International Society for Evidence-Based Health Care
25th Newsletter Edition, 2018

Mission

The mission of the International Society for Evidence-Based Health Care is to develop and encourage research in evidence-based health care and to promote and provide professional and public education in the field.

Vision

The society is inspired by a vision to be a world-wide platform for interaction and collaboration among practitioners, teachers, researchers and the public to promote EBHC. The intent is to provide support to frontline clinicians making day-to-day decisions, and to those who have to develop curricula and teach EBHC.

Key objectives of the Society

- To develop and promote professional and public education regarding EBHC
- To develop, promote, and coordinate international programs through national/international collaboration
- To develop educational materials for facilitating workshops to promote EBHC
- To assist with and encourage EBHC-related programs when requested by an individual national/regional organization
- To advise and guide on fundraising skills in order that national foundations and societies are enabled to finance a greater level and range of activities
- To participate in, and promote programs for national, regional and international workshops regarding EBCP
- To foster the development of an international communications system for individuals and organizations working in EBHC-related areas
- To improve the evidence systems within which health care workers practice.

EBCP WORKSHOP

international society for EVIDENCE BASED HEALTH CARE

Evidence-Based Clinical Practice Office
McMaster University, Canada

TABLE OF CONTENTS

RESEARCH and REVIEWS

RESOURCES and REVIEWS

WORKSHOPS AND CONFERENCES

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Guideline Panel Simulation for GRADE in Sub-Saharan Africa

Michael McCaul, Tamara Kredo,
Nandi Siegfried

Guideline Development Groups at the World Health Organization (WHO) are multidisciplinary committees, representing diverse global regions and including people with complementary expertise to contribute to the development of evidence-informed recommendations. Understanding the guideline development process is a necessary competence for programme managers, clinicians and researchers active in policy-making. In sub-Saharan Africa, opportunity for participation in guideline development lags behind well-resourced settings. In response, we developed a guideline panel simulation workshop, embedded in a Masters level clinical guideline module. Here we report on the development and piloting of the workshop and the associated facilitator manual.

Stellenbosch University (South Africa) hosts a Master's module on clinical practice guidelines including approaches for guideline appraisal, development and implementation. In 2017, we devised a guideline simulation exercise based on a topic relevant to Africa, namely Pre-exposure prophylaxis with Tenofovir to reduce HIV transmission. Students were assigned roles in advance of a 3-hour simulated guideline panel meeting led by a facilitator experienced in guidelines development. Participants were encouraged to contribute to the discussions either within their assigned roles or from their own experience.

In 2018, we used the simulation experience to inform production of a facilitator's manual (Figure 1). The manual outlines a step-by-step approach to delivery of the simulated GRADE evidence-to-decision process. The simulation objectives, setting, role and content are provided to facilitators to adapt to their needs and the needs of the group. The content covers five key learning objectives:

Figure 1

- Guideline panel composition, roles, and managing conflicts of interest (both intellectual and financial)
- Key factors determining overall quality of evidence in a GRADE Evidence Profile
- The GRADE Evidence-to-Decision Framework to inform guideline panel discussions
- Formulation of a recommendation
- Implications of the strength of a recommendation (i.e. weak or strong)

In 2018, a trainer who had observed the 2017 simulation delivered the simulation according to the manualised instructions. Roles for student participants were assigned relevant to the selected topic of HIV Pre-exposure prophylaxis, an important topic in the region. Twenty participants, including policy-makers and full-time students, attended the 2018 simulation. Feedback was very positive (Figure 2).

Figure 2

Using a role-play learning method, facilitators were able to provide a respectful environment to guide students through the challenges and realities of working in a Guideline Development Group using the GRADE evidence-to-decision framework as endorsed by the WHO. This facilitator-led, manualised simulation of a real-world guideline development process offers scalable, experiential learning for building capacity in GRADE for guidelines in less-resourced settings. We are exploring an on-line virtual simulation and welcome interested partners and funders.

