student Facebook page and you will be entered into our FREE prize draw to win £50 of iTunes vouchers. Keep an eye on our Facebook page for details, as well as all the latest news for medical and dental students. Find our page at www.facebook. com/mddus.student or search

4

Keep us informed

SUBSCRIPTION rates for doctors in private practice are based partly on work undertaken and partly on private fees earned. Your renewal notice will show the level of earnings upon which your subscription is based and it is your responsibility to ensure that this is sufficient to cover expected earnings for the year to come.

Should any change be required please inform MDDUS immediately so that a revised subscription can be calculated. If at the end of the subscription year your estimate has proved to be too high or too low you will have an opportunity at that time to adjust it.

We would like to be clear that the figure used should be your gross private earnings from the practice of medicine, however delivered.

In the event that you have formed a company for accounting or other purposes, the relevant figure is the gross income to that company in relation to your practice of medicine. In our recent experience, there are still a small number of doctors declaring their salary from their company, as opposed to the gross fees. In such circumstances we have discretion to make adjustments retrospectively to ensure adequate and appropriate indemnity is in place.

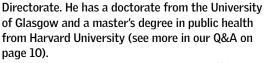
Mutuality is based on the principle that all members contribute an appropriate amount to the common fund held on behalf of all members. We do carry out checks of gross private practice earnings from time to time to ensure that this is being complied with. Please telephone our Membership Department on 0333 043 0000 if you have any questions.



New appointments to MDDUS Board

MDDUS confirmed two key appointments to the Board at the AGM in September. Professor Nairn Wilson, (pictured right) and Professor Jason Leitch, (pictured below) will serve as non-executive directors, initially for three-year and four-year terms, respectively, bringing invaluable experience to the organisation.

Jason has worked for Scottish Government since 2007 and in January 2015 was appointed national clinical director in the Health and Social Care



Nairn is the immediate-past president of the British Dental Association and an emeritus professor of dentistry at King's College London, where he was professor of restorative dentistry and dean and head of the college's Dental Institute and deputy vice principal. He is also a former editor of the *Journal of Dentistry*, a former dean of the Faculty of Dental Surgery of the Royal College of Surgeons of Edinburgh and past president of the General Dental Council. His interests and special expertise include

healthcare regulation, international trends in dental education, and future developments in the clinical practice of dentistry.

Commenting on his appointment, Nairn Wilson said: "I am delighted to have been appointed a non-executive director of MDDUS and to have the opportunity to contribute to the provision of professional indemnity that supports clinicians in meeting the challenges of contemporary clinical

practice. I hope to help strengthen understanding amongst the membership that the security offered by MDDUS in the future is, in large part, dependent on good practice individually and collectively."

Jason Leitch commented: "Broadening my knowledge and using my experience in clinical, academic and policy environments made a Board position with the MDDUS seem like an excellent opportunity. I've thoroughly enjoyed the first few months; it is challenging and stimulating to be involved in the Board and the Investment Committee. It seems, at this early stage, that the members' interests are in good hands."



BOARD APPOINTMENTS TO FOLLOW IN 2017

MDDUS will be appointing two new medical non-executive directors, including a GP practising in England and, potentially, a member with experience of working in medical schools and/or early-stage postgraduate medical training.

A formal advert will appear on the website in mid-December with a closing date for applicants in January. Check the home page at **mddus.com** for a link to the advert which will also be promoted in our *eMonthly* newsletter. For more information, please contact Bryan Hislop (deputy company secretary) on 0333 043 4444 or email at **bhislop@mddus.com**

Facebook for 'mddus student'. The competition runs until Christmas.

 MDDUS WEBINARS Check out our risk webinars which are delivered by in-house advisers and focus on areas of risk in everyday practice. The latest topics can be found in the Risk Management section of mddus.com. Book now for a place – you will need your MDDUS membership number or DPS number. Contact **risk@ mddus.com** to be notified about new webinar dates. • GUIDE TO HELP STRESSED GPs The Royal Medical Benevolent Fund (RMBF) has launched a new guide to help GPs tackle stress. The Vital Signs in Primary Care encourages self-awareness and a healthy work-life balance and is available online (tinyurl.com/jrqrqp5). MDDUS supports the RMBF What's Up Doc? campaign which highlights the care and support offered by the organisation to doctors working and living under increasing pressure.

GMC pledges "light touch" to address unease

THE GMC has expressed concern at "unease" within the medical profession in its annual report on *The state of medical education and practice in the UK*.

In an introduction to the report, GMC Chair Professor Terence Stephenson and Chief Executive Niall Dickson said: "There is a state of unease within the medical profession across the UK that risks affecting patients as well as doctors. The reasons for this are complex and multifactorial, and some are longstanding. Yet the signals of distress are unmistakable".

The report says the GMC has a role to play in addressing this unease by making regulation as "light touch as possible" and reassuring trainees that they are valued doctors and addressing the anger and frustration which has built up during the ongoing dispute in England between the BMA's Junior Doctors' Committee and the Government. The GMC has recently launched a special review to explore how postgraduate training can be made more flexible for doctors in the future.

Statistical trends

AMONG other trends cited in this year's GMC report was a 7 per cent reduction in the number of complaints against doctors in 2015. These rose sharply in the two years to 2013 but fell in both 2014 and 2015. The majority of complaints (68 per cent) came from the public, while 9 per cent came from other doctors, 6 per cent from employers and 6 per cent from self-referrals.

The percentage of GMC complaints leading to a full investigation varied substantially, depending on the source of the complaint. Just 15 per cent of complaints made by the public in 2015 met the threshold for a full investigation by the GMC, compared with 80 per cent of complaints made by employers, 51 per

cent made by the police and 31 per cent made by other doctors.

Over 2,800 investigations concluded in 2015 in which 5 per cent led to warnings, 6 per cent led to conditions or undertakings and 7 per cent led to suspension or erasure. More than two-thirds were closed with no further action and 14 per cent were closed with advice given to the doctor.

GDC case examiners begin work

NEW GDC case examiners began assessing complaints against registrants in November. Cases will now no longer be referred to an investigating committee for

a decision, but will instead be considered by case examiners to determine whether an allegation should go to a practice committee.

Case examiners will make no findings of fact in a case or come to substantive

conclusions regarding a registrant's fitness to practise but will instead be asked to determine whether an allegation should be further considered. Essentially they will conduct a "filtering process", closing some cases and referring others for a full inquiry before a practice committee.

A consultation on the change was undertaken in February 2016. Director of Fitness to Practise at the General Dental Council Jonathan Green said: "Introducing case examiners with a power to agree undertakings with practitioners, means that we will see more complaints dealt with without the need for a practice committee hearing. This should lead to significant reduction in stress for practitioners, as well as ensuring, for all concerned, that suitable cases are resolved earlier and with less expense."





New guidance on surgical consent

NHS trusts face a dramatic increase in litigation payouts if they do not make changes in patient consent processes prior to surgery, warns the Royal College of Surgeons of England.

The College believes that clarification is needed in the understanding of patient consent in light of the 2015 landmark legal judgment given in the case of *Montgomery vs Lanarkshire Health Board*. To this end the College has published new guidance that aims to help doctors and surgeons understand the shift in the law and its implications, as well as give them tools to assist in improving their practice.

The NHS Litigation Authority (NHSLA) paid out over £1.4 billion in claims on

IN BRIEF

• FALL IN UK ANTIBIOTIC PRESCRIBING Antibiotic prescribing in the UK has fallen by over 5 per cent in a year and 11 per cent since a 2012 peak, according to analysis released by Antibiotic Research UK. Seasonal

variation in prescribing has also halved in a year from 68 per cent to 31 per cent, suggesting GPs are heeding advice not to prescribe for winter colds caused by viruses, but regional variation in UK prescribing remains high.

• NICE GUIDANCE ON MULTIMORBIDITY New guidelines on tailoring care for adults with multimorbidity have been launched by NICE with the aim of identifying ways to reduce treatment burdens (such

as polypharmacy and multiple appointments) and unplanned or emergency care. The guidelines promote shared decision-making and also set out which patients are most likely to benefit from an approach that takes account of



Scotland playing "catch-up" on children's dental health

DENTAL health among children in Scotland has improved by 24 per cent since 2000 but the high levels of social inequality in dental care are still unacceptable, says the British Dental Association.

