Guidelines International Network Conference 2011

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“Linking Evidence, Policy, and Practice.”

Abstract Book
The evidence for driving change in healthcare indicates that it needs local ownership and leadership. This is a challenge for national organisations such as National Institute for Health and Clinical Excellence (the National Institute for Health and Clinical Excellence) that produce best practice advice and guidance.

National Institute for Health and Clinical Excellence was established in 1999 to produce guidance on cost-effective treatments with the aim of standardising care across the English National Health Service. National Institute for Health and Clinical Excellence guidance covers a range of areas including the appraisal of new drugs and devices, clinical guidelines, and guidance on public health issues. National Institute for Health and Clinical Excellence is also responsible for NHS Evidence, a service that provides a web-based portal for comprehensive access to a range of evidence for health and social care professionals.

To encourage uptake at a local level, national guideline producers need to ensure the areas covered in guidelines reflect local priorities, and are developed using robust methodology that will inspire the confidence of potential users. Despite having these key elements in place, it became clear in 2003 that the NHS was not uniformly implementing National Institute for Health and Clinical Excellence guidance. National Institute for Health and Clinical Excellence therefore launched an implementation strategy in 2004. The strategy is based on evidence of effective change, and informed by feedback from end users.

The presentation will cover an initial description of the evidence behind the four key elements of the National Institute for Health and Clinical Excellence implementation strategy:

- raising awareness of the need to change
- motivating and inspiring people to change
- providing practical support to facilitate change
- evaluating and monitoring impact of the strategy.

The second part of the presentation will demonstrate how effective these elements have been at getting evidence into practice. This will include data on the impact of National Institute for Health and Clinical Excellence recommendations on change in patient care, with
The hidden intervention: using an effective educational strategy to ensure the uptake of best evidence in practice

Dave Davis, AAMC, US

Guidelines don’t, it has been said, implement themselves. They require work and effort, and a combination of public, quality improvement, policy and professional initiatives. Hidden within them however are clear implications for education – the delivery and uptake of best evidence messages to patients, populations, policy makers – and perhaps especially to health professionals.

Using a guideline format, this presentation will focus on what we know about ‘education’ – focusing on health professionals. It will briefly review the literature, make the case that education, too, is a science worthy of study and develop recommendations about the development of an active, interventionist, educational program for guideline implementation.

Plenary

Plenary 2

Guidance in the absence of evidence: what can - and cannot - be done?

When are randomised trials not needed?

Paul Glasziou, Bond University, Australia

Although we are wary of evidence for treatment effects other than that from randomised controlled trials, there are many examples where confident inferences about treatments
have been based on other kinds of evidence. Some examples include: tracheostomy for tracheal obstruction, ether for anaesthesia, drainage for pain associated with abscesses, neostigmine for myasthenia gravis, defibrillation for ventricular fibrillation, and pressure or suturing for arresting haemorrhage. In these cases the size and rapidity of effects are larger than any plausible biases. This is simplest with stable or progressive conditions and rapid effects of treatment—for example, removing a cataract on vision or of cholinesterase inhibitors for organophosphate poisoning.

The prognosis and the treatment effect interact as noise and signal, and the ease of identification of treatment effects depends on the “signal to noise ratio”: large effects in a background of stable prognosis are convincing without randomization; small effects in a background of a fluctuating or intermittent condition are unconvincing, and randomized trials are generally required. Between these extremes, the need for trials will depend on other factors such as indirect or complementary evidence, the objectiveness of outcomes, the comparability of controls, etc.

The GRADE process for grading evidence currently allows for upgrading of observational evidence based on the size of the observed effect and on dose response relationships.

Further empirical work is needed to more precisely define the risk of bias with different sizes of observed effects.

"What do you do when you have done all the easy stuff?  
– Developing guidelines in the absence of good quality evidence"

Hans Messersmith, McMaster University, Canada

The Program in Evidence-Based Care (PEBC), Cancer Care Ontario, has a mandate to develop both clinical practice and organizational guidelines to assist Ontario clinicians and decision makers in providing high quality care. More recently, we have been asked to address guideline topics in areas where there is limited evidence, and yet there is a strong need for recommendations. Through example case studies of guidelines developed by the PEBC, the presenter will outline issues relevant to these circumstances including key questions to be asked; important methodological innovations that have resulted; and the key lessons we have learned
Translating evidence into policies and guidelines: findings from 3 southern African countries

Karen Daniels,

Health Systems Research Unit of the Medical Research Council, South Africa

Getting research into policy and practice remains an important challenge in most settings. This presentation focuses on understanding the factors affecting the use of research evidence, particularly findings from randomized control trials (RCTs) and systematic reviews, in national policy and guideline development in low- and middle-income countries. In exploring this issue, the presentation draws on two cases - the use of magnesium sulphate in the treatment of eclampsia in pregnancy (a clinical case); and the use of insecticide treated bed nets and indoor residual household spraying for malaria vector control (a public health case) - across the three countries- South Africa, Mozambique and Zimbabwe. The findings suggest that translating research knowledge into policy is a complex and context sensitive process. Researchers aiming to enhance knowledge translation need to be aware of factors influencing the demand for different types of research; interact and work closely with key policy stakeholders, networks and local champions; and acknowledge the roles of important interest groups.

Adapting or de novo development of clinical practice guidelines: Colombian experience

Hernando Gaitan, Universidad Nacional de Colombia, Colombia

Objective: Presenting Colombian experience regarding adapting internationally developed clinical practice guidelines.

Methodology: Current regulations governing the development of guidelines in a Colombian context were reviewed. A description of the problems faced in two cases regarding the search for available guidelines, the use
of the Agree II instrument for evaluating them, mapping the evidence and the recommendations, the use of GRADE methodology as well the stakeholders’ participation is presented.

Results: Clinical practice guidelines for specific pathologies have been prioritised by central government. The guidelines form the basis for including technologies in health insurance plans. The Ministry of Health has created some methodological guidelines which should be followed by the guideline developers. Three universities having important human resources in terms of experts in methodology have formed an alliance for working as a team, providing greater transparency, ensuring greater efficiency and guaranteeing process quality. This alliance is supported by interested scientific societies which actively participate in it. The development process encountered difficulties in putting the guidelines proposed by the Ministry into practice. The AGREE II instrument has limited inter-observer agreement. The guidelines’ scope and objective, as well as mapping the evidence and following the recommendations could affect the decision to adapt good methodological quality guidelines, thus suggesting that it would be better to adopt de novo guideline development. Using the evidence summary tables proposed by the GRADE group requires training so that the users can standardise them, given that it is complex to apply them.

Conclusions: Adaptation is not always the easiest route for developing clinical practice guidelines. This requires an important workload. In spite of it being advisable to first seek the availability of international guidelines and evaluate their possible adaptation to a local context, it is sometimes more suitable to develop them in-house.

One of the priorities of sustaining healthcare systems around the world is to improve health care quality and efficiency in facing increasing healthcare expenditure. In many clinical care areas, development of clinical practice guidelines is becoming an important issue internationally. However, the development of clinical practice guidelines consumes consid-
erable amount of monetary and human resources. Therefore, in order to generate highest benefit with limited resources, policy decision makers of healthcare system have to identify urgent demands and set out priority based on evidence based analysis. For incidence, in Taiwan, the Department of Health decided to develop 10 most important guidelines based on the 10 top diagnosis that spend most National Health Insurance re-sources among all other guidelines developed by specialty societies locally. It set an example for the continuous development of guidelines in the future. On the other hand, it is also crucial to employ strict evidence-based approach in guideline development and followed by independent quality appraisal to ensure professional accountability and its later implementation. Bringing all related stakeholders to work together and the transparency during the process of guideline development can satisfy those key players with diverse interests. It paves the way for sustaining guideline development and implementation. This also provides an effective strategy in dealing with some strong advocate interest parties.

For guidelines to be of relevance to users they must be valid, reliable and current. There are challenges in sustaining the effort needed to ensure all guidelines meet these criteria. Methodologies that may help guideline developers better achieve sustainability include individual patient data and prospective meta-analysis and the international collaboration that is needed for these techniques to be used successfully.

Systematic reviews utilising all the available evidence are the backbone of high quality guidelines. However, there are several potential sources of bias that can be introduced into systematic reviews: bias within individual randomised trials, a biased selection of trials included in the review and a biased selection of treatment questions. Possible ways of overcoming these potential biases include improving the quality of individual trials; improved subgroup and sensitivity analyses via individual patient data meta-analysis; prospective registration of trials to reduce reporting biases and prospective meta-analysis to minimise bias in question selection.

Individual patient data (IPD) meta-analysis involves the central re-collection and analysis of the raw, line-by-line data from each participant in each trial included in a systematic review. This requires the formation of a collaborative group comprising the trialists whose data will be used and a management / data
analysis team. The full collaborative group have direct input into the data to be collated, the methods of analysis and reporting of results. This level of collaboration between reviewers and trialists does not often occur with aggregate data systematic reviews.

A prospective meta-analysis (PMA) is a meta-analysis of studies (usually randomized trials) that were identified, evaluated and determined to be eligible for the meta-analysis before the results of any of those studies became known. Prospective meta-analyses enable hypotheses to be specified in advance of the results of individual trials; enable prospective application of study selection criteria; and enable a priori statements of intended analyses.

Collaboration is crucial to the success of both these methodologies and it is this collaboration that enables the results of both the individual trials and the meta-analysis of the trial results to be incorporated into relevant guidelines sooner, for example, by meta-analysing accumulating data as they emerge. The full involvement of all the relevant trialists from the outset (in a PMA) also encourages the earlier development of additional questions that can be addressed with the combined datasets and results in better dissemination and endorsement of the meta-analysis results and the development of subsequent guidelines.

Guidelines are not always implemented during clinical encounters even if the professional is aware of the guideline and it is readily available. Clinical decision support systems (CDS) integrated with electronic health records (EHRs) are used to remind the professional at the right time when decisions are made. They have been shown to modestly improve care, particularly preventive care and drug safety.

The full impact of evidence-based care can only be realized if interventions are provided to all people who are expected to benefit. Considerable potential for improving the health is implied in contacting people who have been lost to follow-up after a health problem has been identified. The Virtual Health Check (VHC) is a procedure where the structured data of all people in a population (e.g. the panel of a general practitioner) are sent to a CDS system that applies a set of decision support rules to each person. A list of patients with reminders how to improve their care is created.

Simultaneously, also statistics on patients who are eligible to an intervention and on whom the intervention has been implemented are recorded. Eligibility takes into consid-
eration e.g. contraindications to drugs so that people on whom the intervention could not be applied are excluded from the denominator in the quality statistics. If individually tailored targets and care plans are included in the EHR, accuracy of the CDS feedback will be further improved.

The problem with the VHC is that it can only record information based on structured patient data. A key task is to create national or international standards for each country of structuring patient data in all EHR systems. Initiatives for data structuring and sharing include the Continuity of Care Document (CCD) in the USA and epSOS in Europe. Multiple coding systems (like ICD-10, ICD-9 CM, ICPC-2 or SNOMED CT for diagnoses) and different measurement units (centimeters, inches) can be handled on the side of the CDS so that reminders can be created and quality statistics produced from different EHR systems and different countries. In some countries like Finland, all EHR data will be in a central repository, and not only professionals treating the patients but also the patients themselves will have access to the data.

An ideal setting for population-based guideline implementation is the chronic care model and a system where the primary care team is responsible for both preventive and medical care of a panel of patients. One such model is the Patient-Centered Medical Home model of the U.S. A legal and ethical problem on confidentiality may arise if the patient has never visited the professional who reviews the results of the VHC, and does not know that a professional is going to review his/her data.

There are at least two solutions: First, every person could be informed in advance that VHCs will be performed and that they can opt out. Second, the results of the VHC could be sent directly to the citizen via text messages, automatically created letters, or via a personal health record (PHR) application, with decision aids and advice to contact a health care professional when appropriate.

Providing feedback from the VHC directly to the citizen has additional advantages. The citizen can check that the data are correct, and he/she can add and update information on e.g. diet, exercise and smoking. In Finland almost 20 percent of the population have performed an electronic health check for themselves inspired by a reality TV program and web-based questionnaire that estimated the number of life years to come and suggested ways to increase the number of healthy years.

Guideline developers should be actively involved in developing CDS. Via tools like VHC, guidelines can be implemented and their impact evaluated on populations, and resources can be directed where maximum health gains are achievable. Involving citizens directly will make them key actors in their care, while saving health care professionals time to do their part.
Agreement and Alignment - guidelines for five priority diseases in the Southern African Development Community

Tamara Kredo, South African Medical Research Council, South Africa

**Background:** Reducing the burden of disease relies on availability of evidence-based clinical practice guidelines (CPGs). There is limited data on availability, quality and content of guidelines within the Southern African Development Community (SADC). This evaluation aims to address this gap in knowledge and provide recommendations for regional guideline development.

**Methods:** We prioritised five diseases: HIV in adults, malaria in children and adults, pre-eclampsia, diarrhoea in children and hypertension in primary care. A comprehensive electronic search, supported by email contact with SADC Ministries of Health was used to locate guidelines. The AGREE II tool was applied by independent reviewers to evaluate 6 quality domains reporting the guideline development process. Individual domains were scored and percentages calculated. Alignment of the evidence-base of the guidelines was evaluated by comparing content with key recommendations from accepted reference guidelines, identified with a content expert, and percentage scores were calculated.

**Findings:** The search was conducted between June and October 2010. We identified 30 guidelines from 13 countries, publication dates ranging from 2003-2010. Overall the ‘scope and purpose’ and ‘clarity and presentation’ domains of the AGREE II instrument scored highest, median 58% (range 19-92) and 83% (range 17-100) respectively. ‘Stakeholder involvement’ followed with median 39% (range 6-75). ‘Applicability’, ‘rigour of development’ and ‘editorial independence’ scored poorly, all below 25%. Alignment with evidence was variable across member states, the lowest scores occurring in older guidelines or where the guideline being evaluated was part of broader primary healthcare CPG rather than a disease-specific guideline.

**Conclusion:** This review identified quality gaps and variable alignment with best evidence in available guidelines within SADC for five priority diseases. Future guideline development processes within SADC should better adhere to global reporting norms requiring broader consultation of stakeholders and transparency of process. A regional guideline support committee could harness local capacity to support context appropriate guideline development.
The Guidelines International Network (G-I-N) seeks to improve the quality of health care by promoting and sharing systematic and rigorous development of guidelines and their application to practice. G-I-N provides tools and resources for its members to develop high quality guidelines. An important asset of G-I-N is the enormous resource of knowledge and expertise within the membership, which allows for focused development of deliverables. And we have many examples of such deliverables as developed by our working groups and communities.

A standard guideline development process is essential to ensure that developers publish valid, usable and reliable guidelines. The AGREE instrument is a valuable tool to analyze the rigor of development of a good guideline and standards have been developed at national level, such as the recently published standards for trustworthy guidelines by the Institute of Medicine (IOM). However, until date the guideline community has not yet established a common set of international recognized standards to help improve the development of standardized guidelines. International standards will facilitate sharing and adaptation to reduce duplication of efforts and may support initiatives for development of national or local guideline programs.

The G-I-N Board of trustees is seeking ways to initiate the debate within the international guideline community for further promoting the development of high quality guidelines and increasing the production of deliverables. The first step is to publish a position statement for the establishment of internationally recognized and practically implementable standards for the development of high quality guidelines. We should also discuss the desirability and feasibility of accreditation of guidelines or certification of guideline developing organizations. Some G-I-N members have advocated such a system and initiatives already have been launched, while others are opposing this, arguing that this should be a responsibility at national or local level.
Workshop 2

The rationale and challenges of developing an implementation taxonomy:
A workshop for guideline implementers and researchers

Danielle Mazza, Monash University, Australia
Ilkka Kunnamo, University of Helsinki and Duodecim Medical Public, Finland.
Heather Buchan, National Institute of Clinical Studies, Australia.
Phillip Bairstow, Royal Perth Hospital, Australia.
Oliver Van Hecke, Monash University, Australia.
Cathy Grech, Monash University, Australia.

Background, Purpose(Introduction) : An implementation taxonomy would assist researchers to describe implementation activities using common terms, better delineate the outcomes associated with the various strategies and improve the quality of research reports. Based on the EPOC checklist we developed and tested a draft taxonomy by using it to classify abstracts presented in the implementation stream of the Chicago G-I-N Conference. This exercise highlighted issues in the draft taxonomy that require further development and refinement.

Objectives : To describe the rationale for developing an implementation taxonomy
To describe elements of the draft implementation taxonomy and to compare and contrast these to other existing related taxonomies
To seek feedback as to how to further refine the draft taxonomy

Description : A brief presentation on the rationale and process used in developing the draft implementation taxonomy will be given together with an overview of other existing related taxonomies. Participants will break into small groups to discuss elements of the draft taxonomy and to reflect on how these relate to their implementation experiences and reporting of those projects, research studies. A facilitated discussion will draw together the conclusions of these groups and suggestions for future research.
Workshop

Workshop 3

*The GRADE approach to assessing the quality of a body of evidence and the strength of recommendations*

Holger Schünemann, McMaster University, Canada

**Background, Purpose (Introduction):** Training workshop

**Objectives:** To learn how to create a Summary of Findings Table. This workshop involves small group work, with groups lead by workshop trainers.

**Target Audiences:** Guideline developer

**Description:** Summary of Findings (SoF) tables are a relatively new important addition to Cochrane reviews. Although not mandatory, Cochrane review authors are strongly encouraged to include SoF in their reviews. As well as a summary of the results of the review, the Summary of Findings is a tool to ensure that the quality of the evidence is considered along with the magnitude of the effects found in the review. There are three main processes to create a SoF: choosing comparison and outcomes; summarising the evidence in easy to understand numbers; and assessing the quality of the evidence using GRADE.

This workshop provides a brief overview of the process and then an opportunity for small group work. Each group will take a Cochrane review and start to create a Summary of Findings Table. During the small group work, participants will discuss the issues around choosing a comparison and outcomes. The GRADE approach is then described and participants can use and discuss the issues for GRADEing the quality of a body of evidence, including the risk of bias, directness, heterogeneity, precision and publication bias. Hands-on practice will include converting dichotomous and continuous outcomes into absolute effects.
Workshop 4

Development of public health guidance in settings with lack of evidence and lack of time

Frode Forland, European Centre for Disease Prevention and Control, Sweden
Alex Sánchez, Vivar, Health Protection Scotland.HPS, and Health Protect, UK.
John McCallum, Research Translation, National Health and Medical, Australia.

Background, Purpose(Introduction): European Centre for Disease Prevention and Control (ECDC) has addressed the issue of developing evidence based guidance in settings of infectious diseases when there often is time pressure and lack of evidence. In Australia additional issues have been raised, for example: (1)

Objectives: To provide opportunities for participants to discuss the topics outlined above and the tools and templates developed on public health guidance and to share experiences in the field of evidence based public health guideline development.

Target Audiences: Guideline developer

Description:

• Present the findings from the ECDC Working group on development of public health guidance, addressing the questions of level of evidence and grading of recommendations in public health.
• Present an analysis on the application of the AGREE II instrument for Public health guidance and a tool for rapid guideline evaluations, GET 5 (Guidelines Evaluation Tool)
• Present the current developments in Public health guidelines in Australia
• Explore and exchange experiences concerning methodological issues in guideline development and evaluation in the field of public health among participants.
• Discuss international collaboration in the field of guidelines for public health
Workshop 5

Guideline adaptation: making guideline development more efficient and providing opportunities for collaboration

Sue Phillips, National Health and Medical Research Council, Australia
Jako Burgers, IQ Healthcare, Radboud University Nijmegen Medical, Netherlands.
Magali Remy Stockinger, Guidelines International Network, c/o AEZQ, Germany.

Background, Purpose (Introduction): Guideline adaptation is a topic of high interest among guideline developers. In response to this, G-I-N established an Adaptation Working Group. An electronic survey was conducted among G-I-N members in Autumn 2010 to explore the views and preferences of members. The survey was well received and yielded information from 112 respondents that will help shape the work of the working group.

Objectives: To provide opportunities for participants to investigate more efficient ways to adapt and implement guidelines and to increase collaboration nationally and internationally while supporting the tailoring of the adaptation method.

Target Audiences: Guideline developer

Description:

With the background of the ADAPTE method, we will:

- present a summary of the findings of our survey on guideline adaptation
- present different examples of use of guideline adaptation
- explore the facilitators and barriers for efficient guideline development, adaptation among participants; in small groups we will discuss the barriers more in detail and how these could be addressed
- discuss how international collaboration could contribute to raising the quality and efficiency of the guideline development, adaptation process.

The findings from the workshop will be used to help refine and update the guideline adaptation method. Opportunities for participation in and contribution to the G-I-N adaptation working group will be discussed.

Methods used to facilitate interaction: nominal group techniques and small group sessions.
Workshop

Workshop 6

Cochrane collaboration with guideline developers:
A win, win situation

Hugh McGuire, NCC, WCH, UK
Ella Fields, NCC, WCH, UK.
Roz Ullman, NCC, WCH, UK.

Background, Purpose (Introduction): Cochrane reviews provide high quality, reliable health information and have been identified as being of interest to NCC, WCH guidelines. However the outcomes examined are often not what the NCC, WCH are interested in. This means that Cochrane reviews often provide information on trials rather than the findings of the guideline review.

Discussions with Cochrane review groups can help but competing timelines, standards, methodologies also conspire to ensure that existing Cochrane reviews are not used fully in guidelines. One solution would be to engage the Cochrane review groups much earlier in the guideline development process to ensure that the evidence is gathered and reviewed in a way that is guideline compatible.

Objectives: To develop a framework for working with Cochrane groups to ensure that the findings in each review is suitable for use in clinical guidelines.

Description: The workshop will include;
1. an historical view of how Cochrane reviews have been used in guidelines developed at the NCC, WCH. (10 minutes)
2. a planned approach of collaboration with the Cochrane Incontinence Group using a guideline in development (15 minutes)
3. Small, group work to determine ‘best practice’ ideas (20 minutes)
4. an interactive discussion, question and answer session with the audience (45 minutes)

We will provide a short questionnaire to be completed, in advance, by each participant outlining their experience of using Cochrane reviews in guidelines or in clinical practice.
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Workshop

Workshop 7

Evidence tables IV: prognostic and economic evaluation templates

Hans de Beer, CBO, Netherlands
Rob Cook, Bazian, UK.
Craig Whittington, NCCMH, UK.
Ton Kuijpers, CBO, Netherlands.
Robin Harbour, SIGN, UK.
Andres Gerber, IQWiG, Germany.
Magali Remy Stockinger, G-I-N, .
Sara Twaddle, SIGN, UK.

Background,Purpose(Introduction) : As part of the effort to meet G-I-N’s objectives of facilitating information sharing and avoiding duplication of effort, the G-I-N Evidence Tables Working Group (ETWG) was set up to define a minimum dataset for summarising the appraised literature (i.e. templates). These standards would be the first step to meeting the G-I-N objectives.

Previously, two templates to summarise intervention and diagnostic studies have been developed by the ETWG. More recently, two new templates to summarise single studies related to prognostic questions and single economic evaluations have been developed. Initial drafts based on literature review as well as evidence tables in use were discussed at the Chicago conference. The drafts have then been improved and subject of a feasibility study conducted spring 2011.

Objectives :

- to improve participants understanding of what is required in a minimum data set for summarising these studies
- to receive the attendees’ feedback on the templates and their revision thus enabling the production of the final documents.

Target Audiences : Guideline developer

Description : This workshop will:

- present the semi, final drafts of templates on prognostic and economic evaluation.
- present the results of the feasibility study of templates on prognostic and economic evaluation
- enable discussion of the results of the feasibility study
- provide opportunities to obtain the attendees’ feedback on the templates and their revision

Through discussions and examples we will also improve participants understanding of the templates and their use.
Workshop 8

Adaptation of guideline adaptation methodology for guideline development naïve countries

Soo Young Kim, Hallym University, Korea
Nam, Soon Kim, Korea Institute for Health and Social Affairs, Korea.
Heeyoung Lee, National Health Insurance Corporation, Korea.

Background, Purpose (Introduction): Adaptation of guidelines can be an alternative to de novo guideline development and ADAPTE collaboration suggest ADAPTE process for systematic approach to adapting guidelines.

However, the ADAPTE process reflects mainly the experiences and situations of developed countries with rich experience in the development of guidelines, so inexperienced regions like Asian countries may need a somewhat different process. What is more, processes and methodologies used to evaluate guidelines or grade recommendations may require some differences in Asia.

Objectives: For adequate guideline adaptation in such a region as Asia with little experience in the development of guidelines, this workshop will propose what parts should be tailored in the proposed guideline adaptation methodology based on the experiences of Korea.

Target Audiences: Guideline developer

Description: This workshop will be consist of three courses.

1) Adaptation of ADAPTE process
The ADAPTE process proposed in ADAPTE collaboration suggests how areas like Asia without much experience in the development of clinical guidelines should be adapted.

2) Adaptation of AGREE II
Tools such as AGREE for evaluating the quality of clinical guidelines assume that guidelines have been developed de novo. We propose how the quality of guidelines developed through adaptation can be evaluated.

3) Adaptation of GRADE
Considering the experiences of Korea, one of the most difficult parts in the ADAPTE process is assigning the level of evidence and the strength of recommendation. Thus, this study proposes processes necessary for grading the level of evidence and the strength of recommendation using GRADE for guidelines developed through adaptation.
Panel Session 1

Health technology assessment to guide clinical practice

Lee Sang Moo, NECA, Korea
Adun Mohara, HITAP, Thailand.
Mabel Yap, MOH, Singapore.

Background, Purpose (Introduction): Health technology assessment (HTA) and clinical practice guideline development share methodologies and HTA is often carried out to inform guideline development. In addition to clinical guidelines, other means of influencing practice and enabling knowledge translation include reimbursement policies, policy guidelines for benefits packages and development of clinical pathways.

Objectives: This session will showcase examples of HTA to guide clinical practice in three Asian countries.

Target Audiences: Guideline developer

Description:

1) HTA related work and its flow in the evidence, based healthcare system in Korea (Dr Lee Sang Moo)

Many aspects of work related evidence, based health care including legislation of new health technology assessment, new drug reimbursement decision policy and increasing support to investigator initiated trials have been initiated from various parts in Korea. Some part of them are fragmented and the other part of them are linked together. The presentation will deal with the current situation in Korea.

2) The role of policy guidelines for health benefit package development: a one, year experience in Thailand (Dr Adun Mohara)

This presentation describes the role of policy guidelines in facilitating the use of evidence to inform the formulation of benefit package of the Universal Health Coverage Scheme (UC) in Thailand. The guidelines described how evidence informed policy decisions regarding the selection of topics, assessment, appraisal, and implementation, as well as roles of each responsible agency in each stage. The guidelines were applied in the fiscal year 2010, 11 successfully, as a significant tool that brings controversial policy decisions into more systematic, transparent, participatory and evidence, based processes.

3) HTA and clinical practice guidelines as tools for knowledge translation (Dr Mabel Yap)

The Health Services Research and Evaluation Division of the Ministry of Health in Singapore
conducts health services research, including health technology assessment and develops clinical practice guidelines to inform and assist in the implementation of healthcare policies for Singapore. This presentation shows how HTA may be carried out to identify key elements of integrated care pathways for the management of a variety of chronic conditions including hip fracture, stroke and chronic obstructive pulmonary disease.

Speakers:
Dr. Lee Sang Moo
Executive Director, HTA Research Division
National Evidence, based Health Care Collaborating Agency (NECA)
Korea

Mr. Adun Mohara
Health Intervention and Technology Assessment Program (HITAP)
Thailand

Dr. Mabel Yap
Director, Health Services Research and Evaluation Division
Ministry of Health
Singapore

Background, Purpose (Introduction): This workshop is organized by KOMS (Korean Oriental Medical Society) and JSOM (Japanese Society of Oriental Medicine). This will be the first time of having the workshop on the guideline development in the area of Traditional Medicine. I believe that this workshop will be a good opportunity to strengthen the communication and exchanging the information between clinicians, experts and health policy makers worldwide, and promoting the guideline development and establishing of Evidence based traditional medicine.

Objectives: Traditional Medicine is considered a useful approaches to the patients for a long time. Traditional Medicine have had the challenges for professionals of traditional medicine to ensure the diagnosis and assessment of disease activity and the response to treatment of traditional medicine. Our workshop will give a clue to develop the guideline and establish the evidence based traditional medicine.

Target Audiences: Guideline developer
Panel Session 3

Quality of life and patient functioning in clinical guidelines:
a statement of G-I-N’s Allied Health Community

Simone van Dulmen, Radboud University Nijmegen Medical Centre, Netherlands
Sue Lukersmith, Occupational Therapist, Australia.
Josephine Muxlow, Nurse, Canada.
Elaine Santa Mina, Nurse, Canada.
Dunja Dreesens, Regieraad, Netherlands.
Dorien van Benthem, ACCC, Netherlands.
Sarah Bazin, ER, WCPT, UK.
Jenny Gordon, RCN, UK.
Gerdien Fraux, Trimbos, Netherlands.
Philip van der Wees, KNGF, Netherlands.

Background,Purpose(Introduction) : Over time, health care practitioners have changed from viewing health conditions as purely a medical condition to the perspective of a bio-psychosocial model of health, where the individual’s functioning is determined by the complex interaction of the impairment, activities and participation within the individual’s context. This patient, centered view needs to be reflected in guidelines. The G-I-N Allied Health Community proposed to develop a position paper as one of the G-I-N strategies to promote important topics in guidelines.
**Objectives**: To develop a position paper to promote patient functioning and health related quality of life in guideline development and implementation.

**Target Audiences**: Guideline developer

**Description**: The purpose of the session is to present and discuss the draft position paper developed by the G-I-N Allied Health Steering group. The session will focus on the importance of patient functioning and quality of life in guideline development and G-I-N’s contribution in promoting this; provide an overview of definitions of quality of life and patient functioning, the International Classification of Functioning, Disability and Health (ICF) model of health conditions, and present a wiki tool to collect input from stakeholders plus a framework to demonstrate the integration of patient functioning in steps of guideline development. The discussion will be centered on: (a) how can the draft paper be improved, (b) what is needed to implement the results in guideline development; (c) can our method be used for other topics as well in G-I-N’s strategy to produce position papers.

**Names of moderator and invited speakers**: 
Implications for guideline developers, users: 
Simone van Dulmen 
Philip van der Wees 
Sue Lukersmith 
Josephine Muxlow 
Elaine Santa Mina

**Background, Purpose (Introduction)**: Occupational medicine is the field of clinical medicine pertaining to occupational illness, injury and disability. As with any medical discipline, an evidence-based approach is desirable in helping doctors and their patients choose appropriate healthcare. Clinical practice guidelines are a useful tool for occupational physicians.

**Objectives**: This panel session discusses clinical practice guidelines and guideline programmes on occupational medicine topics from three different countries.

**Target Audiences**: Guideline developer
**Description**:

1) The American College of Occupational and Environmental Medicine’s (ACOEM) Occupational Medicine Practice Guidelines, 3rd Edition (Dr Kurt Hegmann)

The ACOEM Practice Guidelines 3rd Edition synthesizes over 15,000 references into over 2,500 treatment recommendations for the care of injured workers. Many of these recommendations also have wider applicability, especially for common musculoskeletal disorders. Challenges include: 1) inadequate quality literature for many common diagnostic, treatment dyads, 2) development of criteria for consensus guidelines recommendations, and 3) seamless incorporation of consensus guidelines within evidence, based guidelines. A reliable article grading system was found to be important. Future plans include ongoing updating processes and expansion to other disorders.

2) Guidelines on work, related aspects of health, in Occupational Health and in General Healthcare (Prof Carel T. J. Hulshof)

Work in itself is an important determining factor for health. Evidence, based guidelines on work, related aspects of health can enhance the professional quality of occupational health professionals and can contribute to a better quality of life outcome of general healthcare. This talk will give examples of how work, related aspects were incorporated in clinical practice guidelines in the Netherlands, and also feature the guidelines programme of the Netherlands Society of Occupational Medicine (NVAB).

3) The Singapore Armed Forces, Ministry of Health clinical practice guidelines on management of heat injury: a collaborative effort for evidence, based heat injury care across multiple settings (Dr Poon Beng Hoong)

This talk describes the development of a set of guidelines for the management of heat injuries developed collaboratively by the Singapore Armed Forces Medical Corps and the Ministry of Health in Singapore. The collaborative and consensus building approach consulted various stakeholder agencies, including the Ministry of Manpower and Singapore Sports Council and resulted in guidelines that could be applied beyond military settings, such as for sports and other strenuous physical activities.

**Names of moderator and invited speakers**

Moderator: Dr Pwee Keng Ho
Deputy Director (Health Technology Assessment)
Ministry of Health
Singapore

Speakers:
Dr Kurt Hegmann
Chair, Evidence, based Practice Committee
American College of Occupational and Environmental Medicine
USA

Professor Carel T. J. Hulshof
Coordinator, Evidence, based guidelines program
Netherlands Society of Occupational Medicine (NVAB)
The Netherlands

Dr Poon Beng Hoong
Senior Family Physician
College of Family Physicians Singapore
Singapore
Oral 1

*Clinical guidelines as a source of disinvestment recommendations: a case study from England and Wales*

Christine Carson, National Institute for Health and Clinical Excellence, UK
Tarang Sharma, National Institute for Health and Clinical Excellence, UK
Sarah Garner, National Institute for Health and Clinical Excellence, UK
Peter Littlejohns, National Institute for Health and Clinical Excellence, UK
Mary Docherty, National Institute for Health and Clinical Excellence, UK
Bhash Naidoo, National Institute for Health and Clinical Excellence, UK
Moni Choudhury, National Institute for Health and Clinical Excellence, UK

**Background, Purpose (Introduction)**: All healthcare systems are seeking to make efficiency, savings while improving the quality of care. Disinvestment remains a controversial activity particularly when it is based on an assessment of cost, effectiveness. National Institute for Health and Clinical Excellence clinical guidelines have always contained disinvestment recommendations but to date they have not been actively promoted.

**Objectives**: To explore the potential of using guideline methodology as a tool for identifying disinvestment opportunities.

**Methods**: National Institute for Health and Clinical Excellence’s existing clinical guidelines were searched for disinvestment opportunities. National Institute for Health and Clinical Excellence’s guideline development groups were also invited to identify disinvestment opportunities within guidelines currently in development. A ‘do not do’ recommendations database was established on National Institute for Health and Clinical Excellence’s website.

**Results**: Since 2007 National Institute for Health and Clinical Excellence has produced 868 recommendations for either complete disinvestment of interventions or restricting from routine use. To date the webpages have been viewed 27,965 times. Preliminary feedback from the NHS suggests the products have been well received and an evaluation is planned. A national workshop will be held to identify future disinvestment opportunities.

**Discussion (Conclusion)**: National Institute for Health and Clinical Excellence’s guideline methodology and process based on systematic review, consensus and consultation is well suited for identifying disinvestment opportunities in the absence of conclusive evidence of lack of benefit.