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Learning to use diagnostic tests

Bruce Arroll

There are some issues with diagnostic tests that need to be understood to enable application of probabilistic reasoning to clinical practice.(1) Most of clinical medicine starts with probabilities whereas clinicians tend to talk as if clinical presentations were dichotomous. The key learning points are[1] :

1. Probabilistic reasoning requires knowing the degree to which a positive or negative result of a test adjusts the probability of a given disease.

2. It is important to know the pre-test probabilities of a disease based on the symptoms and signs of patients in the setting in which you are working. Pre-test probabilities are crucial to what questions you start asking, and are ideally informed by large observational studies. Where they are not available then personal experience or that of an experienced colleague can be informative.

3. The purpose of taking a history and doing a physical examination is to take a presenting pre-test probability and increase it to a probability where standard tests (e.g. lab tests or ultrasound) will rule in or rule out a diagnosis, or to a probability where expensive and/or invasive and/or time-consuming investigations can be justified (e.g. CT scan, colonoscopy).Very high or very low pretest probabilities may mean no testing is required e.g. with a very high pretest you may wish to initiate treatment or gold standard (expensive or dangerous investigations)

4. Each question and physical examination is a diagnostic test in itself with a sensitivity and specificity.

5. Standard everyday tests (e.g. x-ray, blood or urine) work best in medium prevalence settings in that they reasonably rule in (when positive) and rule out (when negative) conditions. Technically, a rule out is accepting a lower probability of disease and the opposite a rule in is accepting a higher probability of disease that warrants treatment or expensive/dangerous investigations.

6. False positives are the problem in low-prevalence settings (see fig 4).
7. False negatives are the problem in high-prevalence settings (see fig 4).

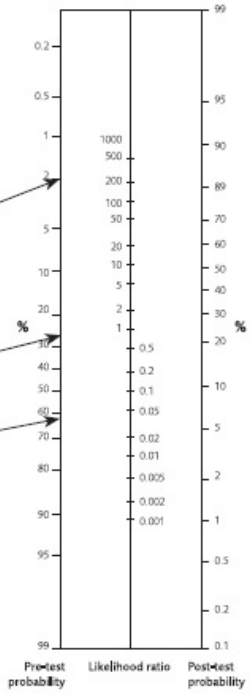
8. A highly sensitive test is useful when the result is negative as it is a good rule out. This is known in evidence-based medicine as a Snout (Sensitivity rule out) e.g. Brain natriuretic blood test is a good rule out for congestive heart failure when negative. Most clinicians erroneously think this is a good way of ruling in a condition.

9. A highly specific test is a good rule in. This is known in evidence-based medicine as a Spin (Specificity rules in) e.g. a raised jugular venous pressure is a good rule in for congestive heart failure.

10. Numbers may facilitate clinician communication more accurately than words.

Figure 4 from reference 1
using the example of possible streptococcal disease, shows the influence of prevalence on test performance. This a function of the underlying mathematics of diagnostic tests. All diagnostics tests behave this way and this includes questions on history, what we find on physical examination and what we traditionally think of as medical tests, such as laboratory and radiological tests. Only gold standard tests get around this issue of false negatives and false positives but even those may not be 100% sensitive and specific.

Figure 4. Combining the prevalence table with the nomogram



	Low prevalence	Medium prevalence	High prevalence
Pre-test of Streptococcus	2%	28%	63%
Issue	False +ve	Tests work well	False –ve
Strategy	**+ve test:** do another test, or gold standard test* **-ve test:** don't treat	**+ve test:** treat **-ve test:** don't treat	**+ve test:** treat **-ve test:** perform gold standard test*
What test can do	rule out not rule in	rule out rule in	rule in not rule out

*** the gold standard for this is serum streptococcal antibodies so only practical in a research setting not clinical settings**

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Competing Risk of Death in DVT Trials in Cancer Patients

Samuel A. Berkman

Numerous studies have demonstrated increased risk of deep vein thrombosis (DVT) among cancer patients. In fact, venous thromboembolism is the second most common cause of death in cancer patients behind the malignancy itself.

