

Issue 10 October 2020

Health Education Collaborative Newsletter

A message from the CEO



Bruce Greaves
CEO/Director

Welcome to issue 10

Like most businesses, we are looking forward to getting back to some normality and delivering face to face training. In saying this, we have both been delivering skills based training and education for the past few months. I have a very sound COVID safe delivery model adopted for my training sessions for DHHS. I have delivered skills sessions for many large groups. Of the 700 plus participants I have trained, not one person has contracted COVID 19 from a training session or working on the frontline in aged care facilities, testing stations or in outbreak areas. Marg has also been delivering simulation sessions during this time using Covid safe guidelines.

The message here is that we are health care professionals; we should be able to facilitate and attend safe face to face clinical skills training in a controlled setting. This week I delivered a fracture management inservice session for Sandringham Ambulatory Care Centre in a COVID safe environment. This was a very proactive and essential skills session identified by staff and management providing ongoing education for clinicians to enhance patient care.

One issue that COVID has shown us is that online learning alone cannot replace face to face skills based training. Sure we can deliver an amazing amount of information and content online, but it can't beat that hands on instructional skills based learning.

Has your organisation got a COVID safe delivery plan?

Bruce Greaves CEO/Director Health Education Collaborative

Course Development

New courses

Second course available

With the first course now full we are pleased to announce a second course which has been scheduled for Wednesday, 9 December 2020.



Be the amongst the first in Australia to attain this endorsed fracture management certificate in immobilisation, splinting and casting endorsed by the Australian Orthopaedic Association.

For further information and to enroll visit our website healthec.com.au

COVID Safe Program

The COVID Safe Program provides a wide range of Infection Prevention Control (IPC) services related to training and development for your staff. We have a vast range of IPC experts available and can tailor a learning program for your organisation that meets all the requirements under the Department of Health and Human Services and WHO guidelines.

A vast majority of the learning can be completed online via interactive learning modalities with essential skills being delivered via face to face training, webinar activities and/or train the trainer organisational champion model.

Of course, it's not just about COVID, the skills learned cover all the basic principles of IPC from day to day standard precautions to specific outbreak situations and of course PPE training.

After training over 700 personal in this area we feel we are well placed to provide this program into clinical and non-clinical settings alike.

This is not an IPC course, it's a program designed and contextualised for your organisation to ensure currency of staff and consistency of IPC training is met. COVID is not going to go away anytime soon, organisations must build ongoing IPC training into their inservice education model.

Clinical Update

Clinical Question

Last month's clinical question answer.



What is the lowest oxygen flow rate you can set when administering oxygen via a simple face (Hudson) mask?

Oxygen is commonly prescribed and when administered correctly it may be lifesaving. However, oxygen is often administered without careful evaluation of its potential side effects. As for any drug, there are clear indications for treatment with oxygen and appropriate methods of delivery.

Marg Villella
Director/ Education
Director

Different oxygen delivery devices provide varying FiO2 (fraction of inspired oxygen). What comes out of the oxygen flow meter is 100%, however the FiO2 the patient inspires is dependent on their minute ventilation volume, the oxygen flow rate and the how much room air is entrained.

What is the appropriate flow rate for a simple face mask?

If a patient requires oxygen via a simple face mask, the oxygen flow rate needs to be set at 6L/min or above. If the flow rate is below this, there is insufficient flow to flush the expired carbon dioxide out of the mask and the patient will rebreathe carbon dioxide, therefore becoming hypercapnic.



Low flow masks deliver a Fi02 of up to 60% with moderate oxygen flow rates (6 to 10L/min).

Nasal prongs are simple and convenient and allow for patients to drink and eat. They also prevent rebreathing. The flow rate for nasal prongs is set at 1-5L/min. Oxygen concentrations up to 36% can be achieved (again dependent on the minute ventilation volume).



Nonrebreather masks have a one-way valve that prevents rebreathing and has a reservoir bag. The reservoir bag needs to be filled prior to applying to the patients face. These masks can provide higher concentrations of Fi02 (up to 85%) and the flow rate is set at 15L/min.



A bag valve bask (BVM) circuit can be used to deliver high flow oxygen. An Fi02 of 100% can be achieved if you apply the correct size face mask and have a complete seal. The flow rate is delivered at 15L/min. It is important to remember there is a valve between the face mask and the

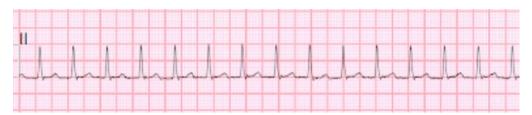
bag and the patient must have sufficient respiratory effort to open this mask otherwise they will not be receiving any oxygen and they will rebreathe their expired carbon dioxide.



It is imperative that when oxygen is applied, you regularly reassess the patient and titrate oxygen flow rates according to the patient's condition and oxygen saturations. Make sure you look at what is normal for the patient, trends are extremely important. Remember, if you want to deliver lower or higher oxygen concentrations, you may need to change your delivery device.

This month's clinical question.

Interpret the following Lead II rhythm strip.



Make sure you systematically assess the rhythm.

If you find this rhythm tricky, you may like to enroll in the ECG Basics Course (fully online). Click here for more information.

This month we interview Paul Biegler.

In the Chat Room



Paul Biegler is a journalist and former specialist emergency physician.



Paul's journalism covers health and science and includes feature articles in the Age, Sydney Morning Herald, Good Weekend, Australian Financial Review, Cosmos magazine, New Philosopher and Arena. He is the author of The Ethical Treatment of Depression (MIT Press 2011) which won the Australian Museum Eureka Prize for Research in Ethics. Paul also penned the ethics

<u>column</u> at Cosmos alongside fellow columnists Alan Finkel, Chief Scientist of Australia, and broadcaster Norman Swan.