New figures from the National Dental Inspection Programme in Scotland show that more than two-thirds (69 per cent) of five-year-olds now have no obvious signs of tooth decay. But the same survey also reveals a huge gap in dental health in P1 children from more affluent areas compared to the lowest income households - with 55 per cent from the most deprived areas free from tooth decay compared with 82 per cent from the least deprived.

Scotland also still lags behind countries of similar development, such as England and Norway. Comparable figures show that two-thirds (75 per cent) of five-year olds in England are decay-free, with broadly similar figures for Norway (73-86 per cent).

Robert Donald, chair of the BDA's Scottish Dental Practice Committee (and also an MDDUS Board member), said: "Scotland is leading the way in investing in children's dental health. The huge improvement we have seen in youngsters' teeth since the millennium is testament to investing in an early years' prevention scheme, which operates in our nurseries and schools.

"However, despite this improvement Scotland is still playing catch-up with our neighbour south of the border, so there is no scope for standing still. There is no escaping either the fact that far too many children from our most disadvantaged communities still bear the burden of tooth decay, a largely preventable disease.

"Government ministers must continue to invest in ChildSmile, to tackle this unacceptable inequality in dental health. The BDA has also called on the Scottish government to expand the ChildSmile programme to five to 12-year-olds and we have championed wide-ranging action on sugar, including taxation, public education and marketing, and for proceeds from the sugar levy to be directed to oral health initiatives."

behalf of NHS trusts in England during 2015/2016 and the RCS is concerned that this bill could go up significantly if hospitals do not take the *Montgomery* ruling seriously.

The ruling set a legal precedent changing how doctors must communicate risk. The court held that patients must now be made aware of any and all risks that they – not the doctor – might consider significant. Doctors can no longer be the sole arbiter in determining what risks are material to the patient.

Mr Leslie Hamilton, a Royal College of Surgeons Council Member, said: "The RCS is very concerned that doctors and hospitals haven't fully appreciated how much the judgment given in 2015 changed our understanding of patient consent. The watershed judgment in the

Montgomery case shifted the focus of consent towards the specific needs of the patient. Hospitals and medical staff are leaving themselves very vulnerable to litigation and increased pay-outs by being slow to change the way the consent process happens."

Antibiotic prophylaxis for infective endocarditis

NICE has made a small but significant change to its guidance on the use of antibiotic prophylaxis against infective endocarditis in cardiac patients undergoing dental procedures.

In 2015 NICE had reaffirmed its 2008 guideline that antibiotic prophylaxis against infective endocarditis in at-risk heart patients is not recommended for

those undergoing dental treatment. There was then a re-think in response to research published in an article in *The Lancet* suggesting that rates of infective endocarditis had increased in England after NICE advised against giving antibiotics to prevent the infection. NICE decided to assess the research but found "insufficient evidence" to warrant a change to the existing recommendations.

But in July of this year NICE announced that the recommendation had been changed to say that dentists should not "routinely" give antibiotics to patients at risk of infective endocarditis during dental procedures. The new ruling allows flexibility so that dentists and cardiologists can recommend antibiotic cover when it is in the best interests of the patient.

multimorbidity. Access at www.nice.org.uk/guidance/ng56 NEW DENTAL IMPLANT TRAINING STANDARDS The FGDP(UK) has published new revised standards for implant dentistry setting out what training a reasonable dental practitioner in the UK should undertake before embarking upon patient care in this discipline. The document is available free to download at www.fgdp.org.uk as part of the Open Standards Initiative.

ONE-HOUR SCAN LIMIT FOR STROKE Suspected stroke patients should undergo a brain scan within one hour of being admitted to hospital, according to new guidance from the Royal College of Physicians. This is a

dramatic reduction on the previous recommended limit of 12 hours and is designed to help identify causes and ensure patients receive timely treatment. Access at www. strokeaudit.org/Guideline/ Guideline-Home.aspx

7 **WINTER 2016**

HEALTH LITERACY ON THE INFORMATION SUPERHIGHWAY

Alan Frame

TIM Berners-Lee invented the World Wide Web in 1989 – not so long ago considering the significant impact it has on just about all areas of modern life. It could be argued that no profession has felt this effect more than healthcare, with vast amounts of information and research data now instantly accessible and with the advent of allied technologies such as telemedicine. One of the most notable ways the internet has changed medicine is by encouraging greater health literacy.

Health literacy has been described as the ability to obtain, read, understand and use healthcare information to make appropriate health decisions and follow instructions for treatment. Low health literacy is not just a problem for patients with a limited education or reading ability but can also be found in individuals who are highly literate in other areas but have difficulty understanding medical terminology and jargon.

A recent survey of 2,000 British adults carried out by YouGov suggests that 47 per cent of the public has searched online for their symptoms or possible diagnoses before visiting their GP. While this engagement is a positive sign that patients may be taking a more active role in the management of their own healthcare, it can also present some real challenges for doctors and dentists. Patients having "Googled symptoms" is increasingly common now in consultations so it is vital for healthcare professionals to understand how to properly manage expectations.

In practice this can mean that patients often arrive with a fixed mindset as to their diagnosis and how the condition should be managed. If these expectations are not met, it can lead to disappointment and frustration and can place a strain on the clinician-patient relationship, with a higher risk of a complaint or claim being made.

Any preconceived ideas regarding a patient's health should never be dismissed out of hand without full discussion, as important details could be missed as well as insights into what the patient may be really worried about. However, it is



"It's perhaps not surprising that more and more patients turn to Dr Google for assistance"

entirely appropriate to urge patients to be cautious about self-diagnosing via the internet, and this may also offer an opportunity to guide them towards more useful health resources.

Patients should be encouraged and supported in improving their health literacy. They should be provided information on positive life choices and how to manage diagnosed conditions, and encouraged to openly discuss their care and treatment. The GMC makes it clear that doctors have a legal and ethical obligation to involve patients in decisions which affect them. This is vital in obtaining valid consent and ensuring that patients understand the full range of treatment options open to them, as well as known risks and benefits.

Back in 2012 a study by researchers at London South Bank University found that 43 per cent of people in England aged between 16 and 65 were unable to "effectively understand and use" basic health information. The study looked at how patients process content such as health screening posters, medicine labels and letters from GPs. Considering these findings it's perhaps not surprising that more and more patients turn to Dr Google for assistance.

The internet can be a useful resource but it's important that patients, particularly vulnerable ones, have the necessary skills and knowledge to use it properly and not to misdiagnose themselves. This is where it is vital that healthcare professionals help ensure patients use the internet to improve health literacy and not as a substitute for a proper consultation.

One particular application is in relation to chronic disease management, where the patient's enhanced understanding can help improve compliance and reduce reliance on the health service. Providing links to recommended websites with information and guidance sheets can be useful for a wide range of conditions, such as asthma or diabetes or for parents caring for chronically ill children.

Certainly the internet is no substitute for a clear explanation and discussion with your patient, but it can reduce the risks associated with a lack of knowledge and understanding. At best, online content can be critically empowering, increasing individual control and allowing patients to seek out information and take greater responsibility for their own health.

Alan Frame is a risk adviser at MDDUS

ETHICS AS INTERPRETATION

Deborah Bowman

LAST week I had a splendid evening at The Crick Institute in London. It was an inspiring setting in which to record a programme for the BBC World Service – this glorious building with its chromosome-based design where one third of the space is underground.

The programme had the bold title 'The Genomic Revolution'. The contributors were a researcher working in genetic oncology from The Crick, a clinician specialising in pre-natal genetics at Great Ormond Street, a remarkable woman whose husband had Lynch Syndrome, and me. The 800-person capacity auditorium was packed and the BBC told us that there was a long waiting list of would-be audience members. The interest in the event was extraordinary and humbling.

We covered a lot of terrain in the discussion. Conversation included exploration of the potential of personalised medicine, confidentiality and disclosure of genetic information within families, pre-natal screening, testing for conditions where, as yet, there is no treatment and the future of research in a post-Brexit Europe. The joy of public events is that the questions and comments from the floor are varied, unpredictable and wide-ranging.