This situation presents a competing risk scenario in which the occurrence of one of the events may alter the probability of the other happening. This relationship assumes particular importance in deciding which cancer outpatients should receive anticoagulant prophylaxis against venous thromboembolism (VTE). If one overestimates the risk of DVT by not taking into account competing risk, one may subject cancer patients, already at

increased risk of bleeding, to a further increase by unnecessarily recommending anticoagulant prophylaxis. Some of the risk assessment models for recommending DVT prophylaxis in cancer patents have not taken competing risk into account.

Routinely used tests for time to VTE, like the Kaplan- Meier estimator, Log Rank test and Cox proportional hazards ratio ignore competing risks. These methods treat VTE as the only possible event, since the cancer patient who remains VTE free, but dies or is lost to follow-up, is handled as missing data.

Missing data from survival analysis can fall under non-informative or informative censoring; the latter

would be when a group of patients already entered into a trial are excluded deliberately by the investigators and handed as missing data such as in the APEX trial involving Betrixaban where the authors excluded patients who did not get ultrasound at 30 days. This informative censoring was criticized by the FDA as a cause of bias, and they demanded that excluded patents be reinserted into the trial whether or not they had an ultrasound. Therefore, censoring whether informative or noninformative, deals with handling of missing information. With respect to competing risk one is dealing with noninformative censoring.

The VTE status of the cancer patient is unrelated to whether or not the patient is censored if he dies, because his risk of DVT is instantly reduced to zero, In other words the Kaplan Meier curve by censoring death as uninformative for VTE status, erroneously assumes that patents who have died and not developed clinical DVT ante mortem, remain at risk for DVT after death. Since the risk drops to zero with death, this situation gives rise to overestimation of the incidence of DVT in cancer patients, unless a mechanism for including CR is included. Because the incidence of DVT calculated by Kaplan Meier, Log Rand or Cox regression will always be greater than 0, such methods will invariably erroneously inflate the risk.

A 2015 trial done by Dr. Ay looking at 1542 cancer patients compared the risk of DVT using Cox proportional analysis versus more complicated methods that accounted for CR such as Stata's stomped suite in patients with malignancies. They detected biased estimates of the VTE risk from using the usual methods and that the magnitude of bias was a direct function of competing mortality. That is to say that the bias tended to be negligible in cancer patients with low mortality but was considerable in patients with high-risk of death.

This observation makes sense since the greater the number of deaths, the more censoring and overestimation, as the risk of DVT after death is not the same as a person who is lost to follow up or still alive. In Ay's study, the risk of DVT was calculated at 7.22% with Kaplan-Meier (KM) and 6.74% with competing risk (CR) at 12 months and 8.4% versus 7.54% at 24 months. These results may not seem like major differences, but when one looks at subgroups of patents with high mortality, they can be substantial.

Several registry studies have indicated that cancers of the pancreas, lung and brain are associated with the highest mortality consequently the highest rate of thrombosis. While these high thrombosis rates are clearly related to the thrombogenicity of the tumor, the lack of factoring in CR further increases the percentages.

The result of the trial showed that death was clearly present as a competing risk and the Kaplan Meier consistently overestimated it. The reason was that by censoring death as uninformative for VTE status, Kaplan Meier erroneously assumed that people who have died but not developed DVT remain at risk for DVT rather being viewed at 0 risks.

Another article by Blix from 2017 is consistent with these results as it shows that overestimation is most likely to occur in patients with aggressive malignancies because this is the population where one observes the most deaths. It also most frequently occurs in the 6 months after diagnosis because this is the period when death is the highest.

The authors used data from the Scandinavian Thrombosis and cancer cohort that included 144,952 subjects. The conclusion of the study was that thrombosis rate was indeed increased by the mortality rate of the cancer and lack of correcting for competing risk as well as the proximity to diagnosis of the cancer. The authors emphasized that this matter must be taken into account when considering cancer patients for prophylaxis for DVT. While prophylactic anticoagulation seems harmless enough, in the Apex trial 7 patients had cerebral hemorrhages on prophylactic dose enoxaparin versus 2 with Betrixaban.

