Evidence Live 2017 - Workshop Abstracts

Wednesday 21 June 09:30 – 11:00

Brian Alper & Peter Oettgen: **Determination of the Certainty of Net Benefit when making recommendations for clinical practice guidelines (Seminar Room 1)**

Objective: An evidence-based approach to clinical practice guidelines includes expressing the confidence that the desirable consequences outweigh the undesirable consequences for a particular recommendation. This is often done by expressing the strength of recommendation and the quality of evidence. The overall quality of evidence rating however is not the same thing as the confidence in the evidence that the summation of beneficial effects outweighs the summation of harmful effects. The objective is to more clearly express this concept and how to do it.

Methods: Members of the GRADE Working Group struggling with how to convey the concept of Overall Certainty of Evidence for a concept when fully contextualized in the guideline development process came to realize that directly expressing Certainty of Net Benefit would be clearer and more useful for guideline users. The workshop facilitators have actively developed a protocol for determining the Certainty of Net Benefit and applied it to numerous examples.

Results: The 7-step process to determine the Certainty of Net Benefit is:
1) determine the outcomes to be combined for a net effect estimate;
2) determine the relative importance for each outcome to be combined;
3) determine the importance-adjusted effect estimate for each outcome to be combined;
4) determine the net effect estimate upon combining the importance-adjusted effect estimates;
5) consider the precision of the net effect estimate and its influence on the certainty of net benefit or harm;
6) consider which outcomes are potential differentiators for the likelihood of net benefit and the certainty of effect estimates for potentially differentiating outcomes; and
7) consider the range of relative importance for outcomes and if the net effect estimate across the range of relative importance changes the Certainty of Net Benefit rating

Conclusion: The Certainty of Net Benefit is a clearer way of expressing the overall confidence that the benefits outweigh harms for a particular decision or recommendation. The 7-step process allows guideline developers to reproducibly determine and rate the certainty of net benefit. Workshop participants will determine the Certainty of Net Benefit for a recommendation to convey the certainty that the benefits outweigh the harms.

Sharon Mickan: **Identifying barriers and facilitators to maximise the implementation of research evidence in clinical practice (Seminar Room 2)**

Objective: This interactive workshop will mix presentations, discussion, and group work to demonstrate how clinicians can systematically and efficiently identify barriers and facilitators in their local context, in order to use research evidence to inform and improve their clinical practice.

Methods: The Canadian Institutes of Health Research model of knowledge translation will be reviewed to identify the importance and timing of identifying barriers and facilitators in the sequential knowledge–to-action process. Theories of organisational readiness and behaviour change will be introduced along with practical tools for stakeholder analysis.

Results: Practical examples of clear knowledge-practice gaps will be shared as a guide for small group work. Participants will be facilitated to apply research evidence to their local practice; beginning with a critical appraisal of the research evidence, focussing on comparisons to their local context. In order to identify key barriers and facilitators, participants will be guided to identify and analyse the motivation and power of key stakeholders, within a broader analysis of their local context.

Conclusion: Key barriers and facilitators will then be identified and mapped against the Knowledge to Action process. Participants will continue to discuss and compare ways they could maximise the potential impact of facilitators, while managing the identified barriers in applying specific research evidence to their own clinical practice. This workshop will highlight that the identification and management of key barriers

and facilitators is an important stage in adapting and applying research evidence within local clinical settings.

Lars Hemkens: **Routinely collected health data (RCD) for randomised controlled trials (RCT) (Seminar Room 3)**

Objectives: Routinely collected data (RCD) e.g. administrative claims data, electronic health records and patient registries can be useful for the conduct of randomised trials. We will outline the opportunities and challenges for the use of RCD, in particular for recruitment of participants and follow-up.

Methods: This interactive workshop invites data scientists, clinical researchers, trial managers, regulators and other interested stakeholders. We will present and discuss empirical research on the validity and reliability of RCD in general and specifically for trial recruitment and follow-up. We will discuss examples from the UK, Switzerland and other countries aiming to interactively outline promises, opportunities and challenges of this way of evidence generation. We aim to develop recommendations for trialists and regulators to make best use of this opportunity.

Results/Conclusions: RCD should be used for more than observational data analyses. Their true value for evidence based health care may be their potential to generate more and more useful randomized evidence by facilitating large-scale pragmatic trials at low cost.