Nonetheless, whatever the particular focus of the discussion or whichever specific question was being considered, there was for me a recurrent theme: what is it to make meaning out of a scientific development, a biomedical advance, a piece of clinical information or a diagnosis that potentially affects a family?

Much of ethics is concerned with solving a 'problem' or taking a stance (beautifully argued, of course). There is nothing wrong with that. Interrogating the moral dimension of a situation and offering a reasoned explanation for a decision are valuable functions for ethics. However, such an approach does perhaps obscure one of the most important aspects of ethics: its interpretative function.

The contested nature of ethics is one of the subject's defining characteristics. An ethical question is one where there are multiple possible responses. Its core concepts, whether they be principles, theories, virtues, values or narrative-based, depend on interpretation. To respect autonomy is not only to allow for, but to require, an act of interpretation, i.e. to discern what matters to an individual. To make a consequentialist assessment of the acceptability of treatment is to weigh different possible outcomes often in the context of uncertainty. To behave with integrity is to make a judgement about what constitutes 'integrity' and how it translates into behaviours. To express a commitment to compassion requires an interpretation of what to prioritise in a clinical encounter with an individual. In adopting a narrative approach, a clinician is working with a patient to explore and create meaning. It is impossible to practise ethically without attending to interpretation and meaning.

Thus it was that at The Crick as the conversation shifted from existential questions about identity to heart-breaking individual stories of loss, the common theme was interpretation. Although we heard about awe-inspiring scientific discovery and breakthroughs, the meaning(s) of these apparently seismic shifts in our understanding and capacity to treat disease remained to be interpreted and negotiated. What's more, despite the evident and exciting progress, it was apparent that there continue to be many

"Ethical practice depends ... on the capacity to acknowledge that it is an act of interpretation in the first place"

unanswered questions.

In the midst of the changing genomic landscape that was the subject of the evening, interpretation endures. Good decisions about screening, testing, disclosure and treatment depend on what meaning an individual derives not only from the discrete piece of biomedical or genetic information, but on the implications of a diagnosis or intervention in the wider context of his or her life.

Ethical practice depends not only on a clinician's willingness to act as a cointerpreter of information or options, but also on the capacity to acknowledge that it is an act of interpretation in the first place. And it is not only clinical practice that is an interpretative act. Even as we heard about the most basic of basic science from the glistening laboratories at The Crick, I was reminded of the many acts of interpretation that imbue scientific research. For example, what society and investigators choose to prioritise in research, what we do with negative or serendipitous findings, where we choose to locate research and with which populations we work, and how research is disseminated, interrogated and received.

The recording at The Crick promised the audience an insight into the 'Genomic Revolution' and I hope that they weren't disappointed. They heard about developments that may indeed transform our understanding and future treatment of illness. However, I also hope that they reflected on the significance of meaning and interpretation that are the essence of ethical practice. Interpretation endures, even in 'revolutions'.

■ Deborah Bowman is Professor of Bioethics, Clinical Ethics and Medical Law at St George's, University of London



An integrated approach

New MDDUS board member Professor Jason Leitch talks to Summons about ongoing reform in Scottish public health and his role in promoting innovation

INDING new ways to think about healthcare improvement has become a hallmark of Professor Jason Leitch's career. Having qualified from Glasgow University in 1991 as a Bachelor of Dental Surgery, he became a consultant in oral surgery based in the west of Scotland. But it was a trip to the US in 2005 to work for the prestigious Institute for Healthcare Improvement (IHI) that he says "turned my career on its head". He completed a Masters in Public Health at the Harvard T.H. Chan School of Public Health in 2006 and returned home to begin working for the Scottish Government, helping to run their patient safety programme.

Ten years later, Professor Leitch is now the Scottish Government's national clinical director. He is a fellow at all three UK surgical royal colleges, a senior fellow at the IHI and holds an honorary professorship at the University of Dundee. He also recently joined the board of MDDUS as a non-executive director.

What are your main priorities in the role as clinical director for healthcare quality and strategy?

We have a directorate structure within Scottish Government and I am one of a set of directors working in health and social care. As national clinical director I have specific responsibility for quality, planning and improvement, which includes patient safety, person-centred care and a host of other clinical priorities. I also share corporate responsibility for how we spend the nearly £14 billion budget and how we manage the health boards and their

160,000 employees. I also have Scottish Government responsibility for other areas of improvement and do quite a lot of work in education and criminal justice, looking at systems of delivery across the public service. It's a broad remit.

What are the key challenges facing healthcare in Scotland in the next 20 years?

It's not dissimilar to the rest of the developed world - the two-pronged challenge of increasing demand at a time of constrained resources. There is the well-publicised increase in the elderly population but there is also another unspoken set of increasing healthcare demands from the middle-aged population. Expectations have changed. This means we have to adjust the way we deliver healthcare. The National Clinical Strategy is an attempt to begin that conversation about shifting the balance of care towards more primary/communitybased care and more locality-based delivery, but at the same time having fewer specialist centres for the very high-end expensive care.

Health and social care integration is a major thrust of the recently published National Clinical Strategy. What has changed this year?

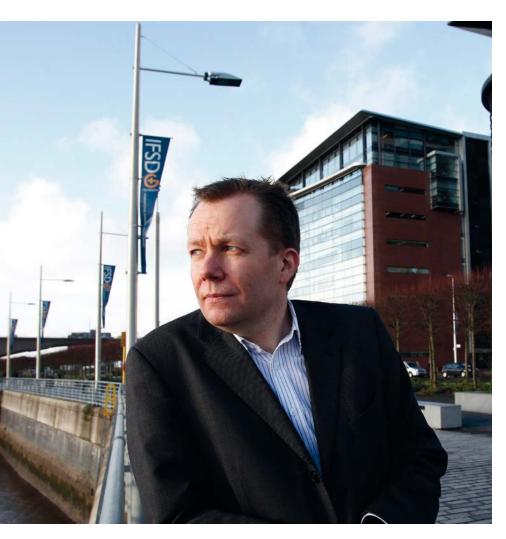
The transitions between GP, dental, hospital and social services are the areas where patients and families can fall through the cracks. Those are the elements that integration is meant to resolve. From 1 April, the Scottish Parliament legislated

to make health and social care integrated at a structural level. But true integration happens at a team level and that's where we're now seeing quite dramatic changes in the way health and social care is delivered on the ground. Genuinely, the driver is quality delivery for the user. But if you can make those transitions between health and social care more efficient from a quality perspective then they become more financially efficient too. It's probably the most important reform in the NHS and social care system in the last 30 years.



I'd say it means "no decision about me, without me." It's fundamentally the inclusion of the patient – or family or carer – in every decision about their health and social care. This might be visiting times, decisions about chemotherapy, end-of-life care or vaccinations in children. I've been involved in supporting the 'What matters to you?' campaign, which is an attempt to focus healthcare teams on the patient and the family. It's about taking a moment in a consultation – whether GP or





hospital – to ask the patient what matters to them. It began in our children's hospitals where a nurse started asking children what mattered to them when they were admitted. They didn't talk about wanting their chemotherapy on time or their antibiotics stopped; they wanted the nurses to smile, for their parents to be able to visit and other things that made them feel more human. It has since expanded to our elderly care units and even schools, and there is also now a campaign day involving 11 other countries.

The Scottish Patient Safety Programme (SPSP) has had impressive results in areas such as reduced sepsis and ventilator-associated pneumonia. What is key to these successes?

Two very simple things have led to the initiatives' success. The first is clear evidence: having a recipe of what to do. Sepsis is a terrific example of having the evidence – now summarised as the "sepsis six" – about what you should do for very acutely ill septic patients. The second is having a method for effective local implementation – and learning that just

telling people what to do or sending them a guideline is not a method. The SPSP ran an improvement science collaborative with multidisciplinary teams and taught them a method to bring about change together – one that allowed them to do it locally. It has taken a lot of hard work over a long period of time.

You speak of a needed "culture change" in patient safety? How is this best achieved?