**Implications for guideline developers, users**: Guidelines developers have the responsibility to highlight areas of potential cost savings and disseminate the information. These initiatives seem to be of benefit to the NHS and can serve as example to other countries.
Oral 2

Risk factors for drug abuse among Nepalese samples selected from a town of Eastern Nepal

Dr. Surya Raj Niraula, Associate Professor, School of Public Health & Comm, Nepal
Dr. Girish Kumar Singh, Professor & Director, INCLEN Lucknow, India
Dr. S. Nagesh, Professor, Lady Harding Medical College, New Delhi, India
Dr. Devendra Bahadur Chhetry, Professor, Central Department of Statistics, TU, K, Nepal

Background, Purpose (Introduction): Drug abuse problem, is a significant health problem particularly among adolescents and adults, causing a significant morbidity and mortality. The study focuses on the serious issue related to the adolescents' and adults' behavior and health.

Objectives: It aims to identify the risk factors for drug abuse from samples taken from a town of Eastern Nepal.

Methods: This is a matched case, control study. An adequate sample of 150 matched pairs was recruited from Dharan municipality in 2006. Samples were collected using snowball, sampling method. The conditional logistic regression method was adopted for data analysis. The diagnosis cut off was determined by Receiver Operating Characteristic curve.

Results: The univariate analysis revealed that those who were below age 20 years, hill natives, students, married, stayed in joint, extended families, and whose father had below 10 years of education were independently associated with drug abuse (P)

Discussion (Conclusion): Drug abuse is a serious and growing public health problem. The level of education, occupation and depression were the strong predictors as identified by the model.

Implications for guideline developers, users: The findings of the study may have implications to aware families and schools in developing countries like Nepal.
Oral 3

The role of primary to specialist care referral guidelines in cost effective care

Christine Carson, National Institute for Health and Clinical Excellence, UK
Tarang Sharma, National Institute for Health and Clinical Excellence, UK
Sarah Garner, National Institute for Health and Clinical Excellence, UK
Peter Littlejohns, National Institute for Health and Clinical Excellence, UK
Mary Docherty, National Institute for Health and Clinical Excellence, UK
Bhash Naidoo, National Institute for Health and Clinical Excellence, UK
Moni Choudhury, National Institute for Health and Clinical Excellence, UK

Lead Author: Mary Docherty

Other Authors: Tarang Sharma, Peter Littlejohns, Sarah Garner, Bhash Naidoo, Moni Choudhury

Nominated speaker: Dr Gillian Leng, Deputy Chief Executive, National Institute for Health and Clinical Excellence

Background: Referral to a specialist service is a crucial point in a patient's management and a delay or failure to refer when indicated could compromise patient care whilst unnecessary referrals are costly and can impact on the care of others.

In response to financial pressures facing the NHS, National Institute for Health and Clinical Excellence identified primary to specialist secondary care referrals as a priority area to reduce ineffective practice and improve the quality of patient care. Since 2001 National Institute for Health and Clinical Excellence has provided advice on the appropriate referral to specialist services but this has only been accessible through specific guidance documents.

Objectives: To develop a database containing National Institute for Health and Clinical Excellence referral advice to improve the accessibility and uptake of these recommendations

Methods: All primary, to, specialist referral advice contained within current National Institute for Health and Clinical Excellence clinical, cancer service and public health guidance were identified and collated in a database. Each record contained the 'referral advice' recommendation, the timescale in which the referral should take place and additional information from the guideline. The database is updated monthly.

Results: Collating and classifying the guidance for the database was complex due to inconsistent classification and methodologies used across guideline groups.

Discussion: It is difficult to provide referral guidance that is both specific whilst accommodating of clinical judgement and a variety of local service arrangements and resources.
Implications for guideline developers: Clear primary to specialist care referral guidelines can reduce costs associated with inappropriate referrals and improve the quality of patient care.

Guideline developers should agree uniform methods to develop and communicate this guidance to improve its efficacy and implementation.

**Oral 4**

*The change of practice of perineal shaving among parturients on admission of labor in two different hospitals*

Ova Emilia, Universitas Gadjah Mada, Indonesia
Mohammad Hakimi, Universitas Gadjah Mada, Indonesia

**Background, Purpose (Introduction)**: Removal of the perineal hair was not mentioned in the birth preparation until a century ago. Previous studies had found many disadvantages for shaving practice such as: multiple abrasions, infection and itching from the hair regrowth. Changing practice that already implemented for years would be a challenge.

**Objectives**: To compare the changing practice of perineal shaving after training for labor unit team in public and teaching hospital.

**Methods**: Three thousands and two hundred pregnant women with labor were included on admission since 2005-2007. Intervention was done in the form of training for all labor unit team in the two hospitals. Data collection was done in the end of 2005 and set as a pre-intervention data. Intervention was conducted during 2006. Then post intervention data was collected in 2007. Qualitative study was conducted by indepth interview to midwives, doctors and also parturient mothers.

**Results**: The adoption of practice was not significantly different between the two hospitals, however the teaching hospital practice less shaving than the public hospitals. Almost all labor team agreed with the policy of not shaving, but sometimes they thought need to shave patients with particular conditions such as overgrowth pubic hair that make perineorrhaphy more difficult. Mothers reasons for shaving, hygiene and religious consideration.

**Discussion (Conclusion)**: The change of practice of perineal shaving among parturients is not significantly different in teaching hospital or public hospital. Teaching hospital tend to adopt new procedure faster than the public hospital.

**Implications for guideline developers, users**: Approaching dissemination of practice should consider the context of the health care facility.
**Oral 5**

*Clinical guidelines as a source of disinvestment recommendations: a case study from England and Wales*

Radim Licenik, Centre for Clinical Practice Guidelines, Czech Republic  
Arnolda P. Nauta, Affiliation, Netherlands  
Katerina Ivanova, Centre for Clinical Practice Guidelines, Czech Republic  
Jan Hopko Precek, Centre for Clinical Practice Guidelines, Czech Republic  
Denisa Osinova, Centre for Clinical Practice Guidelines, Czech Republic  
Katarina Klikova, Centre for Clinical Practice Guidelines, Czech Republic  
Katerina Mokrosova, Centre for Clinical Practice Guidelines, Czech Republic

**Background, Purpose (Introduction)**: Ethical aspects are one of the most important parts of health care as well as clinical practice guidelines. However, ethical principles are not an integral part of guidelines. It is time to bring ethics to the attention of CPG developers, users and other stakeholders. Ethical principles should be an explicit part of CPGs and have to be systematically evaluated.

**Objectives**: We have developed an instrument for evaluation of ethical principles in guidelines based on the AGREE II instrument.

**Methods**:
1. Small working group started with research questions and literature review. The first drafts of the instrument and the User’s guide have been developed, tested followed by the second draft. The questionnaire covers basic ethical principles, i.e. respect for autonomy, beneficence, nonmaleficence and justice, as well as other very important issues such as health professional, patient relationship and interprofessional collaboration. The last question is whether a particular CPG contains examples of ethical dilemmas. The user’s manual offers definitions and descriptions of each problem and suggestions where the ethical issues can be found in CPGs.
2. The final version of the instrument will be developed and field testing will be performed. An integral part of the manual will be case reports for each item.
3. The instrument will be disseminated, implemented and evaluated.

**Results**: Instrument – questionnaire version I and II  
User’s manual version I  
Pilot version of case reports

**Discussion (Conclusion)**: A useful instrument for the evaluation of ethical principles in guidelines based on the AGREE II instrument has been developing.
Implications for guideline developers, users:
The instrument can be used both, during guideline development process, as well as implementation and evaluation of the quality.

Background, Purpose (Introduction):
Despite their value, guidelines are expensive and time consuming to develop and keep up to date. At least in the US, scrutiny from elected officials and the media exacerbates both the increasing scarcity of resources and the pressure to increase the methodological rigor. Thus, guideline producers have to creatively revise models for current and future guideline development.

Context:
The goals: (1) How to get the right (evidence-based) information to the right people at the right time, providing easily searchable content at the point of care;
(2) Maintain current recommendations and promptly publish them;
(3) Provide funding while preserving methodological standards and reducing costs.

The Taskforce met with 10 stakeholder groups who would be most impacted and could offer the best advice on how to accomplish these goals without jeopardizing the stakeholders’ interests.

Description:
An 8-month effort resulted in a sustainable process for maintaining guideline currency with more expeditiously updated recommendations readily available at the point of care, while reducing the overall costs (40, 80%). Surgically targeted recommendations can be updated through a 16-month timeline of narrow evidence reviews, evidence profiles, recommendation and manuscript development, approvals, and publication. An aligned electronic repository of the final guidelines, other decision support tools, and clinical resources provides a portal to search for evidence-based recommendations for a specific patient at the point of care. The pilot for this new model will be initiated summer 2011.

Lessons for guideline developers, adapters, implementers, or users:
Attendees will learn the flowchart for this process, understand where estimated costs can be reduced, and view the electronic repository and its resources.
Oral 7

Development of a Farsi translation of the AGREE instrument, and the effects of group discussion on improving the reliability of the scores

Arash Rashidian, Knowledge Utilization Research Center, School of P, Iran
Reza Yousefi, Nooraie, Department of Clinical Epidemiology and Biostatist, Canada

Background, Purpose (Introduction): At least 20 formal translations of the AGREE instrument are available. To our knowledge, there is no published report of assessing the reliability and validity of the translated versions, and their concordance with the original instrument.

Objectives: We aimed to develop a formal Farsi (Persian) translation of the AGREE clinical guideline appraisal instrument. We considered the effect of group discussion in improving the reliability of scores.

Methods: We followed a multi-step process of translation including independent translations of the instrument and extensive assessment of face validity and fluency. We used the instruments to appraise 11 guidelines from three specialities. After the first appraisal, the raters discussed about each guideline in groups, and had the opportunity to revise their scores individually. In total 96 appraisals were conducted. The intra-class correlations (1,1) were calculated for domain scores obtained by two versions at each time point.

Results: We observed no statistically significant differences between the mean values obtained from the English and the translated versions of AGREE, and the scores at two time points. The average domain scores, as well as the reliability rose significantly after discussion.

Discussion (Conclusion): The Farsi version of the AGREE instrument yields in the scores comparable to the original version, despite a lower reliability. Revision of scores after group discussion leads in higher reliability, probably by helping the raters recognize what they might have overlooked during the short time of assessment.

Implications for guideline developers, users: Farsi translation of the AGREE is suitable for use. We recommend group discussion among the raters and pre, and post, discussion recording of the scores.
Oral 8

A rapid update to a guideline: when new evidence questions the safety of a recommendation

Katrina Sparrow, National Clinical Guideline Centre, UK
Kate Lovibond, National Clinical Guideline Centre, UK
Silvia Rabar, National Clinical Guideline Centre, UK

**Background, Purpose (Introduction)**: The former National Collaborating Centre was commissioned by the National Institute for Health and Clinical Excellence to produce a guideline on anaemia management in people with chronic kidney disease (AMCKD) published in 2006. Subsequently new evidence emerged with safety implications to two recommendations and in 2010 the National Clinical Guideline Centre (NCGC) was commissioned to produce a rapid update.

**Objectives**: To present the NCGC experience of producing a rapid update.

**Methods**: The update was produced in accordance with the National Institute for Health and Clinical Excellence Guidelines Manual 2009, over ten months, with a four-month development period and three guideline development group meetings.

**Results**: The work was published in February 2011 and updated two recommendations. NCGC challenges included working with the changes in National Institute for Health and Clinical Excellence methodology. Incorporating the new evidence using GRADE (and newer methodologies) into the original evidence with the older methodologies proved an interesting exercise with lessons learnt along the way. The rapid update also presented knock on implications and new challenges for the cost effectiveness analysis.

**Discussion (Conclusion)**: Guidelines are normally reviewed for update at National Institute for Health and Clinical Excellence every 3 years, however when new evidence emerges, recommendations may need rapid update. There are challenges when undertaking rapid update work not least evolving methodology and short timelines.

**Implications for guideline developers, users**: The technical team learn many lessons along the way regarding improvements to processes that we seek to share during this presentation.
Oral 9

Updating adapted guidelines:
How to streamline the process without losing rigour

Ann Scott, Institute of Health Economics, Canada
Carmen Moga, Institute of Health Economics, Canada
Paul Taenzer, Calgary Health Region Chronic Pain Centre, Canada
Ted Findlay, Calgary Health Region Chronic Pain Centre, Canada
Christa Harstall, Institute of Health Economics, Canada

Background,Purpose(Introduction) : Guideline adaptation is a popular way of increasing the utility of existing guidelines by reducing duplication and enhancing efficiency and local uptake. However, updating adapted guidelines is imperative if they are to maintain their relevance.

Objectives : To discuss the challenges of updating an adapted guideline.

Methods : In 2009, the Alberta Ambassador Program collaborated with a provincial guideline agency to produce a clinical practice guideline on low back pain that was melded from seven ‘seed’ guidelines. A similar adaptation process was followed for its first update in 2011.

Results : Seven new or updated seed guidelines were identified. The following challenges became apparent during the update process.
• How to efficiently extract information from the new guidelines into evidence tables without duplicating previous effort;
• How to incorporate new seed guideline information, while preserving the accumulated knowledge from previous guidelines whose publication dates would otherwise render them obsolete;
• How to incorporate ‘new’ interventions not covered in the seed guidelines;
• How to update recommendations rated as ‘do not know’ in the original Ambassador guideline and which are not addressed by the new seed guidelines;
• How to overcome attrition among stakeholders and form a streamlined multidisciplinary Guideline Development Group that maximizes local relevance and buy in, but is also efficient.

Discussion(Conclusion) : Careful consideration of the unique practical and methodological challenges inherent in updating adapted guidelines is essential.

Implications for guideline developers,users : A sound original adaptation approach can help ensure that developers maintain a clear connection between the old and new processes, without loss of direction or efficiency.
Background, Purpose (Introduction): Evidence table shows important information obtained from systematic reviews and represents evidences and outcomes that become key tools.

Objectives: To find out the differences among the components of evidence tables in each organization.

Methods: To compare the component we reviewed 4 evidence tables of the Cochrane Collaboration, SIGN (Scottish Intercollegiate Guidelines Network), National Institute for Health and Clinical Excellence (National Institute for Health and Clinical Excellence), and WHO (World Health Organization). All the components are arranged by matrix and they can be compared within or among organizations.

Results: There are 15 factors each in the evidence tables of Cochrane, WHO and 20 factors each in the SIGN's, National Institute for Health and Clinical Excellence's. The 5 factors, number of studies, evidences, consistency, quality, level of evidence, other consideration, factor and comment are common components in 4 evidence tables. The information comprising the evidence tables can be divided into two types. One is for quality assessment of evidence and the other is for summary of findings. In aspects of quality assessment of evidence, three organizations' evidence tables are similar except that of SIGN's. Also, the evidence table of WHO is constituted of some mixed factors from component of the rest organizations in aspects of summary of findings.

Discussion (Conclusion): To help proper decision making it is necessary to identify important factors of the evidence tables in making guidelines.

Implications for guideline developers, users: The evidence table is very useful for developer of CPGs. Therefore, international standardization about evidence table components is needed.
Background,Purpose(Introduction) : There are still difficulties to achieve changes in practice through implementation of Clinical Practice Guidelines (CPGs). This could be influenced by health professionals’ level of knowledge and perceptions about them.

Objectives : To explore knowledge, attitudes and perceptions of Spanish physicians towards CPGs and evidence and recommendations grading systems. We used this information to develop a questionnaire for a national survey in Spain.

Methods : Six focus groups in four regions involving 46 physicians were carried out: three groups with hospital, based specialists and three with general practitioners. Participants were purposely selected. All groups were transcribed and analyzed under the discourse analysis approach.

Results : Participants showed a positive attitude towards CPGs, but these were perceived as remote from daily practice, mainly because they are not adapted to local context and due to vast information they often compile. The way in which recommendations are framed is an important factor, but participants attributed greater value to the institution developing the CPG and the availability of different CPG formats. An explicit description of the methodology underlying the formulation of recommendations also increases confidence. Variability in presentations of grading systems of evidence and recommendations was identified as an important limitation.

Discussion(Conclusion) : The use of CPGs is determined by confidence in the development process and by availability of different feasible formats. A standard grading system for evidence and recommendations would fa-
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Background, Purpose (Introduction): Pioglitazone is commonly used in combination with other anti-diabetes in Thailand. Although, the bioequivalence study indicated that generic (Utmos®) and brand, name (Actos®) were equivalent, the evidence of comparative clinical effectiveness was not available.

Objectives: To compare the effectiveness between generic pioglitazone (Utmos®) and brand, name pioglitazone (Actos®)

Methods: We retrospectively examined the electronic patient database in patients receiving pioglitazone in year 2007, 2009 at a University, affiliated hospital in Thailand. The patients meeting the following criteria were included: 1) 18 years or older; 2) had received pioglitazone for at least 6 months; 3) HbA1c level > 7% within 180 days prior to starting pioglitazone; and 4) had HbA1c result(s) between days 60, 270 after starting pioglitazone. Mean changes in HbA1C from baseline were calculated. Multivariable linear regression with propensity score adjustment was used to estimate the difference of HbA1C changes.

Results: Of 238 patients included, 106 and 132 were received generic and brand pioglitazone, respectively. Mean age were 58.6±1.1 and 63.5±0.95 and the percentages of male were 61.3% and 69.7% in generic and brand, name group, respectively. Mean changes in HbA1C level from baseline were, 0.72±1.67 mg% in the generic group, while the changes in the brand, name group were, 1.11±1.49 mg% (p=0.054). Based on a multivariable linear regression, a propensity, adjusted difference in mean reduc-

Implications for guideline developers, users: It seems necessary to advance in the standardization of a grading system of evidence and presentation of recommendations.
tion of HbA1c was 0.28% (95%CI; 0.70 to 0.13).

**Discussion (Conclusion)**: The magnitude of HbA1c level reduction was not different between the generic and brand name pioglitazone. However, equivalence cannot be concluded since the sample size was insufficient.

**Background, Purpose (Introduction)**: The National Institute for Health and Clinical Excellence Guidelines Manual lists CINAHL as a core database that should be searched for every clinical question posed in a guideline. There is a perception that the unique yield from this is low, bringing into question its place as a core database.

To quantify the unique yield from CINAHL across a range of topics and types of question. To identify the types of questions associated with higher yield from CINAHL. To make recommendations on searching CINAHL in future National Institute for Health and Clinical Excellence guidelines.

**Methods**: A sample of sixteen clinical guidelines was identified, selecting guidelines in which CINAHL was searched using the OVID platform.

The included studies in each guideline were identified and assessed to ascertain whether they were indexed in the core databases at the time of the search, whether they were unique to the CINAHL database or whether they were identified from any other source.

**Results**: The data was analysed and information presented on the total number and proportion of unique included studies from CINAHL.

The data summarises the unique CINAHL yield as frequencies for each question as well as the percentage of included studies for each question with corresponding summary statistics.
Discussion(Conclusion): Drawing on the analysis, conclusions will be made about the role of CINAHL as a core database in the Clinical Guidelines Methods Manual.

Implications for guideline developers, users: This project will introduce time and efficiency savings in identifying evidence for clinical guidelines, while ensuring that relevant evidence is identified.

Oral 14

Pilot, Study: Cochrane Reviews along with current Guidelines – Analysis of the benefit for the user

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Dana Rütters, German Agency for Quality in Medicine (ÄZQ), Germany
Christiane Rothe, German Agency for Quality in Medicine (ÄZQ), Germany
Gerd Antes, German Cochrane Centre, University Medical Center, Germany
Günter Ollenschläger, German Agency for Quality in Medicine (ÄZQ), Germany
Monika Nothacker, German Agency for Quality in Medicine (ÄZQ), Germany

Background, Purpose (Introduction): The German Medical eLibrary (www.arztbibliothek.de) contains evidence, based German guidelines. In addition, abstracts of Cochrane Reviews (aCR, 2006, 12, 2010) are indexed within the context of guideline themes. We found that aCR provide substantial supplementary information, mainly more specific and more actual.

Objectives: Here we explored whether aCR provide supplemental information also for international guidelines.

Methods: Four of the most used German Guidelines (published 2008, 2010) were analyzed (breast cancer, lung cancer, heart failure, depression). For the exploration we used the current version of their international reference guidelines (RG).

We analyzed:
· which percentage of aCR was published after the last search date;
· whether the aCR indexed before the last search date were cited;
· whether not cited aCR contained conform, divergent or more specific information or information on aspects not addressed in the guideline.
Results: For the 4 guideline themes, 10, 35 aCR were indexed. We identified 7 current international RG from 6 organizations (last update 2007, 2010). Every RG indicated a systematic search i.a. within the Cochrane Library (last search 2005, 10, 2009). 20–100% of the aCR indexed within the respective theme were published after the last search date. Of the aCR within the search, dates 4, 36% were cited. 7, 10% of not cited aCRs contained conform information.

Discussion(Conclusion): ACR offered substantial supplementary information for international evidence, based guidelines – not only more current but also more specific and additional information.

Implications for guideline developers, users: Why an important source of aggregated evidence is rather little used will be further analyzed and discussed.

Background, Purpose(Introduction): Implementation of guidelines among general practitioners (GPs) is complex. Although it is recognised that interventions aimed at improving guideline adherence should take into account the specific features of the target group, it is unclear how GPs evaluate different types of interventions.

Objectives: To identify GPs’ preferences for interventions to improve guideline adherence in practice and to determine whether these differ across key recommendations in guidelines.

Dolly Han, University of Waterloo, Canada.

Gert P. Westert, IQ Healthcare, University Medical Centre St. Radbo, Netherlands.

Methods: An electronic survey was conducted among 703 Dutch GPs. GPs were asked to rate interventions in terms of their usefulness in improving guideline adherence in general and for specific key recommendations in guidelines. The interventions were classified according to the taxonomy of the Cochrane Effective Practice and Organisation of Care Group (EPOC).

Results: 264 GPs (38%) completed the questionnaire. In general, GPs preferred interactive small group meetings (84% rated this
as much or very much encouraging) and audit and feedback (53%) as methods for improving guideline adherence. Financial interventions (24%) were of least interest to the GPs. In addition, some interventions were preferred by GPs irrespective of the specific key recommendations (e.g. educational meetings, audit and feedback), while ratings for other strategies differed more across key recommendations (e.g. reminders, computer support, patient mediated strategies, organisational interventions).

Discussion(Conclusion) : GPs have general as well as recommendation, specific preferences for interventions to improve guideline adherence.

Implications for guideline developers, users : As acceptance and local support are essential in initiating behaviour change, it seems useful to take the target groups’ preferences into account when developing plans for guideline implementation to encourage the uptake of guidelines in practice.

Background, Purpose : In 2007 the Guideline International Network (G-I-N) and the National Health and Medical Research Council (NHMRC) initiated the Emergency Care (EC) Community as a working group of G-I-N to support collaboration across the field of international emergency care to improve the application of clinical guidelines.

Objective : To identify formats of guidelines to increase the uptake of evidence based recommendations by clinicians and other health professionals across the emergency care setting.

Method : A web based survey was primarily designed to collect preferences of end users related to: formats of guidelines, attributes of guidelines and where guidelines are most commonly accessed. The survey was distributed widely through the G-I-N Emergency Care Community:

Survey of preferred attributes of guidelines

Samar Aboulsooud\textsuperscript{1}, Marc Afilalo\textsuperscript{1}, Rasmieh Alzeidan\textsuperscript{1}, Scott Bennetts\textsuperscript{1}, Wanderly Bernardo\textsuperscript{1}, Maarit Castren\textsuperscript{1}, Robert Crouch\textsuperscript{1}, Barry Diner\textsuperscript{1}, Megan Hosken\textsuperscript{1}, Peter Wyer\textsuperscript{1}, Wah Hon Yau\textsuperscript{1}, Sue Huckson\textsuperscript{2}

\textsuperscript{1}G-I-N Emergency Care Community Working Group
\textsuperscript{2}National Health & Medical Research Council, National Institute of Clinical Studies, Australia
Community membership and their professional networks.

Results: Results from 206 responses will be presented. Responses were received from over 30 countries with the majority of responses from emergency care physicians in North America, Australia and the UK.

Discussions: Guidelines were most commonly accessed from professional societies and peer reviewed journals followed by searching on the internet.

The preferred formats for guidelines or guideline resources were clinical protocols followed by plain language evidence summaries and clinical algorithms as decision support aids.

Implications for guideline developers, users:
Understanding where guidelines are commonly accessed and preferred attributes of guidelines assists producers of guidelines to develop targeted dissemination strategies and tailored products to increase the usability and uptake of guidelines.

Background, Purpose (Introduction): As part of recent initiatives to improve the quality of child health services, Integrated Management of Childhood Illnesses (IMCI) clinical guidelines, endorsed by World Health Organization, are being used by first level health providers in Bangladesh. We undertook research to gauge community, based health providers’ views regarding the initial implementation of these guidelines in field situations.

Objectives: To gain an understanding of how the IMCI guidelines have impacted on the work of health providers, who are the target users of these clinical guidelines.

Methods: The study was embedded in a cluster randomised control trial. All health workers in participating rural regions were surveyed.

Results: Of all the health providers (n=29),
13 (44.8%) had used IMCI guidelines in the past. Of these 13, 12 (92%) opined that the guidelines were easy to follow, and stated that they gave them a better experience, made them more satisfied and focussed in case management, and resulted in less cost for the government in providing care compared to care prior to the introduction of the guidelines. Just over half considered that clients were happy with the use of the guidelines; however, a similar proportion of health workers considered the guidelines as time consuming.

Discussion(Conclusion) : These findings suggest that health providers who use guidelines are positively disposed towards them but may find them time consuming.

Implications for guideline developers, users: It is important to know the views and perceptions of the providers for effective implementation of such guidelines in field situations where the workload is high and system support is low.

Background, Purpose (Introduction) : At the 2010 G-I-N conference we presented the barriers for Bronchial asthma (BA) guidelines implementation in Pediatric Emergency Department (PED). This oral presentation reflects the implementation strategies of BA guideline in PED.

Objectives:
1. Designing effective implementation strategies for BA guideline implementation in PED
2. Overcoming barriers (that had been identified previously) to BA guideline implementation

Methods: The implementation strategies were devised on the existing guideline and the available resources in PED as follows:
1. Identifying evidence practice gaps (presented 2010 conference), these gaps served as clinical indicators: lack of asthma severity documentation 0.5%, high use of Ipratropium 78.8%, lack of patient, family education 0.5%, under utilization of systemic cortico-
steroid 18% and 0% using spacer in the PED setting.

2. Identifying barriers to implement BA guideline at the level of organization, healthcare providers, the guideline and the patients (done and presented 2010).

3. Reformatting guideline in a friendly use format and to include the work sheet (tick, box) and patient self management action plan.

4. Education sessions included workshop to key pediatricians, education meetings coincide with the departmental ground meeting, and meeting with the key persons.

5. Forming implementation team comprising head of department, consultants, specialists head nurse, pharmacist.

6. Audit and feedback after the full implementation of the BA guideline.

Chart review had been done at the first stage of this study where the clinical indicators gaps and the barriers were identified, so at this stage (stage two) chart review will be re, conducted to evaluate the success of the implementation strategies and figure out if there are improvements on the knowledge practice gaps identified before.

Results: Should focus in improving the clinical indicators to the optimal level, and it be according to evidence, based clinical guideline recommendations, enhance stakeholders’ awareness and the familiarity of the new updated BA guideline and built the ownership of this guideline

Discussion (Conclusion): The successful new BA guideline implementation rests on: appropriate implementation strategies, high quality of evidence, based clinical guideline, education, involvements of stakeholders, audit and feedback. These components are required to ascertain the practice and culture changes and to achieve the best patient care.

Implications for guideline developers, users:

• Clinical guideline developers
• Clinical guideline implementers
• Quality assurance, facilitators

Refining a draft implementation taxonomy: results of an exercise in abstract classification

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Heather Buchan, National Institute of Clinical Studies, UK.
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Background, Purpose (Introduction):

Implementation researchers face difficulties in understanding the true effect of specific implementation tactics or strategies. This is compounded by the fact that there is not uniform reporting of the nature of these interventions in trial results.

Objectives: To pilot the usefulness and feasibility of a draft implementation taxonomy to classify interventions used in implementation research

Methods: Based on the EPOC checklist categories of professional, financial, organizational and regulatory strategies, a draft taxonomy of implementation was developed. Five reviewers independently classified the 85 abstracts selected for the implementation stream of the G-I-N Conference in Chicago in 2010 using the draft taxonomy. Three of the reviewers then met face to face to establish a consensus regarding the exact strategies used and to highlight areas requiring further refinement.

Results: Implementation strategies were overwhelmingly professionally focused (57%). Forty one per cent of projects used only one implementation strategy with 29% using two and 31% three or more. The three most commonly used strategies were changes in quality assurance, quality improvement and/or performance measurement systems, changes in information & communication technology, and distribution of guideline materials (via hard, copy, audio, visual and/or electronic means).

Discussion (Conclusion): Further refinement of the draft taxonomy is required to provide hierarchical dimensions and granularity particularly in the areas of patient focused interventions and those concerned with audit and feedback and quality improvement and electronic forms of implementation and reminders and alerts which might have arose from electronic decision support.

Implications for guideline developers, users: With further improvement the draft implementation taxonomy should prove a useful tool for guideline implementers and researchers.

A National strategy for implementing acute pain management guidelines in Australian emergency departments

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Background, Purpose (Introduction): The National Health and Medical Research Council’s National Institute of Clinical Studies coordinated a national study of emergency de-
partments (EDs), to evaluate a multifaceted intervention designed to increase adherence to evidence, based clinical guidelines for acute pain management.

**Objectives**: Increase adherence to guideline recommendations for best, practice pain management in Australian emergency departments. A previous national audit of 36 ED’s identified a median time of 60 minutes to pain relief.

**Methods**: The intervention was designed informed by comprehensive review of barriers and enablers of best practice pain management within the ED setting. The strategies included training guideline implementation leaders, regular audit and feedback, and development of site, specific protocols and policies. A stepped wedge design was used to evaluate the impact of intervention.

**Results**: 40 Australian EDs completed this national study in late 2010 with data from over 16,000 patient records. Analysis of data has revealed:

- increase in the proportion of documented pain scores
- increase in the proportion of patients receiving analgesia within 30 minutes for patients who had moderate pain
- improvement in median times to 1st analgesia.

**Discussion (Conclusion)**: Given the complexity of the ED practice environment, a multifaceted approach to implementing guidelines was selected. Tailored strategies were designed to influence change in the broader system, policy, and health professionals’ behaviour to improve ED pain management.

**Implications for guideline developers, users**: The study findings support the implementation of clinical guideline recommendations can be achieved by incorporating implementation science principles to improve key clinical performance indicators.

**Background, Purpose (Introduction)**: Implementation of clinical guidelines is demanding. Automatic decision support integrated with an electronic patient record has
a potential to affect physicians treatment decisions at the point of care.

**Objectives**: To study, whether automatic reminders shown to physicians and nurses at the time of the clinical process are able to modify their treatment decisions.

**Methods**: We performed a RCT study in one primary health care centre with the population of 16,000 inhabitants. Patients visiting the centre during the 15 months study period were randomized to have the reminders either shown to the doctor or nurse (study group) or hidden (control group). Quality Index values (QI’s), representing the proportion of patients treated according to the recommendations, were calculated at the beginning of the study and after the last visit.

**Results**: Altogether 485 patients diagnosed with diabetes participated the study. After analysing the data, 615 (40%) of the original indicators for diabetes treatment turned out to be valid in this context: three indicators for the treatment decisions (process indicators targeted to professionals); two indicators for the follow, up process (process indicators targeted to the organisation); and one outcome indicator. During the study period, there was a significant increase in the QI for the treatment decisions in the study group (0.62 vs 0.69, p

**Discussion (Conclusion)**: Adherence to treatment recommendations was increased in the study group only, whereas adherence to follow, up recommendations was increased in the control group as well. We speculate, that the overall increase in QI for follow, up decisions was at least partially caused by the physicians’ learning effect.

**Implications for guideline developers, users**: Implementation of an automatic decision support system, integrated with an electronic patient record, is able to increase the adherence to clinical guidelines.
Background, Purpose (Introduction):
Implementation researchers suggest that interventions aimed at closing evidence practice gaps should be based on theory. With increasing pressure by government and policy makers on GPs to focus on preventive care it is important to effectively engage people as active partners in prevention to improve the uptake of these services.

Objectives: To identify the frameworks or triggers that guide people in their interactions and engagement with general practitioners in relation to prevention health care and to reflect on these using theoretical perspectives.

Methods: Qualitative analysis of 18 focus groups stratified by age, sex and location undertaken in Melbourne, Australia.

Results: Five broad themes influenced participants approach to both lifestyle, related and general practice delivered prevention. These themes consisted of 1) age and lifestage; 2) family history as an evaluation of risk; 3) regular check-ups with a GP; 4) engagement with other health professionals for prevention; and 5) the structure of care. Mapping of these themes against the health belief model, the theory of planned behaviour and stages of change will be described.

Discussion (Conclusion): Our findings of community views of what activates engagement in preventive care through general practice and the theory supporting these views will inform the development of a future patient-focused intervention.

Implications for guideline developers, users: Patients are the focus of preventive care initiatives in general practice. Their views and understandings of prevention and the theoretical constructs they are related to must be considered when planning effective interventions to improve the engagement of individuals in prevention delivered in primary care.

Oral 23

Engagement with and perceptions of preventive health care through general practice: A qualitative study of community members

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The Translating Research Into Practice Fellowships: Building capacity and leadership for guideline implementation in Australia

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Rosie Forster, NHMRC, Australia

Background, Purpose (Introduction): The National Health and Medical Research Council (NHMRC), Australia’s leading funding body for health and medical research, offers Translating Research Into Practice (TRIP) Fellowships annually. The 2-year TRIP Fellowship is aimed at building capacity and leadership for guideline implementation in Australia.

The Translating Research Into Practice Fellowships: Building capacity and leadership for guideline implementation in Australia

Wee-Ming Boon, NHMRC, Australia
Rosie Forster, NHMRC, Australia

Background, Purpose (Introduction): Despite the availability of the Royal Australian College of General Practitioners ‘Redbook’ of preventive care guidelines, introduction of financial incentives and workforce reforms, delivery and uptake of preventive care initiatives in general practice remains poor.

Objectives: Qualitative analysis of 18 focus groups stratified by age, sex and location undertaken in Melbourne, Australia.

Methods: Qualitative analysis of 18 focus groups stratified by age, sex and location undertaken in Melbourne, Australia.

Results: Participants saw preventive care as legitimate in general practice when it was associated with concrete action or a test, rating GPs poorly and describing them as reactive rather than proactive. Preventive care facilitators included trust in and rapport and continuity of care with a GP, awareness of family history and reminders. Key barriers included cost, access, a lack of awareness of the availability of preventive initiatives and lack of a clear schedule of preventive activities to undertake.