Claudia Ashton**: Critical appraisal of the surgical literature: application of the IDEAL framework (Seminar Room 4)**

Background: Evaluation of new surgical procedures is complex. In contrast to pharmaceuticals for which valid evidence of safety and efficacy must be provided via a robust pathway of randomised controlled trials before licensing, surgical innovations frequently gain acceptance following a series of biased observational studies. This relative lack of regulation, together with the unique characteristics of these complex interventions, has resulted in persistent difficulties in obtaining high-quality evidence for surgical innovations. Assessment of new surgical interventions is complicated by a specific set of problems. These include the difficulty in defining surgical procedures precisely, iterative modification of procedures by surgeons during development, lack of agreed standard outcomes in surgery, operator learning curves, variable procedural quality (dependent on training and operative capabilities), as well as strong treatment preferences among patients and clinicians. Recognition of these difficulties led to the development of the Idea, Development, Exploration, Assessment and Long-term follow-up (IDEAL) Framework and Recommendations, in an attempt to establish a more scientifically rigorous and ethical evaluation pathway. [1, 2]

The aim of this workshop is to use the IDEAL Framework as a tool to critically appraise the surgical literature to help understand and identify the key features of evaluation needed at each stage of innovation.

Target audience: Surgeons and non-clinical professionals involved in planning, conducting and publishing surgical studies as well trainees from all disciplines.

Learning objectives:

- Understand the purpose of IDEAL and why it is necessary
- Understand each stage of the Framework and relevant questions at each stage
- Appraise a surgical study by identifying the IDEAL stage of the procedure described in the paper
- Learn how to apply the IDEAL framework and recommendations practically by designing studies to progress through the life-cycle of a surgical innovation

References:

1. McCulloch P, Altman DG, Campbell WB, Flum DR, Glasziou P, Marshall JC et al., No surgical innovation without evaluation: the IDEAL recommendations. Lancet. 2009 Sep 26;374(9695):1105-12
2. Pennell, C.P., et al., *Practical guide to the Idea, Development and Exploration stages of the IDEAL Framework and Recommendations.* British Journal of Surgery, 2016. **103**(5): p. 607-615.

Wednesday 21 June 14:30 – 16:00

Trish Groves: **How to get published (Seminar Room 1)**

Caroline Fiennes: **Bringing evidence-based practice into charity & philanthropy (Seminar Room 2)**

Charities and charitable giving could - like medicine - improve vastly by better use of better quality evidence. Caroline Fiennes recently had an article in Nature calling for 'a science of philanthropy' to enable this.

This workshop will look at the current state-of-play around evidence in charities and charitable giving, and seek input as to how they can most rapidly become more evidence-based.

Amitava Banerjee: **Fixing EBM with data (Seminar Room 3)**

"Routinely collected clinical data are gaining in importance in the electronic health records era, whether as disease-specific registries, local or national audit data, clinical care records or prescription databases. However, such data are currently sub-optimally used. This wastage of resources leads to inefficient data collection and analysis, as well as inadequate healthcare and research. An example of an increasing use of routine data is in real world evidence for effectiveness when trials have either not answered a clinical question or are unlikely to be done. New methodologies are necessary for such uses of routine data, as well as new considerations including ethical, legal and scientific. In a "learning health system", all relevant routine data would be used to improve healthcare whether at the individual or the population level continuously. How can routine data be best used in an evidence-based healthcare framework? What are the limitations? How realistic is a learning health system? These questions and more will be tackled in this workshop."

Sietse Wieringa: **The Fundamentals of EBHC (Seminar Room 4)**

There is a growing interest in the guideline developing community on how to evaluate and integrate other types of knowledge besides randomised controlled trials. Especially with current challenges regarding multi-morbidity, rare conditions, complex interventions and person centred care, there is a call for a consideration of the epistemological concepts that underpin EBHC.

In this workshop we would like to explore with you new insights on the nature of valid knowledge, inferring/reasoning when there is no frequency of events and the processes involved in reaching recommendations. We will discuss several noteworthy developments within the EBHC movement from a philosophy and sociology of science perspective.

We will present recent work from the Appraising and Including Different kinds of knowledge (AID) working group of the Guidelines International Network (GIN) as well as the Knowledge Implementation (KNOWIT) group from the University of Oslo.

Sharon Swain: **Introduction to systematic reviews on diagnostic accuracy (LT 2)**

The aim of this workshop is to provide guidance on conducting a systematic review of diagnostic accuracy studies. The first part of the session focuses on how to write a clinical review question and protocol. Examples will be taken from National Institute for Health and Care Excellence (NICE) clinical guidelines. In the second half of the session participants will be asked to apply the QUADAS2 risk of bias tool to a study. The workshop concludes with how to write up the results.