Nobody is suggesting that that cancer associated thrombosis isn't a significant cause and concern in and of itself with an incidence considerable higher than the general population. However, when one takes into account mortality particularly in cases with aggressive malignancy as well as proximity to time to diagnosis, there are overestimates based upon competing risk which need to be considered when assessing the need for DVT prophylaxis as bleeding risk is also significant in cancer patents.

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Teaching Evidence-Informed Practice (EIP): A Comprehensive Approach

Ekaterini Papadopoulou, Jane D. Saxton, Susan Banks

Bastyr University's approach to teaching evidence-based medicine (EBM), also referred to as EIP, is both typical and innovative. In 2014, the *Journal of the Medical Library Association* published a study of EBM instruction at 115 institutions offering four-year medical degree programs, mapping the most common approaches.[1] EIP instruction in Bastyr's naturopathic medicine clinical doctorate program aligns well with trends: concepts and basic skills in year 1, leading to efficient integration of evidence into clinical practice by year 4. Innovative aspects of the EIP program include the degree of librarian involvement and its primary focus on practitioner process, discussed in more detail below.

Close collaboration between librarians and clinical faculty distinguishes this EIP instruction. A librarian is embedded in Integrated Case Studies (ICS), a six-quarter, required course that meets weekly in years 1 and 2 of the four-year program. Library-created EIP components (assessments, tutorials, exercises) play a major role in ICS classes, which are co-taught by basic science and clinical faculty members and a senior librarian. Entering students take a pre-assessment "test" in the first ICS class session to collect cohort level data. Data from a post-assessment "test" in the final quarter of year 2 is compiled at both the individual and the cohort levels; students scoring below the baseline are required to remediate with a librarian. As students progress through years 3 and 4, they apply the EIP approach to clinical care utilizing standard EBM tools such as PICO, specialized filters (e.g. PubMed's *Clinical Queries*, Embase's PICO search), clinical consult resources (e.g. BMJ Best Practice, Dynamed, UpToDate), and statistics calculators to find and assess relevant research.

The EIP curriculum introduces various ways of conceptualizing the evidence base. Limitations inherent to the hierarchical "evidence pyramid" present a challenge to teaching EIP in a program emphasizing wellness, prevention and individualized care. As W.B. Jonas, M.D., stated in 2005, "[t]he evidence hierarchy is too simplistic for much of medicine …. As every clinician knows, patients recover for complex and interacting reasons, many of which are not additive and cannot be isolated in controlled environments." [2] Various alternatives to a pyramid model have been proposed, including an "evidence circle,"[3] and an "evidence funnel," created and described in detail by Paul M. Finch.[4]

In both EBM/EIP and Finch's view, the clinician's ability to locate and assess the relevance of existing research is just as important as, for example, compiling case histories and evaluating test results. The evidence funnel models *process by* arranging quantitative and qualitative methodologies horizontally, with expert opinion and untested theories off to the sides; this broad array filters down to potentially relevant research, informed evaluation, and, finally, integration with patient preferences and values. Librarians teach both evidence models: the funnel emphasizing the practitioner's process in broadly searching for then carefully assessing the quality of evidence; the pyramid directing attention to strengths and limitations inherent to top tier research methodologies. Thus, the EIP curriculum both supports and expands the EBM approach by encouraging inquisitiveness and ensuring that students graduate with the high-level research literacy skills required for clinical decision-making. To identify *the best suited* answer for the patient and the question at hand, the funnel model complements the familiar evidence pyramid, inviting students and practitioners to adopt a process view in engaging with the research base relevant to patient care.

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Incorporation of Evidence Based Medicine in Medical Professionals' Education in Bulgaria.