I am increasingly convinced that culture change comes from a series of tasks that you do in teams. Edgar Schein – a leading management thinker – says your aim cannot be 'culture change' because that is too vague. You should have specific goals, for example "reduce mortality by 20 per cent by the end of 2015", and then the culture change will come as a result of that.

Where is improvement most needed in NHS Scotland?

Our National Clinical Strategy makes it clear that for our high-performing healthcare system to continue to improve it needs to modernise – and that's a neverending task. There isn't a moment when a system is transformed and you can relax. It requires constant effort and the principal thing we have to do now is to move care downstream as much as possible, both in a prevention sense and in a primary and community care sense. Improvement is needed in out-of-hospital care and that's partly about care of the elderly but also in chronic disease management, bolstering primary care teams - not just doctors but a much broader set of professionals who can keep people at home. What we say in our 2020 vision is care at home or in a "homely setting" - so as much as possible keeping patients outside very expensive acute hospitals.

Are Scotland's health challenges improving?

I'd say the nature of the challenges is changing. In the past 30 years we have made unprecedented improvements in areas like cardiac disease, stroke care and smoking cessation. But new challenges are emerging, such as liver disease and alcohol/drug/mental health issues in young men. Added to that, of course, is the next public health challenge of physical activity and obesity. We need to do more to encourage physical activity in the elderly and the rest of the population and that will be a big challenge going forward. It brings us back again to health and social care integration.

How will healthcare provision in Scotland be affected by Brexit?

There are two principle risks: workforce and research funding. Scotland employs many EU nationals in healthcare, and Brexit could bring uncertainty for both those here now and those who might want to come in future. Similarly, there would be uncertainty for Scottish graduates who want to go to Europe to learn and bring that expertise home. We also have significant EU research funding in Scotland and that will become increasingly difficult to rely on and would have to be replaced or substituted in some way. The First Minister has made clear in recent speeches that, as far as possible, our position in terms of workforce and research funding should remain unchanged.

Barry Parker looks at the factors to consider when a medical condition may compromise a patient's fitness to drive

Unfit to drive

T'S CLEAR from the calls we receive on our advice line that matters related to medical confidentiality continue to be a source of concern and challenge to members. Confidentiality lies at the heart of the trusted doctor-patient relationship and it is rightly taken very seriously by doctors but cannot be absolute. Information may have to be disclosed in order to protect the public interest, even when consent has been refused by the patient.

This is seen clearly in cases where patients present with medical conditions that may impair their fitness to drive. The ability to drive can be of huge importance to patients, tied in with their occupation, independence, social interaction, family life and identity.

Though some patients will immediately understand and be happy to follow their doctor's advice to stop driving when faced with a disqualifying medical condition or treatment, others may find it more difficult to accept. They may disagree with the advice and consider that they are still competent to drive, or they may seek to cope with the condition by offering to restrict driving in some way.

Public risk

Clearly, whilst patients may be willing to accept any risk to themselves in driving, the risk inevitably extends to other members of the public. Doctors who are accustomed to acting as patient advocates may find themselves in the uncomfortable position of having to act against their patient's wishes and to breach their confidentiality in such circumstances.



The decision on whether or not a patient may drive with a temporary or permanent medical condition or treatment is a matter of clinical judgment, bearing in mind the detailed guidance provided by the DVLA. Some conditions, such as a clearly documented loss of visual acuity, may be relatively straightforward, but others such as alcohol misuse or fainting episodes may be more difficult to assess. It is therefore important to record as precisely as possible the history provided and any examination findings, together with the reasons for the decision on fitness to drive. In some areas of the UK it is possible to refer patients to a specialist centre for a formal driving assessment to help decide on matters in borderline cases.

Under the provisions of the Road Traffic Act 1998, a person who has a medical condition or treatment that may impair his fitness to drive has a legal obligation to notify the matter to the DVLA. Failure to do so is an offence that may attract a fine of up to £1,000, and in the event of an accident a driver may face prosecution. The first step for doctors is therefore to explain clearly the nature of the medical condition or treatment and how this may affect driving. The patient should then be advised to stop driving and of their legal obligation to self-report to the DVLA.

In May 2016 the DVLA published a revised edition of its *Accessing fitness to drive – a guide for medical professionals.* This document is available online (access at tinyurl.com/jkkoklf) and can be accessed to demonstrate the regulations to the patient if need be. This conversation should then be recorded in detail in the medical records.



"Doctors accustomed to acting as advocates may find themselves in the uncomfortable position of having to act against their patient's wishes"

Refusal to comply

The situation becomes challenging when, despite the doctor's best attempts, the patient refuses to agree to self-reporting and signals an intention to continue driving. In these circumstances, the GMC provides specific and helpful supplementary guidance (go to tinyurl. com/h2uuv2b). It may be that the patient will welcome referral for a second opinion on fitness to drive if this is suggested, and the doctor may wish to raise this and to offer to arrange it. However, it is important that the patient agrees and accepts that driving is prohibited in the meantime whilst awaiting the second opinion.

If a patient continues to drive when they may not be fit to do so, then every reasonable effort should be made to persuade them to stop. Discussing the matter with relatives, friends or carers could be helpful but only if the patient consents to this approach.

Should all attempts fail to persuade the patient to stop driving, or the doctor discovers that the patient is continuing to drive against advice, then this should be disclosed to a medical adviser at the DVLA. This should be done in confidence and include all relevant medical information which relates to the patient's fitness to drive.

Before taking this step, however, it is important that the doctor tries to inform the patient of the decision to disclose personal information to the DVLA and perhaps further discuss the matter. Having made the disclosure, the doctor should then, in addition, write to the patient confirming that this has been done.

Each step of this process advised by the GMC should be documented carefully in the patient's records, so that there is clear

evidence of the measures that have been taken to persuade the patient to stop driving, and to protect the patient and the public interest.

Cognitive decline

The situation is somewhat different when a patient who may be unfit to drive presents with a condition such as dementia which is associated with cognitive decline. In this case, an additional assessment must be made as to whether the patient understands fully the advice they are being given in relation to driving, and has the mental capacity to remember to self-report to the DVLA and follow the advice given.

The GMC advises that if the patient is incapable of understanding the advice, for example because of dementia, then the doctor should inform the DVLA immediately. Again the reasons for deciding to disclose in this way should be recorded.

The GMC last produced guidance on confidentiality and DVLA disclosures in 2009, and revised guidance is due to be released in 2017, a consultation process having been completed through 2015 and 2016. It is likely, however, that the new guidance will simply build on the current guidance, emphasising the key ethical duties and obligations of doctors in relation to fitness to drive issues.

Should members have any specific queries in regard to fitness to drive and making disclosures to the DVLA, please phone an adviser at MDDUS.

■ Barry Parker is a medical adviser at MDDUS and editor of Summons

Medicine on the

OGNITIVE overload is not a risk that most of us often have to contend with in our jobs – or at least not as it is defined by Dr Stephen Hearns, lead consultant at the Scottish Emergency Medical Retrieval Service (EMRS).

Consider the scenario: a paraglider piles into a 500-foot cliff on the island of Arran. He is left dangling from his chute with a broken lumbar spine and some cord compromise. A helicopter approaches for a rescue but gusts from the rotor fill the chute and threaten to blow the casualty off the cliff. So an emergency medical consultant is lowered down from the clifftop to assess the patient, administer analgesia, secure him into a stretcher as the chute cords are cut and he is winched up into the helicopter.

Dr Hearns likes to characterise the psychological factors at work here using a concept known as the Yerkes-Dodson law, which describes the relationship between performance and arousal (see graph opposite). Rising levels of stimulation in the medic lead to a point of peak performance but beyond that excess stress causes increasing anxiety with a serious drop in performance. Says Dr Hearns: "In this situation I think most of us would be quite far over to the right of the curve and quite dysfunctional." And he should know as this scenario happened to him just over a year ago.

I recently visited Dr Hearns at the EMRS base of operations in a hangar next to the main runway at Glasgow Airport. The team is part of SCOTSTAR (Scottish Specialist Transport and Retrieval), which is a division of the Scottish Ambulance Service and is funded by NHS Scotland to provide critical care and safe transfer to definitive treatment for patients in remote healthcare locations and at accident scenes across the country – from the Shetland islands to the Borders.