Discussion (Conclusion): A disconnect exists between patient perceptions of prevention in general practice and government expectations of this sector at a time when general practice is being asked to increase its focus and effectiveness in this field. Policy makers and the profession will need to take heed of these community perceptions and respond to these concerns in reorienting general practice towards prevention.

Implications for guideline developers, users: Patient barriers and enablers to preventive care in general practice are key issues to consider in planning effective interventions to improve uptake of preventive care guidelines.
at developing future leaders in the uptake of evidence-based guidelines into clinical practice.

**Context**: The greatest benefits Australians gain from health and medical research are realised when knowledge from research and available guidelines, are successfully translated into improved health care. This scheme aims to build capacity and develop a cohort of clinical leaders who have skills and expertise in this field.

**Description**: The Fellowships include: 1. Half-time salary package to protect Fellows time. 2. Implementation science training. 3. Support for networking opportunities. 4. Mentoring by senior health care personnel.

**Implications for guideline developers, users**: A total of 45 Fellowships have been awarded from 2004-2010, with high levels of success in guideline implementation projects ranging from improving pain management in children to reducing the use of X-rays for ankle injuries in the emergency department. The TRIP Fellowship has successfully created leaders in the implementation of evidence into practice across health care. The Fellows are recognised as leaders in their fields, invited to be part of review committees, boards and other expert advisory panels, and continue to be highly involved in the improvement of health care through guideline implementation and knowledge translation.

**Background, Purpose (Introduction)**: SIGN is increasingly supporting the implementation of its guidelines by developing a specific implementation support strategy for each new guideline.

**Context**: Our implementation support strategies rely on:

- robust dissemination to ensure right people know about new guidelines
- producing guidelines in different formats to suit different target audiences
- conducting awareness raising
- developing educational resources
- publishing implementation support resources (algorithms, care pathways, audit tools, costing tools)
- networking and collaborating with professional groups and Government to implement recommendations.
Description: In February 2010, SIGN published a guideline on the management of obesity. Obesity in Scotland has reached epidemic proportions and its prevalence is increasing. This guideline focuses on the prevention and treatment of obesity within the clinical setting, in children, young people and adults.

In order to support the implementation of this guideline, a number of awareness raising events were held around Scotland. In addition, implementation support resources were published alongside the guideline. These included a care pathway, information for patients and costing reports for bariatric surgery and weight management programmes.

In addition, the SIGN guideline formed part of the evidence base for the development of the Scottish Government policy for preventing obesity.

Lessons for guideline developers, adapters, implementers, or users: We found that collaborating with Government and coordinating our work with the wide range of activities that are going on helps implementation. This has been helped by the fact that Scotland is a small country. Our Government colleagues are easily accessible and have a high regard for SIGN guidelines.

Background, Purpose (Introduction): Guideline documents are often written to meet multiple needs, including education of clinicians, documentation of the technical details of the guideline development, and presentation of clinical guidance. Clinicians at the point of care, however, typically seek guidance in clinical decision making, and less frequently seek education or background information. With careful planning, a web site can be developed to guide clinicians to individualized recommendations, while providing context, specific entry points into the larger guideline document.

Context: Kaiser Permanente (KP) is the largest US not-for-profit healthcare delivery organization. KP has an Electronic Health Record (EHR) and develops its own evidence-based guidelines.

Description: KP had previously developed
a web page for its Dyslipidemia Guideline, which presented clinician users with guidance in an order and format that directly supports clinical decision making. This was further refined to allow the user to input all the required variables to estimate a patient’s risk of coronary artery disease, and trigger presentation of specific recommendations, based on risk and current medications. The web site also supports automated data transfer from our EHR, so it can be populated automatically. Context, specific links into the larger guideline document allow interested readers to delve deeper.

A live demonstration of the web site will be presented.

**Lessons for guideline developers, adapters, implementers, or users**: Web sites can incorporate data entry and logic to support individualized guidance at the point of care. Data entry can be automated. This structure allows decision support to be built outside of EHRs and still facilitates context, specific links into a larger guideline document.

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**Background, Purpose (Introduction)**: The clinical guideline is the bridge from the research evidence to practice and evidence based guideline is thought as current better guideline which developed by scientific methods.

**Description**: Results 1. 45 evidence based guidelines identified, which published in books and in papers from 2000 to 2010. 2. Most of guidelines were developed by developed by Chinese medical association, an inter-disciplinary group and few patients had opportunity to involved guidelines. 20%(9/45) mentioned to update with new evidence. Two guidelines reported using GRADE methods. 3. Guidelines mainly related to disease prevention and treatment, which mainly related to diabetes, lung cancer, chronic hepatitis, critical care, fatty liver diseases, liver failure, hypertension, stroke and etc.

**Conclusion**: The number of evidence based guideline in China is increasingly with recently years. It is necessary to develop a national guideline to help the development of the evidence based guideline and facilitate its use. The patients should be involved for relevant guideline process.
Oral 28

**Barriers and enablers to implementing the StrokeLink program: linking evidence to practice for stroke care in Queensland, Australia.**

*Oral*

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**Background, Purpose (Introduction):**

StrokeLink is a team based quality improvement program developed by the National Stroke Foundation (NSF) Australia to facilitate reducing the gap between evidence (as outlined in the guidelines) and practice (as found in the national stroke audit). Evaluation was undertaken to determine the usefulness, barriers and enablers of the program.

**Context:** This is the first state-wide, stroke specific quality improvement program in Australia.

**Description:** Qualitative and quantitative methods were utilised involving three focus groups (13 participants), semi-structured interviews via phone or face to face with key stakeholders (11 interviews with 12 participants) and a survey to all participants (39 responses received). Data was thematically analysed to understand the implementation of the StrokeLink program.

**Lessons for guideline developers, adapters, implementers, or users:** The StrokeLink program has been well received by clinicians. Participants recognise StrokeLink as a catalyst for reflection and improvement of stroke care. The credibility and expertise of the NSF staff working on StrokeLink is seen as a strength of the program with the workshops and ongoing support in the form of advice, information and connections were instrumental in facilitating change. Lack of time and resources together with the non-engagement by key persons/groups within the care setting were identified as the barriers to implementing StrokeLink.

If data is available, progress demonstrated in the 2011 National stroke audit for sites participating in StrokeLink will be presented. StrokeLink is an innovative program which provides useful support to stroke teams in order to utilise audit results and implement stroke guideline recommendations. Further analysis using audit data will provide clearer insights into the program.
Identifying and prioritising evidence gaps in the guideline development process: National Institute for Health and Clinical Excellence observations on how and when

Background, Purpose (Introduction): National Institute for Health and Clinical Excellence guidelines are based on review, syntheses and interpretation of the available evidence by independent guideline development groups (GDGs). “Best practice” is identified, but so are uncertainties in the evidence. Uncertainties are translated into research recommendations, and prioritised and presented to funding organisations. However, uptake has been slow, and this has been attributed to delays between submitting identified priorities and considerations by research funders.

Objectives: A new process is required to support National Institute for Health and Clinical Excellence’s aims in the uptake of research recommendations by funders, through earlier prioritisation and promotion, to inform future guideline development, and ultimately improve clinical practice.

Methods: 1. Observe GDG meetings to understand how they identify and manage evidence gaps.
2. Facilitate workshops to raise awareness of the National Institute for Health and Clinical Excellence research recommendations life, cycle.
3. Create a guide supporting research recommendations development and prioritisation.

Results: Unexploited opportunities for prioritisation occur at several levels and different times in guideline development: from the technical stage of evidence gathering, through the deliberations of the GDG, to the administrative centre within National Institute for Health and Clinical Excellence. A review is underway to refine the criteria for both earlier prioritisation and timely submission of significant research recommendations to funders.

Discussion (Conclusion): The journey from evidence gap to a funded research project is complex, with varying roles and responsibilities. Guideline developers should use the resources available to them to prioritise and submit research recommendations as early as they are identified.

Implications for guideline developers, users: Process, structural and behavioural barriers need to be changed and aligned if prioritisation is to be a meaningful exercise, resulting in higher rates of timely funded research.
Background, Purpose (Introduction): During the period from March, October 2010 we conducted a drug utilization review in Khartoum Teaching Hospital – Sudan to evaluate the use and administration of antibiotics used for surgical prophylaxis. The results showed that there was general unawareness with the principals of surgical prophylaxis. The selection of prophylactic agents not based on microbiological background; first preoperative doses were not given in ideal time frame, sub standard doses and prolongation of the duration of prophylaxis were the common features of irrationality.

Methods: The guideline development process involved adaptation of international guidelines for surgical prophylaxis. A literature review was conducted and final decision was made to adapt the guideline issued by the Scottish Intercollegiate guidelines network; (ANTIBIOTIC PROPHYLAXIS IN SURGERY, A national clinical guidelines 2008), regarding the clinical evidence for the use and against use of antibiotic prophylaxis for the specific surgical procedure. The antibiotic selection for each surgical procedure was based on the result of the resistance patterns obtained from a study conducted as part of the project. The guidelines draft was prepared and circulated to the targeted practitioners for comments and criticisms. Finally the modified copy was produced in a pocket, size book and the summary of recommendations and antibiotics selected was distributed in posters.

Results: Result: A monitoring phase will be conducted during the coming months.
Guidelines adaptation in the context of LMIC: a nationally adapted guideline for the management of diabetes mellitus 2 in Argentina

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Background, Purpose (Introduction):
Resources for “de novo” elaboration of high quality guidelines in Low Middle Income Countries (LMIC) are scarce. Adaptation processes should involve stakeholders and be systematic and transparent.

Objectives: to apply an evidence-based framework for adaptation of existing guidelines for the management of diabetes mellitus 2 (DM2) in Argentina.

Methods: a stepwise approach was adopted: 1) selection of a priority topic; 2) formulation and prioritization of structured clinical questions (CQ); 3) systematic searching of CPG and systematic reviews (SR); 4) quality assessment; 5) analysis of CPG, SR content; 6) adaptation of recommendations upon established criteria; 7) external validation; 8) endorsement by official authorities.

Results: An interdisciplinary team, constituted by representatives of the National Academy of Medicine (NAM), Ministry of Health (MoH), scientific societies, hospitals and social security organizations, defined the scope and 26 CQ. 133 CPG and 106 SR were found but only 3 and 38, respectively, had the minimum quality criteria to be included in the adaptation process. 24 CQ were totally (22 CQ) or partially (2 CQ) answered by CPG and SR; only 2 required “de novo” elaboration, as no evidence was found.

Discussion (Conclusion): This evidence, based and nationally adapted CPG was the first one that was successfully produced by a joint effort of the MoH, the NAM and representatives of other Argentine institutions.

Implications for guideline developers, users: First initiatives of systematic guidelines adaptation in the context of LMIC imply a methodological challenge as well as a cultural change that requires time, commitment and financing in order to achieve sustainability.
Oral 32

Evidence based clinical practice guidelines design and adaptation methodology in the Republic of Tajikistan – the first experience

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Background, Purpose (Introduction): Today the complicated task is before the Republic of Tajikistan to accumulate critical mass of clinical practice guidelines (CPG’s) in a short space of time so as to develop assessment and monitoring indicators of quality health care in the next few years. Evidence based medicine (EBM) in Tajikistan is a new paradigm of clinical practice and it isn’t quite enough familiar to teachers and health professionals. Unfortunately present CPG’s commonly were adopted on basis of accessible literature with no account taken of EBM foundation.

Objectives: Adaptation and introduction manual “Evidence based clinical practice guidelines design and adaptation methodology” is the first experience in the Republic of Tajikistan.

Target Audiences: Guideline developer

Description: The present manual was adapted in terms of international manuals under support of the USAID, ZdravPlus project on the basis of EBM resource center of Avicenna Tajik State Medical University. The series of workshops “EBM practice guidelines design and adaptation methodology” were conducted for key personalities who are responsible for adaptation and introduction CPG’s. The workshop’s program included lectures and practical work on CPG design, organization and working group forming. Special attention was given to CPG’s search and critical appraisal according to AGREE Instrument. Received knowledge and skills were used in process of adaptation and introduction Clinical practice guideline for hypertension on health care level. That is the first CPG which qualify for AGREE Instrument in Tajikistan. It’s necessary to provide active education of EBM principles for health professionals as far as unsubstantiated CPG’s use can become more harmful than beneficial.
Oral 33

20 Years of Clinical Practice Guideline Development

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Background, Purpose (Introduction): The CARPA Standard Treatment Manual has been providing clinical practice guidelines for primary health care practitioners for almost 20 years.

Context: The first set of Australian clinical practice guidelines for remote and Indigenous practice was produced by a group of remote practitioners ‘with fire in their bellies’ in 1992. This ‘for, the, user, by, the, user’ concept is still successfully utilised by the Central Australian Rural Practitioners Association, which is currently developing the sixth edition of the manual.

Description: Their guideline development model of combining evidence review, expert advice, and user participation – arrived at out of necessity and extreme health need – has stood the test of time and been validated by the literature. In line with best practice, this multi, level process for updating the manual also considers the target context, service capacity, and health profile, ensuring a quality, fit, for, purpose product. The multi, professional and iterative nature of the review brings the considerable collective wisdom and experience of volunteer content experts, context specialists, and remote area practitioners to bear on the recent literature. Updated protocols are reviewed by remote practitioners (end, users) for clarity, practicality and acceptability before finalisation, ensuring that it remains a manual by remote practitioners for remote practitioners. For the first time the current process is being supported by an electronic editorial and review process.

Lessons for guideline developers, adapters, implementers, or users: Guidelines are only useful when up, to, date, yet reviewing them can be as time and resource intensive as creating them. Sustainability is an ongoing concern for guidelines maintained by voluntary editorial groups, yet user participation is considered a key to their success.
A Software Assistant to Promote Guideline Development

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Background, Purpose (Introduction): Despite years of experience, many guideline recommendations continue to fail tests of clarity and transparency.

Context: A clear, transparent, and implementable key action statement indicates:

- WHEN (i.e., precisely under what circumstances)
- WHO
- OUGHT (with what level of implied obligation)
- To DO WHAT
- To WHOM
- HOW and WHY

Our primary design objective was to demonstrate that guideline recommendations could be developed by assembling the information required to populate this framework in a systematic and replicable manner using a software wizard, i.e., a program that leads a user through a clearly defined sequence of activities.

Description: A sequence of screens representing chunks of information that must be acquired and assembled is projected on a screen at a guideline development session. The authors systematically and sequentially determine what action is to be recommended, the conditions under which the action is to be performed, the benefits, risks, harms, and costs of the proposed action, and the quality of the evidence supporting the action. The program’s output is an IF…THEN rule and supporting evidence profile.

Surveying 69 panelists on 5 guideline development panels sponsored by 2 different national professional organizations there was substantial agreement that use of the software assistant promoted quality, clarity, transparency, and implementability and supported a process that was deemed useful and usable.

Lessons for guideline developers, adapters, implementers, or users: A software wizard can facilitate the development of clear, transparent, and implementable guideline recommendations.
Background, Purpose (Introduction): The explosion in scientific knowledge and ongoing resource constraints challenge evidence synthesizers and healthcare institutions to design streamlined guideline development processes while maintaining the required level of rigor. Additionally, the ‘potential to globalize evidence and localize decision’ is well recognized. (Eisenberg 2002, Clancy 2005). Therefore, international collaboration between evidence synthesizers and decision makers can provide capacity and catalyze guideline development.

Context: At Kaiser’s request, BMJEC provided evidence summaries to support development of a Kaiser HIV,STI CPG. BMJEC delivered quality products in accordance with GRADE evidence based ratings.

Description: Description of Best Practices
- Clear scope and predefined outputs
- Regular meetings
- Transparency of methodologies: critical appraisal; systematic review; evidence synthesis; GRADE
- Merging expertise to eliminate redundancies
- Geographical applicability of gold standard evidence based methodology
- Essential role of frontline clinicians, content experts for incorporating scientific value judgments in localized recommendations.
Lessons for guideline developers, adapters, implementers, or users:

- Applicability, transparency of retrieval methodologies; evidence synthesis across international settings
- Implementation paradigms; integration of evidence within KP, specific workflows.

Background, Purpose (Introduction):
Guideline development is an important component of evidence-based medicine.

Context: In Turkey, one of the examples about guideline development is ‘CPGs for Primary Health Care‘, published by School of Public Health. These guidelines were sent out to all primary care health centers so many of the physicians could be able to use them at their practices. In order to assess the quality of guidelines, the AGREE Instrument was translated to Turkish by the Evidence Based Medicine Association. ‘CPGs for Primary Care‘ were evaluated by AGREE Criteria and according to this quality assessment; the domain scores, especially ‘rigour of development’ and ‘editorial independence’ were inadequate.

Description: The other guideline development studies are carried out by some associations like Turkish Thoracic Society, Turkish Society of Cardiology, and etc. There are two types of guideline development; new guidelines and Turkish translations. Translation guidelines have high quality but the numbers are limited. It isn’t possible to be translated all of guidelines. Also every country has own health system and priorities. That’s why the national guidelines are always more useful.

Lessons for guideline developers, adapters, implementers, or users: In Turkey there are some requirements for guideline development. First of all, an independence organization should be found. And other issue is qualified human resources. The physicians or the other technical personnel in the working groups should be trained about guideline development. They should follow the developments and adapt the suitable ones to the national guidelines and review the guidelines periodically. We believe that high quality national guidelines will also improve the quality of health care.
Oral 37

Use of wiki technology to develop and update cancer care guidelines

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Background, Purpose (Introduction) : Written cancer treatment guidelines are resource intensive particularly full systematic literature reviews for each revision, even expert authors volunteering their time. The need to widely circulate to stakeholders for input, while desirable, has also been problematic in delaying publication, which often makes guidelines out of date when they are published.

Context : Cancer Council Australia has been developing written clinical guidelines for the last 15 years. The organisation started looking into modern technological solutions to improve the process as well as the standard and consistency of clinical guidelines. Cancer Council Australia has implemented a wiki, based platform as the technical solution to address many of the issues.

Description : On the wiki platform, the guideline is divided into manageable chunks of information which can be linked and continuously updated. It is envisaged that there will be an annotation to each reference which will comment on the nature of the publication, its quality and whether or not it influenced the guideline recommendation. This will be part of the audit trail. Electronic literature searches will feed relevant papers into the wiki for the authors to consider. New available evidence can also be suggested by users visiting the site. Web, based guidelines are easily disseminated and continuous public consultation is an integral part of the process. Evaluation of the use of the guideline can also be built into the wiki.

Lessons for guideline developers, adapters, implementers, or users : Iterative development and testing is the key to success, Go for the simplest solution and never lose sight of the vision.
Oral 38

Formulating recommendations in the absence of evidence: time for more rigorous methods

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Background, Purpose (Introduction):
Rigorous methods have been developed to ensure that high quality evidence, based clinical practice guidelines (CPG) are developed. A number of systems are now available to develop graded CPG recommendations which take into account the quality of the evidence and other factors such as benefits vs. potential harm, context, cost, applicability, generalisability and implementability of recommendations. However, in reality, many guidelines are developed in areas where there is a paucity of evidence. More guidance is needed to assist developers in this area.

Objectives: To propose a more systematic approach to the formulation of clinical practice guideline recommendations in areas where the evidence base is poor or absent.

Methods: An audit of methods used to develop recommendations in ten CPG recently approved by the National Health and Medical Research Council of Australia was conducted. Comparisons were made to methodologies described in other key CPG development handbooks.

Results: The audit found that recommendations in CPGs can be categorised into three different types. Those that were developed when a systematic evidence review:
  a. identified good quality evidence.
  b. identified no or poor quality evidence.
  c. was not conducted.

Methods used to formulate recommendations in categories b. or c. described above ranged from formal consensus reaching processes to informal expert opinion. Differing nomenclature is also used for these types of recommendations. Current CPG development handbooks offer insufficient guidance in this area.

Discussion (Conclusion): Inconsistent approaches in formulating recommendations in areas of no or low level evidence undermines the credibility of CPG recommendations. More precise guidance is needed in this area to improve methodological rigour and enable users to assess the trustworthiness of guideline recommendations.

Implications for guideline developers, users: A clear, consistent and agreed approach to formulating recommendations in areas of no or low evidence will improve the overall quality of CPGs developed, and support its implementation and uptake.
Antivirals for Influenza:
Review of the Evidence from Observational Studies

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Background, Purpose (Introduction): Influenza virus infections cause major health and economic burden worldwide. The World Health Organization (WHO) estimates the average global burden of inter, pandemic influenza to be on the order of ~1 billion cases of flu, ~3-5 million cases of severe illness and 300 000-500 000 deaths annually. While prevention by immunization may be an effective strategy, pharmacological treatment and prevention has been a mainstay of influenza management. Antivirals, such as neuroamindase inhibitors (oseltamivir and zanamivir) and M2 ion channel blockers or amantadanes (amantadine and rimantadine) are currently available for treatment.

In February 2010 the WHO updated guidelines for the treatment of influenza and these guidelines are currently being used world-wide. The evidence about the effects and safety of these anti-viral agents continues to grow and in 2010, Jefferson and colleagues reviewed the randomised controlled trial (RCT) literature to inform treatment decisions. While, in theory, the best evidence for healthcare decisions comes from RCTs, there is concern about the quality of the body of evidence across these RCTs that are, in part, based on the lack of precision about the effect estimates and the lack of evidence for certain health outcomes. However, the conduct of systematic reviews of observational studies for organizations such as WHO bears many challenges, including the assessment of the quality of evidence using the GRADE approach. Despite the challenges of conducting systematic reviews of observational studies, we undertook a WHO, commissioned review of the evidence from observational studies to inform WHO guidelines and the WHO essential medicine list about the pharmacological treatment of influenza.

Objectives:
- Learn about using GRADE for observational studies
- Learn about comparing RCT Evidence with that of observational studies
- Learn about the challenge of summarizing observational study evidence

Methods: We used standard systematic review literature based on the formulation of
questions that would directly allow the formulation of recommendations and assessment of pharmacological interventions. We evaluated the quality of evidence using the GRADE approach.

**Results**: We found very low to low quality evidence focusing on the efficacy of four major pharmacological interventions. However, this evidence may be of equal or higher quality compared to that of RCTs for some of the interventions. We successfully used the GRADE approach to assess the quality of evidence for observational studies and prepared GRADE evidence profiles for each of the PICO questions to inform the WHO essential medicine list and the WHO committee that prepares guidelines for the pharmacological management of influenza.

**Discussion (Conclusion)**: The quality of evidence from observational studies may be equivalent to that of RCTs. Guideline panels face challenges of integrating this type of conflicting evidence and need, under those circumstances, pay increased attention to make transparent decisions that integrate the quality of evidence, the balance of benefits and downsides, values and preferences and resource use. These challenges will be discussed during this presentation.

**Implications for guideline developers, users**: The approach can be used as a model for other guidelines.

**Background, Purpose (Introduction)**: When the clinicians or healthcare professionals are to make decisions, they can judge the quality of evidence and reliability of recommendations by ‘Level of evidence’ and ‘Grade of recommendation’. Because of this, the step of grading evidence and recommendations are very important in developing CPGs.
Objectives: To identify the various grading systems and criterion of the CPGs.

Methods: We reviewed guidelines and analyzed all the grading systems that are in guidelines. The processes of analysis are of following: First, every grading systems are collected and listed by reviewing the guidelines on National Guideline Clearinghouse, CPGs database that are running by U.S. Agency for Healthcare Research and Quality; Second, comparison among grading systems and criterion by organizations are carried out; Third, grading systems are categorized by similar criterion. Then, we analyzed current situation of CPGs development organizations and published guidelines.

Results: The grading systems for 'Level of evidence' and 'Grade of recommendation' are categorized in 4 categories each. To grade evidences 'study design', 'study quality', 'consistency', 'limitation', 'strength of evidence' and 'validity' are considered as criterion. And 'level, quality of evidence', 'strength of recommendations', 'study quality', 'consistency', 'applicability', 'balance between benefit and harm' and 'effectiveness, usefulness' are considered to grade of recommendations in grading systems.

Discussion(Conclusion): The formal grading system based on consistent and clear approaches is needed, because the process of grading work can be subjective when CPGs users are in decision making.

Implications for guideline developers,users: It is necessary for CPGs developers to have a common criterion so that they can judge the grade of evidence and recommendations objectively in development CPGs.

Background, Purpose(Introduction): Guidelines are not merely used by health professionals and patients; insurers and governments regard guidelines as tools for assess-
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Incorporating economic considerations into guidelines: systematic review of economic evaluations of interventions against influenza pandemics

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Incorporating economic considerations into guidelines: systematic review of economic evaluations of interventions against influenza pandemics

Objectives: Do guidelines include cost considerations, why (not), can they contribute to cost containment?

Methods: 62 guidelines on 25 diseases were analysed using the AGREE, instrument extended with 4 additional health economics topics. The analysis was carried out by at least 2 HTA, experts (in addition to 2 others). Differences > 1 were discussed by the researchers until consensus was reached. Furthermore 20 semi, structured interviews were carried out using a topic list to establish how guidelines were drawn up and which factors were taken into consideration.

Results: One third of the guidelines pays explicit attention to cost effectiveness, scores ranging between 0 and 33% (one exception of 75%). So even if a guideline pays attention to cost effectiveness it is limited. Cost effectiveness was considered informally in the other guidelines. Reasons for not including cost effectiveness mainly are: no or limited evidence, especially concerning organisation or collaboration of care, and the absence of cost considerations when defining starting questions.

Discussion(Conclusion): Should health economics and cost effectiveness play a role when prioritising the issues the guideline should address? If these subjects are integral part of guideline development, whose accountability is it and how to deal with cost implications when there is no national guideline programme?

Implications for guideline developers, users: A broader responsibility, not only concerning the quality of healthcare but also its affordability.
Background, Purpose (Introduction): Although public health guidelines have implications for resource allocation, these issues were not explicitly considered in the World Health Organization’s (WHO) pandemic influenza guidance.

Objectives:
1. Review and incorporate economic evidence into WHO guidance.
2. Provide recommendations on future research.

Methods: 10 databases, 2 search engines, references screening, and contact with authors were used. Full and partial economic evaluations considering both costs and outcomes were included. Reviews, editorials, and studies on economic impact or complications were excluded.

Results: 30 studies were included. Most studies adopted cost, effectiveness and cost, utility approaches. Although most complied with cost, effectiveness guidelines, the quality of evidence was limited. Vaccination protocols and drug regimens were varied. Pharmaceutical plus non-pharmaceutical interventions are relatively cost, effective versus vaccines and/or antivirals alone. Pharmaceutical interventions vary from cost, saving to high cost, effectiveness ratios. According to ceiling thresholds (Gross National Income per capita), reduction of non-essential contacts and pharmaceutical prophylaxis plus school closure are amongst cost, effective strategies for all countries. However, quarantine for household contacts is not cost, effective even for low, and middle, income countries.

Discussion (Conclusion): Although incorporating economic considerations into public health guidelines constitutes a robust case, evidence was limited. Experts should agree on certain parameters. Moreover, studies on interventions should be readily implemented in forthcoming events. Finally, guidelines for assessing impact of disease and relevant interventions should facilitate these studies.

Implications for guideline developers, users: This study aimed to help WHO incorporate resource implications in their guidance. Despite limited evidence and difficulties in universal cost, effectiveness recommendations, it is still important to raise awareness on economic issues among member countries by presenting state, of, the, art economic evidence.
Implementing clinical guidelines on Integrated Management of Childhood Illnesses (IMCI) for first level health providers working in a resource, poor setting: early findings from rural Bangladesh

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Background, Purpose (Introduction):
Bangladesh has recently implemented the Integrated Management of Childhood Illnesses (IMCI) approach to combat high child mortality. As part of this approach, rural non-physician providers use evidence-based clinical guidelines. This research evaluated these guidelines in the resource poor health system of Bangladesh.

Objectives: To assess health providers’ compliance with IMCI guidelines.

Methods: Case management by IMCI trained and untrained workers was observed in real, time in all the health posts within 20 Unions, the lowest administrative unit, participating in a cluster randomised trial evaluating the IMCI approach in rural Bangladesh.

Results: Findings regarding the action points listed for the clinical assessment module of the guidelines are presented here. IMCI trained providers complied substantially more with the guidelines compared with their untrained counterparts. The high, compliance action points included recording body, weight and level of consciousness, and asking about the child’s ability to drink, continue breastfeeding, or whether the child had vomiting or had cough, difficult breathing. Similar proportions of both groups asked about convulsion and recorded body temperature. Very few children in either group were examined for severe wasting, palmar pallor, or leg oedema, or had growth, monitoring.

Discussion (Conclusion): These findings show overall good compliance by IMCI trained providers and identify the action points with good, no, or low compliance. Low compliance rates for actions requiring physical examination are noteworthy.

Implications for guideline developers, users: Guideline developers and implementers need to determine whether this variation in compliance is due to the structure of the guidelines or issues such as workload or lack of support from the health system.
Oral 44

Improved care for patients with non, small cell lung carcinoma (NSCLC) after guideline implementation and monitoring in the Netherlands

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Background, Purpose (Introduction) : CCC coordinated the development, implementation and evaluation of the evidence based guideline on NSCLC (www.oncoline.nl).

Objectives : Implementation of the guideline NSCLC and improved quality of care.

Methods : A national expert team formulated indicators based on the recommendations in the guideline NSCLC about the organisation and accessibility of care. These indicators were registered by the hospital teams using a web based system. CCC supported the teams with workshops to improve their process of care. The project started in October 2008 and ended in May 2010.

Results : In this project 51 out of 100 Dutch hospitals participated and 3645 NSCLC patients were registered. This provided hospital teams direct insight in their actual care processes and was used to improve their activities during the project. The indicators were compared for the first and the second nine months of the project period. The mean waiting time to the first hospital visit reduced significantly from 4 to 3 days. A significant reduction in days, from 24 to 21, was achieved to diagnose patients and set up a treatment plan. At the end of the project 39 hospitals discussed more then 80% of the patients in a multi disciplinary team meeting. More patients were seen by an oncology nurse for psychosocial care.

Discussion (Conclusion) : This project showed improvements in lung cancer care. Challenges for further improvement lay in reduction of waiting time to treatment and screening of need for psychosocial care.

Implications for guideline developers, users : A web based monitoring system is of great value to provide direct insight in guideline adherence and actual delivered care.
Implementing Evidence, Based Guidelines in Sinusitis and Otitis Media by Iranian Otolaryngologists

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**Background, Purpose (Introduction)**: Evidence-based guidelines are one of the most important approaches to develop a good clinical behavior. Evidence-based guidelines are based on the last updated systematic reviews and clinical trials.

**Objectives**: This study aimed to evaluate the rate of implementation of guidelines in sinusitis and pediatric acute otitis media by Iranian otolaryngologists.

**Methods**: Using a questionnaire including two clinical scenarios about sinusitis and otitis media, data were obtained from 120 otolaryngologists, attended in the meeting of Iranian Society of Otolaryngology Surgeons in 2009. Suggested diagnosis or treatment methods of participants were surveyed.

**Results**: In acute sinusitis, 19.2% of otolaryngologists had guideline-based behavior while 69.2% advised antibiotics for an uncomplicated condition. Guideline was the main practical reference for 27.5% of otolaryngologists while 24.2% preferred textbooks and 44.2% journals’ RCTs. RCTs were chosen as the best level of evidence by 57.5% of participants but 15.8% chose systematic reviews. The rate of being familiar with databases was: Cochrane 10.8%, TRIP 1.7%, Pubmed 44.2% and Google, Scholar 38.2%.

**Discussion (Conclusion)**: It seems most of participants were not familiar with evidence-based guidelines and this may decrease the rate of implementation evidence-based methods in treatment. They also do not have enough information about levels of evidence as they prefer RCTs to systematic reviews. They also had a same situation toward evidence databases.

**Implications for guideline developers, users**: It seems producing and introducing national evidence-based guidelines is necessary under clinical governance supervision in Iran.

**Background, Purpose (Introduction)**: Health
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Concepts for Applying High, Value, Cost, Conscious Health Care from the American College of Physicians (ACP)

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care costs are rising unsustainably and one of the major drivers is the overuse and misuse of services that are not recommended. Therefore it is necessary to cut costs while continuing to provide valuable medical services.

Objectives: The goal of ACP’s Best Practice Advice is to help clinicians evaluate the value of interventions by looking collectively at the balance of benefits, harms, and costs.

Methods: Literature on cost, effective analysis, comparative effectiveness research, and randomized controlled trials was reviewed and discussed in this conceptual paper.

Results: Three key concepts for understanding how to assess value include:
1. Assessment of benefits, harms and costs of intervention to determine value
2. Consideration of downstream costs and savings that result from intervention in cost assessment
3. Use of the incremental cost effectiveness ratio to measure additional cost required to obtain additional health benefit

A cost, effectiveness threshold can be used to choose between beneficial interventions that differ in cost, but this threshold varies according to the decision maker’s resources and values.

Discussion(Conclusion): ACP recommends the following points for implementing high, value, cost, conscious health care:
1. Eliminate interventions that provide no benefit and can be harmful regardless of the cost.
2. Provide interventions that are both effective and decrease costs.
3. Use cost effective analysis to assess value of interventions that provide additional benefit at additional cost.

Implications for guideline developers, users: ACP will continue to produce Best Practice Advice papers on various clinical topics where misuse or overuse of medical interventions is evident to help guide clinicians in implementing high, value, cost, conscious care.
Developing National Institute for Health and Clinical Excellence Quality Standards for the NHS in England: chronic kidney disease as a case study

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Background, Purpose (Introduction)

National Institute for Health and Clinical Excellence established a Quality Standards programme in 2009. The NHS White Paper 'Equity and Excellence: Liberating the NHS (2010) sees National Institute for Health and Clinical Excellence’s quality standards as crucial to the delivery of a high quality outcomes focused NHS in England and proposes that up to 150 of these are developed by National Institute for Health and Clinical Excellence over 5 years. A quality standard is a set of specific, concise statements that: act as markers of high, quality, cost, effective patient care across a pathway or clinical area, are derived from the best available evidence and are produced collaboratively with the NHS and social care. Each quality standard has a set of 10, 15 descriptive quality statements of the key infrastructural and clinical requirements for high, quality care and a set of quality measures that allow achievement against the quality statements to be measured.

Objectives

Understand National Institute for Health and Clinical Excellence’s methodology of using clinical guideline recommendations to develop quality standards using chronic kidney disease (CKD) as a case study.

Methods

Overview of how National Institute for Health and Clinical Excellence used evidence, based clinical guideline recommendations to develop a quality standard for CKD incorporating quality statements, measures and audience descriptors for healthcare professionals, service providers, commissioners and patients.

Results

A quality standard addressing the full care pathway for CKD in adults, from identification to established renal failure, has been published.

Discussion (Conclusion)

National Institute for Health and Clinical Excellence’s experience of developing quality standards based on clinical guideline recommendations will be discussed using the CKD quality standard.