Nikoleta Leventi, Antoniya Yanakieva,

Public health decisions should be informed by the best available evidence. In the Faculty of Public Health in the Medical University – Sofia we have integrated an evidence-based medicine (EBM) course into three programs of study: (1) Public Health and Health Management, Bachelor's and Master's programs, and (2) the Clinical Trial Management Master's program. The department of Health Technology Assessment (HTA) provides this course in order to familiarize students with the process of HTA. According to the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) "HTA is defined as an evidence–based multidisciplinary process intended to support healthcare decision making by assessing properties and effects of one or more new or existing health technologies in comparison with a current standard. Aiming at determining added value, HTA uses explicit analytical frameworks based on research and the scientific method in a systematic, transparent, unbiased way."[1] Positive feedback regarding the EBM course led us to explore incorporating this material into our medical students' curriculum.

A survey about the incorporation of EBM course into medical professionals' education in Bulgaria is ongoing, and we currently have completed surveys from 610 participants: 300 clinicians (physicians, dentists, nurses, midwives, and physiotherapists) and 310 students. The questionnaire includes three parts: (1) demographic characteristics of respondents, (2) attitudes towards EBM, and (3) applicability of EBM in their daily clinical work.

The purpose of this survey is to explore the impact of EBM knowledge on the development of professional competencies, and on informing healthcare delivery. We look forward to presenting the results of our survey in a future Newsletter article.

1. https://www.ispor.org/

Finding, Interpreting and Using Systematic Reviews: An Evidence Synthesis Workshop in Kenya, Kilifi

Michael McCaul

The role of systematic reviews is increasingly recognised in Sub-Saharan Africa, where there is a need for evidence-based policies and practices to address the huge burden of disease. In order to effectively use evidence, all healthcare workers, decision-makers and researchers need to be able to find, critically appraise and interpret systematic reviews. As part of the Effective Health Care Research Consortium (EHCRC) www.evidence4health.org, staff members from the Centre for Evidence-based Health Care (CEBHC) at Stellenbosch University, Cochrane South Africa and the Liverpool School of Tropical Medicine (LSTM) developed a 3-4 day course, Primer in Systematic Reviews, which aims to equip participants with the knowledge and skills to find, appraise and use systematic reviews of therapeutic interventions. The course makes use of interactive presentations, group work and relevant systematic reviews to enhance learning. The course was first offered in Tanzania in 2012, and has since been implemented in various African countries, tailored to the specific needs of participants.

From 24-27 July 2018, facilitators from the CEBHC and the Ministry of Health, in Kenya, as part of Cochrane Africa (https://africa.cochrane.org/), offered the 4-day workshop to 29 junior and senior health researchers at the KEMRI|Wellcome Trust Research Programme in Kilifi, Kenya. The learning objectives for the workshop were for participants, on completion of the course, to be able to: (1) outline the rationale for research synthesis; (2) identify components of a high quality Cochrane systematic review; (3) identify relevant systematic reviews after formulating clear questions using the PICO (population, intervention, control, outcome) format; (4) critically appraise therapeutic reviews, including statistical interpretation of meta-analysis; (5) interpret a GRADE profile table; and (6) outline key issues that need to be considered when applying the findings to health policy and practice.

On the first day we divided participants into five small groups, which they remained in for the duration of the course. Each group received a unique scenario, describing an area of uncertainty, and had to develop a clear research question using the PICO format, develop a search strategy and search for evidence to answer their question, critically appraise a randomized controlled trial

(RCT) related to their question, and critically appraise and interpret the results of a systematic review relevant to their question. The RCT and systematic review were provided beforehand as part of the course materials, to save on reading time, prepare and orientate students to the topic. The topics included oral iron supplementation in malaria-endemic areas, task-shifting for initiating and maintaining antiretroviral treatment, fixed dose versus single formulation of drugs for tuberculosis, interventions to improve coverage of childhood immunisation, and pre-exposure prophylaxis to prevent HIV. Participants actively engaged with each other in their small groups and contributed to discussion during feedback sessions. Their evaluation of the workshop was positive, with many commenting on the relevance and timeliness of the training. Participants also suggested expanding the scope beyond systematic reviews of therapeutic interventions.