Flying ICU

EMRS employs 28 retrieval consultants (nine whole-time equivalents) who are all specialists in emergency medicine, anaesthetics or intensive care. It also employs six critical care practitioners and two registrars.

Jim Killgore speaks with Dr Stephen Hearns of the Scottish Emergency Medical Retrieval Service (EMRS)

"Two teams are on duty every day," says Hearns. "Both are consultant-delivered. We never go out with anyone less than a consultant. The second member of the team is either a trainee doctor or a nurse or paramedic with advanced critical care training."

EMRS carries out over a thousand retrievals each year and is tailored to the particular needs of Scotland where over 10 per cent of the population live more than an hour away from a hospital with an intensive care unit or an emergency department – many of these in remote and rural areas.

"There are 24 small hospitals in Scotland that don't have on-site intensive care," says Dr Hearns. "So if somebody comes into those hospitals critically unwell or seriously injured there are not the facilities to



"You are offloading the cognitive burden by planning what's predictable and practising that"

provide definitive care for them. Our job is basically to take an intensive care unit with us in the helicopter or plane, fly out to that small hospital, stabilise the patient and then transport them safely to definitive care. We call these secondary retrievals."

EMRS also has a vital role in carrying out "primary retrievals", which usually involve flying to the site of serious accidents and providing prehospital care. Says Dr Hearns: "This might be a car accident or where someone has fallen from a building and is seriously injured. We can bring the emergency department to the patient. That includes securing airways, providing emergency anaesthesia, blood transfusions and some types of surgical procedures and then stabilising them and taking them to a major trauma centre."

The team is also on-call for major incidents involving multiple casualties. EMRS provided emergency medical support at the 2013 Clutha bar helicopter crash in Glasgow and recently at a major accident on a rollercoaster at an amusement park in North Lanarkshire.

Avoiding cognitive overload

It is in delivering time-sensitive, life-saving care in such high-pressure circumstances that cognitive overload can become a serious risk and challenge for the team. "Retrievals are basically unpredictable," says Dr Hearns. "It's very easy for our guys to become overloaded in trying to carry out lots of interventions and assessments in a small team. But there are predictable components. So what we do is plan and practise the predictable components so that during an actual retrieval we don't have to think so much about those."

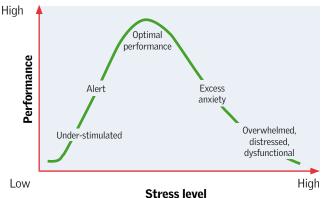
Rigid procedures and protocols with constant drilling and simulations are therefore key to the service. The team has 148 standard operating procedures (SOPs) covering the various clinical scenarios they might face in any retrieval. These have been worked out in the "cold light of day", says Dr Hearns. "You want to be able to perform a number of procedures that are predictable but with the minimal amount of thought or cognitive function so that the rest of your brain is left to say: 'Right, how



do I interpret this ECG or ultrasound? What's actually wrong with the patient? What do I do next?' So you are offloading the cognitive burden by planning what's predictable and practising that."

One major innovation that has also helped reduce cognitive overload and transformed the care provided by EMRS is the development of a mobile app with immediate access to all 148 SOPs along with a wealth of other essential tools and information, such as drug calculators and formularies, direct dial telephone numbers for hospitals, information on landing sites and what clinical facilities are available where. "A team can be in flight to the island of Barra", says Dr Hearns, "and find out that the aerodrome is eight miles from the hospital and takes 18 minutes to reach. It has no X-rays, it has no blood and if we are taking someone from Barra we are going to the Queen Elizabeth in Glasgow."

The team also employs multiple checklists to ensure nothing essential is missed out in delivering emergency care. "We use a two-person check and response system with one person reading out the list and the other checking." The system is used at all stages of a mission from restocking emergency medical bags, checking equipment and supplies before departure, carrying out procedures on-site and also before leaving the scene. Restocked and checked medical bags are then sealed



with plastic tabs before the next mission.

"That means if we are going out on a job and the various pockets are sealed we know that everything we need is in that bag."

Drill and drill some more

In free time between missions the duty team makes use of an on-site simulation suite with medical manikins, or uses mobile manikins to practise procedures in more difficult circumstance such as in stairwells or in a cramped helicopter cabin.

"There are certain procedures that might have 20 or 30 stages. So if we drill everyday so that everyone is confident about how to perform a procedure – such as anaesthetising a patient or how to put on a splint or start a blood transfusion – it will take up less of our cognitive bandwidth when we are with an actual patient."

These are only a few of many innovations that have made the EMRS team recognised world leaders in the field of retrieval medicine. The service has been instrumental in the development of a

diploma in retrieval and transfer medicine at the Royal College of Surgeons of Edinburgh, with candidates from all over the world. Each year EMRS also runs a conference in Glasgow on retrieval medicine. Dr Hearns believes the service provided by EMRS will become even more vital in future.

"The increased move towards centralised specialist services is improving outcomes but you've got to get the patient safely to those specialist centres. That's where prehospital care and retrieval medicine comes in. It provides equity of access to people wherever they are in the country."

■ Jim Killgore is managing editor of Summons

Sepsis

alert

Dr Ron Daniels of the UK Sepsis Trust highlights the importance of improved diagnosis and management in this oft-missed condition

EPSIS is a reaction to infection in which the body attacks its own organs and tissues. It can arise in response to any infection, but most typically a bacterial infection of the lungs, urinary tract, skin/soft tissues (arising from a bite, cut or sting or from cellulitis) or abdomen (such as a perforated bowel). If not spotted and treated quickly, sepsis can rapidly lead to organ failure and death.

Every year in the UK 150,000 people are affected by sepsis; 44,000 die as a result and 26,500 (a quarter of all survivors) suffer permanent, life-changing injury.

It's an indiscriminate condition, claiming young and old alike and affecting the previously fit and healthy. It is more common than myocardial infarction and kills more people than bowel, breast and prostate cancer and road accidents combined. Misdiagnosis and delayed treatment (followed by rapid deterioration) are at the centre of most poor outcomes or fatalities. Earlier identification and treatment across the UK would save 14,000 lives and result in 400,000 fewer days in hospital for patients every year, which alone would save the NHS over £314 million per annum.

A report published last year by the National Confidential Enquiry into Patient Outcome and Death (access at tinyurl.com/owh24qs) revealed that in over a third (36 per cent) of cases there were delays in identifying sepsis. The report also found that many hospitals had no formal protocols in place to recognise sepsis.

Diagnosis

The new National Institute for Health and Care Excellence (NICE) sepsis guideline (nice.org.uk/guidance/ng51) – published this July and building on care recommendations developed by the UK Sepsis Trust – provides best practice guidance for healthcare professionals confronted with potential cases.

The guideline advises that sepsis be considered in any patient with an infection and that the condition should be treated with the same urgency as a possible myocardial infarction. It describes the signs and symptoms that clinicians should check for, dividing these into high and moderate risk criteria and delineating where the person should be treated. It further advises which tests to use in diagnosing sepsis and monitoring response to therapy.



If someone is identified in the community as being high-risk, NICE says they should be admitted to hospital urgently by ambulance. Once in hospital they should be seen by a senior doctor or nurse straight away so that treatment may be commenced.

The guideline also advocates responsible use of antibiotics. Antibiotics should only be given to the sickest people: those who meet the high-risk criteria set out in the guideline, or alternatively those with a particular combination of moderate risk criteria. The UK Sepsis Trust screening tools (sepsistrust.org/clinical-toolkit/) encapsulate both patient groups under the term 'red flag sepsis': those patients warranting urgent intervention.

Management

If the patient has a suspected infection and their physiology suggests that there may be complications developing, the UK Sepsis Trust screening tools work well in conjunction with the NICE guidelines to identify patients with red flag sepsis. It is important



to listen to the patient and their relatives: health professionals will ignore phrases like "I've never seen him this ill" or "I feel like I'm going to die" at their peril.