Thursday 22 June 14:30 – 16:00

Paul Chrisp: **From population to personal: getting the balance right in evidence-based medicine (Seminar Room 1)**

- What is the fit between guidelines and shared decision making?
- What is the place of clinical judgement and the patient voice?

Caroline Blaine, BMJ Knowledge Centre: **Evidence at the Point of Care (Seminar Room 2)**

Health care professionals are increasingly time poor and feel overwhelmed by the sheer amount of information available. As well as the lack of time there is often also the lack of skills to interpret the available evidence and decide if it is applicable to the patient in front of you. Point of care tools are used to guide evidence-based practice (EBP), however recommendations without access to the underlying evidence in

an easy to understand format may hinder true EBP. This workshop will explore how evidence can be presented in a meaningful way in the clinical workflow, using the example of BMJ Best Practice's new evidence layer consisting of Cochrane Clinical Answers and BMJ Rapid Recommendations.

Paul Hewitson: **Patient Engagement (Seminar Room 3)**
Expanding the role of patients/public in the design and interpretation of research.

Rachel Dean: **A One Health approach to evidence-based medicine - working across healthcare disciplines to improve care (Seminar Room 4)**

The application of evidence-based medicine (EBM) has impacted healthcare in medicine for a number years but in other healthcare disciplines e.g. veterinary medicine, dentistry, physiotherapy, midwifery etc., it is not so well developed. The relative novelty of EBM, the diverse healthcare models and delivery systems means in the other professions the EBM principles are being used in many different ways. These professions are in a situation where they can copy the successes of EBM in medicine, potentially side step the 'failures' and test new ways of delivering evidence-based healthcare in these more novel healthcare settings. Meanwhile the 'machine' that is EBM in medical healthcare has been criticised and challenged. EBM can be viewed as a complex intervention that is currently being trialled in a number of different ways in a number of different settings but which is the most efficacious?

If we wish to promote better healthcare across all professions, we need to reflect on our practice and those of other professions. The patients of some professionals are the clients or patients of others and we all provide healthcare information to decision makes so we affect their healthcare choices which influences the quality of care they (or their pets) receive.

To date there has not been a cross disciplinary 'think tank' that has explored the successes and failures in applying EBM. During this discussion the panel will present the current status of EBM in their professions, highlight the differences and similarities to other professions, discuss their perspective on the EBM manifesto and propose how a One Health approach EBM can help patients - whatever the species, whatever the discipline.

Jon Brassey: **TRIP - Community rapid reviews (LT 2)**

Rapid reviews are increasingly being discussed yet there is considerable confusion as to what they are! For supporters, they are a useful tool that compensates for some of the deficiencies of systematic reviews. For detractors they are often dismissed as being 'quick and dirty'.

The Trip Database (www.tripdatabase.com), an EBM search engine, was created to help support clinical question answering and it's still the main use of the site. This question answering activity is a form of rapid review and thousands of questions are answered, using Trip, every week. Currently this hard work in answering questions is only seen by the person doing the review.

It is proposed that the community rapid review system will be built with nurturing users at the heart of it. Users will be supported in undertaking their review by a step-by-step rapid review 'wizard' and by the latest developments in automation. At every step users can ask for help from the Trip community. When finished the user will post the review and other community members can review and, if needed, improve it. This improvement may be immediate or in the future as new research is published. As such the reviews will never truly be finishing, they will be living documents.

A key mantra underpinning the system will be: *coax don't criticise*.

The challenges are substantial but the rewards – a large database of freely available, high quality rapid reviews – seems ultimately worth it. The purpose of the workshop is to explore the proposed system and to help find solutions to the problems (such as quality) and also to look at opportunities for further collaboration and enhancement of the system.

Participants are asked to come along and prepare to be involved at the start of this great initiative.

Aims

1. To share with attendees the background, principles and plans for the development of a community rapid review system to be made available, for free, via the Trip Database.
2. To gain input from the attendees on opportunities and barriers to the approach.

Objectives

· To describe the work the Trip Database is undertaking in the area of rapid reviews.
· To explore the thinking behind providing a rapid review system to users of the Trip Database and to outline the likely features of the system and how it might work.
· To use the experience and knowledge of participants to explore ways of enhancing the usage of such a system and to minimise any possible problems with the approach.