There has been a lot of interest in the course since its inception in 2012. However, as the course is resource and time intensive, it is not always feasible to offer it in the above format. In order to reach a wider audience, we therefore transformed the existing 4-day face-to-face course into an online short course. This online Primer in Systematic Reviews is aimed at clinicians and policy makers, who often don't have the time to attend a face-to-face workshop. The online Primer runs over 6 weeks, with approximately 2-3 hours required every week by participants. Content includes voice-over presentations, key readings, forums discussions and resources, exercises and weekly assessments. Participants can either complete the course as a certificate of attendance or upon completing the assessments, receive a certificate of competence.

Both the face-to-face and online Primer in Systematic Reviews courses have been well received and have contributed to building capacity in finding, using, appraising and interpreting systematic reviews of therapeutic interventions.

Some key Tweets and pictures from the event:
https://twitter.com/cebhc/status/1022459388790022144
https://twitter.com/cebhc/status/1022450839347183616
https://twitter.com/cebhc/status/1021720794974408704
https://twitter.com/cebhc/status/1021666402028150785

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Acknowledgements:
This course was developed by the Effective Health Care Research Programme Consortium in 2012, funded by UK aid from the UK Government for the benefit of developing countries (Grant: 5242).

Global Evidence Synthesis Initiative for support to set the course up as an online course.

Engaging Health Systems to Support Evidence-Based Healthcare: A Perspective From the Brazilian Workshop on Evidence Based Clinical Practice

Suzana Alves da Silva on behalf of the Brazilian Working Group on Evidence Based Clinical Practice

The Brazilian Workshop on evidence based clinical practice (EBCP) is an initiative launched in 2006 in Brazil in partnership with McMaster University and the New York Academy of Medicine. The workshop uses the McMaster approach of small group activities interspersed with large group presentations as vehicle for learning[1], enhanced by an immersion environment in a resort out of the city of Rio. It has relied on non-Portuguese speaking faculty and Brazilian facilitators trained in EBCP concepts in one or another institution.[1] The workshop timeline can be divided into two phases, the 1st from 2006 to 2011, focused on critical appraisal of literature and the 2nd phase, which started in 2012, expanding the initial focus into three other dimensions (1. Interpretation of study results 2. Guideline development and 3. Guideline implementation) in order to be able to attend local needs.

The 1st phase of the Workshop was attended mostly by participants from the Brazilian Health Ministry whose main objective was to learn how to identify and critically appraise available evidence. EBCP concepts were applied to participants' own scenarios within the context being faced in the Ministry. The main purpose was to provide these participants with content and tools that would allow them to create a capacity building initiative within the government in the arena of health technology assessment (HTA). In 2010,[2] the workshop gained the attention of private health care organizations including health insurers and regulatory agencies, which led the workshop to its 2nd phase in 2012. With the participation of these new attendees the workshop had to be adapted into a model that encompassed not only the needs for capacity

building in critical appraisal, but also implementation and use of scientific literature to inform decision-making in several levels of a healthcare.

Attendees of the 2nd phase of the Workshop comprised mostly physicians linked to regulation and implementation of standards of care as well as decision-makers in the top level of participating organizations. The Workshop itself was divided into four tracks: (1) critical appraisal; (2) interpretation of the results of different studies, where executives could learn how to use evidence to inform their decision; (3) use of GRADE for developing recommendations; and (4) adaptation and implementation of guidelines. What we observed in these past years is that about 30% of participants return to the workshop to reinforce their training and discuss use of evidence to issues such as:

- Modification of processes used within the Brazilian National Regulatory Agency of Health (ANS) to determine the incorporation or disincorporation of health technologies in the national list of mandate coverage.
- Dialogues with healthcare providers, medical associations and regulatory agencies about new models of payment other than fee for service.
- Elaboration and implementation of standards of care to control costs of overutilization of health technologies.
- Identification and interpretation of scientific evidence to inform the judicial system on litigation and coverage obligations by health payers.
- Enhancement of the quality of health technology assessments and health policies made within organizations.