Implications for guideline developers, users

Key issues national guideline developers need to consider when linking their work to quality standard development will be discussed based on learning from the CKD quality standard.
Background, Purpose (Introduction): Previous work has established that specific linguistic markers present in clinical guidelines can be used to support their automatic structuring within a document engineering environment.

Objectives: In this study, we explore the readability of clinical guidelines. We discuss a structural measure of document readability that exploits the ratio between these linguistic markers (deontic structures) and the remainder of the text.

Methods: We describe an experiment in which a corpus of 10 French clinical guidelines is scored for structural readability. We correlate these scores with measures of textual cohesion (computed using latent semantic analysis) and the results of a readability survey performed by a panel of domain experts.

Results: Our results suggest an association between the density of deontic structures in a clinical guideline and its overall readability. This implies that certain generic readability measures can henceforth be utilised in our document engineering environment.

Discussion (Conclusion): The purpose of this study was to confirm an intuition common amongst users of the G, DEE document engineering platform that the best quality clinical guidelines are those authored around the structure imposed by recommendations.

Implications for guideline developers, users: We plan to develop a lightweight plug-in for G, DEE that tracks normalised deontic frequency throughout the elaboration of a clinical guideline. This plug-in will provide a real-time, impartial indication of the quality, readability of a guideline that can be used to steer the iterative authoring process.
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*Implementation of the NVOG, guideline on PPH and the MOET, instructions: barriers and facilitators amongst professionals and patients*

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**Background, Purpose (Introduction)**: Post partum haemorrhagia (PPH) is defined as blood loss of more than 1000ml per 24 hours during and after delivery.

**Objectives**: The objective of this study is to detect barriers and facilitators amongst professionals involved in the implementation of the NVOG, guideline on PPH and the MOET instructions and among patients. Quantify

**Methods**: We analyzed barriers for guideline adherence by focus group interviews among groups of different professionals involved in the care for PPH, patients (gynecologists, gynecologists in training, midwives and nurses). Patient experiences were analyzed by a semi-structured interview. In order to quantify the barriers we sent a questionnaire to all professionals involved in PPH care.

**Results**: The most important barrier for guideline adherence was not having a flow-chart or checklist available in the delivery rooms about PPH care. Almost 60 percent of the respondents claimed that there is a need for more skills and drills in their hospital.

**Discussion (Conclusion)**: This study resulted in a list of factors that should be improved for better guideline adherence in the Netherlands.

**Implications for guideline developers, users**: Dutch guideline developers should take into account the barriers and facilitators resulting from this study when developing and implementing a guideline about PPH.
Background, Purpose (Introduction): The multidisciplinary guideline ‘Cancer Rehabilitation’ enables health professionals to support cancer patients with timely, effective and tailored cancer rehabilitation. Since oncology care is provided by many different disciplines, we used innovative methods to maximize their involvement in the development and dissemination of the guideline.

Objectives: To describe innovative methods to involve professionals and patients in the development and dissemination of the guideline ‘Cancer rehabilitation’.

Methods: The innovative methods included an Open Space conference with cancer patients. An online survey in a multidisciplinary group of professionals both to identify and prioritize key questions and for peer review of the guideline. In, depth review by (inter) national experts in interactive workshops. Finally, we will use e, learning for dissemination of the guideline recommendations among professionals.

Results: Seventeen patients participated in the Open space conference. We collected their recommendations regarding cancer rehabilitation during and after curative, palliative treatment. The online survey for problem analysis was filled in by a multidisciplinary group of 501 professionals. Based on the input of both patients and professionals ten key questions were identified and described. The online survey for peer review of the guideline was filled in by 61 professionals. A total of 285 professionals participated in the interactive review workshops. A web, based e, learning programme for professionals will be available in June 2011.

Discussion (Conclusion): The innovative methods were very effective in consulting and involving patients and a multidisciplinary group of professionals, resulting in a broadly supported multidisciplinary guideline with recommendations for screening, intake and tailored rehabilitation.

Implications for guideline developers, users: These innovative methods are useful for other guideline developers.
Patient involvement in clinical practice guideline – methodological approach

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Background, Purpose (Introduction): Strategies for patient involvement in Clinical Practice Guidelines (CPG) are essential to achieve quality patient, oriented CPGs. The method proposed is based on our experience in four CPGs included in Spanish National CPG Development Program (GuíaSalud).

Objectives: To describe method used for patient involvement that includes both patient consultation and participation.

Methods: Patient consultation in CPG preparation phase combined quantitative and qualitative primary research techniques as well as a systematic review of patient perspective studies. In, depth interview and discussion group were used with patients and professionals, through a previously designed script. Participant’s selection was based on a typological and socio, structural classification. NVivo8 Software was used to analyze qualitative data.

Results: Through methods described patients provided relevant information on their perspectives, experiences with the illness, social circumstances, habits, values and preferences regarding the disorders of the developed CPG, anxiety, insomnia, autism and stroke. They collaborated in setting the scope, defining key questions, reviewing recommendations, developing patients' versions and disseminating CPGs.

Discussion (Conclusion): This strategy allows patient, oriented CPG development, but it requires an appropriate training and knowledge of qualitative research techniques for developers. It is also crucial a specific support for patients to facilitate an effective engagement.

Implications for guideline developers, users: Patient involvement, including patient consultation and patient participation, is feasible if taking into account minimum requirements including training and support for both, patients and professionals. Our work supposes the beginning of a larger country, specific initiative in patient involvement.
Usability testing of clinical guidelines

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**Background, Purpose (Introduction)**: The Norwegian Electronic Health Library (NEHL) published web-based guidelines for stroke. We performed a usability test in 2010 before publishing more clinical guidelines.

**Objectives**: To improve functionality, navigation and user experience, through usability testing of web-based guidelines.

**Methods**: Nurses, GPs, cardiologist and physiotherapist participated. An instructor was sitting with each test person while they solved general and clinical questions. In another room observers listened, watched video, followed eye, tracking and the screen from the test person's PC.

**Results**: The web-based guideline was perceived as useful and reliable. Heatmap of the opening page shows focus at the menu and headlines. In the guideline chapters the structured recommendations, separated from the text, got most attention.

Menu at the top of every page that follows the clinical pathway was liked and used. Font size should be increased to 13 – 15 pixels for body text and line distance to 1.3 x the font size.

Links to explanation for level of evidence were understood, but they wanted links to the evidence for each recommendation. Links must be self-explanatory like

**Discussion (Conclusion)**: The results of usability test were positive and are used to teach other guideline developers, but also led to improvements. Web-based guidelines are useful for clinicians.

**Implications for guideline developers, users**: Other guideline developers can use NEHL’s publishing solution and results when publishing clinical guidelines.
Oral 53

A systematic review of disease specific ethical issues in dementia and chronic kidney disease. A new component for guideline development manuals?

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**Background, Purpose (Introduction):** Clinical practice guidelines (CPG) aim to improve standards of clinical competence. CPG development manuals fail, however, in addressing methods for the systematic and transparent integration of disease specific ethical issues (DSEI). DSEI are deeply intertwined with the concepts of clinical competence and professionalism.

**Objectives:** To develop a theoretically saturated framework of DSEI for dementia and chronic kidney disease (CKD).

**Methods:** A systematic review of ethics literature on dementia and CKD was performed. The included literature was then analyzed qualitatively in order to develop a theoretically saturated framework of DSEI.

**Results:** 57 references for dementia and 32 references for CKD were included in the qualitative analysis, which produced 26,18 DSEI for dementia, CKD. For both diseases all DSEI could be grouped under 7 main categories (indication, patient information, patient decision making competence, proxy decisions, social and context related aspects, clinical conduct, and evaluation). We present the DSEI frameworks and discuss further methodological approaches for using these frameworks in CPG development.

**Discussion (Conclusion):** Systematic reviews of DSEI together with thematic analysis provide the scope of DSEI. Such DSEI frameworks should build the basis for a systematic and transparent integration of DSEI in CPGs.

**Implications for guideline developers, users:** Further research needs to clarify how guideline development groups should select the most relevant DSEI and then draft ethical recommendations in a systematic and transparent manner.
Guideline for guidelines: are they up to the task?
A comparative review of guideline development strategies

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Background, Purpose (Introduction): We conducted a comparative review of guideline development handbooks in order to design a plan for development of national CPGs in Iran.

Objectives: To assess the methods and approaches adopted by established guideline development programs.

Methods: We conducted systematic searches and included handbooks produced by national, international, professional or academic bodies responsible for evidenced, based CPG development published in English. We reviewed all the handbooks to identify the main tasks that contribute to the CPG development, analyzed each handbook and assigned a classification score to each task: 2+ (the task suitably addressed and explained), 1+ (the task briefly described), and 0 (the handbook did not mention the task). The tasks included in over 75% of the handbooks were considered as 'necessary' tasks.

Results: Seventeen handbooks and twenty five main tasks were identified. Necessary tasks are: selecting the topic, determining the scope, involving the consumers, forming a GDG, running GDG, systematic search, Identifying the evidence, appraising researches, synthesis and analysis, consensus development, creating recommendations, final consultation, implementation strategy, updating and correcting errors are necessary tasks. Only four programs scored over 35.

Discussion (Conclusion): Adequate details for evidence based development of guidelines were still lacking from many 'handbooks'. The tasks relevant to 'ethical issues', 'identifying exciting CPGs', and 'piloting' were missing in most handbooks.

Implications for guideline developers, users: The findings help decision makers in identifying the necessary tasks for guideline development and provide an updated comparative list of guideline development handbooks to choose among them, and provide a checklist to assess the comprehensiveness of guideline development processes.
Oral 56

Framing for Prevention: Implementing the GRADE approach to support the development of evidence, based clinical preventive guidelines

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Background, Purpose (Introduction): Primary care practitioners are faced with determining which screening or preventive interventions to offer their patients. The Canadian Task Force on Preventive Health Care is currently integrating the GRADE approach to assist in our methods for guideline production.

Objectives: We implemented the GRADE approach to assist in the methods for evidence, based clinical preventive guideline development.

Methods: Unique methodology challenges can arise in the development of clinical preventive guidelines. We will discuss how the Canadian Task Force is addressing these challenges to ensure a transparent and rigorous systematic review and guideline development process.

Results: Key challenges of integrating the GRADE approach for preventive guidelines include framing and focusing research questions, developing an approach for weighing benefits and risks of screening interventions, and differentiating high risk versus low risk populations to help tailor screening recommendations and clinical considerations. We will provide examples of how we addressed these challenges in relation to our protocol development for Breast Cancer, Diabetes, Hypertension, Cervical Cancer, and Depression.

Discussion (Conclusion): Ensuring that key questions are framed and answered according to a transparent process; focusing on clinically important outcomes; and (where possible) prioritizing effectiveness rather than efficacy are important to ensure that guidelines for clinical preventive care are balanced.

Implications for guideline developers, users: the GRADE approach provides methods that can assist in the development of clinical preventive guidelines.
Background, Purpose (Introduction): Clinical practice guideline is a systematically developed statement to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances. Many clinical practice guidelines (CPG) in traditional Chinese medicine, initiated by World Health Organization, Western Pacific Regional Office, were developed during last five years.

Objectives: The challenges are as follows: i) Who need CPG of TCM? ii) Whether CPG of TCM has been used in practice? iii) Whether CPG of TCM can improve the quality of clinical practice? iv) Whether CPG of TCM has been developed following the guideline of developing CPG? v) Whether the best evidence has been combined in the CPG of TCM? vi) Whether CPGs of TCM were developed by a well trained group? vii) Whether CPGs of TCM were updated on time? viii) Whether CPG of TCM promoted proper cost, effective use of TCM in clinical practice?

Based on the developed CPGs of TCM and those challenges, the future direction of CPG of TCM may be as follows: i) Clinical applicability and clinical flexibility should be the first point to be considered; ii) To increase the reliability of CPG of TCM; iii) To generate the high quality evidence about safety and efficacy is the important step for development of CPGs of TCM; iv) To conduct systematic review about the classic literature and analysis the evidence based on a acceptable scoring system; v) To evaluate the evidence systematically from the clinical and non-clinical aspects; and vi) To promote the CPG of TCM in practice.

Target Audiences: Guideline developer
Evaluation of Japanese clinical practice guidelines based on Kampo descriptions

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**Background, Purpose (Introduction)**: Kampo medicines (hereafter “Kampo”) are used by approximately 86% of medical doctors in Japan. However, it is unclear how Kampo is cited and described in current clinical practice guidelines (CPGs).

**Objectives**: Our aim was to systematically review Japanese CPGs and Kampo descriptions therein.

**Target Audiences**: Guideline developer

**Description**: Materials and Methods: We reviewed a quasi, comprehensive list of Japanese CPGs available through the Toho University Medical Media Center (TUMMC), the largest Japanese CPG database available. We also performed hand searches. CPGs citing Kampo products were classified into three types: type A—CPGs that provide evidence, based recommendations; type B—CPGs that cite references but do not provide recommendations; and type C—CPGs that describe Kampo practice or Kampo, related terms without citing relevant references.

**Results**: By March 2010, 51 of 528 CPGs listed in TUMMC contained descriptions of Kampo products. One Kampo, related CPG was identified by hand search. Of these 52 CPGs, 8 were type A, 19 were type B, and 25 were type C. Type A included CPGs for psychosomatic disease, cataracts, allergic rhinitis, bronchial asthma, acne, male lower urinary tract symptoms, nocturnal pollakiuria, and chronic headache; type B included CPGs for hepatocellular carcinoma, Alzheimer, type dementia, hypertension, cerebrovascular disorder, and others; and type C included CPGs for breast cancer, diabetes mellitus, cancer pain, and others.

Conclusions: The citation rate of Kampo in CPGs was approximately 10%. Given the few evidence, based recommendation, containing CPGs, we suggest that CPG developers should systematically search for Kampo, related randomized controlled trials.
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Conclusions: The citation rate of Kampo in CPGs was approximately 10%. Given the few evidence, based recommendation, containing CPGs, we suggest that CPG developers should systematically search for Kampo, related randomized controlled trials.
Background,Purpose(Introduction) : Practice Guidelines enable to improve the quality of treatment of health care problems.

Objectives : This study is the first in our research agenda about guideline adherence during OOH.

Methods : The guidelines on uncomplicated Lower Urinary Tract Infections (LUTI) in healthy females are easy to summarize and study. As a first project on international guideline adherence during OOH we choose national guidelines on uncomplicated LUTI in 8 European countries (Belgium, Denmark, Germany, Norway, the Netherlands, Slovenia, Spain and Switzerland). In this first part we summarize, compare and develop theories on the causes of similarities and differences between practice guidelines on the diagnosis and treatment of LUTI.

Results : Most countries use one national guideline on LUTI. None of the countries use specific guidelines for use during OOH care. 7 out of 8 countries do not recommend any clinical nor technical examination for simple cases. Most guidelines (7 out of 8) recommend treatment with trimethoprim, whether with or without sulfamethoxazole, or nitrofurantoin as first choice.

Discussion(Conclusion) : Guidelines on LUTI are very similar in the countries we studied.

Implications for guideline developers,users : Differences in diagnoses can be caused by different health care settings, e.g. the possibility of telephone consultation. Different treatments can be explained by differences in availability of and local resistance against antibiotics and by established local patterns in prescription.
Using a Community of Practice model to implement clinical guidelines in Australia

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**Background, Purpose (Introduction)**: The National Institute of Clinical Studies (NICS) established a Community of Practice (CoP) in 2003 with an aim to increase the uptake of evidence and improving the quality of patient care in the Australian emergency care sector. CoPs have been defined as “groups of people who share a concern, a set of problems, or a passion about a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis”.

**Context**: The Australian emergency care sector was identified as a priority given the clinical pressures including high demand, a diversified clinical knowledge base which is rapidly changing, and a large presentation of high acuity patients.

**Description**: The Emergency Care CoP is coordinated by NICS and advised by national emergency care leaders. Through close collaboration with the clinical community, the CoP has engaged over 70% of the ED’s nationally to participate in a range of activities to support guideline implementation. These national projects have demonstrated improved clinical outcomes, informed practice standards and policy, and the development of tailored implementation resources.

To support the clinical community a range of communication strategies were used including the establishment of web based knowledge gateway to share resources, monthly newsletters, and regular teleconferences.

**Lessons for guideline developers, adapters, implementers, or users**: Working collaboratively with clinical communities has been effective in terms of harnessing the resources of the community, demonstrating improved clinical outcomes and development of implementation expertise across a sector of health care.
Oral 62

**Using evidence to stop inappropriate practice: National Institute for Health and Clinical Excellence and Cochrane work together.**

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**Background,Purpose(Introduction):**
Cochrane reviews provide quality assessments of RCT evidence evaluating healthcare interventions. A proportion of reviews conclude that an intervention should be used only in research or should not be used.

**Objectives:** In response to financial pressures facing the NHS, National Institute for Health and Clinical Excellence and the Cochrane Collaboration undertook a project to explore the potential of using Cochrane reviews to identify and promote disinvestment candidates.

**Methods:** Over five months newly published Cochrane reviews concluding that an intervention could not be recommended were assessed by National Institute for Health and Clinical Excellence against four domains: quality of care; patient and carer experience; patient safety; and productivity savings. Reviews were excluded if the intervention: a) was not relevant to UK practice; b) required additional investigation; c) was unlikely to achieve gains in any domains.

**Results:** Of the 65 reviews appraised, only 43% provided candidate interventions for local disinvestment. Many interventions were no longer in use following successful implementation of National Institute for Health and Clinical Excellence guidelines. Quantification of potential productivity savings was difficult due to the absence of NHS usage data. Most had insufficient evidence for their efficacy making a disinvestment recommendation inappropriate and occasionally potentially harmful in the absence of a robust national decision, making process.

**Discussion(Conclusion):** Using existing systematic reviews to identify disinvestment candidates is an attractive proposition, but highlights the importance of having a robust process to evaluate interventions in the event of inadequate or insufficient evidence.

**Implications for guideline developers,users:** Encouraging guideline developers to identify inappropriate practices as opportunities for disinvestment is likely to be more productive than relying on systematic reviews alone.
Oral 63

Safety (norms) in guidelines; handle with care?

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Background, Purpose (Introduction): An important question for policy makers is whether guidelines can be used for the external governance of safe care.

Objectives: To establish the potential of guidelines, based risk governance.

Methods: As part of a mixed, method study, 18 guidelines for high, risk diagnosis were qualitatively analysed and 62 guidelines for the top, 25 diagnoses were analysed with an adjusted version of the AGREE instrument, to see how they address patient safety. Analysis of guideline texts was complemented with a literature study and 20 semi, structured interviews with guideline developers.

Results: Recommendations can at present rarely be used as safety norms as the strength of the recommendation is insufficiently clear. It is often unclear whether a recommendation concerns a minimum safety norm, a consideration or a conditional norm. This does not point to the absence of safety in guidelines: 66% of the guidelines attain a AGREE score of greater than 60% on safety. This score is explained by the increased attention for safety in healthcare in general and by safety being an integral part of delivering care.

Discussion (Conclusion): For simple risks safety norms could be made explicit in guidelines by clarifying the wording of recommendations. For complex, uncertain or ambiguous risks a more open and flexible wording of recommendations is advised as norm, setting is unproductive and even dangerous. Guidelines are therefore insufficient tools for the governance of safety but could play a larger role than they presently do.

Implications for guideline developers, users: Differentiate between simple and other risks to develop guidelines as partial risk, governance tools. Acknowledge the limitations of guidelines for ensuring bottom line safety.
Background, Purpose (Introduction): Guidelines have been criticized for not being evidence-based enough and lamented for their lack of influence on clinicians. Others criticize them for neglecting organizational, cultural, financial or ethical considerations and for their threat to clinicians’ autonomy and skill. G-I-N has emerged as an important actor in trying to solve the puzzle of how to produce guidelines that follow EBM tenets, satisfy quality improvement ideals and are acceptable to and useable by clinicians.

Objectives: To examine the ways that legitimate and acceptable guidelines are produced amidst high expectations and diverse critiques. What instruments and ideals are developed to that purpose?

Methods: Qualitative methods; document analysis; participant observation at G-I-N conferences 2007, 2010, as a G-I-N Public member and at related projects (AGREE, ADAPTE); interviews with G-I-N founders.

Results: G-I-N and its related projects have created a level of meta-standardization for guideline development. This meta-standardization does not globalize guidelines, but has created ‘guidelines for guidelines’. By developing an internationally valid guideline development methodology, G-I-N exerts a regulatory and legitimizing role for guideline developers all over the world.

Discussion (Conclusion): G-I-N’s meta-standardization has consequences for the direction of EBM, debates, and possible future challenges for G-I-N will be discussed.

Implications for guideline developers, users: G-I-N provides legitimacy and justifications for guideline developers and this may be the first step towards their formal professionalization. Yet, G-I-N also exerts normative influence and by standardizing guideline developers’ procedures it reduces their room to maneuver.
Guidelines development in the social care sector grounded on experience

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Background, Purpose (Introduction) : The development of practice guidelines (PG) in the social care sector encompasses specific challenges. Methods for developing PG are still unclear.

Objectives : To present a process of PG elaboration in the social care sector.

Methods : A multidisciplinary committee was asked to share their knowledge and their own experience in the development of PG. The eight three-hour meetings were recorded and transcribed. Grounded, theory qualitative research methods were applied to identify units of meaning. These units were grouped and connected through the technical design of a cognitive map. This map was validated by the committee and a consensus was reached. A literature search was then performed to compare the results from the cognitive map with the processes documented in the literature.

Results : Three critical stages in the production of a GP were identified: 1) the analysis of the needs and priorities and the decision to produce a guideline and invest the resources to implement; 2) the collection and synthesis of various types of data: scientific evidence, grey literature, contextual data, and knowledge or experience of experts including users; 3) the implementation and the evaluation. The literature echoed most of the issues discussed by the committee.

Discussion (Conclusion) : A shared vision about principles, process, and content related to PG aroused from the committee process. The method allowed developing a guide and cognitive map describing the process of PG development in the social care sector.

Implications for guideline developers, users: These tools will be useful to assist in the development of PG in social care.
Declaration of conflicts of interest in German clinical practice guidelines

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Background, Purpose (Introduction): A former analysis of 200 German guidelines in August 2009 showed that only 5% contain specific information on the results of conflicts of interest declarations of the authors [1].

Objectives: The objective of this recent analysis is to provide answers to the following questions: 1.) What proportion of guidelines published between 08, 2009 and 11, 2010 contains information on conflicts of interest of the authors? 2.) Which kind of relations and circumstances are disclosed in current German guidelines up to 11, 2010? 3.) How were conflicts of interest handled?

Methods: For appraisal Criterium 23 of the German Guideline Appraisal Instrument (DELBI), which is based on AGREE, was used. All guidelines were examined by two reviewers independently. The results were summarised with the analysis from 2009 [1]. Information on conflicts of interest of the authors was extracted and assessed quantitatively.

Results: 24% of the guidelines published between 08, 2009 and 11, 2010 (n=57) contain information on conflicts of interests of the authors. The portion of valid guidelines with declaration of conflicts of interests rose from 5% (2009) to 10%. The most frequent relations were speaker honorarium (29.6%), consultancy (28.3%), and research support (21.1%). No guidelines reported that an author was assessed to be potentially biased, indicating consequences to the development process.

Discussion (Conclusion): Declaration of conflicts of interests in German guidelines has increased but is still at an insufficient level. Relations and circumstances which point to conflicts of interests are common among guideline authors.

Implications for guideline developers, users: Standards should be developed for the assessment and the management of conflicts of interests in guidelines.
New “GRADE” based methods to assist in the development of evidence, based clinical guidelines for immigrants and refugees

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Background, Purpose (Introduction): There is often a need for evidence, based clinical guidelines explicitly developed for vulnerable populations. Evidence to evaluate the benefits and harms of interventions for vulnerable populations is often difficult to find, or does not exist. This presentation will report on the evidence review and guideline development methodology that was designed by the Canadian Collaborative for Immigrant and Refugee Health Guideline Committee.

Objectives: We aimed to standardize the guideline development process for each priority health condition and to determine preventive recommendations for vulnerable populations.

Methods: We combined the AGREE best practice framework with the GRADE approach to devise the first evidence based clinical preventative guidelines for immigrants and refugees in Canada.

Results: A systematic approach was developed to operationalize the evidence reviews and apply the GRADE approach; build on evidence from previous systematic reviews; search and compare evidence between general and specific immigrant populations; and apply the GRADE criteria to make recommendations. This methodology was successfully applied to 19 conditions (for example, Varicella, Hepatitis B, Intestinal Parasites, PTSD, Child Maltreatment) selected by practitioners caring for immigrants and refugees in Canada.

Discussion (Conclusion): A 14, step methods process was defined to standardize the guideline development process for each priority health condition. The basis of the recommendations (balance of benefit and harms, quality of evidence, and values) was explicitly stated to ensure transparency.

Implications for guideline developers, users: This 14 step methods process was defined to standardize the CCIRH guideline development process and may be of assistance for guideline development for other vulnerable populations.
Oral 68

‘Rapid, E’ clinical guidance: A case study in Type 2 Diabetes.

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Background, Purpose (Introduction): In New Zealand, funders perceive both high cost and low impact of traditional clinical guidelines.

Objectives: To trial a new guidance product called ‘Rapid, E’ which reduces time and cost; draws heavily on strongly evidence, based international guidelines, and devotes most resources to implementation.

Relevant clinical recommendations were sourced from the 2010 SIGN guideline Management of diabetes.

Results: Recommendations were reproduced in an evidence summary document, alongside relevant local case studies.

This document informed an implementation plan setting out scope and costs for seven implementation solutions, many of which are now being enacted.

Discussion (Conclusion): Potential limitations include reliance on other guideline groups to pose clinical questions of interest and conduct properly systematic review (though the SIGN guideline used in this case was of high quality); significant problems of generalisability to New Zealand’s population – especially the Maori population whose social and clinical epidemiology is markedly different from any non-Maori population; narrowness of guidance scope which creates challenges for integration into broad clinical workflow, and; aspects of setting in New Zealand primary care which create barriers to programmatic practice change.

Implications for guideline developers, users: In this situation, the Rapid, E approach appears to have been a time, and cost, effective alternative to a traditional guideline development project.
An indicator to improve quality of Multidisciplinary Review Meetings for Cancer Patients

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Background,Purpose(Introduction) : The French National Authority for Health generalizes mandatory quality indicators (QIs) in healthcare organisations (HCOs).

Objectives : To analyze quality of Multidisciplinary Review Meetings (MRMs) for cancer patients. To obtain benchmarking data and bring about an inciting effect on the improvement of the professional practices.

Methods : The QI was elaborated by the French National Institute for Medical Research, taking into account the national cancer plan (2003), ministerial regulations (2005) and guidelines established by the National Cancer Institute, HAS and health professionals (2006) providing quality standards for MRMs.

784 HCOs collected data on 60 random medical records. Each HCO got its results accompanied by references in order to compare each other. The QI was defined as the proportion of cancer patients at initial phase of treatment with a dated MRM report and for which a treatment decision, making was realized by at least three different specialized physicians.

Results : 51043 medical records were analyzed. Mean rate was rather poor (38%). The comparison between HCOs showed an important difference between the lowest rate (0%) and the highest rate (100%).

MRM reports at initial phase of treatment were missing in 27% of cases. MRM reports without the names of three different physicians or their specialties were standards with the worst conformity: respectively 15.4% and 47.1%. Undated MRM reports or without a treatment decision, making were standards with better results: respectively 2.4% and 2%.

Discussion(Conclusion) : This generalization shows that quality of MRMs can be highly improved and allows to objectify standards on which the HCOs must do their utmost.

Implications for guideline developers,users : QIs are assessment tools whereby health professionals can implement guidelines.
Background, Purpose (Introduction): To address the need for more effective screening, the U.S. Centers for Disease Control and Prevention (CDC) is considering the merits of including a supplement addressing birth, cohort screening in “Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV, Related Chronic Disease.”

Objectives: Describe the methodology used to create national public health recommendations.

Methods: In consideration of a birth, cohort screening strategy for the identification of HCV and HCV, related chronic disease among persons born from 1945, 1965, CDC employs an evidence-based approach to assess the quality of peer-reviewed literature. Initiated in 2009, comprehensive systematic reviews were conducted examining the burden of unidentified HCV in the birth cohort. These recommendations will be reviewed in consultations with diverse stakeholders including: federal agencies; academicians; clinicians; and community and advocacy groups. Other stakeholder input will be solicited through a series of teleconferences and listening sessions at national conferences.

Results: Recommendations will be based on graded evidence and input from consultations and from stakeholders. An implementation plan will be developed to assist in the adoption of these recommendations. Continued consultation with stakeholders will help to maintain transparency throughout the development process.

Discussion (Conclusion): Following the consultations a further draft will be vetted through a peer review and public comment process. Concurrent development of implementation activities will facilitate the dissemination of the finished recommendations. This supplement will precede the complete update of the 1998 recommendations.

Implications for guideline developers, users: A transparent evidence-based approach can identify research needs, engage partners for implementation, and strengthen the rationale for public health recommendations.
Towards overcoming cultural barriers and disparities in healthcare; a proposed model for involving immigrant patients in the interpretation of a preventative clinical practice guideline and the development of support tools.

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Background, Purpose (Introduction): There is a growing body of literature addressing the challenges that healthcare organizations face in incorporating patient involvement in the development of clinical practice guidelines (CPG). This practice is both time consuming and expensive. Therefore, many healthcare institutions that do not have the capacity to develop comprehensive guidelines in-house rely on the adoption of preexisting work.

Context: While the adoption of CPGs has significant advantages, it also has inherent drawbacks especially in immigrant communities in the Pacific Northwest where unaddressed cultural nuances contribute to ever widening healthcare disparities. This reality underscores the urgency to establish a guideline, oriented patient and public involvement program (PPIPs).

Description: We propose a comprehensive model of “collaborative engagement” by recruiting immigrant patients for participation in cultural interpretation of a CPG and the development of culturally relevant patient support tools. Our model emphasizes the need to appropriately address cultural, language and health literacy issues so that we may improve the immigrant health status and decrease health disparities between populations.

Lessons for guideline developers, adapters, implementers, or users: Model highlights include but not limited to:

• Linking health representatives of immigrant populations with tradition western medicine clinicians to identify health conditions and barriers to treatment.
• Identifying patient barriers to early detection and preventative health care
• Incorporating culturally sensitive language and practices in patient support tools as well as tools for clinicians.
**Oral 74**

**Quality Management in Oncology**

- building up a network between the German Guideline Program in Oncology, Cancer Registries and Certified Oncological Centres in Germany tools.

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**Background, Purpose (Introduction)**: The National Cancer Plan in Germany sets the goal to implement clinical practice guidelines for all relevant tumor entities. To achieve this goal, the Association of the Scientific Medical Societies in Germany, the German Cancer Society and the German Cancer Aid jointly launched the German Guideline program in Oncology in 2008. The development of quality indicators (QI) is mandatory within the program.

**Context**: In Germany several institutions are involved in analysing the quality of health care in oncology on the local, regional and national level. Networking of these players seems essential in order to reach consensus on and apply core sets of methodologically sound QIs, to assess guideline adherence and effects on health outcomes, and to develop strategies for quality improvement where required.

**Description**: The following aspects will be described and explained by examples:

- methodology of QI development within the Guideline development process
- implementation of QI in Certified Cancer Centres and Cancer Registries
- structured feedback of results to physicians and guideline groups
- interaction of the relevant actors in national quality initiatives in oncology
- results of QI, measurement on the national level over time since 2003.

**Lessons for guideline developers, adapters, implementers, or users**: The development of QI in the scope of guideline development should follow a standardized and transparent process. Hereby it is crucial to account for pre-existent quality measures, to network with relevant stakeholders, to harmonize definitions and specifications of QI, to establish feedback, to guarantee for review and update according to needs and thus to keep the workload of documentation reasonable.
Oral 75

Testing of draft guidelines as a form of pilot implementation

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Background, Purpose (Introduction): Poor or suboptimal implementation is often the achilles heel of adherence to evidence based guidelines in healthcare in daily practice. To our view implementation can be improved if, during the guideline development, a test on feasibility in practice is carried out with a draft of the guideline. The results of the practice test can be used to adapt and tailor the final version of the guideline.

Context: The Netherlands Society of Occupational Medicine has included a pilot implementation by means of a practice test in its guideline development process. The aim of this test is to evaluate the feasibility in a group of volunteering practitioners; to develop and test training tools; and to gain first experiences from pilot implementation.

Description: The guideline development group defines a number of performance indicators on key issues of the guideline. Testing volunteers are recruited among the members of the Society. They receive a short training in the new aspects of the draft guideline and are asked to use the guideline in their daily practice and to document their activities in standardized forms. For each case performance on the chosen indicators is assessed. Low group performance scores on one or more indicators indicate problems with feasibility and should lead to adaptation of the guideline or the further implementation plan.

Lessons for guideline developers, adapters, implementers, or users: A practice test is a valuable tool in the guideline development process. It makes the guideline better and the implementation easier.

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Background,Purpose(Introduction): National Institute for Health and Clinical Excellence established a Quality Standards programme in 2009. The NHS White Paper 'Equity and Excellence: Liberating the NHS' (2010) sees National Institute for Health and Clinical Excellence’s quality standards as crucial to the delivery of a high quality outcomes focused NHS in England and proposes that up to 150 of these should be developed by National Institute for Health and Clinical Excellence over 5 years.

Description: The interim process guide for the National Institute for Health and Clinical Excellence Quality Standards programme has been published and 12 National Institute for Health and Clinical Excellence quality standards covering a range of major chronic diseases (e.g., Diabetes, Depression, Stroke) have been published as of August 2011. An overview and analysis of the 12 published quality standards, how clinical guidelines were used to inform their development and methodological issues encountered will be discussed. Experience from the first two years of the programme will be summarised, including how National Institute for Health and Clinical Excellence will apply this learning to future quality standards.

Lessons for guideline developers, adapters, implementers, or users: The key issues national guideline developers need to consider when linking their work to quality standard development will be discussed.
Oral 77

*Guideline Dissemination: Reaching the public by the billions*

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*Julie Cox, MFA, American Academy of Neurology*

**Background, Purpose (Introduction)**: AAN has developed guidelines since 1989 and incorporated additional awareness efforts in 2001.

**Objective**: Attendees of this workshop will learn how to market their organization’s guidelines effectively to increase exposure and awareness of best practices.