NICE, the UK Sepsis Trust and the international Surviving Sepsis Campaign all recommend the delivery of a set of basic care elements for patients within the first hour – in the UK and in other countries these are described by the Trust's 'Sepsis Six' care bundle.

The Sepsis Six (see box) is a set of interventions which can be delivered by any junior healthcare professional working as part of a team – all it requires is a qualified prescriber and basic healthcare equipment. Executing these six steps in the first hour following presentation with sepsis will double the patient's chance of survival.

A majority of patients will begin to improve rapidly once the Sepsis Six are delivered in a timely fashion. For those who don't, or who continue to deteriorate, early contact with seniors and with critical care is of paramount importance: patients with sepsis have

Sepsis Six

- **1.** Administer oxygen to maintain oxygen saturations > 92%
- **2.** Take blood cultures and other samples
- **3.** Give broad-spectrum antibiotics according to local policy
- **4.** Give intravenous fluid challenges
- 5. Measure serum lactate, and repeat if initially elevated
- 6. Measure accurate hourly urine output

a 30 per cent risk of death so nothing should be left to chance.

Start the clock ticking following presentation: it is not acceptable to start the clock ticking on first identifying red flag sepsis; rather it should be when having first identified the condition. For emergency departments and acute medical units, this might be at triage, but for inpatient facilities we should acknowledge that even in acute trusts, guidelines mandate observations only every 12 hours in otherwise stable patients.

Implications for increased awareness

For 2016/17 and into the next financial year, NHS England has (via commissioners) put in place a national lever to drive improvement in hospitals, requiring that they screen for sepsis and deliver antimicrobials promptly. The Royal College of General Practitioners has developed a sepsis toolkit, NHS England has issued a Safety Alert, and Health Education England has developed a suite of resources. These all aim to increase the awareness of the condition and its treatment.

With increasing levels of public awareness, and following the Parliamentary and Health Service Ombudsman's report of 2013, complaints around sepsis are on the rise. Guidelines will give way to a NICE Quality Standard in 2017, which will make deviation from accepted protocol harder to defend.

It is crucial that healthcare professionals can show that reasonable steps were taken to identify sepsis, and to assess and investigate the symptoms. Organisations are expected to demonstrate that systems are in place to facilitate recognition and intervention.

Of course, not every situation in which diagnosis or treatment was delayed will amount to negligence. Healthcare professionals must have exhibited unreasonable and inappropriate actions (or inactions) – for example not investigating symptoms or leaving the patient without basic care (e.g. fluids or antibiotics). Clear medical records that explain an individual's actions and the steps they took to dismiss or confirm any suspected diagnosis, together with clear documentation of intervention, are important.

It can be difficult to link negligence to causation of harm in a condition as deadly and complex as sepsis where deterioration may be rapid, but early intervention is beneficial. Once septic shock has developed, there is only a 50 per cent chance of survival. For every hour that life-saving antimicrobials are delayed in septic shock, the risk of death increases by almost 8 per cent.

In summary, following the NICE guidelines, which have been operationalised in the UK, will provide key protection – and these include recognising red flag sepsis early and delivering the Sepsis Six within one hour, communicating and escalating clearly and keeping clear records of those actions in the medical records.

■ Dr Ron Daniels BEM is chief executive of the UK Sepsis Trust and a global sepsis expert

ENTAL abscesses tend to lurk within bone around the apices of infected teeth. They may be painful, but at least they're usually not visible. Yet, for the unlucky few, an abscess can spread, resulting in a facial swelling. This can lead to a rapid and spectacular rearrangement of the patient's classic good looks. Even more serious and alarming complications, such as respiratory embarrassment, are possible. That such incidents often lead to a complaint or claim is unsurprising, especially in cases where the onset of the swelling follows recent attendance to report symptoms or receive treatment.

It is striking how regularly this involves an allegation that the swelling was caused by the treating dentist's failure (or refusal) to provide antibiotics. All things being equal, responding to this particular point can be quite straightforward – the use of antibiotics is heavily restricted, with best practice guidelines recommending that first-line management should, if at all possible, be drainage of dental infections. Usually this is achieved by measures such as extraction or endodontics.

Antibiotics should only be introduced where the assessment of the patient reveals, for example, lymph gland involvement or cellulitis. In the absence of these signs, the decision to withhold antibiotics is normally defensible. Arguably, it is this discouragement of reliance on antibiotics by dentists that actually helps to limit the incidence of severe facial swellings.

Honoured in the breach?

Yet if dentists reflect on this issue, many will admit (perhaps only to themselves) that they are guilty of departure from these same guidelines. It would be difficult to argue otherwise – published studies have confirmed the high rate of antibiotic prescribing by UK dentists.

The rationales for these decisions are many and varied. For example, some dentists firmly believe that dry sockets respond to metronidazole. Others will provide antibiotics to palliate an acutely painful abscess, thus allowing the patient to reflect on definitive treatment choices following a good night's sleep. In the current climate, one is inclined to doubt whether these approaches would completely escape criticism. However, the ice becomes even thinner in other more commonly encountered scenarios.

In some cases the provision of antibiotics is simply a capitulation in the face of

concerted patient pressure. The assertiveness and persistence with which some patients will seek a prescription never fails to astonish. It's quite easy to empathise – there may well be a degree of reassurance to be derived from holding a prescription. Perhaps there is a genuine misperception that if the pills work, the expense, inconvenience and discomfort of dental treatment can be avoided. However, as the concept of patient autonomy flourishes in healthcare, there may also be a belief that the receipt of antibiotics is a "right".

Not so. Patients are entitled to consider treatment options, together with their

benefits and material risks. This ethical doctrine is now enshrined in medical jurisprudence following the seminal ruling in *Montgomery v Lanarkshire*. However, this is not carte blanche for patients to demand whatever they please – clinicians still cannot be required to offer treatment which is contrary to good practice. In circumstances in which the treatment of dental infections by means of antibiotics is contraindicated, a prescription should not be included in the menu of treatment choices, irrespective of the patient's wishes.

Another potential motivation for writing a prescription is expediency. Adherence to

Doug Hamilton considers the dilemma faced by dentists in deciding when

Resistance is



appointment timetables is an elusive art, especially on those days when dental "toothaches" have been shoehorned into already busy books. Logic dictates that many such emergency patients tend to be poor attenders. They are often anxious and delay treatment until the situation is dire.

Commencing an unscheduled discussion of the risks and benefits of endodontics versus surgical extraction (as well as non-intervention) in the middle of a busy session can be daunting and may trigger a panic attack (usually by the patient but sometimes by the dental nurse). Here the temptation to hand out a prescription

antibiotic treatment is a necessity

futile



without further (time-consuming and probably fraught) consideration of curative treatments may be irresistible.

The patient may be delighted at the time, but the relief provided by antibiotics is likely to be, at best, temporary. The recurrent symptoms are often – in the patient's mind, at least – more severe and usually coincide with a wedding, job interview or Caribbean cruise. Paradoxically, the resulting complaint tends to focus on why antibiotics were prescribed. A gentle reminder that, on the day in question, time was at a premium is unlikely to garner much sympathy and, if the patient makes a claim, may be seized upon by solicitors as an indefensible consenting failure.

Montgomery acknowledges that there will be practitioners "...who are more hurried..." but maintains that these practitioners are "...obliged to pause and engage in the discussion which the law requires". It is anticipated that this "... may not be welcomed by some healthcare providers..." No kidding.

In the absence of systemic involvement, for example, reliance on antibiotics may be very hard to justify. As this message is recognised and accepted by the dental profession, we might expect the numbers of prescriptions to fall which, in turn, makes a contribution to the battle against the tide of antibiotic-resistant bugs.

Exception to the rule

There is, however, one small development which may buck this trend. Up until July 2016, NICE Guideline 64 included the unequivocal recommendation that antimicrobial prophylaxis against endocarditis should not be employed for patients undergoing dental treatment. This engendered significant disquiet, especially amongst at-risk patients who, prior to 2008 (when these NICE guidelines were first published) had always been advised to take prophylactic antibiotics prior to procedures such as scalings and extractions.