It is our general perception that these Workshops have enhanced the capacity of healthcare organizations in HTA initiatives and formulation and implementation of health policies. Next steps are to formally evaluate the effect of Workshops within participating organizations, including core concepts acquired and concrete examples of resulting decisions.
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SOURCE Evidence-Based Surgery Program Update

Achilles Thoma, Jessica Murphy

The members of SOURCE (Surgical OUtcomes Research Centre) continue to add to their "Users' Guide to the Surgical Literature" article series. Since our update in 2017, two new articles have been published in the Canadian Journal of Surgery. One focused on the appraisal of non-inferiority trials (1), and the other on qualitative studies (2); both, in surgery. There is now a total of 21 articles within this series that should appeal to surgeons of all subspecialties. We found from past experience that surgeons had difficulty appreciating the JAMA Users' Guides as the clinical scenarios were non-surgical.

At the last SOURCE Evidence Based Surgery (EBS) workshop in February 2018, over 20 participants from the McMaster University affiliated hospitals attended and learned about power and sample size from our five experienced tutors.

The largest accomplishment for SOURCE this year was the completion of a book, inspired by the article series. This book, titled "Evidence-Based Surgery: A Guide to Understanding and Interpreting the Surgical Literature" is being published by SPRINGER, and will be released in 2019. The co-editors of the book are: Achilles Thoma MD, MSc, Sheila Sprague PhD, Sophocles Voineskos MD, MSc, and Charles H. Goldsmith PhD. This book contains 32 chapters, each focusing on a specific area within the surgical literature; examples of chapters include: simple statistical tests and p-value, opinion pieces in surgery, and clinical practice guidelines. Each chapter begins with a surgical clinical scenario, followed by an introduction to the theme of the chapter, the literature search to find the best evidence, and a set of questions to appraise an identified article. We believe this book will of great value to all surgeons, surgical residents and Fellows, and serve as an excellent resource for surgical Journal clubs. If you are interested in more information, or in purchasing a copy of this book please contact Jessica Murphy (murphj11@mcmaster.ca)

Our annual workshop will take place on Wednesday February 6th from 12:00-4:00pm at the Juravinski

Hospital in Hamilton. This year's topic is Health Related Quality of Life (HRQOL), and the workshop is free of charge. To register for the SOURCE workshop please contact Jessica Murphy (murphj11@mcmaster.ca).

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McMaster Evidence-Based Clinical Practice Workshops

Experience the BEST in EVIDENCE-BASED Health Care Education

Monday, June 3rd - Friday, June 7th, 2019

Come to McMaster, the birthplace of evidence-based health-care, where we offer an optional pre-course in addition to one of two closely related workshops. The first caters to clinicians who wish to improve their clinical practice through enhanced skills in reading, interpreting, and applying the medical literature. The second is designed for clinician educators interested in enhancing their skills for teaching the principles of evidence-based practice to others. Both workshops are tailored to faculty and community internists, hospitalists, and senior and incoming chief residents.

What is Evidence-Based Clinical Practice/Evidence-Based Medicine?

Evidence-based clinical practice (EBCP) is an approach to health-care practice that explicitly acknowledges the evidence that bears on each patient management decision, the strength of that evidence, the benefits and risk of alternative management strategies, and the role of patients' values and preferences in trading off those benefits and risks.

Why are Evidence and Values or Preferences Important?

Clinicians are confronted daily with questions about the interpretation of diagnostic tests, the harm associated with exposure to an agent, the prognosis of a disease in a specific patient, the effectiveness of a preventive or therapeutic intervention, and the relative costs and benefits associated with these decisions. Both clinicians and policy makers need to know whether the conclusions of a primary study or a systematic review are valid, and whether recommendations in clinical practice guidelines are sound.