**Target Audience**: Guideline developer
Guideline implementer
Developer of guideline-based products
Allied health professionals
Consumers and patients representatives

**Description**: In 2009 and 2010, American Academy of Neurology (AAN) evidence-based guidelines garnered over 4 billion media impressions at almost a $4.75 million advertising value (at just $120,000 in expense); over one million accesses via www.guidelines.gov, the National Guideline Clearinghouse website; over one million accesses via www.neurology.org, website of the AAN journal Neurology; and over 500,000 accesses via www.aan.com. AAN guidelines don’t just reside in the Neurology journal or on the AAN website, to be forgotten after publication; they are disseminated to medical and public audiences through a multifaceted strategy conceived by the AAN. In addition to guideline publication, we produce summary tools, including a press release, a clinician summary of the clinical questions and corresponding recommendations (based solely on the evidence), a patient summary in a question-and-answer format, a presentation slide set, a clinical case example with coding and billing information, and more. In addition to disseminating guidelines and guideline products, we reach out to physician professional and patient advocacy organizations for collaborative dissemination through endorsement requests, promotional communications, and joint educational efforts. Our guidelines are promoted by the Agency for Healthcare Research and Quality (AHRQ) National Guideline Clearinghouse. We continue to broaden our outreach with educational offerings through society conferences, webinars, and podcasts.
Background,Purpose(Introduction) : National Breast and Ovarian Cancer Centre has provided Australian clinicians with hard copy evidence, based guidelines for 10 years. A web, based publishing platform for more efficient and effective development, dissemination and updating of clinical practice guidelines was needed. Web, based publishing formats using HyperText Markup Language (html) have potential to improve flexibility and functionality.

Objectives : To develop a web, based publishing platform that enables accessible web, based dissemination of guidelines, incorporating a single source approach for developing and updating guidelines.

Methods : A platform was identified that uses single, source information in Extensible Markup Language (xml), with automated version control and functionality to simultaneously generate web, based html pages and print, ready pdf files for users. A content management system was identified to customise the platform for guidelines.

Results : A customised web, based platform was developed, incorporating optimal content structuring, and customised graphic templates and styles. The html format is more searchable and enables links to related resources. Design of the web pages included tabs for rapid navigation, tool boxes for printing, and links to relevant information, including systematic reviews.

Discussion(Conclusion) : Seven topic, specific guidelines on the management of breast cancer have been uploaded onto the platform. Initial end user testing has indicated strong acceptability; usability and ease of navigation were rated highly.

Implications for guideline developers,users : This web, based publishing platform has the potential to improve development, dissemination and updating of clinical practice guide-
lines, to enhance usability and functionality for end users and promote the uptake of evidence, based practice. Further development will extend the platform functionality to include collaborative editing and online guideline review.

Background, Purpose (Introduction):
Evidence-based clearinghouses convey evidence to end users including guideline developers.

Objectives: The purpose of this presentation is to describe several evidence-based clearinghouses focused on social work, mental health and related intervention outcomes, placing them in the context of how such clearinghouses can contribute to research dissemination to foster effective, evidence-based practice. Chinese EB clearinghouse maintained by the Chinese Cochrane Center and the University of Southern California will be presented.

Methods: The study employed an analysis of data provided in clearinghouse websites and internal documentation as well pertinent international literature.

Results: The clearinghouses are web-based portals where quality-controlled scientific evidence of what works, what is promising, or what is possibly harmful in professional practice and policy interventions is made available to professionals, decision makers, and the general public in accessible and transparent language and format.

Discussion (Conclusion): Evidence-based clearinghouses in human services are promising vehicles of bringing high quality evidence to professionals, decision makers, and other end users.

Implications for guideline developers, users: Guideline developers need to be aware the quality of evidence-based clearinghouses they depend on in guideline development.
Background, Purpose (Introduction):
Guideline production in Australia is not centrally coordinated and occurs in professional silos, resulting in limited opportunities to promote international innovation and quality standards. In an attempt to breakdown silos and support the workforce, a national Guideline Developer Network was conceived.

Context: To provide a forum for guideline developers to share knowledge and improve skills. The network is also conceived as a test bed for dissemination and pilot of quality initiatives.

Description: In 2011, there are 71 guideline development organisations represented in the network. Additionally membership includes methodologists and clinicians, representing more than 75% of guideline development stakeholders in Australia. The network membership is growing by 8% per month.

Results of the survey showed that improving the implementability of guidelines (14.6% of responses) and advice on how to implement guidelines (23%) as the two top ranking topics (n=177). Evaluating guideline use (10%) and making better use of evidence grading systems (8.4%) were the next ranking issues.

Lessons for guideline developers, adapters, implementers, or users: International networks such as GIN provide a global forum for sharing quality guideline innovations, while local networks serve as a complimentary forum to facilitate local knowledge exchange, identify local needs and provide policy makers real time opportunities to test and disseminate guideline quality initiatives. As the Australian network matures further opportunities for knowledge sharing and collaborative projects will be promoted.
Oral 81

Embedding an Integrated Platform for Data Extraction, Systematic Reviews and Guideline Development

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Background, Purpose (Introduction):
Systematic reviews are considered the “gold standard” for synthesizing evidence to support clinical decision making. However, the process of conducting systematic reviews is labor intensive and difficult to update, thus putting such work outside the capacity of most guideline developers.

Context: Kaiser Permanente (KP) is the largest US not, for, profit healthcare delivery organization and develops its own evidence-based guidelines. Doctor Evidence specializes in extracting data from clinical studies and compiling and transforming it into a digital clinical content repository, providing transparent data for comparative effectiveness analysis.

Description: Previously, KP developed its guidelines through a fragmented and manual process. We will discuss the advantages of using an integrated technology platform for developing and maintaining guidelines that include:

- Documenting the guideline development process, in a single platform, from the clinical question through the writing of the recommendation and rationale statements.
- Facilitating the critical appraisal process (Cochrane Risk of Bias and GRADE)
- Automating the process for generating evidence tables
- Conducting meta-analysis including generation of forest plots and funnel plots

We will also describe the process of embedding this new method of guideline development. Key aspects include:

- Demonstrate value to high-level sponsors
- Maximize use of limited analytic resources
- Encourage other groups within KP (e.g. pharmacy and purchasing) to use the technology platform and to reuse, repurpose data.

Lessons for guideline developers, adapters, implementers, or users: Transitioning from a fragmented and manual system to an integrated and automated platform has allowed KP to streamline its guideline development processes, while improving the rigor and transparency of our guidelines.
Background, Purpose (Introduction) :
Guideline recommendations require inductive inferences from evidence AND deductive inferences from principles. Deductive inferences are often non-transparent.

Context : In updating the American Academy of Neurology’s guideline for the determination of Brain Death, strong recommendations could only be made using deductive inferences from principles derived the Uniform Determination of Death Act (UDDA).

Description : To judge the soundness of deductive inferences used in the formulation of recommendations, guideline developers first enumerated the structure of the inference by listing premises and inferred conclusion. Using consensus, developers rated the validity of the inference after assuming the truth of each premise. Subsequently, the belief in the truth of each premise was determined using a forced choice process. Compelling conclusions supporting strong recommendations resulted from validly structured inferences based upon unanimously accepted premises. To illustrate, the premises—Brain death is the irreversible cessation of whole brain function (UDDA definition) and, some conditions causing the cessation of whole brain function are reversible (unanimously agreed upon premise)—supported the conclusion: Not knowing the cause of the cessation of brain function makes it impossible to confirm irreversibility. This in turn supported the recommendation: Physicians MUST determine the cause of brain injury to diagnose brain death. All strong recommendations in the brain death guideline were supported by similar deductive inferences.

Lessons for guideline developers, adapters, implementers, or users : Developers can improve guideline transparency by explication of both the structure and premises used in making deductive inferences. Sound deductive inferences based upon compelling premises can support stronger recommendations.
Cost reduction in the guidelines development process 
by the use of online tools

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Background, Purpose (Introduction): The development of Guidelines requires considerable time and financial resources. Travelling costs for consensus meeting and time necessary for extensive editing and reviewing of drafts are possible aspects of cost reduction.

Objectives: Identification and piloting of online tools to perform online consensus conferences and to facilitate open online commenting of guidelines.

Methods: Search for online tools using Google, evaluation using predefined criteria, piloting of identified platforms in several guideline projects.

Results: Adobe Acrobat Connect Pro proved to be the most suitable tool for online consensus conferences, allowing for text sharing, chat as well as voting. Voice could be transmitted via Adobe Acrobat; we however used a standard telephone conference to avoid the necessity of installing microphones. During piloting, no technical difficulties occurred. A survey among the participants showed high acceptance rates of this format, however, for kick off meetings a face to face conference was preferred. For commenting, the online platform "crocodoc" was identified as ideal, allowing reading, commenting, accessing of comments and further answering of comments directly in the document.

Discussion (Conclusion): Online tools are not likely to totally replace traditional consensus conferences. They can be very valuable in short discussions for updating or finalizing open points not finalized during prior consensus conferences. The open online review platform proved very valuable to allow many readers to participate in the guidelines reviewing process. It avoided that the same aspects were commented several times and processing of the comments could be performed transparently.

Implications for guideline developers, users: Costs for guidelines' development can be reduced using online tools for consensus conferences or online open reviews.
Fast track guideline update successful

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Background, Purpose (Introduction): The purpose of the Comprehensive Cancer Centre (CCC) the Netherlands is to provide cancer patients and their families access to comprehensive and high, quality care as close to home as possible. CCC was set up to improve treatment, patient care and clinical research within the field of oncology. An important CCC activity is guideline development. CCC faces a challenge in maintaining the set of evidence based oncology guidelines, in a timely and cost effective way. With a grant from SKMS CCC performed a successful pilot to revise an evidence based guideline on oesophageal cancer within one year, and as such proved the ‘CCC fast track’ method effective. The method used stresses the process to the limit and at the same time enchants the professionals.

Context: The 2005 guideline on oesophageal cancer was revised in 2010. To limit and control both time and cost aspects the guideline update was partly evidence based, partly consensus based.

Description: A multidisciplinary guideline working group was formed, supported by a CCC process manager. To start with, the time table was drawn, working backwards from the dates the authorising societies meet, in order to prevent waste of time during authorisation phase. A broad and multidisciplinary problem analysis was issued next and used to generate the topics that needed evidence based revision. Five topics were selected, including a patient oriented topic. The 22 experts and two patients participating in the guideline working group were allocated to the topics and an agenda was set for monthly meetings with preceding conference calls to ensure focussed meetings. A third party specialized in literature search and appraisal was contracted.. A web, based comment procedure was introduced, enabling a quick gathering and response of comments by scientific, professional and patient societies. A total of six meetings was needed to develop the revised guideline. The last plenary meeting was also used to generate the first conceptual indicators to monitor guideline implementation. The guideline is authorized by six scientific societies. The complete process was rounded off within a year and stayed within the budget limitations. A new pilot is started to revise the guideline continuously, creating a living guideline.
Lessons for guideline developers, adapters, implementers, or users: Web, based commentary round enables quick proceeding. Frequent and well prepared meetings during a short period of time are well appreciated by the professionals. A contracted external party to perform the literature study enables the professionals to keep focussed on their field of expertise.

Background, Purpose (Introduction):
American Dietetic Association (ADA) is the nation’s largest organization of food and nutrition professionals (70,000+ members). One of ADA’s most valued resources is the Evidence Analysis Library which houses Evidence, based Nutrition Practice Guidelines. ADA has adopted its own multi, step, rigorous process for developing guidelines; publishing 15 sets of guidelines for various diseases, conditions since 2005. Recently, ADA published the HIV/AIDS Evidence, Based Nutrition Practice Guideline.

Objectives: American Dietetic Association (ADA) is the nation’s largest organization of food and nutrition professionals (70,000+ members). One of ADA’s most valued resources is the Evidence Analysis Library which houses Evidence, based Nutrition Practice Guidelines. ADA has adopted its own multi, step, rigorous process for developing guidelines; publishing 15 sets of guidelines for various diseases, conditions since 2005. Recently, ADA published the HIV/AIDS Evidence, Based Nutrition Practice Guideline.

Methods:
Formulate Question
Conduct Literature Review
Appraise Each Report
Summarize Evidence
Develop Conclusion Statement and Grade
Formulate Recommendations
Develop Clinical Algorithm
Review Process
Publish

Results: 152 articles were summarized and 16 recommendations were formulated.

Discussion (Conclusion): HIV infection is a life, threatening disease affecting over 33 million worldwide. The nutrition status of these individuals is highly important and can have an effect on their overall condition. Nutrition goals are aimed at delaying disease pro-
Elaboration of clinical guidelines in the Republic of Kazakhstan

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Background, Purpose (Introduction): One of the main conditions of reforming of Healthcare system is to improve the quality of medical services, based on evidence, based medicine.

Objectives: The objects of the study in our analysis were 3 clinical guidelines (the first experience in Kazakhstan): Management of acute respiratory disease and pneumonia among children under 5 years, management of acute intestinal infections in children under 5 years, management of HIV infection and AIDS. AGREE was used for evaluation of CPG’s, the evaluation was conducted by 6 experts.

Methods: Experts have found: the total average score is 2,41 ± 0,36. Scope and purpose of clinical guideline, 2,75 ± 0,24, interested parties, 1,97 ± 0,26, well designed, 2,26 ± 0,24, clarity and form of the text, 2,66 ± 0,11, degree of implementation, 1,62 ± 0,55, independence of developers, 2,19 ± 0,17.

Results: Also not determined the expected results of clinical guidelines objectives, poorly detailed categories of patients. Clinical guidelines are set out clearly. Algorithms actions represented in most clinical guidelines.

Discussion (Conclusion): Degree of the creator’s independence is inversely proportional to a conflict of interest under a single management of health and medical services in particular.

Implications for guideline developers, users: Thus, it is necessary to develop and implement a system for creating clinical guidelines for medical societies and develop a culture of evidence, based medicine.
How many evidence based guidelines in China

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**Background, Purpose (Introduction)**: Little is known about quality and quantity of Chinese clinical guidelines.

**Objectives**: To systematically review all of Chinese clinical guidelines.

**Methods**: We searched CNKI (China National Knowledge Infrastructure, Chinese Academic Journals full text Database), VIP (a fulltext database of China), WANFANG(a full-text database of China) and CBM (China Biomedicine Database Disc) using the term guideline. Two groups of review authors independently applied inclusion criteria, assessed trial quality, and extracted data.

**Results**: We identified 397 clinical guidelines from 1978 to 2010, and only 37 (9.3%) were claimed that an evidence based approached were used in the process of development. 3 (0.8%) provided search strategies and 20 (5%) provided the levels of evidence and the recommendation.

**Discussion (Conclusion)**: There were very few evidence based clinical guidelines in China. We are going to further assess all guidelines using AGREE II instrument.

**Implications for guideline developers, users**: To train guideline developers to use GRADE and systematic reviews in the development of guidelines.

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Background, Purpose (Introduction) : Clinical practice guidelines (CPG) aim to improve standards of clinical competence. CPGs and development manuals fail, however, in addressing disease specific ethical issues (DSEI) that are deeply intertwined with the concepts of clinical competence and professionalism.

Objectives : 1) To assess the extent of how CPGs for dementia and chronic kidney disease (CKD) cover recommendation of how to deal with DSEI. 2) To evaluate a method for systematic and transparent review of DSEI.

Methods : First, a systematic review of ethics literature on dementia and CKD was performed. The included literature was analyzed qualitatively in order to develop a theoretically saturated set of DSEI. Second, a systematic review of CPGs on dementia and CKD was performed. Finally, we assessed the representation of DSEI in all included CPGs using the aforementioned DSEI, sets as a framework.

Results : The systematic review together with qualitative analysis produced 26,18 DSEI for dementia, CKD that could be grouped under 7 main categories (indication, information, patient competence, proxies, social aspects, clinical conduct, evaluation). We present qualitative and quantitative differences in how comprehensive current CPGs represent those DSEI. Interim analyses show a rather poor representation of those DSEI in CPGs of dementia and CKD. The analysis will be finalized in May 2011. We also discuss further steps necessary for the systematic integration of DSEI in CPGs.

Discussion (Conclusion) : Concerning the rational given above we conclude that DSEI should be better represented in CPGs.

Implications for guideline developers, users : Methods for a systematic and transparent integration of DSEI in CPG should be addressed in CPG development guidelines.
Oral 90

Does Evidence Based Practice guideline applicable without understanding EBM mathematics?

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Background,Purpose(Introduction) : Critical appraisal seems to be the most complicated part of EBM, which is difficult to learn and may count as main pitiful of good practice. On the other hand well conducted guidelines incorporate validity, reliability, and clinical applicability of evidence through a standard process

Objectives : This study demonstrated that: Does the guidelines can be applicable without well understanding of Evidence Based mathematics?

Methods : This cross sectional study designed to evaluate the knowledge of Iranian Ophthalmologists toward EBM; and in second phase, their daily practice about two common condition was observed. One hounded Ophthalmologists were selected by a simple randomization. In first Phase a valid Persian EBM questionnaire, was distributed in Ophthalmology conference. Six month later, two clinical scenarios about mature cataract and open angle glaucoma were posted to same people to evaluate the correlation of their daily practice with practice guidelines

Results : 99 questionnaires were returned. Eighty three percents have heard about EBM; but 79% had positive sensation for EBP. 32.2% of them were familiar with Evidence Based data bases. Less than 9% of the felt that they understood the mathematics of EBM; and only 22% chose the appropriate therapeutic option for a fake scenario based on ARD, RR and NNT.

The surprising results were shown in second phase; for the both scenarios, the best recommended approach of cataract and open angle glaucoma guidelines was chosen (45, 86%).

Discussion(Conclusion) : Implementation of guidelines may not completely related to clinicians’ ability in EBM.

Implications for guideline developers,users : Even without fully understanding of EBM mathematics, the guidelines are implementable
Barriers and facilitators to implementation of chronic disease prevention guidelines in Australian general practice

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Background, Purpose (Introduction): Best practice guidelines from various professional bodies in Australia address behavioural and physiological risk factors for vascular disease. Despite their widespread dissemination they have not been systematically implemented across the population in the general practice setting.

Objectives: As part of a larger study to develop and trial an intervention to improve the implementation of chronic disease prevention guidelines in general practice we sought to identify barriers and facilitators to guideline implementation.

Methods: Twenty, four in-depth interviews were conducted with key informants and general practice staff. Grounded theory was used for data analysis.

Results: GPs identified their workload, user, friendliness of the guidelines, achievability of targets, and perceived lack of patients’ compliance with lifestyle advice as barriers to implementing guidelines. Limited reimbursement for preventive care was not seen as a barrier because most GPs saw it as part of their core business. Key informants identified a lack of information management systems, lack of organisational and IT skills and GPs’ age and cultural background as barriers. Collaborative quality improvement, practice visits and community engagement were seen as helpful in changing GPs clinical practice. All interviewees identified the lack of affordable and accessible referral services as barrier to providing preventive care according to guidelines. Involvement of nurses in preventive care helped GPs to manage their workload.

Discussion (Conclusion): Our research confirms that improved practice organisation (including teamwork and effective information management systems) could facilitate further implementation of prevention guidelines.

Implications for guideline developers, users: The availability and affordability of referral services needs to be addressed if preventive guidelines are to be implemented fully.
Background, Purpose (Introduction): Antibiotic use is of major concern in most countries. Therefore it is a point of interest in the development and adherence to practical guidelines.

Objectives: Our project aims to examine the possibility of using a simple intervention to improve the adherence to the recommendation on uncomplicated lower urinary tract infections in the context of a general practitioner cooperative (GPC) during out of hours (OOH).

Methods: We conducted an interventional study with pre, and post, measurement in an intervention and control region during 4 periods of 4 months each. We chose to apply a multifaceted approach. The total number of cases diagnosed with uncomplicated acute cystitis was included in the study in both regions.

Results: In the intervention region, the percentage of procedures following the recommendations increased during the intervention period from 26.9% to 69.4%. During the first post, test there was a decline to 47.2%. One year after the intervention, we registered good treatments in 40.8% of the cases. In the control region, no significant changes were found.

Discussion (Conclusion): In the intervention region, we noticed a significant improvement in guideline adherence on the treatment of uncomplicated cystitis. Although the effect of the intervention was temporarily, the prescribing behaviour remained better than before, even one year after the intervention.

Implications for guideline developers, users: Not only facilitates the setting of GPC the registration of data and the possibility of uniform interventions on recommendations for good medical practice. Possibly this context also encourages a reflective attitude of the doctors.
Practical tools to improve implementation of a Primary Care Clinical Practice Guideline for Sleep Disorders in Children

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**Background, Purpose (Introduction)**: Clinical Practice Guidelines (CPG) aim to become helpful tools for clinicians, by mainstreaming best available evidence into medical practice. Guideline length could be a barrier to their implementation; therefore, many guidelines include quick reference versions, algorithms and other tools directed to increase and facilitate their use.

**Objectives**: To elaborate a management algorithm and other tools to improve the guideline adherence by general practitioners to a CPG for Sleep Disorders in Children.

**Methods**: An algorithm for general practitioners was developed with recommendations about clinical diagnosis and management included in the “Primary Care CPG for Sleep Disorders in Children”. It was summarized and captured by the guideline development group. The group also identified areas where additional adherence improvement tools could be offered.

**Results**: The final algorithm contains clinical diagnosis criteria included in the International Classification of Sleep Disorders (ICSD, 2) and guidelines to conduct the patient interview and clinical diagnosis. Diagnosis scales were included as helpful tools. The algorithm also includes recommendations about referral criteria. All recommendations, algorithm and tools were included in the quick reference guideline.

**Discussion (Conclusion)**: A quick reference guideline, which includes algorithm, recommendations, scales and other practical tools, will improve the CPG dissemination and implementation process. These quick versions are easy to use in daily clinical practice.

**Implications for guideline developers, users**: To develop practical tools may be a helpful strategy in order to improve CPG adherence by general practitioners.
A collaborative model of CVD clinical guideline development in Australia

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Background,Purpose(Introduction) : The Australian Government Department of Health and Ageing (DoHA) commissioned the National Heart Foundation of Australia to outline a collaborative model for cardiovascular disease (CVD) guideline development that’s compatible with National Health and Medical Research Council (NHMRC) standards. A formal proposal to trial and evaluate the model was also developed.

context : There is no national framework for the prioritisation or development of CVD clinical guidelines in Australia.

Description : The project Advisory committees had oversight of the following methodology:
1. ‘Baseline’ assessment of Australian practice in guideline development.
2. Review of international literature.
3. Two consultation rounds among a broad range of stakeholders using an adapted online Delphi Technique (informed by 1 and 2.) to identify areas of consensus in guideline development processes.

Areas investigated:
• topic prioritisation processes
• implementation considerations during guideline development
• indicators of clinical effectiveness
• maintaining guideline currency
• socio, economic factors, and challenges facing Aboriginal and Torres Strait Islander peoples.

Lessons for guideline developers, adapters, implementers, or users : There’s strong stakeholder support for establishing an improved nationally coordinated and funded model of CVD clinical guideline development, with the following components:
• Transparent processes in topic selection.
• Mechanisms to highlight research needs where evidence gaps identified.
• Implementation planning occurs during
Background, Purpose (Introduction): When deciding to make recommendations, the local situation and evidence should be considered.

Objectives: We compared the cancer screening guidelines in Korea and Japan to clarify the basic requirements for recommendations based on insufficient evidence.

Methods: The following items were compared between Korea and Japan to determine a recommendation for cancer screening: all evidence for recommendation, original studies, disease burden and other factors. Additional literatures were identified by searching MEDLINE after publications of the guidelines in Korea and Japan.

Results: Breast, cervical and colorectal cancer screening was recommended in both countries. No original studies evaluated mortality reductions by mammographic screening in Korea and Japan. Case, control studies have been related to cervical and colorectal cancer screening in Japan, but not in Korea. Lung cancer screening was recommended in Japan based on original case, control studies alone. In Japan, radiographic screening was recommended based on original cohort and case, control studies. In Korea, gastric cancer screening using radiography and endoscopy was recommended. There is insufficient evidence to evaluate mortality reduction from gastric cancer by endoscopic screening. In Korea, screening for hepatocellular carcinoma was recommended in high, risk group, and hepatitis screening among asymptomatic populations in Japan. Although the burden of hepatitis, related disease was serious in Korea and Japan, there is no evidence to evaluate mortality reduction due to screening for hepatitis, related diseases.
Oral 96
Evidence Gap when East meets West: short term prognosis of Transient ischemic attack in Hong Kong Chinese

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Background/Purpose (Introduction): There are data indicating differences between Chinese and Caucasian in the pathophysiological mechanisms of cerebrovascular diseases. But studies on transient ischemic attack (TIA) in Hong Kong Chinese are scarce.

Objectives: We aimed at determining the short term prognosis and the predictive value of the ABCD2 score in stroke risk after a TIA in Hong Kong Chinese.

Methods: A retrospective cohort of TIA patients admitted to 13 Hong Kong acute public hospitals in 2006 was recruited. Electronic records and hard copies were studied up to 90 days on clinical details in stroke development and ABCD2 score.

Results: In 1005 patients recruited, the day 2, 7, 30, 90 stroke risk after a TIA was 0.2%, 1.4%, 2.9% and 4.4% respectively. The areas under Receiver Operator Characteristic curve of ABCD2 score for stroke risk in 7 days were 0.608, 30 days 0.608, 90 days 0.575. The P for trend across ABCD2 score levels = 0.036 at 30 days. The odd ratio for every point of the score = 1.36, P = 0.039. Abnormal carotid Doppler were associated with increased strokes within 7 days (OR 3.36, P = 0.047). Diabetic mellitus, history of stroke and carotid bruit were associated with increased strokes within 90 days (OR 0.36, P = 0.043 and 0.032 respectively). 505 had normal CT brain, 468 had lacunar infarct or small vessel disease. 89% of patients had antiplatelets, 7% on warfarin after admission.

Discussion/Conclusion: Hong Kong Chinese have a more favorable prognosis than Caucasians in stroke risk after TIA. The ABCD2 score has limited predictive value in stroke risk in this population.

Implications for guideline developers/users: Further studies are needed to formulate recommendations considering local situations and weak evidence.
Oral 97

Evidence, based Clinical Practice Guidelines in Korea

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Background, Purpose (Introduction): The use of application of evidence, based medicine (EBM) to clinical guidelines has increased in Korea.

Objectives: To provide a brief introduction regarding development of evidence, based clinical guidelines by topics.

Methods: A total of 107 Korean clinical guidelines were analyzed: we used 2 domains of the Agency for Healthcare Research and Quality (AHRQ) for guideline classification system, which encompassed a total of 20 types of guideline topics.

Results: Of the 107 guidelines, 21 (19.6%) used the evidence, based methodology such as assessing quality of evidence and/or risk of bias using validated scales and instrument. The most common clinical field of evidence, based guideline was cancer (50%), followed by digestive disease (46.2%) and respiratory track disease (37.5%).

Discussion (Conclusion): These results may have an important impact on understanding the application of evidence, based methodology to develop clinical guidelines in Korea.

Implications for guideline developers, users: Development of evidence, based clinical practice guidelines by topics include cardiovascular disease, endocrine system and metabolic syndrome, surgery, nephrology disease, and palliative medicine is need in the future in Korea.
The self, efficacy of evidence, based practice among nurses studied in a senior nursing college of nursing

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Background, Purpose (Introduction) :
Evidence, based practice in Nursing could guide nurse personnel to clinical care for patients with scientific evidence. However, previous study found that there was about 15% of nurses performed evidence, based practice (EBP). The evidence of how confident nurses are in practicing EBP in Taiwan is limited.

Objectives : To identify the self, efficacy of performing EBP among nurses who studied in a senior nursing college of nursing.

Methods : A design of cross, sectional survey was used. Participants were purposefully sampled from a group of nursing students who studied in a senior nursing college of nursing. A set of translated questionnaire was used for this study, which includes self, efficacy and beliefs of evidence, based practice, barriers of performing evidence, based practice, and social demographical factors.

Results : A total of 27 nurses was recruited (mean age=27). Most of them worked in intensive care unit (96%) and nearly half of them (48%) have undertaken training of evidence, based practice. Overall, the self, efficacy of EBP among this group of nurses was less than 0.6 (0.58, SD=0.14). The question entitled “how much confidence to read English research articles” got the lowest self, efficacy level, which was 0.4 (n=27). The mean score of EBP beliefs was 3.3 (SD=0.28) and EBP barriers was 3.1 (SD=0.50) (range=1, 5).

Discussion (Conclusion) : The self, efficacy for nurses to implement evidence, based practice is not high. Intervention to promoting evidence, based practice among nurses may need to consider to enhancing self, efficacy of EBP.

Implications for guideline developers, users : Findings of the present study, as a baseline data, may inform the evaluation and outcome of the intervention on promoting evidence, based practice.
**Poster 1**

*Intraoperative Radiotherapy with Low Energy X, rays*

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**Background, Purpose (Introduction):** This study was conducted to compare IORT (intraoperative radiotherapy) alone with IORT combined with EBRT (external beam radiotherapy).

**Objectives:** We aimed to assess the Safety and Effectiveness such as complications, disease, free survival, distant metastasis, free survival, recurrence rate, quality of life, cosmetic outcome.

**Methods:** We performed a systematic review. We searched MEDLINE, EMBASE, and The Cochrane Library and identified 54 citations, and included 6 studies that met our eligibility criteria.

**Results:** Safety was evaluated by death rate and procedure, related complications from 6 studies. Concerning IORT alone, the comparative study was not identified. The complication rate of IORT was 0, 8.3%. No major complications were reported. When compared with EBRT alone, the complication rate of IORT combined with EBRT group (0, 15.4%) was similar to the control group (0, 17.3%). Severe toxicity (grade 3, 4) was not reported. Effectiveness was assessed by survival rate, quality of life, recurrence rate and cosmetic outcomes from 5 studies. There was no report on survival rate or quality of life. In one study, IORT had no recurrence and good cosmetic outcome. However, it was a small (n = 24) single, arm research with short follow-up period (median 18 months). Also, the measure for cosmetic outcome was not mentioned. IORT combined with EBRT showed no differences in cosmetic results compared with IORT alone, and recurrence was not reported in the literature.

**Discussion (Conclusion):** IORT with Low Energy X, rays, which needs no shielding facilities, is a safe and highly available technique. However, more studies are needed to clarify the effectiveness of the procedure.

**Implications for guideline developers, users:** IORT with Low Energy X, rays needed more studies to develop a guideline for breast cancer patients.
**Background, Purpose (Introduction)**

Menorrhagia has a negative impact on the quality of life of many women.

**Objectives**

We aimed to assess the Safety and Effectiveness of endometrial ablation such as complications, amenorrhoea rates, hysterectomy rate, and quality of life in patients with menorrhagia secondary to abnormal uterine bleeding (AUB).

**Methods**

We performed a systematic review of the literature. We searched Ovid, MEDLINE, EMBASE and The Cochrane Library and identified 120 citations, and included 13 studies that met our eligibility criteria. In Addition, KOREAMED, National Assembly Library and other hand searching was conducted to July 2009. Two reviewers independently screened all references, assessing included article quality and extracted data.

**Results**

The Safety and Efficacy analysis was conducted in comparison with the first and second generation endometrial ablative techniques. The complication rate was 0~13.0% in impedance, controlled ablation group, 25.3% in rollerball ablation group (first generation) and 0~16.7% in balloon ablation group (second generation). The success rate was 88.3~98.0% in impedance, controlled ablation group, 81.7% in rollerball ablation group. The amenorrhea rate (success rate) was 48% in impedance, controlled ablation group, 32% in balloon ablation group. Hysterectomy and retreatment rate was 1.7% vs 2.2% and 2.3% vs 2.2% (impedance, controlled ablation group vs rollerball ablation group), 9.8% vs 12.9% and 16.0% vs 0% (impedance, controlled ablation group vs balloon ablation group). Patient satisfaction was 81.5~91.8% in impedance, controlled ablation group, 93.9% in rollerball ablation group and 83.0% in balloon ablation group.

**Discussion (Conclusion)**

The impedance, controlled ablation system is a safe and effective method of treatment of women with menorrhagia secondary to DUB.

**Implications for guideline developers, users**

It provides high amenorrhea and success rates and low surgical reintervention rates after treatment.
Background, Purpose (Introduction): Bone scintigraphy and bone single photon emission computed tomography (SPECT) using 99mTc (technetium), labeled phosphate has been the standard method of imaging bones. Due to shortage of 99mTc supply and advancement of PET technology, attention was paid to surrogate radiopharmaceuticals and imaging modalities for bone.

Objectives: The aim of this study was to investigate the safety and effectiveness of 18F, NaF PET or PET, CT in skeletal imaging.

Methods: A systematic review was conducted to identify relevant articles published until June 2010. The databases such as MEDLINE, EMBASE and Cochrane Library were searched. The SIGN (Scottish Intercollegiate Guidelines Network) methodology checklists were used for critical appraisal. After data extraction, descriptive analysis was performed. Each process was independently carried out by two evaluators.

Results: The search yielded 407 studies, 19 articles (1 meta-analysis, 18 diagnostic studies) of which met our inclusion criteria. Effective doses of 18F, NaF PET or PET, CT (2.7, 28.0 mSv) were significantly higher than those of bone scintigraphy or SPECT, but they were lower than those of 18F, fluorodeoxyglucose (FDG) PET, CT (13, 33 mSv). On bone metastases, 18F, NaF PET or PET, CT revealed better diagnostic accuracy (per patient analysis: sensitivity, specificity, accuracy) than bone scintigraphy or SPECT, but they were lower than those of 18F, fluorodeoxyglucose (FDG) PET, CT (0.96 and 0.45, 0.99 and 0.88, 0.97 and 0.64, respectively) or SPECT (0.96 and 0.82, 0.99 and 0.97, 0.95, respectively). However, more studies are needed to confirm the effectiveness of 18F, NaF PET or PET, CT on benign bone diseases.

Discussion (Conclusion): Based on current literature, there is evidence that 18F, NaF PET or PET, CT is safe and effective for assessment, detection, and monitoring of bone metastases.
Poster 4

GLAUCOMA AQUEOUS TUBE INSERTION:
A SYSTEMATIC REVIEW

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Background,Purpose(Introduction) : The purpose of this study was to evaluate the strength of evidence that glaucoma aqueous tube insertion is an effective surgery in glaucoma patients.

Objectives : To evaluate the strength of evidence that glaucoma aqueous tube insertion

Methods : A systematic review of the literature through MEDLINE, EMBASE, Cochrane Library and eight domestic documents database of Korea until September 25, 2009. The Scottish Intercollegiate Guidelines(SIGN) criteria was utilized to assess the evidence regarding glaucoma aqueous tube insertion and arrives at conclusions as to their efficacy in decreasing intraocular pressure. Studies were also graded using SIGN criteria.

Results : A total of 10 studies (1 randomized clinical trials, 1 observational study, and 8 case series) were identified for the evaluation of glaucoma aqueous tube insertion. 10 studies mentioned the complication such as shallow anterior chamber, flat anterior chamber, bleb leak, choroidal detachment etc. However, the complication rate was similar or lower than trabeculectomy in glaucoma patients. All of the articles reported positive outcomes including reduced intraocular pressure, reduced medication consumption, improved visual acuity, success rate etc. Reduction of intraocular pressure in open angle glaucoma is better or similar than trabeculectomy. The body of evidence as a whole is a level of strength of Grade B.

Discussion(Conclusion) : The glaucoma aqueous tube insertion is a safe and useful procedure in open angle glaucoma who do not effected in glaucoma medications with at least grade B evidence based on existent studies.