Certainly, the patients' oft-expressed desire to take the standard dose of amoxicillin (assuming they weren't allergic) was as profound as it was understandable. However, there were no exceptions to the NICE recommendations and the doctrine that patients cannot require treatments contrary to a clinician's best judgement (invariably informed by authoritative bodies such as NICE) prevailed.

Yet this remained a controversial issue,

with commentators pointing to the disparity between the position set out by NICE and the contrary views of, for example, the European Society for Cardiology. A degree of consensus was finally reached following the insertion (rather surreptitiously) of one word into the NICE guideline, which now states that "antibiotic prophylaxis against infective endocarditis is not recommended *routinely* for people undergoing dental procedures" (my emphasis).

It may be that this amendment was, to some extent, a consequence of the *Montgomery* ruling which provides that patients must be made "...aware of any material risks involved in any recommended treatment..." The "... test of materiality is whether, in the circumstances of the particular case, a reasonable person in the patient's position would be likely to attach significance to the risk..."

Recognised bodies of clinical opinion (other than NICE) have been suggesting for some time that, for example, a dental extraction without prophylaxis for a high-risk patient may cause a recurrence of endocarditis. This is a particularly serious condition and it is likely that a high-risk patient would attach significance to that risk. Therefore, it may have been that *Montgomery* would have justified or even compelled the introduction of prophylaxis into the consenting discussion, even if NICE had not been revised.

In conclusion...

There will undoubtedly be occasions in which the provision of antibiotics is clinically indicated. It is also possible that digression from prescribing guidelines could be justified by a coherent, scrupulously recorded diagnostic and consenting process. However, this is a hot-button issue which attracts plenty of publicity. It is therefore unsurprising that third parties, especially the GDC, will cross-reference the dentist's antibiotic use and regimens with authoritative guidelines when considering complaints and reviewing records.

Patient expectations, complex diagnoses and time-limitations conspire to exert significant pressure on the beleaguered practitioner. However, the time-honoured tradition of reaching for the prescription pad when in a tight spot has had its day.

■ Doug Hamilton is a dental adviser at MDDUS

CASE studies

These studies are summarised versions of actual cases from MDDUS files and are published in *Summons* to highlight common pitfalls and encourage proactive risk management and best practice. Details have been changed to maintain confidentiality



PROFESSIONALISM: PRESSURE TO PRESCRIBE

BACKGROUND: Dr G is a salaried GP and also works as a doctor at a local private school. He visits the school once a week and is often asked to attend sporting events on a Saturday morning to provide first aid. He has developed good relationships with both pupils and parents, who often ask him questions relating to their own health.

One Saturday morning a parent tells Dr G about her difficulties with anxiety and insomnia. She had been treated for this in the past when she lived abroad and found a particular treatment very helpful. She is worried her condition will again deteriorate and asks Dr G to prescribe a small number of the benzodiazepine that she used several years ago as a short-term measure to alleviate her symptoms. She explains she has found it difficult to see her own GP as she has been too busy with work and her children. She assures Dr G she will call her own GP to make an appointment on Monday. Dr G is sympathetic to her concerns and, even though she is not his patient, agrees to help. He writes a prescription on his practice (NHS) pad for a short course of treatment and tells the parent this will be the only time he can do so. She is very grateful for his help.

Four days later Dr G's practice is contacted by a local pharmacist who informs them that the drug prescribed by Dr G is not available on the NHS. When the details are checked, it becomes apparent the person who this prescription was for is not in fact a registered patient at the practice. The partners arrange a meeting with Dr G to discuss the matter.

ANALYSIS/OUTCOME: Dr G contacts MDDUS for advice on how to proceed. He regrets his actions and admits he felt pressured into writing the prescription because he felt sorry for the parent. He was unaware that he should not have used the practice's FP10 prescriptions for this and should have issued a private prescription instead. Having reflected on the incident, he accepts that in future he should not prescribe a medication that he is not familiar with or has not used before, and certainly not without a thorough assessment of the patient.

The MDDUS adviser recommends familiarising himself with General Medical Council guidance on prescribing, which states: "You should prescribe medicines only if you have adequate knowledge of the patient's health and you are satisfied that they serve the patient's needs." Dr G is advised to meet with the partners to discuss the matter, to consider undertaking a significant event analysis to identify learning points and to reflect on this case at his next appraisal.

KEY POINTS

- Don't feel pressured into writing prescriptions for someone without adequate knowledge of their health.
- Consider whether a prescription request should be directed to the individual's own GP.
- Take extra care with requests for medicines such as benzodiazepines which can be more commonly associated with misuse.





DIAGNOSIS: **ABDOMINAL LUMP**

BACKGROUND: Mrs R is 53 years old and attends her GP surgery complaining of pain in the left side of her abdomen. She recently recovered from "gastric flu" but is now worried that she can also feel a lump near the site of the pain. Three years previous she was treated for breast cancer.

The patient is examined by Dr T who records a finding of spasm in the right iliac fossa with bloating. He diagnoses post-viral irritable bowel syndrome and prescribes mebeverine.

Two months later Mrs R returns to the surgery with recurring abdominal pain though she reports that the medication did help initially. She can also still feel a lump in her abdomen. On this visit Dr T orders a full range of blood tests but does not examine the patient's abdomen.

Five days later the results of the blood tests arrive and are reviewed by a locum GP – Dr N. All are normal apart from a marginal drop in haemoglobin to 113. Dr N highlights "slight anaemia" in the notes but judges it not to be significant enough for a patient recall and files the result.

Mrs R returns to the GP surgery one month later and examination reveals a palpable mass. Mrs R is later admitted to hospital for a colonoscopy and biopsy confirms a diagnosis of colon carcinoma, though not one suggestive of spread from breast cancer. A week later she undergoes a hemicolectomy and the cancer is found to have spread outside the bowel.

Four months later a letter of claim is received by the surgery naming both Dr T and Dr N. It is alleged that Dr T was negligent in failing to make an urgent two-week cancer referral after the patient presented with ongoing abdominal pain and a palpable

mass. It is also alleged that Dr N failed to flag up the low haemoglobin result which was suggestive of colorectal cancer.

ANALYSIS/OUTCOME: MDDUS – acting only on behalf of our member Dr N – commissions a report from a primary care expert. He considers the actions of Dr T in the first consultation and finds no fault in not making an urgent referral at this stage, accepting that the lump could have been interpreted as a spasm or bloating.

In regard to the second consultation, he is of the opinion that the failure here to examine the abdomen constituted negligence. An examination would have likely revealed the presence of the mass and led to urgent referral. It is also unclear why Dr T ordered the blood tests, as the clinical notes are poor.

Considering Dr N's involvement the expert is of the opinion that the notes did not make it explicit as to why Dr T had ordered the blood tests. In this context he contends that although a marginally low haemoglobin result might be consistent with bowel cancer it is not indicative of it – and that Dr N's actions in not issuing a recall of the patient do not constitute negligence. MDDUS responds on behalf of Dr N and he is dropped from the proceedings.

KEY POINTS

- Ensure that the clinical notes reflect diagnostic thinking; just recording results is not adequate.
- Consider alerting the requesting clinician to potentially relevant results if the rationale for the test is unclear.



TREATMENT: NO PROPHYLACTIC ANTIBIOTICS

BACKGROUND: Mr D is a 48-year-old self-employed lorry driver. He attends the dental surgery complaining of severe pain in his lower right jaw. The dentist – Ms J – examines the patient and notes a large restoration in LR5 and that the tooth is tender to percussion. A periapical radiograph reveals a deep apical abscess. Ms J discusses treatment options with the patient and Mr D opts to have the tooth extracted. The tooth is removed uneventfully and the patient is sent home with instructions on routine post-operative care.

Three days later the patient returns to the surgery for an emergency appointment having already been to see his GP. He is suffering submandibular swelling with trismus and difficulty swallowing and breathing. Ms J checks that the patient has not already been prescribed antibiotics and then urgently refers him to the local A&E. He is admitted to hospital to have the area incised/curetted and is treated with IV antibiotics. The infection is slow to clear and Mr D is out of work for three weeks.