HEC: Paul you started your medical career as an emergency physician, why the change to journalism and bioethics?

Paul: After a decade or so of medical practice things started to get repetitive and I needed a new challenge. I did a Master of Bioethics at Monash University which opened my mind to philosophers from Plato and Aristotle to William James and modern-day greats like Peter Singer. It was an intellectual liberation to be exposed to their ideas and the gauntlet was really thrown down to see if we, as students, could add something useful to the literature. My bioethics work, covering depression, end-of-life decision-making and drug marketing, is still health-focused even if outside the clinical realm. I tried journalism to write simply but colourfully about mind-blowing stuff in science and tech, like brain-computer interfaces and mini-organs grown from stem cells – things that need serious community debate to see how far they should go.

HEC: What's a typical day like for a bioethics journalist and lecturer?

Paul: I research and write feature articles and sometimes short science news pieces, although a lot of freelance work has dried up during the pandemic. I'm also working up a book proposal on the science of pain. I teach at Monash University, which has all been online during lockdown, so I'll do Zoom tutorials with twenty or so medical students doing their ethics rotations. We use ethical principles and reasoning to decide how best to navigate real-life patient scenarios.

HEC: What is the most challenging part of your job?

Paul: Dealing with the down time when there is little or no journalism work. And dealing with rejection. I estimate around a fifth of all my pitches have nosedived, each one representing hours of work honing a focused, hyperlinked story pitch only for it to be knocked back by the relevant editor. I've developed a philosophy around dealing with failure. Each failure is a rung on the ladder to success - you have to climb it to

get to the next level. If you're motivated to deal with failure, then you're primed for success!

HEC: You are a finalist for a prestigious award - can you tell us about that?

Paul: I'm one of two finalists for the Finkel Foundation Eureka Prize for Long-Form Science Journalism. It's for a feature in Cosmos magazine on embryoids, which are embryo-like structures grown in a plastic dish from stem cells, often sourced from human skin. It's fascinating research that could help understand birth defects and why so many pregnancies miscarry. But it's hugely contentious ethically – could these things ever feel pain, for example? I actually won the Eureka Prize for Research in Ethics back in 2011 for my book *The Ethical Treatment of Depression*. To be a finalist for a science journalism award makes me feel like now, maybe, I really can call myself a journalist.

HEC: Why is Bioethics so important in health care?

Paul: When I studied medicine at Monash Uni in the 1980s there was no ethics teaching. There was little or no ethics literacy among medical students and doctors. I think a big part of ethics teaching is consciousness-raising rather than just pushing health workers through an ethical rabbit run. It lifts the profile of patients as drivers of healthcare decisions, rather than passive recipients of treatments that are simply done to them. Doctors may be experts on the science, but patients are always expert on what they value. Only patients know what risks they're prepared to take for any given benefit, which is always the deciding factor.

HEC: Do you think COVID has had an effect on health care workers and their approach to ethical standards of care.

Paul: I'm not practicing anymore so I haven't seen this firsthand. My impression is that COVID has raised the stakes in terms of the limits of beneficence – the yardstick here is that a doctor's duty of care extends up to but not beyond the point at which the risk to them exceeds the benefit to the patient. Some doctors may baulk at treating COVID patients because of the risk to their own health. Most, I suspect, take it as a duty implicit in their initial decision to go into medicine. One thing I have noticed is the utilitarian bent in rationing guidelines – scarce ventilators are allocated on the number of life years likely to be saved. It suggests that when push comes to shove, we don't weight all lives equally. That concept might not cross the threshold easily but, nonetheless, it is a strong candidate for the most fair under the circumstances.

HEC: So, what does a bioethics journalist lecturer and former emergency specialist physician do to unwind and relax.

Paul: I try to build exercise into everyday life. So, I ride my bike to commute and do grocery shopping - which means I can wind down just buying bread and milk! I have three wonderful kids, all school age, so we hangout, play Frisbee with our dog Pepper and generally just dag around. I run once or twice a week and enjoy a good Netflix chill as much as the next man. But I'm in a fortunate position where my writing (when I'm not tearing my hair out) is incredibly rewarding — it's hard to match the sense of accomplishment of getting a solid few pages down before school's out and the chaos starts....

Thanks Paul that was very interesting.

I have had the privilege of knowing and working with Paul for many years during his time as an emergency physician. I have read many of Paul's articles which are stimulating, thought provoking and well worth the read. (Bruce Greaves)

If you would like to read more about Paul's work

Click HERE

Inservice Education

Events & Courses

HEC provided Sandringham Ambulatory Care Centre a refresher inservice session on splinting and casting techniques. Many of the participants had previously attended similar sessions, however attended the refresher to learn new techniques, tips, tricks and practice and refine their skills.

Online courses

Course in Clinical Assessment

ECG Basics (collaborative course with Baker Heart & Diabetes Institute)

Women after gestational diabetes (collaborative course with Baker Heart & Diabetes Institute).

This is currently a closed course, however if you are interested please contact us.

Fracture Management (collaborative course with Australian Orthopaedic Association).

This has an online component as well as a face to face component.

Medical Scribing Courses (level 1 and level 2 advanced). (collaborative course with Medscribe Australia)

If you would like us to present at any of your events, run an inservice session or manage your organisations inservice program please contact us on info@healthec.com.au or phone Marg on 0419939458.

Partner with us.

Collaborative Partnerships

Got an idea for a course or program?

Want to turn your academic research into a course?

Already have the material but not sure how to develop it and get it out there?

Want someone to develop a learning program for your organisation?

Need some help managing your organisations inservice program?

Then give us a call.

If you would like further information or to just run an idea by us, then contact us via our website to leave an expression of interest info@healthec.com.au or give Marg or Bruce a call.

Next Issue: November 2020



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