Implications for guideline developers,users : The glaucoma aqueous tube insertion is a safe and useful procedure in open angle glaucoma who do not effected in glaucoma medications.
Poster 5

**Intrastromal Corneal Ring Surgery for keratoconus patients:**

*A Systematic Review*

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**Background, Purpose (Introduction):** The purpose of this study was to evaluate the strength of evidence that glaucoma aqueous tube insertion is an effective surgery in glaucoma patients.

**Objectives:** We aimed to assess the effectiveness and safety of ICRS for treating patients with keratoconus.

**Methods:** We performed a systematic review of the literature. We searched MEDLINE, EMBASE, the Cochrane Library and Eight domestic databases up to 10 March 2009. Searches were conducted without language restriction. We identified 28 studies that met our eligibility criteria. Two reviewers independently extracted data and assessed trial quality.

**Results:** The safety of ICRS was evaluated based on 1 non-randomized clinical trial and 22 case series in terms of procedure, related complications as a keratitis, perforation etc. 1 non-RCT reported that there were no intraoperative complications or clinically significant postoperative complications in the ICRS group. However, corneal transplantation groups occurred complications as a graft rejection, elevation in intraocular pressure. 21 case series reported that ICRS's major complication rates were 0.6~10%. But most of patients were resolved by topical treatment. The effectiveness of ICRS was evaluated in terms of topographic findings and visual acuity, contact lens tolerance, quality of life from 28 studies. After ICRS, topographic findings (Keratometry, refractive cylinder, spherical equivalent) were reduced consistently. Visual acuity was significantly improved 0.31~0.89 logMAR (UCVA), 0.07~0.25 logMAR (BSCVA) after ICRS. Also 2 studies reported successfully fit contact lenses in patients with contact lens intolerance.

**Discussion (Conclusion):** The ICRS is a relatively safe and effective procedure for keratoconus stage I ~ III patients who were contact lens intolerant. It provides improvements in visual acuity and refractive error.

**Implications for guideline developers, users:** Current evidence on the safety and efficacy of ICRS appears adequate procedure for keratoconus patients.
Background, Purpose (Introduction): In all countries, the demand for medical care exceeds the resources available to finance. In Kazakhstan, the Government has annually increased budgetary resources allocated to the healthcare sector. Thus, in the period from 2004 to 2009, funding for a guaranteed volume of medical care rose from 90.5 to 273.1 billion KZT.

Objectives: This qualitative analysis is based on research evidence on the introduction and dissemination the health technology assessment in clinical practice in the Republic of Kazakhstan.

Methods: Qualitative semi-structured interviews were conducted with twenty respondents holding various positions in the Ministry of Health Republic of Kazakhstan, Health Development Institute Republic of Kazakhstan, Astana Medical University, Medical Information, Analytical Center Republic of Kazakhstan, as well as several research institutes of medical specialization. The data was analyzed using the framework approach.

Results: An important aspect is that when there is insufficient regulation of this process can occur out of control conflicts of interest. Therefore, in conditions of introduction into the health system Republic of Kazakhstan a mechanism for HTA necessary to implement the following steps: first, by law regulate the procedure for HTA, secondly, to develop financing procedures mechanisms for HTA in accordance with applicable law, and thirdly, develop processes to identify and manage conflicts of interest at different levels of HTA.

Discussion (Conclusion): There is a need for clear regulatory approaches and mechanisms of HTA. Results should be used by managers of health decision, making aimed at improving the diagnosis and treatment of diseases.

Implications for guideline developers, users: Identify key challenges to effective use of HTA with EBM.
Poster 7

Making the use of evidence in policymaking transparent and participatory: development of HTA process guidelines in Thailand

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Yot Teerawattananon, HITAP, Thailand.

Background, Purpose (Introduction): Although the Health Intervention and Technology Assessment Program (HITAP) has methodological guidelines on health technology assessment (HTA), there are no formal guidelines on other processes complementary and fundamental to research.

Objectives:
1. Elaboration of HTA process guidelines
2. Design of dissemination strategy among stakeholders

Methods: A search in HTA agencies’ websites and databases for guidelines, a survey among staff for research timelines and views, and stakeholder meetings to scope and validate the guidelines were conducted.

Results: HTA priority setting is made through 3 channels: annual topic selection, benefit package, and others. Eligible stakeholders and their selection are explained. HTA production covers process, timeframe and number of meetings, stakeholder, expert identification, and timelines for results. Pertinent aspects of HTA appraisal are also specified, especially number, groups of stakeholders and timeframes. Finally, HTA dissemination is clarified with timelines, target groups and strategies. The guidelines will be available on HITAP’s website, in pocket book and in relevant journals.

Discussion (Conclusion): The guidelines consider international standards, but are adapted to the particular context and include staff views and other stakeholders’ expectations. Because HITAP has no authority for policymaking, decision, making and implementation are not covered. Finally, to measure their impact, a 1-year post implementation analysis will be conducted.

Implications for guideline developers, users: This is an example of participatory and transparent policy guidelines development, where all concerning parties were invited. The guidelines are expected to provide both internal and external benefits: enhanced staff performance, training, and resolution of discrepancies; improved consistency among works, efficiency and quality; and, improved transparency and accountability, participation of stakeholders, and understanding of HITAP.
Background, Purpose (Introduction): It has long been recognised that health promotion and disease prevention (P&P) plays major role to improve population health. However, its implementation is often fragmented and without adequate evidence supported. Recently, decision makers demanded the improvement of the P&P package under the Universal Coverage Scheme which covers 65 millions Thai populations.

Objectives: To describe how evidence is used for development of P&P package for children aged 0, 5 years.

Methods: Physical, mental and social health problems of Thai children aged 0, 5 years were prioritized. This is to narrow down the scope for a systematic review on effectiveness and cost, effectiveness of P&P interventions that target major problems. In addition, reviews of national policies in Japan, Canada, USA, Taiwan, and Jordan were performed to learn foreign experiences. The national capacity in delivering and supporting P&P activities was evaluated. Results were presented to stakeholders for validation and their opinions. The P&P package was subsequently formed and tested before implementation.

Results: Infection, injuries and peri, natal conditions are major health problems. Thailand’s capacity to deliver P&P services is limited in health facilities and this inhibits the implementation of school, based and community, based activities. Most of published impact assessments focus on biological, biomedical interventions e.g. drugs and vaccines. There is severe shortage of evidence on social interventions.

Discussion (Conclusion): It is essential to develop P&P package in a systematic, participatory and evidence, based manner.

Implications for guideline developers, users: More efforts are needed to generate evidence of non, biomedical interventions and for better understanding factors affecting the success of P&P interventions across settings.
Background,Purpose(Introduction) : Clinical practice guidelines (CPGs) may improve treatment quality for rare diseases (RDs). However, CPG development for RDs is often difficult, due to poor evidence.

Objectives : How do CPG developers and health technology assessment (HTA) agencies deal with evidence on RDs for the development of CPGs or HTAs?

Methods : A systematic search was conducted for manuals on the development of CPGs or HTAs and for CPGs on selected RDs. Information on the following topics was extracted and summarized: (a) topic identification for CPGs, (b) literature search, (c) specification of relevant study types, (d) evidence assessment, (e) evidence synthesis, and (f) formulation of recommendations.

Results : 62 CPG manuals, 24 HTA manuals, and 39 CPGs were identified. Only 7 CPG manuals and 5 HTA manuals included statements with a clear reference to RDs. Only more general statements were identified on all topics (a, f), e.g. indications of a potential disadvantage of patients with RDs in the prioritization of CPG topics (a), naming of case, control studies as a study type for information on RDs (c), or indication of a decreased informative value of randomized controlled trials in small populations (d).

Discussion(Conclusion) : Despite the potential of CPGs to improve the care of patients with RDs, so far no uniform methods exist to deal with evidence for the corresponding CPGs, therefore it is still necessary to further focus on methods for CPG development and improve the evidence base on RDs.

Implications for guideline developers,users : A stronger focus on RDs by CPG developers and HTA agencies can contribute greatly to the care of affected patients.
Background, Purpose (Introduction): There are economic, social, ethical and physical consequences when there is a poor match between a wheelchair, the user, and their environments. Two Australian government organisations funded the development of a clinical guideline for therapists on the assessment of, and prescription of wheelchairs and scooters for, people with spinal cord injury or traumatic brain injury. Limited quantitative research evidence existed on the prescription of wheelchairs. The hierarchical model for grading recommendations was inadequate, if a range of research designs were to be included for a rigorous evidence base.

Objectives: To develop a grading system for recommendations, which recognised the complexity of the intervention and utilized all relevant sources of evidence.

Methods: A national grading matrix was adapted to include other research methodologies. A further three grades were added. The final seven grades utilized specific criteria in recognition of the quality and body of evidence.

Results: Literature searches for evidence were extended beyond databases to a range of other sources. Quantitative and qualitative research, single case studies, expert opinion, consensus, grey literature and statutory regulations were used in the development of over seventy recommendations.

Discussion (Conclusion): The nature of complex therapy interventions such as wheelchair prescription can preclude quantitative research studies that have subjects randomly assigned, matched controls and avoid bias (subject, clinician and assessor blinding).

Implications for guideline developers, users: Yet, there is a need for evidence based guidance for therapists. One of the solutions is the judicious use of a broad range and mix of evidence within a pragmatic grading system for the development of a guideline.
**Background, Purpose (Introduction)**: Despite a rapid growth in the provision of health information, the quality of the information remains variable. The critical appraisal of medical literature is a demanding process that requires epidemiological skills and careful reading of the selected evidence.

**Objectives**: Related to these difficulties we decided to develop instruments in order to facilitate the critical appraisal process and the summary of scientific evidence.

**Methods**: Therefore we carried out a systematic review to identify critical appraisal tools and articles about the criteria to be applied to critical appraisal. Afterwards a software application was designed and validated by an assessment of its “content and face validity”. These critical appraisal tools have been updated and translated from Spanish into English. Furthermore, a Web platform has been developed containing 7 different instruments for critical appraisal depending on different study designs.

**Results**: The Web platform 2.0 has some very interesting features including: a guided process to complete the appraisals, automatic generation of evidence tables meanwhile you can easily complete the evaluation, bilingual glossary of epidemiological terms, immediate access from any computer connected to internet, automatic updates of the version online, etc.

**Discussion (Conclusion)**: Although several instruments for critical appraisal have been already published until now, www.lecturacritica.com is the first website to offer both appraisal of the medical information and resources of the Web 2.0 to share our assessments and outcomes.

**Implications for guideline developers, users**: Option to share your appraisals with other researchers online.
Background,Purpose(Introduction) : Journal club teaching is a good style of gaining the effectiveness of evidence, based medicine (EBM) into clinical teaching but its efficacy is still unknown.

Objectives : The purpose of this study was to assess EBM curriculum in

Methods : We collected the questionnaire from “seeded instructors” before and after the” journal club in EBM”. The questionnaire contained “formation of clinical problems, searching for information, literature appraisal, clinical application, evidence attitude, and the overall attitude” totally 26 items included. The clinical scenario was announced a week ago. The evaluation list score was graded in 5 levels.

Results : Literature searches for evidence were extended beyond databases to a range of other sources. Quantitative and qualitative research, single case studies, expert opinion, consensus, grey literature and statutory regulations were used in the development of over seventy recommendations.

Discussion(Conclusion) : The nature of complex therapy interventions such as wheelchair prescription can preclude quantitative research studies that have subjects randomly assigned, matched controls and avoid bias (subject, clinician and assessor blinding).

Implications for guideline developers,users : Yet, there is a need for evidence based guidance for therapists. One of the solutions is the judicious use of a broad range and mix of evidence within a pragmatic grading system for the development of a guideline.
Poster 14

Is the capture, recapture method suitable in PubMed search for the estimate of numbers published for EBM in clinical practice?

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Background, Purpose (Introduction): The capture, recapture method of evidence, based medicine (EBM) search is used in clinical teaching, however, its efficacy is unknown. To date, none has attempted to enumerate the true extent of this important method in EBM.

Objectives: To estimate the numbers if test, treat published within a time, period is interesting and important. The purpose of this study was to assess EBM search method in

Methods: We searched the topic “cyclic vomiting” in the context of diagnosis with the key words 1st time with “cyclic vomiting and diagnosis”, and 2nd search with “cyclic vomiting and ultrasound or computed tomography or endoscope”.

Results: There were 204 studies found in the 1st search. There were 9 studies found in the 2nd search. Totally, there were 9 studies recaptured at both 2 times, of these, all were the 9 studies in the 2nd time.

Discussion (Conclusion): The effectiveness of capture, recapture method in the PubMed database is not satisfactory in screening all the related studies especially for the disease diagnosis in the searched field.

Implications for guideline developers, users: The effectiveness of capture, recaptured method in EBM in in Pubmed database is not satisfactory; however, its usage in other database needs further analysis.
Poster 15

Walking intervention on blood pressure control: a systematic review

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Background, Purpose (Introduction): Physical activity has been recommended as an important lifestyle modification for the prevention and control of hypertension. Walking is recommended by health care professionals as a form of exercise for controlling hypertension. Studies testing the effect of walking on blood pressure have produced inconsistent findings.

Objectives: To systematically review the evidence for the effectiveness of walking intervention on blood pressure.

Methods: A systematic search of the literature was conducted using a range of electronic and evidence-based databases to identify studies. Criteria for study inclusion were a randomised controlled trial design with a non-intervention control group; study samples were aged 16 years and over; the intervention was predominantly focused on walking and blood pressure was an outcome. Data extraction and quality appraisal were carried out independently by two reviewers; a third reviewer was consulted when needed.

Results: A total of 27 randomised controlled trials were included and nine of the 27 trials found an effect of walking intervention on blood pressure control. Walking intervention tends to be effective from studies with larger sample size. A beneficial effect of walking on blood pressure tended to employ moderate to high intensity walking and a longer intervention period than those trials not showing the effect.

Discussion (Conclusion): The results of this review provide evidence of the beneficial effects of walking on lowering blood pressure.

Implications for guideline developers, users: Recommendations on lowering blood pressure with a walking activity should address the issue of walking intensity to achieve a beneficial effect on lowering blood pressure.
**Background, Purpose (Introduction)**: Stroke was the second leading cause of premature mortality burden and 7th highest cause of disability burden in Singapore in 2004.

**Objectives**: An integrated care pathway (ICP) was developed from evidence, based key elements of care for stroke patients.

**Methods**: Expert clinical and policy workgroups were appointed to determine the scope of the pathway and clinically important outcomes for stroke interventions. A comprehensive search was done for stroke interventions as expressed in published clinical practice guidelines. Identified guidelines were critically appraised with the Appraisal of Guidelines Research and Evaluation (AGREE) instrument and interventions recommended were extracted (with their supporting scientific literature) and presented in an evidence table. The workgroups then identified locally relevant interventions for the acute phase of the stroke ICP. A further search to update the evidence and a search for economic evaluation evidence was done, and the evidence was then tabulated as an evidence matrix showing levels of supporting evidence and effect size against the expert, determined outcome measures.

**Results**: 12 guidelines were rated “recommended” by the AGREE instrument and had their interventions (n=687) extracted. Four interventions on acute stroke management were selected, updated and tabulated into the evidence matrix: acute stroke service, early specialist assessment for TIA, early administration of IV rt, PA, and stroke rehabilitation. These interventions were supported by meta-analyses, randomized controlled trials and prospective cohort studies.

**Discussion (Conclusion)**: This method of identifying interventions through international guidelines recommendations has allowed clinicians to easily identify interventions that have a strong evidence base, and determine which key elements of care should be incorporated into the ICP.

**Implications for guideline developers, users**: A similar process will be used for determining key elements of care in other phases of stroke management and for other disease conditions.
**Background, Purpose (Introduction)**: The use of methylphenidate to enhance processing speed on patients with TBI has been viewed as an adequate pharmacotherapy. However, no sufficient and validated systematic reviews support its use in patients with brain injury to promote overall cognitive function.

**Objectives**: To systematically evaluate the effect of methylphenidate for cognitive improvement following traumatic brain injury.

**Methods**: Searching strategy was addressed by using keywords as brain injury and methylphenidate without any limitations in the database of MEDLINE, PubMed, PsycINFO, CINAHL, EMBASE and CENTRAL (The Cochrane Library) from inception to Jul, 2010. Only RCTs meet the inclusion criteria. In addition handsearching and expert consultation were executed. Pooled data was divided into two groups, methylphenidate group and placebo group, to determine the significance by using CMA software version 2.0 for data analysis. Attention, memory and cognitive function were analyzed as our outcome measures by forest plots.

**Results**: Twelve RCTs were identified and included in this review. Three RCTs of these compared the reaction time (effect size: 0.36, 95% CI from 0.715 to 0.005) after administrating methylphenidate. Attention function, detected by choice reaction time, was significantly enhanced in the methylphenidate group. No significant improvements were observed in vigilance, distractibility, memory and cognitive function.

**Discussion (Conclusion)**: Methylphenidate seems to have medium efficacy to facilitate the reaction time in patients with traumatic brain injury. However, no prominent outcome improvements were achieved in memory and cognitive function.

**Implications for guideline developers, users**: Well, designed researches are needed to determine the optimal dosage, treatment duration and side effects.
Poster 18

Therapy for cyclic vomiting syndrome in children

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Background, Purpose (Introduction): Cyclic vomiting syndrome is difficult to cure. Many drugs have made progresses in the remissions of this syndrome.

Objectives: To assess the guidelines of medicines in the remission or treatment of cyclic vomiting.

Methods: Search strategy: We searched the Cochrane Library, MEDLINE, EMBASE, Cochrane library without limitation of years published.
Selection criteria: All randomized clinical trials of treatment of cyclic vomiting in children were included.
Data collection and analysis: Two authors independently extracted the data, which were analyzed by RevMan 5.0 software. For dichotomous data, we estimated the relative risk. For continuous data, we calculated the mean difference.

Results: Two qualified trials with 194 cyclic vomiting children patients were identified, two of which were of low quality for with different drugs (one was Amitriptyline, another was Valproate). We could not pool the results because no more than two publications were used the same intervention or outcomes.

Discussion (Conclusion): The effectiveness of therapy of cyclic vomiting is different and cannot have guidelines till now. Well designed clinical trials are required urgently before any confident conclusions can be drawn about the syndrome.

Implications for guideline developers, users: The effectiveness of therapy of children cyclic vomiting in EBM database is not satisfactory. Therapy with Amitriptyline can reach 56% effect and Valproate 85%, but the results were inconclusive.
Dissemination of the Cochrane Library into the Regional Hospitals of Taiwan

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Background, Purpose (Introduction): The Cochrane library is a well-known online evidence retrieval database. Since 2007 the National Health Research Institutes (NHRI) has offered free access to the Cochrane library for regional hospitals in Taiwan.

Objectives: This study is to investigate the potential organizational barriers and incentives of the access to the Cochrane library.

Methods: A structured questionnaire survey was conducted for the leaders in charge of the promotion of Cochrane library in the regional hospitals of Taiwan. The respondents were stratified into three groups by the relative rate of access in their hospitals (high, medium, and low access rate).

Results: Four leader’s characteristics (including male gender, medical doctor, director, and leader in charge of evidence, based practice) and 5 promotional strategies (including providing relevant information via email, investing in early adopters, having assistance of designated personnel, conducting workshops, and inviting experts for speeches) were more common in the hospitals with high access rate of Cochrane Library. Leaders in the high usage group (86.7%) more often used three or more methods for dissemination than subjects in the low usage group (23.1%) (p

Discussion (Conclusion): This study has identified several crucial factors in relation to the access of Cochrane library. Our data shall provide stakeholders and promoters valuable information in spreading Cochrane Library.

Implications for guideline developers, users: Multifaceted strategies can facilitate the utilization of Cochrane Library. Useful methods include conscious raise, active information, helping relationships, and educative training.
Background, Purpose (Introduction):
Evidence, based practice has changed clinical nursing care policy.

Objectives: The study is to understand the barriers and the facilitates of evidence, based practice.

Methods: A descriptive, cross, sectional survey is conduced in the eastern of Taiwan. The unnamed questionnaire is designed for the nursing staff who working in the medical center. There are 440 questionnaires will sent to the nursing staff. Nurses will survey to elicit their opinions regarding barriers to research utilization and facilitates to evidence, based practice. The barriers Scale and facilitates Scale were used. Data analysis was performed using SPSS for Windows.

Results: The response rate was 82% (n = 362). There were only 4.4% of nurses had research experiences before. The nurses feel the top three barriers to implementation the research were (1) language barrier: most of the research papers, articles are in English and the nurses are difficulty to understand the research paper; (2) lack of time: the nursing staff does not have time to read research journal; (3) lack of EBP practice: the nurses have not adequate time to implement the new ideas during the clinical practice. There were facilitates to improve the EBP in the clinical practice such as enhance the ability of nurses to comprehend the research papers; provide the research network to support and share the nurses and other health providers; provide the research training program to the nurses.

Discussion (Conclusion): The findings will provide institution to develop the EBP in the hospital.

Implications for guideline developers, users: In the future, the EBP training program and the EBP implementation need be examined...
Training and certification of developers of clinical guidelines

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Background, Purpose (Introduction): Training of the guidelines development group (GDG) members to adaptation of clinical guidelines is a prerequisite for participation.

Objectives:
1. Identify criteria for selecting GDG members and skills that they should possess;
2. Describe the training program for GDG members;

Methods: We reviewed materials used by other organizations developing clinical guidelines, took into account the experience of international experts working in Ukraine at EU Project (executive NICARE), current trends existing in the development, adaptation of clinical guidelines and the Ukrainian legal base.

Results: State Expert Center of the Ministry of Health of Ukraine (MOH) has developed a two, stage training program for managers, practitioners, representatives of allied professions, and public that will participate in the adaptation of clinical guidelines. Members of the GDG (developers) are involved in a two, day training program which covers the principles of Evidence, Based Medicine, shows the place and role of clinical guidelines, standards of medical care and clinical protocols, explains the adaptation scheme, implementation, and assessment. After training all participants will receive certificates of the MOH which entitle them to be members of GDG. During adaptation process, trainings for members of GDG working on specific topics are carried out. At these trainings, adaptation of clinical guidelines, development of medical care standards, and clinical pathways, are thoroughly covered.

Discussion (Conclusion): The proposed program can be used for training of GDG members.

Implications for guideline developers, users: It is necessary to develop an assessment form for feedback from GDG members.
Background, Purpose (Introduction) : A national guideline developer was commissioned to develop a short clinical guideline on interferon, gamma immunological testing (IGTs) for diagnosing latent TB as a partial update of a previous guideline published in 2006, when there was no evidence available on their diagnostic utility. As IGT is now commonly used in practice, it was decided that this section should be updated.

Objectives : To highlight the practical challenges encountered throughout the development of the guideline. These include managing the expectations of the Guideline Development Group (GDG) and the format of the guideline.

Methods : A retrospective evaluation of the processes used to develop a partial update, taking into account variations of the standard processes as outlined in the guidelines manual (2009).

Results : [The policy document relating to presenting updated clinical guidelines is currently a draft document]

A working policy document relating to the presentation of updated clinical guidelines has been drafted with the expectation that it will be incorporated into the relevant sections of the guidelines manual. This paper suggests a focused approach on outputs and the labelling of recommendations. Specifically it offers clarification on labelling and recommends early discussions about format, boundaries between old and new, and dealing with changes in old recommendations

Discussion (Conclusion) : As clinical guidelines are updated, there are challenges in developing and presenting these clearly to the GDG and other stakeholders, both for consultation and publication. It is important to make clear what has changed, particularly in the recommendations, and to indicate how up, to, date the evidence review is for individual recommendations.

Implications for guideline developers, users : Identification of key problem areas may facilitate the development of future partial updates of previous guidelines
**Background, Purpose (Introduction)**: We assessed the quality of a sample of clinical guidelines for thyroid nodules and thyroid cancers, using the AGREE instrument.

**Objectives**: We also evaluated the reliability and validity of the AGREE instrument and summarized the key recommendations of the appraised guidelines.

**Methods**: Twenty-six clinical researchers and endocrinologists who had been trained in the principles of developing clinical guidelines and using the AGREE instrument participated in the study. Clinical guidelines selected via a systematic search were assessed, each by eight participants. We compared the AGREE domain scores of the guidelines. We used Cronbach’s Alpha and Intra Class Coefficients to assess the reliability, and the spearman’s rho to assess the correlation between the overall assessment and other variables.

**Results**: Seven guidelines were included in the study. ‘Scope and purpose’ and ‘clarity and presentation’ achieved the highest domain scores. The ‘applicability’ received the lowest domain scores and reliability coefficients. The ‘rigor of development’ and ‘clarity and presentation’ obtained the highest correlations with overall assessment scores. There was a significant relationship between the overall assessment score and the numbers of algorithms, tables and figures in the guidelines.

**Discussion (Conclusion)**: We identified three clinical guidelines that obtained high overall assessment scores and were recommended for use in practice. Our findings have important implications for those developing clinical guidelines, especially as clarity and presentation significantly influenced the participants’ assessment of the guidelines.

**Implications for guideline developers, users**: The developers should ensure that the recommendations are presented clearly and unambiguously, and flowcharts, algorithms and other tools are developed to help the users in applying the recommendations to practice. Further work is needed for improving the ‘applicability’ domain of the AGREE.
Poster 26


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Background, Purpose (Introduction) : The prevalence of bacterial resistance to antibiotics (AB) in French hospitals is high and France is one of the largest consumers of AB in Europe. On 2008, HAS guidelines updated guidelines on “Proper use of antibiotics in hospitals” and promoted use of antibiotic guidelines.

Objectives : To evaluate impact of HAS guidelines on professional practices concerning antibiotherapy in French hospitals

Methods : Analysis was done with checklists including national indicators. The study was realised in 2009 in public and private hospitals with acute medical, surgical and obstetrical activities.

Results : 1,561 hospitals were analysed. There is an anti-infection agents committee in 93% of the hospital (with 4 or more sessions a year in 59% of cases). An AB “advisor” exits in 84% of hospitals. Information and training for new healthcare providers are realised in 49% of hospitals. There is usually an updated list of available AB (98%), a monitoring of AB consumption in DDD (92%), a list of AB reserved for certain indications or not delivered without clinical or bacteriological information (73%) or delivered with a limited duration (81%). Compliance with AB protocols is assessed each year or more in 59% of hospitals.

Discussion (Conclusion) : The results show that French hospitals are progressively taking initiatives for the best use of antibiotics. Indicators for the monitoring of prescribing practices are well developed in France.

Implications for guideline developers, users : Some efforts have to be done specially for evaluation of antibiotic practices. Moreover, information provision and training have still to be performed.
**Background, Purpose (Introduction)**: On 2008, Haute Autorité de Santé (HAS) updated and promoted use of guidelines on “proper use of antibiotics in hospitals” focusing on institutional players such as the pharmacy.

**Objectives**: To analyse the practices of hospital pharmacies concerning antibiotherapy in French hospitals with regard to HAS guidelines.

**Methods**: Analysis was done with checklists including items about the role of the pharmacies in the proper use of antibiotics in hospitals.

**Results**: 373 representative hospitals were analysed. The pharmacies have a process of management and stockage of antibiotics in 46% of cases (61% if surgical activities, 59% if intensive care units). The list of the anti-infectious available has been drawn by a committee for anti-infectious (35%) or for medicinal products and sterile medical devices (83%) or for prevention of hospital infection (46%). The pharmacy supply information about available antibiotics (90%), best practice guidelines (68%) and daily treatment costs (38%). A list of antibiotics with control distribution exists in 56% of hospitals (77% if surgical activities – 85% if intensive care unit). The pharmacy’s information management enable pharmaceutical validation of prescription (81%), tracability of prescription (88%), dispensing (85%), administration (86%) and return to the pharmacy of units not administered (63%). Evaluation of protocols compliance are realized in 20% of hospitals.

**Discussion (Conclusion)**: The pharmacies of the French hospitals are taking initiatives for the best use of antibiotics.

**Implications for guideline developers, users**: Some efforts have to be done for evaluation of practices, information about guidelines, costs and cooperation with microbiology laboratory and the clinical departments.
Developing guidance on improving service user experience in mental health services: methodological challenges

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Background, Purpose (Introduction): There has been considerable interest in the experience of people using healthcare in the UK, with it forming a key part of the strategies for health over the last few years. There is little guidance in this area.

Objectives: The National Institute for Health and Clinical Excellence (National Institute for Health and Clinical Excellence) commissioned the National Collaborating Centre for Mental Health to create a piece of guidance to improve the experience of people using inpatient and community adult mental health services.

Methods: The guidance development group comprises of equal numbers of health professionals and service users, and the technical team are developing specific methodologies to include evidence from a wide variety of sources, including existing qualitative and quantitative reviews, new qualitative analyses, complaints data and surveys. There are a number of challenges in developing evidence based guidance in this field. These include how to grade evidence consistently when the evidence comes from different research paradigms, small scale studies, and the complexities of producing a single piece of guidance when people’s individual needs and choices are an integral part of improving their experience.

Results: These are being addressed by using a matrix of service, user experience (based on the Picker Institute’s eight dimensions of patient, centred care and a care pathway approach), triangulation of evidence, and guidance development group expertise.

Discussion (Conclusion): This is an ongoing piece of work, due for publication in August 2011.

Implications for guideline developers, users: Despite these challenges, the guidance will be important in shaping mental health services across England and Wales, and future methodology within National Institute for Health and Clinical Excellence’s guidance development programme.
Poster

Poster 29

A Survey of The Awareness Rate of GRADE in China

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Background, Purpose (Introduction): The “Grades of Recommendation, Assessment, Development, and Evaluation” (GRADE) system has important implications for clinical practice guidelines. It is still a relatively new concept in China.

Objectives: To investigate the awareness of GRADE system among health providers and researchers.

Methods: We conducted a two, part survey. The first using a survey questionnaire to attendees on the 6th Asia, Pacific Evidence Based Medicine Conference on September 25; the second using a web, based survey on www.dxy.cn (The biggest medical community site in China) from October 13 to 28.

Results: Of the 245 respondents who completed a questionnaire, 118(48%) heard of GRADE system. Among those who heard of GRADE, 53(45%) had accessed the web site of GRADE; 20(17%) had used the GRADEpro; 91(77%) didn’t knew how many levels of the quality of evidence and 102(86%) didn’t how many levels of the strength of recommendations exactly in the GRADE system; 6(5%) knew all upgraded factors and 39(33%) knew all degraded factors of GRADE system.

Discussion (Conclusion): Respondents have limited familiarity with the concept of GRADE but most of them thought the GRADE approach was important to clinical practice in China.

Implications for guideline developers, users: It is necessary to introduce and apply the GRADE system in China, and GRADE will provide a systematic and transparent approach for guideline developers in China.
**Poster 30**  
*How to deal with intellectual conflicts of interest*

*Tjerk Wiersma, Dutch College of general Practitioners, Netherlands*

**Background,Purpose(Introduction)**: Evidence, based guidelines should represent the actual state of medical science. A relatively ignored potential source of bias in guideline development is intellectual conflict of interest.

**Context**: Guideline development groups are often filled with experts. Most experts are scientific investigators who publish their findings in medical journals. Due to human psychology scientists tend to overestimate the importance of the results of their own investigations and will try to translate their findings into a recommendation.

**Description**: The Dutch College of General Practitioners has published about 90 guidelines so far. Guidelines containing recommendations based on research of members of their guideline development group were identified. In a number of cases it is questionable whether the recommendation should have existed without the involvement of individual members. Some examples of this will be shown.

**Lessons for guideline developers, adapters, implementers, or users**: Intellectual conflict of interest can be a source of bias in guideline development. Several strategies how to minimize this kind of bias will be discussed.

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**Poster 31**  
*Collaboration on guideline development: better, faster, cheaper?*

*Sonja Kersten, CCC The Netherlands, Netherlands*  
*Daphne Stemkens, CCC The Netherlands, Netherlands*

**Background,Purpose(Introduction)**: Guideline organizations produce guidelines on the same topics using similar methods, resulting in unnecessary duplication of effort. Two
guideline developing organizations, the Belgian Health Care Knowledge Centre (KCE) and Comprehensive Cancer Centre (CCC) the Netherlands, explored possibilities to collaborate.

**Objectives**: To reduce duplication of effort, produce guidelines more efficiently and improve the quality of guidelines through collaboration.

**Methods**: A stepwise approach was undertaken:
1. Trust building within the CoCanCPG project (Coordination of Cancer Clinical Practice Guidelines), through comparison of methods and (retrospective) comparison on a guideline on the same topic
2. Collaboration on guideline cervical cancer (pilot)
   a. Comparison of key questions
   b. Literature study of common key questions divided between two organizations
   c. Exchange of evidence tables and reports

**Results**: Within the CoCanCPG project (Era Net), KCE and CCCC performed a retrospective pilot study that build trust and harmonized methodologies. As a result, KCE and CCC were confident to start collaboration on the guideline cervical cancer. Four common key questions were identified, of which the literature study was divided between the two organizations. The project runs from February 2011 – June 2011.

**Discussion(Conclusion)**: The most expensive part of guideline development is the literature search. KCE and CCC decided dividing the work for their guideline on cervical cancer, each performing half of the literature search and exchanging results of four common questions. This pilot is expected to result in higher quality through cross validation (better), reduction of time (faster) and costs (cheaper) of guideline development.

**Implications for guideline developers, users**: Collaboration on guideline development is possible and fruitful.

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**Poster 32**

*Development of standardization in the Health of the Republic of Kazakhstan*

*K. Rustemova, Center of Standardization and Health Technologies, Kazakhstan
A.Kostyuk, Center of Standardization and Health Technologies, Kazakhstan*

**Background, Purpose (Introduction)**: Creating a system of standardization in the Healthcare system of the Republic of Kazakhstan is one of the priorities of the state.
Objectives: The objectives of the Center of Standardization and HTA are:
• consideration, coordination and preparation for approval of normative documents of standardization.
• development and implementation of clinical guidelines, clinical protocols
• examination regulations in accordance with interstate and international standards;
• assessment of the status of standardization in health care.

Methods: Developed standards present to the Expert Council in the Ministry of Health. The Expert Council is composed of highly skilled clinicians, experts, scientists, trained for Standardization.

Results: Improving the quality of clinical practice in the Republic of Kazakhstan will be achieved by switching from the use of clinical protocols for clinical guidelines. For this purpose have been established Centers of evidence, based medicine. Main functions of Centers are to adapt clinical guidelines, collection and analysis of proposals on existing standards, providing guidance and training management practitioners.

Discussion (Conclusion): The presence in each hospital of clinical guidelines will form the library and to create conditions for training doctors in the workplace and improve the quality of medical services, enhance the credibility of the patient.

Implications for guideline developers, users: Currently in the Republic of Kazakhstan is actively working on the development and implementation of clinical guidelines. Were determined main five main areas for CPG’s development. There are: Pediatrics, Obstetrics, Surgery, Therapy and Emergency care.