Members of the Health Research Methods, Evidence, and Impact (HEI) at McMaster University, in collaboration with other colleagues trained in both medicine and in clinical epidemiology, have developed a set of common sense strategies to assist in the critical appraisal of evidence. They have also developed approaches explicitly considering values and preferences in clinical decision-making, thereby encouraging the practice of EBCP.

Workshop Objectives

Optional Pre-course: An additional 4-hour pre-course for individuals wishing for an overview or refresher on basic EBM concepts. The pre-course requires separate registration and fees in addition to the main workshop registration. Participants must register for the Workshop to be eligible to take the Pre-course.

Both streams: To help participants advance their skills in critically appraising the literature, and their skills in acknowledging and incorporating values and preferences in clinical decision-making.

Improve your practice stream: To acquire an understanding of common epidemiological concepts (e.g. interpreting hazard ratios, confidence intervals, critical appraisals of a systematic review) and advance their skills in using the literature for quality assurance, improving practice, and judging comparative effectiveness of health care interventions.

Teaching stream: To help participants learn how to teach EBCP using a variety of educational models in different settings, with different types of learners.

Workshop Format

The Pre-Course is presented in a Large group setting over a 4 hour morning session. The workshop is offered as a one-week intensive course in small group format. Participants will be learning in interactive small groups led by clinical epidemiologists and practitioners from McMaster and other institutions. The workshop will consist of small and large group sessions, individual study time and, for the teaching stream, opportunities for workshop participants to lead teaching sessions using their own ideas, materials, and reflecting their own experiences.

Workshop Materials

Prior to and at the workshop, participants will have access on-line to educational materials that include literature on critical appraisal and EBCP, the small group learning format, a set of clinical problems, JAMA evidence, and a variety of other EBCP aids.

Why come to McMaster University?

McMaster University is not only the birthplace of evidence-based medicine, and has produced the definitive evidence-based health care texts, we also continue to lead the world in innovation and advances in EBHC practice and teaching. McMaster's workshop, running for more than 25 years, has provided the model for EBHC workshops throughout the world. Over this time, we have developed a cadre of the best EBHC educators in North America who return to the workshop

year after year because of the intensely stimulating and educational environment. Come to experience the best in EBHC education!

Travel Facilities and Accommodation

The workshop will be held at McMaster University. Upon confirmation of a definite placement in the workshop, you will receive a formal letter, access to the website and background and introductory materials will be provided with general information regarding specifics of the workshop, accommodation and travel. Travel and accommodation arrangements are the responsibility of the Registrant. Modest accommodation is available on campus. Other accommodations are available in city hotels, 10-30 minutes away by foot, bus or car.

$200 discount if you register before Dec 31, 2018

REGISTRATION FEES	Canadian $	
Optional Pre-course	$ 400.00	+ 13% Harmonized Sales Tax
One member from an institution	$2800.00	+ 13% Harmonized Sales Tax
Two members from an institution	$2500.00 each	+ 13% Harmonized Sales Tax
Three or more members from an institution	$2200.00 each	+ 13% Harmonized Sales Tax

13% Harmonized Sales Tax (HST # R119-035-988).
Registration fee includes, 3rd Edition – Users' Guide to the Medical Literature, photocopying services, access to computer literature searching, Lunch for Pre-course Participants and dinner on the first and last evenings.

Register online at: https://ebcp.mcmaster.ca/

Please Direct Any Inquiries to:

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MAILING LIST

We would like to keep our mailing list as up to date as possible. If you are planning to move, have moved, or know someone who once received the newsletter who has moved, please e-mail ayres@mcmaster.ca or write your new address here and send to Laurel Grainger, HEI, HSC 2C12, McMaster University Health Sciences Centre, 1280 Main Street West, Hamilton, ON L8S 4K1, Canada. Thank you!

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SIGN UP A COLLEAGUE!

If you would like to encourage a colleague to attend the workshop next year, please e-mail graing@mcmaster.ca or write the address here and send to Laurel Grainger, HEI, HSC 2C12, McMaster University Health Sciences Centre, 1280 Main Street West, Hamilton, ON L8S 4K1, Canada. Thank you!

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