Two months later the dental surgery receives a letter of complaint from Mr D claiming that Ms J's failure to prescribe an antibiotic after his extraction led to "serious complications"

resulting in his prolonged recovery and loss of earnings.

ANALYSIS/OUTCOME: Ms J contacts MDDUS and an adviser provides assistance in drafting a reply to the complaint. First the dentist expresses regret at the suffering and inconvenience experienced by Mr D, and then she explains that prophylactic antibiotics are not routinely prescribed in extractions and that this protocol is based on well-accepted clinical guidelines.

She further states that nothing in Mr D's clinical presentation suggested that his symptoms would not resolve with extraction, and the (relatively) rare complication could not be attributed to any negligence on her part. The letter concludes with advice on contacting the health ombudsman if the patient wants to pursue the complaint further.

KEY POINTS

- Ensure the practice has a standard protocol on the prescribing of antibiotics.
- Be vigilant for any signs of spreading infection when treating dental abscesses.

This oval goa stone (~1601-1800) with its sliver gilt case still bears traces of gold foil. Goa stones (named after their place of origin) are manufactured versions of bezoar stones found in animal stomachs. They were made from a combination of clay, silt, musk, pearl dust and other exotic ingredients. Scrapings were mixed with water and drunk as medicinal remedies.



Crossword												
1		2			3	4		5		6		7
				8								
9								10				
11												
												12
13		14					15					
						16						
	17									18		
19												
20						21						
22									23			

ACROSS

- Danger (4) Made less irregular (8) Social status (7)
- 10 11 13 Rib (5)
- Cocktail (3-9)
- Rests (6)
- Law of arousal and performance. Yerkes-
- Pertaining to farming (12)
- Am (5)
- Fortified structures (7) Time-management tool (8)
- Consumes (4)

DOWN

- Answer (8) To be in a vertical state (5) Of which there are 12 annually (6)
- Corrects the position of teeth 5
- Above! (7)
- Profound (4)
- 8 Unhappy because of
- confounded expectation (12) 12 Examination (8)
- Primary language of USA (7) 14
- 16 18 Facial nerve (6)
- Tumbles (5) Obtains (4)

See answers online at www.mddus.com/news/notice-board

Book choice

Being Mortal: Illness, Medicine and What Matters in the End

By Atwul Gawande Profile Books, £6.99 paperback Review by Greg Dollman, medical adviser, MDDUS

First published in 2014, Being Mortal explores (as the subtitle puts it) illness, medicine and what matters in the end - all in under 300 pages. How did a book dealing with growing old, written by a neurosurgeon (who begins with an admission that he learnt a lot of things in medical school, but mortality wasn't one of them), become an international bestseller?

I think there are a few reasons: mortality is a topical issue. We are living longer and want to live better – but at what financial and personal cost? Gawande combines personal experiences with a keen exploration of the topic, and while the book may not tell us much that we don't already know, it offers a challenge to the medical profession's approach to mortality.

Gawande first explores the worldwide shift away from multigenerational families living under the same roof to elders living alone. He then proposes that many of those older people living alone are reluctant to give up this imposed independence.

The book traces the development of "institutionalised existence, a medically designed answer to unfixable problems, a life designed to be safe but empty of anything the person cares about". The inherent problems are obvious: how to balance keeping people safe against being controlled, upholding independence and the wishes of the person rather than the goal of society (Gawande writes that one resident "felt incarcerated, like she was in prison for being old") and preventing 'the task' (such as washing or dressing) from becoming more important than 'the person'.

Gawande considers other end-of-life care scenarios, applauding the skill set of palliative care clinicians and suggesting that all

doctors should receive similar training. He then

investigates the concept of assisted living, as well as innovations to the traditional models of care homes. What happens when 'life' (be it plants, animals, children or students) is incorporated into a care setting? Gawande finds that residents seem to prosper.

More and more people are now dying of 'old age' and Gawande considers how medicine in particular has responded to this biological transformation. He asserts that the focus has traditionally been on the repair of health ("fixing a problem") rather than "sustenance of the soul". He argues that when the problem is a "crumbling" older person, doctors often respond with technical prowess rather than an understanding of human needs.

Gawande concludes with a reminder that medicine's interventions are only justified if they serve the larger aims of a person's life. He puts across a good argument that, when considering being mortal, this is what matters most in the end.

ATUL GAWANDE BEING

Vignette: Cardiologist and inventor of the portable defibrillator Frank Pantridge (1916-2004)

JAMES Francis Pantridge was a crank, in the way that Mark Twain said any man with a new idea was a crank - until, of course, that idea succeeds.

Pantridge was born in Hillsborough, County Down, in the middle of the First World War and graduated in medicine from Queen's University Belfast on the eve of the Second. Both his school days and his undergraduate life were troubled by his lifelong refusal to conform and his constant clashes with those in authority.

With the outbreak of war, he enlisted in the Royal Army Medical Corps and was sent to Singapore. There, in his usual fashion, he quickly fell out with his commanding officer and was seconded to Changi. Despite this, for his tireless work during the campaign, he was awarded the Military Cross in 1942, the citation reading: "He was absolutely cool under the heaviest fire". With the surrender of Singapore shortly afterwards, Pantridge was taken prisoner of war and was incarcerated in the notorious Changi camp. In 1943, he was taken along with 7,000 others to work as slave labourers on the Siam-Burma railway. Only a few hundred would survive the barbaric conditions, but Pantridge was among them. He did not survive unscathed, however, as severe nutritional deficiencies led him to develop near fatal cardiac beriberi, the consequences of which would ਰੋਂ trouble him for the rest of his life.

He was repatriated at the end of the war and became a lecturer back in Belfast and this was followed by a seminal period working in the US under Frank Wilson, the world authority on electrocardiography at the time. He returned again to Belfast where, in 1951, he was appointed consultant physician in the Royal Victoria Hospital.

Accounts vary, but the concept of out-of-hospital coronary care was probably first sown in Pantridge's mind around 1960 by the Professor of Medicine, Graham Bull. Pantridge was highly

skeptical and said at the time: "This is yet another of the many idiotic ideas which emanate with monotonous regularity from the Professor of Medicine, who thinks it is possible to achieve immortality for

patients with coronary artery disease".

Despite his initial opposition, Pantridge eventually came to agree with Bull and aggressively pursued the goal of being able to deliver defibrillation to patients when and where they needed it, which was often not in hospital. Existing defibrillators were heavy and cumbersome and a new approach was needed. Thus, in the winter of 1965, Pantridge with his junior medical colleague John Geddes and the technician Alfred Mawhinney, using the resources of a British Heart Foundation grant, converted a mains defibrillator to operate from car batteries in the back of an old ambulance. This became the first mobile coronary care unit and in its first 15 months was responsible for 10 successful resuscitations. Quickly, Northern Ireland became known as the place to have your heart attack.

The original "portable" device weighed

in at 70kg, but by 1968 Pantridge had refined the design, incorporating a miniature capacitor invented by NASA, and it now weighed only 3kg. Services in North America quickly took on

> board Pantridge's portable defibrillator and embraced the concept of mobile coronary care, but British medicine was slow to follow and his ideas would take more than 15 years to find acceptance.

Speaking about his invention in 1988, he said that he had created the device not for personal gain or glory but simply to save lives. "People were getting cardiac arrests," he explained. "In the casualty department [they] were arriving dead, having died in the ambulance. My objective was to have an almost pocket-sized defibrillator." He was showered with honours,

especially in the US where he became known as the "father of emergency medicine", but he received few such accolades in his homeland. He did receive a CBE in 1978, but the knighthood that many thought he should have been awarded, eluded him. His cantankerous and arrogant style alienated many who found his barbs hard to forgive.

Although Frank Pantridge saw his idea succeed, saving the lives of thousands around the world, he ultimately remained a crank. Not by Twain's definition, but by that of Ernst Schumacher. According to that economist, a crank is simply a small device that causes revolutions. When we consider Pantridge's impact on emergency medicine and pre-hospital coronary care, he certainly did that.

■ Dr Allan Gaw is a writer and educator in Glasgow

The Independent, Obituary 24 January 2005

BMJ Obituary 2004

BBC News 2015

23 **WINTER 2016**