Background, Purpose (Introduction): Ukraine belongs to the countries with limited resources and cannot afford the full cycle of clinical guidelines development. With the support of the EU Project (executive NICARE), on the basis of SIGN 50 adaptation methodology
called ‘Unified Methodology for Adaptation of Clinical Guidelines, Standards and Protocols of Medical Care’ was developed and subsequently approved by the Ministry of Health of Ukraine (MOH). The methodology considers the peculiarities of Ukrainian medical care. Clinical guidelines adaptation is provided according to the procedure regulated by the MOH on the principles of Evidence, Based Medicine with the use of G-I-N (prototypic clinical guidelines selection) and AGREE (evaluation and selection of clinical guidelines for adaptation), which allowed to abandon the consensus method. Technical consultations with NHS QIS are carried out within the approved Memorandum.

**Objectives**: 
1. Describe the experience of ‘Unified methodology ...’ adaptation and application. 
2. Determine the part of international and Ukrainian experience in clinical guidelines adaptation.

**Methods**: We conducted a retrospective analysis of medical care standards and clinical protocols existing in Ukraine until 2004 regarding compliance with the principles of Evidence, Based Medicine.

**Results**: Based on this analysis and with the assistance of experts of the Project ‘Medical Standards Promotion in Ukraine’, SIGN 50 ‘A guideline developer’s handbook’ was adapted. This methodology takes into account peculiarities of the Ukrainian healthcare system and basic principles of SIGN, National Institute for Health and Clinical Excellence, and ADAPTE.

**Discussion(Conclusion)**: Since 2009 Ukraine has moved from consensus method to adaptation of clinical guidelines and development of medical care standards based on Evidence, Based Medicine.

**Implications for guideline developers, users**: Proposed methodology is applicable for the countries with limited resources.

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**Poster 34**

*Moving from one pain to another: Can guideline adaption processes be customized to different clinical areas?*

**Christa Harstall, Institute of Health Economics, Canada**

**Paul Taenzer, Calgary Health Region Chronic Pain Centre, Canada**

**Context**: The Alberta Ambassador Program formed a multidisciplinary partnership of clinicians, health technology assessment researchers, and other key stakeholders to successfully meld and contextualize seven ‘seed’ guidelines into one clinical practice guideline.
on the management of low back pain for use by all professionals in community practice.

Description: The same process has now been used to create a guideline on headache management in primary care.

Lessons for guideline developers, adapters, implementers, or users: The Ambassador Program’s initial success was, in part, due to its origins in a knowledge translation strategy, which enabled it to leverage existing stakeholder interest and receptivity into the guideline development process. Its application in the more complex field of headache helped to identify the tools and strategies that were useful, and those that were not so useful, in these two very different areas of primary care. Key factors that influenced the transferability of the Ambassador adaptation process included: the membership of the Guideline Development Group (GDG); the expertise and profile of the GDG Chair; the level of complexity of the health issue; and the experience of the Steering Committee and Research Team. Understanding how these factors affect the universal application of various components of the adaptation process can help guideline developers avoid potential pitfalls.

Background, Purpose (Introduction): There is little research into how Guideline Development Groups (GDG) reach decisions and subsequently make recommendations, but it is important to understand this to ensure that the process is transparent. Most GDG’s reach an agreement by using informal consensus, but this may be easier when there is good quality evidence. There are occasions when a formal consensus method may be more appropriate.

Objectives: We aim to describe the use of Delphi, RAND and Nominal Group Technique (NGT) consensus methods used, in a national programme of clinical guidelines, and explore the association between the decision, making process and outcome.

Methods: An assessment questionnaire will be developed for analysing the GDG’s and developers’ views on the use of formal consensus methods. These views will be used to develop a descriptive categorisation of the interactions of the GDG and outputs of the formal con-
sensus process. The data will be analysed thematically using framework analysis which is especially suitable for combining data from disparate sources.

**Results**: The survey is currently in the planning stages, but results will be ready for presentation at G-I-N.

**Discussion (Conclusion)**: The constraints of working within a scope, the very limited timescales and ensuring adherence to the organisational policy on openness and transparency are key factors that need to be considered at every stage of the decision making.

**Implications for guideline developers, users**: It is therefore important that formal consensus methods are considered when planning the development of clinical guidelines, and we anticipate that results from the survey will give some indication of when formal consensus methods may be used appropriately and how they contribute to the principle of transparency.

**Background, Purpose (Introduction)**: The growing number of at risk in elderly population and availability of treatment options for dementia favour early screening to optimise the benefit of early treatment.

**Objectives**: To determine routine suitable tools for screening people at risk of dementia at primary care level.

**Methods**: Systematic reviews were performed from June 2006 to July 2009. A total of 22 articles were retrieved from various electronic databases such as PubMed, Medline, PsycINFO, and Cochrane Database of Reviews. Articles were appraised and graded the strength of evidence using US, Canadian Preventive Services Task Force.

**Results**: There was insufficient evidence to support routine screening of elderly people for dementia at primary care level. Mini Mental State Examination (MMSE) has been recommended due to its widespread use for screen-
ing people at risk of dementia. A systematic review analysed and compared 22 instruments by their likelihood ratio. Twelve brief screening tests at primary care were suggested according to the brevity of tests. Another systematic review looked into patient, administered and informant–rated instruments. Sixteen instruments were reviewed and two were found had satisfied the criteria as a good screening tool based on psychometric and administration properties. Symptom of Dementia Screeners (SDS) is a care giver base tool with the cut off ≥5 gave 90.2% sensitivity and 84.6% specificity. Short version of geriatric depression scale (GDS, 4) was found to be effective for screening depression.

Discussion (Conclusion) : A care giver based questionnaire (e.g. SDS) may be used before proceeding with more detailed screening. For detailed screening, MMSE or ECAQ and GDS, 4 were recommended

Implications for guideline developers, users: Screening tools

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Poster 37

**What kind of publication types are referred in the guidelines? Are the references up to date enough?**

Leena Lodenius, the Finnish Medical Society Duodecim, Finland

Mari Honkanen, the Finnish Medical Society Duodecim, Finland

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**Background, Purpose (Introduction)**: It is essential that publication types of good quality are basis for the evidence of the guidelines.

**Objectives**: The aim is to analyze publication types referred in two guidelines and also find out if those references are up to date enough.

**Methods**: Two psoriasis guidelines were chosen, one produced by SIGN and the other one by Finnish Medical Society Duodecim (Current Care). As these guidelines vastly discuss the treatment of psoriasis, there exists a lot of clinical trials in the world literature to choose from. The references that were found in Medline were studied and were categorized by publication type based on Medline indexing. How up to date the references were, was studied by comparing the publication year of each reference to the publication year of the guideline.

**Results**: The study is ongoing and there are no results yet.
**Discussion(Conclusion)**: In Finland the significance of the publication types and the knowledge and availability of the latest publications is emphasized and taught in several courses and workshops. Critical assessment of the literature – seminars and information retrieval workshops are frequently arranged for the members of the guideline groups.

**Implications for guideline developers, users**: By means of this study we will bring up the significance of appreciated publication types as references when preparing guidelines. Also the currency of the references is of great importance. This minor study will show a trend of the literature used. Education of critical assessment of the literature is a good way to direct the attention to the quality of references.

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**Poster 38**

Evidence, based guideline for management of tennis elbow in primary care

*Dr. PLLau, Professional Development and Quality Assurance, De, Hong Kong*

**Background, Purpose (Introduction)**: Tennis elbow is a common problem encountered in general practice. There was scarce local studies and international guidelines on tennis elbow management.

**Objectives**: To develop an EBM guideline with multidisciplinary and patient involvement for primary healthcare professionals

**Methods**: A multidisciplinary guideline development group consists of family physician, nurse, physiotherapist, occupational therapist and patient representative. Systematic search was made on guidelines from major guideline developers, Cochrane library and Medline; and they were critically appraised. Consensus were made by Delphi technique.

**Results**: Based on ACOEM and Clinical Evidence (BMJ), the recommendations are:

1. To identify and modify offending or aggravating activities.
2. Patients recovering from acute or sub, acute elbow problems should be encouraged to continue to working
3. Immobilization should be avoided
4. Topical NSAIDs is recommended for pain relief and global improvement for tennis elbow lasting 4 weeks or less
5. Oral NSAIDs could be effective for pain relief in the short term and may do better than
corticosteroids in long term pain relief up to 26 weeks.
- Corticosteroid injection could be considered for tennis elbow pain 4, 6wks
- Ultrasound therapy could be considered for long term pain relief.
- Low level laser therapy, phonophoresis and opioids are not recommended.

**Discussion (Conclusion):** To bridge between research and practice, the following is proposed for dissemination:
- Disseminate through an active educational intervention e.g. CME seminar on EBM practice of tennis elbow.

**Implications for guideline developers, users:**
For implementation strategies:
- To identify external barriers to implementation and develop implementation strategies that address the external barriers accordingly.
- Interventions to promote implementation with evidence of effectiveness e.g. reminders, educational outreach.
- Monitor and evaluation of dissemination and implementation: through clinical audit.

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**Background, Purpose (Introduction):** The clinical practice guideline (CPG) based on the evidence, based approach has been important in identifying best practices and standardizing treatments, but the quality of CPG varies considerably.

**Objectives:** The purpose of this study was to develop standard reporting items for CPG.

**Methods:** We identified reporting guidelines for CPG, systematic review, and etc through the comprehensive literature search. Then, we selected 46 items after reviewing reporting guidelines and related information. The RAND, UCLA Appropriateness Method (RAM) was used to assess appropriateness of 46 items and rated by a 2, stage process. In first stage, 9 panelists separately rated items using a 9, point scale. The second round of ratings was conducted during the panel meeting. Panelists discussed items that were not agreed in the first round and 9 panelist rated again independently. The standard reporting items was selected by the scoring system of RAM.
Results: Thirty four items were agreed to be appropriate for standard reporting of CPG. Those items were defined and arranged into 10 dimensions to create checklist form of standard reporting Items for CPG (i.e. STARIGs). We also developed an explanatory document to increase the usefulness of this checklist. For each checklist item, this document contains an example of good reporting and a rationale for its inclusion.

Discussion(Conclusion): STARIGs provides a framework to support more comprehensive documentation of CPG. We believe this checklist will also serve as a useful resource for most organizations that are active in developing CPG.

Implications for guideline developers, users: STARIGs will be a useful tool for guideline developers.

Background, Purpose (Introduction): Comparison of perinatal mortality in the Netherlands with that in other European countries suggested a higher mortality rate in the Netherlands. More research is necessary to gain insight into the prevalence of risk factors for perinatal mortality compared with other European countries. A Dutch committee proposed several measures to take to decrease perinatal mortality. One of these (non, evidence based) proposals was to incorporate programmes of preconception care. Both midwives as general practitioners are thought to give this care.

Context: The general practitioner in the Netherlands is used to a demand, driven way of consultation and is a gatekeeper to specialized care. Finance for program based care or supply, oriented care is not provided. The Dutch government gives the opportunity for research of best practice preconception care in especially deprived neighborhood.

Description: The guideline Preconception care of the Dutch College of General Practitioners describes individual risk inventarisation before a planned pregnancy. Although evidence exists of several risk factors for unfavorable outcome of pregnancy, less is known about programmes of supply, oriented care with the ultimate goal of decreasing perinatal mortality.
Lessons for guideline developers, adapters, implementers, or users: Supply, oriented care needs sufficient evidence. In absence of evidence the guideline follows the demand, driven care of general practitioners.

Background, Purpose (Introduction):

Although pain is a significant source of distress for cancer patients, much of it remains undertreated. Optimal use of opioid in cancer pain management can be a challenge. In Malaysia, its consumption is considerably lower than the global mean. With implementation of pain as fifth vital sign, guidelines are developed to improve the management of cancer pain.

Objectives: To optimise pain control, minimise side effects and enhance well being of adult patients with cancer pain with opioid analgesia

Methods: Literature search was done systematically in Medline, Pubmed, Ovid, Cochrane Library, Health Technology Assessment and G-I-N databases and general search engine. Reference lists of retrieved articles were searched and experts in the field were contacted to identify further studies. Critical appraisal was done using CASP checklist and AGREE instrument. Evidence was graded using US, Canadian Preventive Services Task Force.

Results: Nine systematic reviews, 11 clinical trials, two clinical practice guidelines and 26 other type of evidence were included in the review. Opioid use in cancer pain management should be based on WHO Analgesic Ladder. Weak opioids should be used in mild to moderate cancer pain while oral morphine should be the first line therapy for moderate to severe pain. Rapid titration using parenteral morphine is preferred for initial control of severe pain. In chronic cancer pain, ‘around the clock’ (ATC) opioid therapy should be given. Opioid switching should be considered when side effects limit further dose escalation.

Discussion (Conclusion): Opioid analgesia
plays an important role in the management of cancer pain.

**Implications for guideline developers, users**:
Proper management of cancer pain using opioid based on best retrievable evidence.

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**Background, Purpose (Introduction)**: Use of OTC drugs by patient for prevention and treatment of worsening health and self, recognized symptoms are considered as a vital element of health care, including pharmacotherapy. Ensuring the proper use of OTC drugs in patients’ interest is the main mission of pharmacy professionals in responsible self, treatment. Development of evidence, based standard operating procedures in the provision of pharmaceutical care is critical for public health and fully meets the WHO and the FIP concept of good pharmacy practice.

**Objectives**:
1. To identify the methods for adapting clinical guidelines for allied health professionals.
2. To understand the possibility of evidence, based clinical guidelines using for development of standard operating procedures in the provision of pharmaceutical care in some minor self, recognized disturbances.

**Methods**: All guidelines are based on State formulary of drugs. The search was made in sources of information, including G-I-N, to identify clinical guidelines for use in development of guidelines for pharmaceutical care in responsible self, treatment. Clinical guidelines on the topics

**Results**: 32 protocols for pharmacy professionals in responsible self, treatment were developed. They were approved by the Ministry of Health of Ukraine in November 2010 (available http://www.moz.gov.ua/ua/portal/dn_20101105_960.html).

**Discussion (Conclusion)**: Monitoring of the guidelines implementation in pharmacist’s practice in the provision of pharmaceutical care is currently carried out. There regular updating of these protocols is intended.

**Implications for guideline developers, users**: Use of evidence, based clinical guidelines for the development of guidelines to provide pharmaceutical care is advisable.
Findings of the practice guidelines making situation for 108 subcommittees joining the Japan Medical Association

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**Background, Purpose (Introduction)**: In Minds, we search for the clinical practice guidelines made by medical societies and evaluate and publish them, but still not cover all the practice guidelines that medical societies made yet.

**Objectives**: This study is intended to cover all the practice guidelines present in Japan and to grasp the present situation of the practice guidelines making methods and the needs of the making group.

**Methods**: We conducted a questionnaire survey for 108 subcommittees joining the Japan Medical Association from 10th November to 17th December 2010. The participation request to the survey was distributed via postal mail.

**Results**: 75 groups (69%) of total 108 groups replied it. According to the guideline development status of these 75 groups, (47%) answered “Yes” whereas 26 (35%) said “No project”. According to the number of the guidelines, 21 groups (28%) have made “1, 3” guidelines respectively, thus 40 or more guidelines are being made by subcommittees of medical society at present situation. According to methods to diffuse practice guidelines, “publishing the guidelines” was 48 groups (64%), among which, published on society homepage was 33 groups (44%), published in the official journal of medical society was 22 groups (29%), published on Minds was 9 groups (12%). According to patient’s preference, 36 groups (48%) answered the published guidelines “do not raise the opinion of the patients”, and 3 groups (4%) said the guidelines “raise the opinion of the patients”.

**Discussion (Conclusion)**: We were able to grasp the present situation of the guidelines making in Japan. These results indicate that various problems should be addressed in the future clinical practice guidelines development in Japan.

**Implications for guideline developers, users**: The guidelines developers, users should recognize the importance of diffusing practice guidelines, and should recognize its usability, newness and fairness.
Poster 45

HOW TO WRITE CLINICAL GUIDELINES FOR THE WEB?

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Background, Purpose (Introduction): The Norwegian Health Library publishes national guidelines as web, based decision support.

Context: On the web it is important to think a little opposite of the traditional way of writing.

Description: Based on our experience we have made a two, page guidance on how to write clinical guidelines for web, for guideline authors.

Lessons for guideline developers, adapters, implementers, or users: Use multiple, stage strategy if it is a lot of complicated and comprehensive content.

First things first:
• The most important content in the beginning of each chapter
• Recommendations should be placed at top of each chapter

Titles are crucial
• A title of 4, 5 words should summarize an extensive text

• Use the appropriate trigger words
• Titles should make sense alone, when someone links to your document it is usually the heading that appears in the link
• The headings are ranked highly by search engines
• A collection of the titles on a web page should give a brief summary of the content

Active language
• Do not use passive verbs or auxiliary verbs like; ought to, will, should, etc.
• Do not use “tribal” language, think of what the users enter into the search field.
• What is under a menu item must be intuitive

Links
• Provide links to relevant information so that the user can get more detailed information on the subject
• Links should be meaningful and make sense on their own
Background, Purpose (Introduction): Evidence-based clinical practice guidelines have been developed for a wide range of medical fields, including cancer, which is currently the leading cause of death in Japan. The high burden of cancer has created a need for a continuum of medical services, ranging from diagnostic tests to palliative medicine, care.

Objectives: Here, we explored potential barriers to effective palliative medicine, care by studying the descriptive nature of palliative medicine, care in Japanese clinical oncology practice guidelines.

Methods: We performed a content analysis of oncology guidelines published in Japan between 2002 and 2006. Two researchers independently assessed the total number of index words and text lines relating to palliative medicine, care. Surveyed data were compared and a consensus was established.

Results: A total of 14 oncology guidelines were surveyed. Of the 40,563 total lines of text, 1,076 lines (2.7%) related to palliative medicine, care. A total of 283 articles related to palliative medicine, care. Nine of the guidelines focused on clarifying clinical questions, and only eight of the 383 clinical questions (2.0%) pertained to palliative medicine, care issues.

Discussion (Conclusion): Oncology guidelines published in Japan make little reference to palliative medicine, care issues. When evident, clinical questions guidelines were more likely to include information regarding palliative medicine, care.

Implications for guideline developers, users: Thus, there is a need for more evidence-based palliative medicine, care studies. While it is necessary to formulate strategies promoting evidence-based research on palliative medicine, care, we suggest that incorporating clinician viewpoints into oncology guidelines may also be constructive.
Background, Purpose (Introduction): Clinical practice guidelines (CPGs) reduce variability in clinical practice, but there are numerous factors that influence their acceptability and use by healthcare providers in country, specific context.

Objectives: To explore and describe the knowledge, attitudes and perceptions of Spanish clinicians towards CPGs.

Methods: National online survey of 1000 general practitioners and 800 hospital specialists. Initially, we carried out focus groups and used the results to inform the development of the survey. Thirty, one questions organized in five thematic areas were included. We piloted the survey with clinicians (n=11) and experts in CPGs (n=8). Specific strategies to maximize the response rate, such as user-friendly format, pre-notification and reminders are applied. Response frequencies are calculated and regression analyses run for pre-selected variables.

Results: We will present relevant information about: a) demographic characteristics, professional qualifications and respondents’ experience in CPGs development; b) knowledge of CPGs; c) access and use of CPGs in the daily practice; d) attitudes and perceptions towards CPGs (factors influencing trust and uptake, preferences determinant for conditions in which clinicians follow guideline recommendations, and barriers for their use), and e) knowledge and perceptions about the Spanish National Guideline Development Program (GuiaSalud).

Discussion (Conclusion): The identified patterns in clinicians’ attitudes and perceptions, as well as CPGs adoption, non-adoption factors in the Spanish context, will be described and discussed.

Implications for guideline developers, users: Knowledge on attitudes and perceptions of Spanish clinicians toward CPGs will be useful for designing successful dissemination and implementation strategies, in Spain and in similar contexts.
Do barriers for guideline implementation differ between specialist and general physical therapists?

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Background, Purpose (Introduction): Despite wide distribution and promotion of practice guidelines, adherence among physical therapists is suboptimal. To assist physical therapists in adhering to guideline recommendations, implementation strategies that address barriers to change need to be developed. Several studies already identified barriers to change among physical therapists. However, these studies did not assess similarities and differences in barriers to change between specialist and general physical therapists. However, literature suggests that these might be different.

Objectives: This study aims to explore the similarities and differences in the perceived barriers towards the use of guidelines among specialist and general physical therapists.

Methods: A qualitative study using four focus groups was conducted in January 2010, in which 24 physical therapists participated, with an average of 6 participants per session. Focus groups discussions were audiotaped and transcribed verbatim.

Results: Besides many similarities (e.g. lack of outcome expectancy, motivation, time and practice requirements), our study showed some important differences between barriers for the use of guidelines between specialist and general physical therapists. General physical therapists seem to have more difficulties in interpreting the guideline (cognitive barriers) and have less favourable opinions about the guideline (affective barriers) than specialist physical therapists. Specialist physical therapists are, on their turn, hampered by external barriers such as a lack of agreement about the roles and responsibilities among professions involved in the care of the same patient group.

Discussion (Conclusion): Despite many similarities, differences in barriers between general and specialist physiotherapists regarding the use of guidelines are identified, including barriers in the cognitive, affective and external domains.

Implications for guideline developers, users: Our findings indicate that future implementation strategies for guideline adherence need to take into account differences in determinants of guideline adherence among specialist and general physical therapists to improve guideline adherence.
Poster 50

**Competency and Barriers to Evidence Based Practice for General Hospital Nurses**

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**Background, Purpose (Introduction):** A commonly recommended strategies to facilitate EBP in clinical practice are to overcome barriers and to increase nurses' EBP competency.

**Objectives:** The objectives of this study were to explore general hospital nurses' access & use of clinical information resources and to identify barriers to research utilization and evidence based practice (EBP) competency of nurses.

**Methods:** Nurses working at five hospitals in Daegu and Kyungpook in Korea were sampled as participants of this study. Questionnaires were distributed to 300 nurses from October 25th to November 6th, 2010 and 278 nurses completed the questionnaires. Nurses' actual access and use of information resources and barriers & competency of EBP were measured by self administered questionnaires.

**Results:** The mean scores of nurses' access to information resources (3.00) was higher than the use (2.94). Human resources such as staff was the most frequently accessed and used by the nurses to get the information. Nurses feel relatively high barriers to EBP (3.02) and identified communication characteristics as a main barrier to EBP. The mean scores of nurses' EBP competency was 2.70 out of 5 point. Nurse with longer clinical experience or who had research experience showed higher EBP competency and lower perception of barrier.

**Discussion (Conclusion):** For general hospital nurses, organization, research, and communication barriers and low EBP competency persist as impediments to EBP.

**Implications for guideline developers, users:** Decreasing known barriers and increasing nurse's EBP competency would facilitate evidence, based practice in hospital setting. Nurse leaders can create environments conducive to EBP by supporting computerized access to evidence based guideline, supporting time for research utilization efforts.
Poster 51

*Hospital nurses’ perception and performance of evidence, based pressure ulcer managements*

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**Background, Purpose (Introduction):** The prevalence and incidence rates of pressure ulcers, coupled with the cost of treatment, constitute a substantial burden for health care system in Korea. Although evidence-based guidelines for prevention and optimum treatment of pressure ulcers have been developed, there is little empirical evidence about the actual implementation of evidence-based pressure ulcer management.

**Objectives:** The purpose of this study was to explore the gaps between nurses’ perception and performance level of evidence-based pressure ulcer management.

**Methods:** The subjects were 250 staff nurses in a university hospital and 227 questionnaires were analyzed. The questionnaires were developed based on recommendations from evidence-based pressure ulcers management guidelines by Agency for Health Research and Quality, Hartford Institute Geriatric Nursing, and Registered Nurses Association of Ontario.

**Results:** Level of perception and performance were significantly different in each area of pressure ulcer management; assessment (4.20, 3.84; \(t=11.374, p=.000\)), skin care and skin protection (4.24, 3.68; \(t=17.032, p=.000\)), positioning and pressure decrease (4.23, 3.70; \(t=15.956, p=.000\)), nutrition (3.96, 3.04; \(t=7.358, p=.000\)), and education (4.30, 3.32; \(t=20.321, p=.000\)). Level of perception and performance were significantly different according to knowledge level and pressure ulcer management experience.

**Discussion (Conclusion):** This study showed that there was gap between hospital nurses’ level of perception and actual performance of evidence-based pressure ulcer management and traditional pressure ulcer management without evidence are still provided.

**Implications for guideline developers, users:** The barriers to evidence-based pressure ulcer management need to be identified and develop the strategies to facilitate adoption of the evidence-based pressure ulcer management.
**Background, Purpose (Introduction)**: Stroke is a highly prevalent condition and has great impact on the use of health care resources. To offset this situation requires the use of existing resources to answer patients’ needs more efficiently and the adoption of national stroke best practices to deliver care more effectively. An e, collaborative platform was developed to create a networking environment to capture knowledge sharing around members’ interactions with respect to implementation of best practice changes in stroke care and organisation of care delivery.

**Objectives**: This paper reports the first six months of utilization of the platform among health professionals, highlighting users characteristics and the nature of communications around stroke best practices.

**Methods**: Participants completed questionnaires measuring socio, demographic characteristics, their practice style profile and their perception of stroke best practices. Activities on the platform were monitored and content analysis was performed.

**Results**: To date, over 350 health professionals registered to the e, collaborative platform. Participants are mostly women (89%) with a large representation of physiotherapists and occupational therapists. However, only 10% of members actively wrote a message on best practices. Users visit on average once a week and spend 11 minutes per visit. Automated e-mails with targeted content increase utilization rates and visibility to best practices.

**Discussion (Conclusion)**: Different strategies must be put in place to optimize utilization by other groups of professionals and ensure sustainability of the platform among current users.

**Implications for guideline developers, users**: This project advances our understanding of the role and capacity of web, based applications in supporting interprofessional collaborative networks to accelerate implementation of best practices.
Background, Purpose (Introduction): Clinical practice guidelines can be adapted and embedded in hospitals’ local procedural descriptions, possibly increasing uptake through stronger local ownership. In Norway local clinical practice guidelines and procedures (LCPGs,Ps) are maintained within mandatory electronic quality systems within each hospital trust. The methodological quality of this work and the amount of resources used to generate LCPGs,Ps within these local systems is unknown.

Objectives: To assess the scope, collaboration, sharing and quality of LCPGs,Ps work in the hospital trusts in Norway.

Methods: We conducted a survey among all hospital trusts in Norway (n=30) in 2009. A questionnaire was mailed to the owners and main administrators of the quality systems in the trusts, followed by telephone interviews.

Results: 29 out of 30 trusts replied. The number of LCPGs,Ps is above 45 000. In a country of 4.9 million inhabitants, approximately 4700 health professionals in the hospitals are involved in the development of LCPGs,Ps. 15 trusts assess the quality of their procedures and 7 evaluate their user, friendliness. 7 trusts collaborate with other trusts. 2 publish their procedures on the Internet. Within most trusts, procedures differ between individual units.

Discussion (Conclusion): The development of LCPGs,Ps in Norwegian hospitals probably involves an extensive amount of redundant work. Procedures are usually not shared with other trusts, primary healthcare, or the public. The primary purpose of the quality systems is to fulfill legal requirements.

Implications for guideline developers, users: New technical solutions, better collaboration and a robust, transparent methodology could potentially transform Norwegian LCPGs,Ps into evidence, based, user, friendly tools that improve practice. Local ownership and adaptation should be maintained.
**Poster 54**

*Interaction of documents from medical aid national and local levels*

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**Background, Purpose (Introduction):**

According to the methodology based on the principles of Evidence-Based Medicine approved by the Ministry of Health of Ukraine (MOH) in 2009, clinical guidelines contain regulations on the best current practice and form the basis for decision making. Recommendations and regulations represented in clinical guidelines and integrated into medical care standards and unified clinical protocols to match Ukrainian medical care. Local protocols of medical care are developed according to medical care standards and unified clinical protocols taking into account institution resources.

**Objectives:**

1. Describe interaction of the adopted clinical guideline, medical care standard, unified and local medical care clinical protocols.
2. Explain healthcare documents interaction under the development and interaction of local medical care protocols for hypertension at outpatient institutions.

**Methods:**

After reviewing clinical protocols approved by the MOH, Ukrainian professional associations recommendations, European Society of Cardiology guidelines and National Institute for Health and Clinical Excellence guidelines, situational analysis for patients with hypertension on healthcare provision compliance to Evidence-Based Medicine requirements, assessment of hospitals facilities and obstacles in providing medical care within the recommendations were conducted.

**Results:**

Local medical care protocol for patients with hypertension, indicators of quality care and a program of the protocol implementation were developed under the analysis.

Discussion: Developers of the local medical care protocol for patients with hypertension independently analyzed and adapted the European Society of Cardiology regulations and National Institute for Health and Clinical Excellence clinical guidelines.

**Discussion (Conclusion):** Local medical care protocols development is possible without adapted clinical guidelines, but not individual assessment of existing prototypes and independent recommendations adaptation by healthcare institution practitioners.
**Background, Purpose (Introduction)**: Health care organizations need tools for planning health care activities, essential resources and rational allocation of tasks. Evidence based guidelines can be used in treatment paths, house rules, task division, and even quality indicators to combine evidence with structures, processes and clinical outcomes. The implementation of evidence is still challenging and too little is known of its effects on health care decision making.

**Objectives**: The aim is to analyze health care decision makers’ knowledge of Current Care (CC) guidelines, and how they use the evidence in decision making.

**Methods**: A web, based questionnaire was sent to 146 health care decision makers and analyzed.

**Results**: The response rate was 51%. According to the results CC guidelines are well known. They are especially used in education (80% of respondents) and over 70% used guidelines to discuss effective and safe treatment protocols with patients. Guidelines are used for house rules as well, but in multidisciplinary task division they were underused.

**Discussion (Conclusion)**: Guidelines are well known in patient care, but only partly used in health care planning and organizing. It is challenging to increase the use of the guidelines as sources of effective interventions. Task and resource allocation would benefit from full use of guidelines.

**Implications for guideline developers, users**: Guidelines should be user friendly and developed to the direction that the audience, despite of profession, could read them easily and the evidence should be easily absorbable. We have started an indicator project to make the evidence more soluble and measurable to increase implementation.
Background, Purpose (Introduction): In Finland, approximately 75% of young men and a few hundred voluntary young women from every birth cohort serve in the military from 6 to 12 months. In 2009 the 24 health centers of the Centre for Military Medicine provided the primary health care of almost 24,000 conscripts. The national guideline for depression was updated in 2010. It concludes that in the acute phase of treatment, brief psychotherapies are effective in cases of mild to moderate depression. Antidepressants are effective, their importance increasing according to the level of severity of depression. Primary health care is responsible for the majority of mild to moderate cases of depression, with the support of the psychiatric consultation services.

Objectives: On December 2010 the Centre for Military Medicine sent a questionnaire to the chief medical officers of the health centres in order to assess possible educational needs, and to promote the implementation of updated national guideline on depression.

Methods: The questions were related to best practices in the depression treatment according to the updated guideline. During military service, safety issues, such as how to follow antidepressant medication during service, are highly emphasized.

Results: 17 responses were received from 24 health centers. Almost half of the answerers were familiar with the updated guideline. The majority of the respondents knew best practices well, but wished for further education on the subject.

Discussion (Conclusion): Educational material is offered via an open, access website for chief medical officers.

Implications for guideline developers, users: Military medicine issues should be more actively included in guidelines.
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*G-I-N Kindergarten. A modification of educational programme for undergraduate medical students.*

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**Background, Purpose (Introduction):** The Centre for Clinical Practice Guidelines of the Faculty of Medicine and Dentistry, Palacky University is concerned with issues of clinical practice guidelines (CPGs) as viewed from different perspectives.

To disseminate knowledge on CPGs we have developed a comprehensive educational programme (CEP) for undergraduate medical students called The G-I-N Kindergarten in 2008.

The programme has been evaluated and recently modified using the updated resuscitation guidelines of the European Resuscitation Council.

**Objectives:** Develop and assess implementation strategies.
Develop and improve educational programme for undergraduate medical students.

**Methods:** We have developed a CEP focused on various aspects of CPGs and many workshops and lectures have been held since 2008. As a part of the CEP a series of lectures for final year medical students were listed in the standard curriculum in 2009, 2010. The lectures covered the basic principles of systematic development, adaptation, evaluation and implementation of CPGs as well as search strategies for best evidence, applied legal and ethical aspects. The recent modification using the ERC 2010 resuscitation guidelines is an implementation of the guidelines and also shows medical students the basic methodological principles. The part of the lecture is a training of CPR using a mannequin and two scenarios.

**Results:** Lectures focused on CPGs, a compulsory subject for final year medical students (n=360) since 2009.
CPR training as an integral part of the lecture focused on methodological and other aspects of CPGs.

**Discussion (Conclusion):** The best CPG implementation strategy is to incorporate it into undergraduate medical curricula in an attractive way.

**Implications for guideline developers, users:** Undergraduate medical students are useful target group for implementation.
Objectives: More attention needs to be paid to the development of “learning organizations” in terms of research use (Chagnon, 2009; Nutley, Walter, & Davies, 2007) since no single knowledge transfer (KT) activity proves to be highly effective in implementing practice guidelines (Grimshaw et al., 2004) and since individual approaches have a limited impact on practice change (Rycroft, Malone et al., 2004).

Methods: Open, ended questions were answered by a group of managers (n=10). These questions intended to explore seven core organizational competencies involved in KT (Chagnon, 2009). Another set of open, ended questions were used to help clinical leaders (n=20) describe their use of scientific knowledge and their interest in benefiting from an e-watch.

Results: The managers agreed on an organizational diagnosis of KT strengths and needs that should be addressed in an action plan. The clinical leaders identified the potential benefits of an e-watch. They also expressed the need to know more about research methods, to reflect on the nature of evidence and to be supported to learn.

Discussion (Conclusion): Strategies to facilitate the use of practice guidelines should be embedded in an action plan geared toward KT capacity building within the organization.

Implications for guideline developers, users: This project gives insights about a process that can help organizations use practice guidelines and scientific knowledge more effectively.
Regional agreements between general practitioners and medical specialists based on national guidelines

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Background, Purpose (Introduction) : In the Netherlands national bodies of general practitioners (GPs) and medical specialists together developed, based on guidelines, national agreements (NA) with recommendations for cooperation between GPs and medical specialists at the regional level. In 2009 eight NAs were available.

Objectives : To establish the number of regional agreements (RAs) based on NAs and to assess the similarity between NAs and RAs.

Methods : All available RAs based on NAs were collected. For a number of regions we scored the agreement between RAs and NAs on item level.

Results : Seven of the eight NAs were translated into at least one RA; on average six RAs were developed per NA (range 1, 12). There was no RA for the NA ‘Acute coronary heart syndrome’. The NA ‘TIA, Stroke’ was most frequently translated into RAs. High rates of agreement between NAs and RAs were found. Indications for referral and shared care were relatively less frequently included in RAs.

Discussion (Conclusion) : If not all relevant parties are represented in the development of NAs, there is less chance of translation into an RA; this was the case for the NA ‘Acute coronary heart syndrome’. The number of regionally translated NAs may reflect regional differences in the need for RAs.

Implications for guideline developers, users : In determining recommendations for regional collaboration national guideline developers should be aware of the needs at regional level. To enhance regional collaboration all parties should be involved in the process of developing NAs and RAs.
Background,Purpose(Introduction) : Preterm infants with patent ductus arteriosus (PDA) are at high risk of mortality and severe morbidities, though the management varied widely within Japan and there were urgent needs for evidence, based guidance.

Objectives : To develop and assess effectiveness of guidance on management of PDA in preterm infants based upon the best available evidence.

Methods : A total of 18 clinical questions relevant to management of preterm PDA were formulated. Literature searches were conducted in four databases in February 2008 against predefined criteria. Draft recommendations were developed from the newly conducted systematic reviews and refined via the Delphi process in an independent and multidisciplinary panel including a patient representative, as well as a public consultation and peer, reviews. The Guideline had been transformed into a workshop with lectures and case reviews, and tested in two hospitals. Process indicators including clinical skills and confidence by using validated tools, as well as clinical outcomes of infants were assessed before and after the workshop.

Results : A total of 33 recommendations were developed with relatively high level of agreement. Implementing guideline increased confidence and knowledge and also improved clinical skills of clinicians. Changes in clinical outcomes will also be reported.

Discussion(Conclusion) : A management strategy of preterm PDA in Japan was developed in an objective and systematic manner. Implementing workshop seemed to be valid and feasible.

Implications for guideline developers,users : Assessing impact on clinical outcome and process indicators, as well as ensuring robust methodology to develop guidelines in Japan is feasible and important.
Background, Purpose (Introduction): European guidelines recommend that door, to, balloon time for patients with ST, elevation myocardial infarction (STEMI) is below 90 minutes.

Objectives: To evaluate median door, to, balloon time for patients with STEMI using information extracted from medical records.

Methods: Median door, to, balloon time was evaluated for patients hospitalized in 54 voluntary hospitals. Inclusion criteria included patients with STEMI with time from onset to first medical contact inferior to twelve hours. For uniformity purpose, door time was defined as time of first EKG showing ST elevation. The data was extracted from a sample of medical records obtained by randomly selecting up to a 100 claims submitted by the hospital with ICD, 10 of acute myocardial infarction (AMI).

Results: A total of 3,956 medical records were selected and 2,070 records met the inclusion criteria and 836 were included (exclusions: 1,039 patients with non ST elevated AMI, 549 with time from onset greater than twelve hours, 298 records not available and 1234 with missing data). Thirty, two percent of patients had balloon inflation during a percutaneous coronary intervention within 90 minutes of door time (median door, to, balloon time: 1h52; 1st quartile: 1h21; 3rd quartile: 2h47).

Discussion (Conclusion): Conformity rate with the guideline was low in our sample. However, time of first EKG is much earlier than hospital door time in France because of medicalized emergency transport. This could explain the low conformity rate.

Implications for guideline developers, users: Those results points out the challenge of directly transposing European guidelines without taking into account local health care organization.
**Background, Purpose (Introduction)**: Monitoring of standards of medical care and healthcare quality assessment are defined as a priority task for Ukrainian healthcare system. Until now, state healthcare statistical reporting was the basis for obtaining medical information in Ukraine. The practice of comparing healthcare quality in the context of regional health services through a formal set of rating parameters reduced the credibility of medical information and brought scepticism on its use.

**Objectives**: Develop principles of information support for monitoring of clinical guidelines implementation in practice.

**Methods**: Review of up to date experience of the best practice in using of medical information.

**Results**: Recommendations for measuring of the healthcare quality using indicators were developed. Indicators for support of clinical guidelines, standards of medical care and clinical pathways are being developed.

**Discussion (Conclusion)**: Priorities for implementing of healthcare quality monitoring system are:
- Creation of reliable data sources;
- Change of information role perception for its using in quality improvement;
- Development of indicators together with standards of medical care based on guidelines according to the principles of evidence based medicine.

**Implications for guideline developers, users**: Priorities for implementing of healthcare quality monitoring system are:
- Creation of reliable data sources;
- Change of information role perception for its using in quality improvement;
- Development of indicators together with standards of medical care based on guidelines according to the principles of evidence based medicine.
**Background, Purpose (Introduction)**: The National Health and Medical Research Council’s (NHMRC) National Institute of Clinical Studies (NICS) works to improve health care by getting the best available evidence from research into everyday practice. NICS adapted the Institute for Healthcare Improvement’s (IHI) ‘bundle of care’ approach to improve the uptake of the Australian National Stroke Foundation’s guidelines related to care for stroke and TIA patients in the emergency department (ED). A care bundle is a group of evidence-based interventions or recommendations that when combined significantly improve care.

Identifying and prioritising recommendations is a key step required in the guideline implementation process. The ED is an ideal setting to test the ‘bundle of care’ approach to support guideline implementation given the competing demands, high acuity, and broad diversity of clinical presentations.

The purpose is to evaluate the use and impact of the NHMRC Emergency Department Stroke and Transient Ischaemic Attack Care Bundle.

**Objectives**: Increase adherence to best practice stroke management in Australian ED’s.

**Methods**: A mixed method evaluation has been developed including a survey of ED clinicians and a retrospective medical record audit.

**Results**: Results will be available for presentation at the conference.

**Discussion (Conclusion)**: This evaluation will examine the dissemination, utility and acceptability of the care bundle, including the associated audit tool, and any impact on clinical outcomes following its release.

**Implications for guideline developers, users**: It is important to consider tailoring implementation tools to the practice setting as part of the guideline development process to support the best possible uptake of guideline recommendations.
Background, Purpose (Introduction): A link has been shown between volume activity and 30 days mortality in AMI patients but relationships between hospital case volume and quality of care are less documented.

Objectives: Assessment of the influence of hospital care volume on quality of care measured by Quality Indicators (QI) of prescription appropriateness in AMI patients at hospital discharge.

Methods: Appropriate prescription at discharge of antiplatelets, beta blockers, angiotensin conversion enzyme inhibitors (ACEI) when left ventricular ejection fraction

Results: In 2008, 589 hospitals participated, for a total of 17,720 patient records. The composite AON score showed wide variation according to hospital case volume. After adjustment, patients in the lowest volume category had 2.1 (CI 1.8, 2.5) times greater risk of having at least 1 inappropriate prescription than patients in the highest volume category. Each indicator showed the same trend, except ACE prescription, which concerned a lower number of patients.

Discussion (Conclusion): Appropriateness of prescription at discharge is lesser in low, volume hospitals. However beyond a threshold of 120 cases per year, quality did not increase with an increasing number of patients.

Implications for guideline developers, users: To improve guidelines’ appropriation in all hospital, whatever the case volume.
Background,Purpose(Introduction) : A national guideline on the use of growth hormone (GH) in adults was developed as the enthusiasm for its use has far exceeded medical evidence, ranging from normal physiological changes to acute physical insults, despite the indication in GH deficient adults. Quick Reference (QR), a pocket summary extracting recommendation from the guideline has been developed as an implementation tool. Selecting a robust implementation tool is crucial in ensuring its utilization.

Objectives : To assess robustness of the developed QR as implementation tool.

Methods : Informal discussion with few stakeholders was undertaken to determine expected key requirement in a QR. A questionnaire was invented to pre, test the developed QR and assess its robustness. Pre, testing to selected target user was done as part of QR development process before it can be disseminated.

Results : An open ended questionnaire assessing the QR was developed consisting of sets of question on the overall QR quality including adequacy of highlighting key messages, appropriateness of sections arrangement, provision of a comprehensible algorithm, applicability in daily clinical practice and rating of the QR. Pre, testing of the QR is currently ongoing but preliminary result showed that adapting the newly developed questionnaire allows customizing the QR according to target user needs, hence increasing the utilization.

Discussion(Conclusion) : QR is accepted as a tool to guideline implementation. A newly invented questionnaire to assess the QR robustness creates an essential first step in ensuring the guideline recommendation being accepted and utilized by the target user.

Implications for guideline developers,users : Choosing a robust implementation tool is important in ensuring guideline utilization hence facilitates sustainability of impacts.
Background, Purpose (Introduction): The implementation of national guidelines involving both medical specialists and general practitioners (GP’s) in daily practice demands special efforts, in particular when it regards their cooperation.

In the Netherlands 20 regional Medical Coordinating Centers are responsible for translating national guidelines into Regional Agreements (RA).

Objectives: To provide insight into the process of formulating RAs on the basis of national guidelines.

Methods: We selected seven regional centers who developed the highest number of RAs. Thirty nine semi-structured interviews were conducted with nine medical coordinators (MCs), 14 medical specialists and 16 GPs. RAs regarded cooperation on the following topics: hematuria, gastroscopy, postmenopausal bleeding, stroke and exercise ECGs.

Results: Two different methods were identified. With the first method agreements were prepared by a medical specialist with the medical coordinator and sent to regional GPs for comments. This method resulted in referral guidelines driven by medical specialist. The other method included the formulation of agreements by a joint group of medical specialists and GPs chaired by a medical coordinator. This method resulted in agreements about regional collaboration between medical specialists and GPs.

If a national guideline contained recommendations for regional implementation these were considered helpful for formulating RAs.

Discussion (Conclusion): In the Netherlands two methods of regional translation of national guidelines could be identified, which can be characterized as ‘top, down’ and ‘bottom, up’. This characteristic may have an impact on the degree of implementation of national guidelines.

Implications for guideline developers, users: It is desirable that each national guideline includes recommendations for regional collaboration processes between GPs and specialists.
Background, Purpose (Introduction): The purpose of the Comprehensive Cancer Centre (CCC) in the Netherlands is to provide cancer patients and their families access to comprehensive and high, quality care as close to home as possible. CCC was set up to improve treatment, patient care and clinical research within the field of oncology. A major activity is guideline development. Patient participation in guideline development is a key issue. In 2010 the collaboration with the Dutch Federation of Cancer patient organisations (in Dutch NFK) resulted in a mutual agreement on realizing optimal patient participation in guideline development.

Context: The agreement implies that CCC informs NFK about the annual guideline program. Knowing the guideline subjects, NFK starts a call for participants and simultaneously starts a search on problem analysis from the patients point of view. That way prompt reaction is guaranteed as soon as the guideline development starts.

Description: The guideline on oesophageal cancer was updated in 2010 using a fast track method (see other abstract). Two patient(s participated in the guideline working group, they were trained in guideline development and attended all meetings. The patient oriented topic was ‘the value of vitamin B12 suppletion after resection’, prior to the guideline development patients were convinced that B12 suppletion should be the new standard of care. The literature search yielded only one small un, randomised study. The conclusion that the literature was insufficient to support the patients pre, assumption was a disappointment. However, a study was initiated on this topic to generate more evidence. The full impact of this method of patient participation on the guideline quality will be evaluated in 2011, 2012.

Lessons for guideline developers, adapters, implementers, or users: Two patient(s in the working party was feasible. They found comfort in participating as a team within a team. The patient issues are as a standard included in CCC guideline development.
**Background, Purpose (Introduction)**: Patient and Public Involvement (PPI) is increasingly on the guideline developers’ agenda. In the literature there are a variety of rationales, purposes and methods of PPI and it can take many different forms in practice. For example, a variety of terms are used (patient, public, citizen, consumer, representative, lay, expert) that have different but overlapping meanings and expectations.

**Objectives**: This study served to analyse the diversity in PPI.

**Methods**: Based on document analysis (academic literature, PPI handbooks and conference presentations); participant observation (G-I-N and G-I-N Public); observation (Guideline Development Groups) and interviews (patient representatives and organizations) one negative and three positive models of PPI are identified.

**Results**: The four models include 1) ‘Instrumentalism’ in which patients participate symbolically and justify decisions without effecting them 2) ‘Democratic Right’ in which patients as political subjects contribute values on which to base public policy 3) ‘User Design’ in which patients as stakeholders contribute experiential knowledge of care, context and illness 4) ‘Witness’ in which patients with critical thinking and skeptical stance increase process authority and accountability.

G-I-N mostly envisions model 3 and 4 as it encourages Patient Involvement to develop locally appropriate guidelines and to ensure accountability to evidence.

**Discussion (Conclusion)**: Lack of standardization of PPI hampers evaluation on an international level, but prevention of harm may be more important than proof of effectiveness.

**Implications for guideline developers, users**: The diversity in PPI models may allow PPI to function as a ‘boundary object’ bridging EBM and Patient Centered Care and multiply on a ‘universal’ scale, with a variety of results.
Background, Purpose (Introduction): Infantile cerebral palsy (CP) is the most common disorder in the childhood that causes physical disability. The most critical question in case of CP is how to prevent the progression of the disability in the childhood and how to achieve the best possible quality of life in the adulthood.

The aim of the study was to obtain a comprehensive overview of the social and rehabilitation services that are most often offered to and used in order to increase their ability to cope with everyday life, social integration and the study evaluates their social network, obtaining of basic and vocational education and integration.

Objectives: This study includes adult patients CP who have been diagnosed to have a spastic syndrome. The age of the study subjects was between 19 – 44 years.

Methods: The data were collected and analysed using a quantitative method. The quantitative method included the collection of data with the help of a semi, structured questionnaire.

Results: The study confirmed the hypothesis that timely and persistent rehabilitation will increase the social activity of the adult patients with CP, but they still have significant shortcomings in independent subsistence. Often the patients have somatic problems and neurological disorders, therefore special requirements have to be taken into account when choosing a job and including into the working life.

Discussion (Conclusion): Social integration of the patients with spastic CP has somewhat improved.

Implications for guideline developers, users: Maximum use of the social and rehabilitation services in the early childhood will help the patients to maintain social integration also in the adulthood.
Background, Purpose (Introduction): The policies to promote the evidence-based medicine and formulate and spread clinical practice guidelines were set out in Japan in 1996, and 47 priority diseases were selected based on four criteria: health improvement, number of patients, cost, effectiveness, and standardization. Evidence-based clinical practice guidelines are then made for each disease to support clinical decision and facilitate communication between patients and clinicians. The guidelines have been made open to the public on Minds from 2004.

Objectives: To examine whether or not the guidelines have been formulated and disseminated as originally planned, and to confirm the status of their revision.

Methods: We searched for clinical practice guidelines on the Ministry of Health, Labour and Welfare database and websites. We examined 643 books, 205 reports, 706 medical documents, and 88 guidelines on the web that were published between 1998 and July 2008, in the light of the 47 priority diseases initially selected and the diseases posted on Minds.

Results: Since one guideline, Respiratory Tract Infectious Diseases was created for four similar diseases, we ended up examining a total of 44 diseases. Guidelines were published in 33 books, 22 reports, and on 19 websites.

Discussion (Conclusion): In Minds, we posted 63 evidence-based guidelines that were highly evaluated in AGREE, but among 44 priority diseases only 19 (39%) of guidelines met this standard.

Implications for guideline developers, users: Assuming AGREE evaluation from the outset, it is essential to promptly post guidelines on the website and to streamline the process, which is also expected to ease the extra burden.
Background, Purpose (Introduction): At present, the Medical Information Network Distribution Service (Minds) provides the contents of 66 clinical practice guidelines in Japan to the general public via the Internet. Although these guidelines are well established, the construction of clinical questions (CQs) and corresponding recommendations varies greatly.

Objectives: To develop a systematic method for summarizing core, components of guidelines into a structured format.

Methods: We developed a worksheet for systematically summarizing the core, components of guidelines, i.e., CQs and recommendations. The following steps show how to fill out this worksheet. The first step is to pick out PI(E)CO components from each CQ and corresponding recommendation; “Patients or Participants”, “Interventions or Exposures”, “Comparisons”, and “Outcomes”. The second step is to restructure the sentences of the CQ and recommendation according to the PI(E)CO format. As a trial, we summarized the clinical practice guideline for biliary tract cancer with this method.

Results: There were 37 CQs and corresponding recommendations in the guideline for biliary tract cancer. Among them, 21 were successfully summarized into the worksheet. For another 14, we filled all components of the structured format but could not maintain the original meaning of the CQs. The remaining 2 could not be completed because of the lack of essential information.

Discussion (Conclusion): Although this method would be applicable to many CQs and recommendations, it needs further modification to deal with all of them.

Implications for guideline developers, users: With the application of this method, Minds is now planning to create a faceted browsing database system of such structured summaries of guidelines.
Systematic analysis of clinical practice guidelines for decisions in health care: a success story

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Background, Purpose (Introduction):

International clinical practice guidelines (CPGs) can often not be applied to decision making in health care because of their methodological uncertainty, complexity or sheer number. A systematic, sound analysis of CPGs could help.

Objectives: Using the two report types for “disease management programme (DMP) updating” and “topic searches and prioritization for quality assurance measures (QAMs)”, we present IQWiG’s methods for developing systematic CPG analyses and show how the reports are used to assist in health policy decisions.

Methods: CPG analysis is based on a systematic search for evidence, based CPGs. Their methodological quality is assessed and recommendations extracted using a standardized procedure. By comparing recommendations, health care standards are identified and summarized. For DMP updating, the identified standards were compared with DMP recommendations (1). For QAMs, the identified standards were supplemented by additional information, e.g. from systematic reviews, and structural and care data (2).

Results:

1. It was possible to systematically identify aspects of the DMP that were in need of updating or supplementation. Recommended changes were discussed by the health policy decision makers and partly adopted.
2. On the basis of the reports for QAMs, 2 out of 4 topics were prioritized by the health policy decision makers and commissioned.

Discussion (Conclusion): CPG analyses are a viable way of assisting health policy decision makers. Methodological challenges exist, for instance, regarding the transferability of international CPG recommendations and the appraisal of content quality of CPG recommendations.

Implications for guideline developers, users: Already when developing CPGs, authors should consider that they are also used to support health policy decisions.
**Background, Purpose (Introduction)**: The Minds acts as a clinical guideline clearinghouse in Japan that was established in 2002. Currently, the Minds website includes contents on 70 diseases and themes that are open to the public.

**Objectives**: This study aimed to clarify the needs and expectations of Minds website users.

**Methods**: We administered a questionnaire survey to users from December 2010 to January 2011. The request to participate in the survey was posted on the Minds website and sent via e-mail to registered users. The survey was performed online using a website created exclusively for the questionnaire.

**Results**: Among 2,874 respondents, 952 gave answers regarding their demands for the Minds website. Analysis of these 952 answers revealed that demands for “prompt publishing of guidelines” (124 respondents; 13.0%), “increasing the number of guidelines” (108; 11.3%), and “further improvement of the system” (112; 11.8%) had increased most. Analysis according to vocation (members of the general public, healthcare providers, medical, related workers) showed that the ratio of these three demands had increased more among healthcare providers and medical, related workers than among the general public (healthcare providers, 16.0%, 12.3%, and 14.7%, respectively; medical, related workers 14.9%, 13.0%, and 12.5%, respectively). With respect to age, the ratio of these demands had increased most among respondents in their 20s and 30s (21.1%, 17.0%, and 15.2%, respectively).

**Discussion (Conclusion)**: In the Minds website, there are important issues such as newness and amount of information, and easiness of use of the website.

**Implications for guideline developers, users**: To sustain the Minds, information services that meet users’ needs and expectations are crucial.
A validation test of the Chinese version of the Outcome Expectations for Exercise scale

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Background, Purpose (Introduction):
Estimates of the reliability and validity of the English nine item Outcome Expectations for Exercise (OEE) scale have been tested and found to be valid for use in various settings. Data on the use of the OEE scale among older Chinese people living in the community and how cultural differences might affect the administration of the OEE scale are limited.

Objectives: To test the validity and reliability of the Chinese version of the Outcome Expectations for Exercise scale among older people.

Methods: A cross-sectional validation study was designed to test the Chinese version of the OEE scale. Reliability was examined by testing both the internal consistency and the squared multiple correlation coefficient. The validity of the scale was tested on both a traditional psychometric test and a confirmatory factor analysis. The Mokken Scaling Procedure (MSP) was used to investigate if there were any hierarchical, cumulative sets of items in the measure.

Results: There was acceptable internal consistency (alpha= .85) and model fit in the scale. Evidence of the validity of the measure was demonstrated by the tests for criterion, related validity and construct validity. An analysis of the Mokken Scaling Procedure found that nine items of the scale were all retained in the analysis and the resulting scale was reliable and statistically significant (p= .0008).

Discussion (Conclusion): The results obtained in the present study provided acceptable levels of reliability and validity evidence for the Chinese Outcome Expectations for Exercise scale when used with older people in Taiwan.

Implications for guideline developers, users: It is important for guideline developers to evaluate the effectiveness of using guideline on promoting physical activity among older people with the use of OEE, C scale.
Background,Purpose(Introduction) : The overuse of imaging for low back pain by lumbar radiography, computer tomography (CT), or magnetic resonance imaging (MRI) results in increased healthcare costs and exposes patients to unnecessary harms.

Objectives : The goal of ACP's Best Practice Advice on Diagnostic Imaging for Low Back Pain is to present the available evidence on the evaluation of lower back pain.

Methods : Literature on imaging for low back pain, including a systematic review developed for ACP, American Pain Society low back pain guideline, and meta, analyses was reviewed.

Results : ACP found strong evidence that routine imaging for uncomplicated, non, specific low back pain by radiography, CT, or MRI provides no clinically meaningful benefits and exposes patients to unnecessary harms, including radiation exposure and potentially unnecessary invasive procedures. Despite evidence supporting a selective rather than routine approach to imaging, it is often overused.

Discussion(Conclusion) : ACP recommends imaging for low back pain only in patients with serious underlying medical conditions. Clinicians should educate patients and address their concerns by discussing the favorable natural history of acute low back pain, the low prevalence of serious underlying conditions and identification with risk factor assessment, the potential harms of imaging and the fact that imaging does not lead to improved outcomes.

Implications for guideline developers,users : It is important for clinicians to implement high, value, cost, conscious care to continue providing patients the best medical services possible to help minimize costs. Eliminating interventions that provide no net benefit and may cause harms, such as routine imaging for low back pain, is one way that clinicians can contribute to high, value care.
Background,Purpose(Introduction) : The National Collaborating Centre for Women’s and Children’s Health (NCC, WCH) is commissioned by National Institute for Health and Clinical Excellence to produce guidance for the UK National Health service. Thus our evidence reviews, translations and recommendations are developed with a strong focus on UK populations, resources and clinical practices.

However there is a strong demand worldwide for National Institute for Health and Clinical Excellence guidelines to be transferable for use in different countries especially in resource, constrained countries. One way of ensuring this is possible is to examine what recommendations in children’s guidelines could easily be used in resource, constrained countries as they are included in the World Health Organization essential medicines list.

Objectives : To investigate if guidelines produced by the NCC, WCH are consistent with the “WHO Model List of Essential Medicines for Children, 2nd List. 2009.”

Methods : A retrospective analysis of recommendations in guidelines produced by the NCC, WCH with the aim of identifying and highlighting those KPI’s which could be used in resources, constrained Asian countries. We will examine how

- the generation of these recommendations could aid guideline development in a non, UK setting.
- decision makers interpreted the evidences and how they affected the formation of recommendation
- the challenges facing guideline developers when translating National Institute for Health and Clinical Excellence guidance for use in resource, constrained countries
Background, Purpose (Introduction): Falling is a momentous condition that affects fragile people. Prevention of falls in those has the potential to elude serious adverse consequences of falls and has been a notable area of research into the healthy. The Osteoporosis Association in Taiwan supported the first edition of the Clinical Practice Guidelines for the Osteoporosis (CPGO) in 2010. The recommendations of clinical practice strategies to fall prevention in these guidelines are discussed.

Context: We organized the strategies, including assessment instruments and risk factors identified, in the prevention of fall. Systematic literature searching of Cochrane, PubMed, CINAHL and Airiti library Chinese electronic database, and of the reference list of each identified publication. References were appraised for quality and validity according to standard defined by Critical Appraisal Skills and eight levels of Evidence Rating Scale based on the criteria of the Scottish Intercollegiate Guidelines Network (SIGN).

Description: Overall, 13 recommendations extracted from references are formed. Three of all are rated as grade A, four as grade B, and the others as grade D. With respect to the assessment tools, all of those are classified into three groups, e.g. general, acute and chronic settings available. An increased likelihood of falling was estimated for the use of sedatives and hypnotics, neuroleptics and anti-psychotics, antidepressants, benzodiazepines, and non-steroidal anti-inflammatory drugs.

Lessons for guideline developers, adapters, implementers, or users: We organized comprehensively the first evidence, based, clinical practice guidelines for reducing the number of falls. It is expected that the guidelines will provide appropriated recommendations to promote the quality of care for those fragile people.
Background, Purpose (Introduction) : The majority of adults are not consistently physically active globally. Older people are recommended to participate in exercise activities but they may not even understand what exercise is according to results from a qualitative interview study.

Objectives : This review aims to develop a physical activity guideline for both older people and health care professionals who have a role in instructing and promoting physical activity among older people.

Methods : A systematic search of the literature was conducted using a range of electronic and evidence, based databases to identify evidence. Inclusion criteria were guidelines, systematic reviews or randomized controlled trial; study samples were age 60 years and over, physical activity or exercise was of a main focus.

Results : A total of five guidelines were included, two from American College of Sports Medicine and one each from The National Institute for Clinical Excellence (National Institute for Health and Clinical Excellence), Austrian Department of Health and Ageing and Canadian Fitness and Lifestyle Research Institute. Overall recommendations were provided for both older adults and health care professionals. Apart from physical activity recommendations on frequency, duration and intensity, evidence suggests that older people are encouraged to be physically active by making plans and plans should include a gradual approach to increase physical activity over time using multiple bouts of activity (>=10 minutes) as opposed to continuous bouts when appropriate.

Discussion (Conclusion) : The results of this review provide thorough evidence for recommendations of physical activity among older people.

Implications for guideline developers, users : Effective ways of providing tailored recommendations on physical activity for older adult population were listed. Future study tested feasibility and effectiveness of this evidence, based guideline is warranted.
Poster 80

The effect of a community, based and multi, disciplinary healthy diet intervention among older people: A pilot study

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Background, Purpose (Introduction): Health promotion service for older people in the community helped nurses discover 76% of them showed little interest in diets of substantial vegetables and fruits. 78% often ate salty or sweet marinated food. 43% barely controlled blood pressure. 65% hardly managed their glucose.

Objectives: This study aimed to increase older people’s intake of vegetables and fruits.

Methods: Health promotion service for older people in the community helped nurses discover 76% of them showed little interest in diets of substantial vegetables and fruits. 78% often ate salty or sweet marinated food. 43% barely controlled blood pressure. 65% hardly managed their glucose.

Results: Health promotion service for older people in the community helped nurses discover 76% of them showed little interest in diets of substantial vegetables and fruits. 78% often ate salty or sweet marinated food. 43% barely controlled blood pressure. 65% hardly managed their glucose.

Discussion (Conclusion): Health promotion service for older people in the community helped nurses discover 76% of them showed little interest in diets of substantial vegetables and fruits. 78% often ate salty or sweet marinated food. 43% barely controlled blood pressure. 65% hardly managed their glucose.

Implications for guideline developers, users: Health promotion service for older people in the community helped nurses discover 76% of them showed little interest in diets of substantial vegetables and fruits. 78% often ate salty or sweet marinated food. 43% barely controlled blood pressure. 65% hardly managed their glucose.
Evaluation of the use of Easy, Care Standard on assessment of health needs in older people

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Background, Purpose (Introduction): Ageing society is an inevitable development worldwide. A comprehensive health assessment is warranted for providing individualized health care for older people who are living in community.

Objectives: To pilot test the use of Easy, Care Standard on assessment of older people’s health needs.

Methods: A design of cross-sectional survey was used. Easy, Care Standard was chosen to evaluate older people’s health needs, which consists of both physical and mental dimensions.

Results: A total of 40 participants were recruited in this study (mean age=72). The majority of them had primary school education (53%); lived with family (85%); and suffered from moderately pain (78%), which limited their capability of walking. There were more than half of participants diagnosed with osteoarthritis (53%) and nearly three forth of them were bothered by forgetfulness (73%). With regards to the use of Easy, Care Standard, we found that the open, ended questions aren’t colloquial enough and made older people in Taiwan felt difficult to express their opinions and thoughts of their health concerns concretely. Additionally, it was too hard for this group of older people to name the medical items and frequency for their medical history.

Discussion (Conclusion): In general, using EASY, Care Standard could identify older people’s overall health problems. Further study that focuses on providing individualized health cares for their unmet needs is warranted.

Implications for guideline developers, users: It is important for guideline developers and users to test the effect of a developed guideline on promoting older people’s health. Findings of the present study may be treated as a baseline data to inform the evaluation process and outcome.
Background, Purpose (Introduction) : Fever is the most common symptom that makes parents bring child to the emergency department in Taiwan. Professionals and parents have different perspectives on fever managements. To develop a Clinical Practice Guideline (CPG) with this issue is necessary.

Context : Based on the methodology of the Scottish Intercollegiate Guidelines Network (SIGN), the Department of Health (DOH) of Taiwan proposed the development of CPG. In June 2008, we organized the multidisciplinary committee and selected topics including body temperature measurement, non, medication management (ex: ice pillow, tepid sponging… etc.), antipyretic, nutrition and fluid therapy, and advice for home care. References were classified into 8 levels of evidence and recommendations as A to D according to the criteria of the SIGN.

Description : By January 2009, the CPG were completed by twenty, five experts (http:, www.wanfang.gov.tw,ebm,07_cpg,01_cpg_n.htm. Overall, 22 recommendations are formed. Nine of these are rated as grade A. AGREE instrument is selected to assess the quality of this CPG. The average scores for the six domains of AGREE were 83, 75, 78, 58, 72, and 91. We also surveyed the clinical applicability in 2 hospitals RNs in northern and southern Taiwan. The results showed that 91% nurses think this CPG help them to provide more effective and higher quality of care as well as health education.

Lessons for guideline developers, adapters, implementers, or users : We developed this CPG and planed to improve the quality of care for feverish children in Taiwan. Parents’ opinions, simple flow charts and education resources in this CPG can facilitate its clinical application.
**Background,Purpose (Introduction)**: As the evidence, based practice for improving the quality of healthcare has grown around the world, tailoring guideline recommendations to individual patients has also emphasized.

**Objectives**: To develop a computerized adaptive testing (CAT) system for assessing and training balance function in an individualized, efficient, and precise fashion in patients with stroke.

**Methods**: First, 764 patients were administered to fit an item response theory model and a simulation study to determine the optimal 34, items for the item bank of the Balance CAT. Second, we tested another independent sample of 85 patients to determine the psychometric properties of Balance CAT.

**Results**: We set 2 stopping rules (i.e., reliability coefficient > 0.9 or ≤ 6 items) for the CAT (available in the website as http://140.112.116.44,cat,). The scores were highly correlated with those of Berg Balance Scale (BBS) (Person r = 0.88), supporting the concurrent validity. The internal responsiveness (effect size = 0.90) and predictive validity for Barthel Index (rho = 0.58) were satisfactory. The average time needed to administer (83 second) was only 18% of BBS.

**Discussion (Conclusion)**: Our Balance CAT program was installed on a Web, based server. A personal digital device (iPod touch) or cell phone was used to administer and the test results reported immediately through internet. Therefore, we can obtain patient, centered performance, based measures, and then tailor task, oriented rehabilitation programs to individual patients with hierarchical balance function.

**Implications for guideline developers, users**: The results provide strong evidence that the Balance CAT is individualized, efficient, reliable, and valid for guideline recommendations of the balance tasks training in patients with stroke.
Poster 84

Motivational analysis of the health professionals in the usage of online evidence retrieval systems

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Background, Purpose (Introduction): Online database offers an easy access to evidence-based information and facilitates the integration of evidence into practice by providing summarized recommendations for clinical services.

Objectives: This study aims to understand the motives of health professionals in the use of online database.

Methods: A constructed questionnaire survey was carried out to examine the correlation of accessing online evidence retrieval systems with the motivation among 2975 nationwide representatives in the regional teaching hospitals of Taiwan. Statistical analysis was performed by chi square test using commercial available software.

Results: The most common motivation to access the online database was class assignment (62.2%), followed by searching information for clinical practice (56.1%), instruction preparation (37.8%), personal interest (28.3%), and research (22.4%). Specifically, physicians used online databases to locate health information the most for clinical practice (76.6%), followed by instruction preparation (63.3%), and research (57.0%). Nevertheless, nurses used such databases more often for class assignments (66.4%) and clinical practice (55.8%). In addition, the motives among health professionals who accessed the Cochrane Library were associated with searching information for clinical practice, class assignment, instruction preparation, personal interest, research need, and medical accreditation (P < 0.01). Furthermore, the health professionals who had positive belief, attitudes, knowledge or skills of evidence-based practice more often accessed the online databases to search information for clinical practice (P < 0.01).

Discussion (Conclusion): Motivation is a key element in the clinical practice with evidence.

Implications for guideline developers, users: Active motive to access the online database is important in the practice with evidence.
**Background, Purpose (Introduction)**: The dissemination of evidence, based practice (EBP) has been widely investigated, but few data exist on the effect of promotion campaign. The National Health Research Institutes has launched a complex outreach program, including information resource supports and promotion activities, to diffuse EBP into hospital, based health professionals in Taiwan since 2007.

**Objectives**: The aim of this study is to evaluate the impact of this project on the adoption of EBP.

**Methods**: A pre, and post, survey design was carried out to examine the changes of belief, attitude, knowledge, skill, barriers and behavior of EBP. Data were gathered twice in 2007 and 2009 from a constructed questionnaire reported by a nationally representative sample in the regional hospitals. A total of 3212 questionnaires were valid for analysis.

**Results**: Both physicians and nurses in 2009 survey tended to have more knowledge and skill of EBP than their counterparts in 2007 survey (P < 0.001). However, they were less likely to believe in that EBP can improve patient care quality and to support the implementation of EBP (P < 0.001). The perceived barriers to EBP reduced after a 2 year study period. In addition, physicians and nurses in 2009 survey more often accessed the online evidence retrieval databases than those in 2007 survey.

**Discussion (Conclusion)**: The knowledge, skill, and behavior of EBP have improved after a promotion period of 2 years.

**Implications for guideline developers, users**: A multifaceted nationwide promotion campaign is useful in the diffusion of clinical practice with evidence.
Evidence-based medicine (EBM) in Taiwan was introduced primarily aimed to enhance front-line clinical practice and continuous medical education since 1996. During the past few years, various bottom-up EBM related activities were promoted to support and share the implementation of evidence-based decision-making within clinical setting. Annual EBM contests held by Taiwan Joint Commission on Hospital Accreditation and Taiwan Evidence-Based Medicine Association (TEBMA) shared practical evidences regarding how clinicians improved their patient cares via EBM approach. The EBM teacher training program designed by TEBMA provided another supports to embed EBM on decision making within healthcare organization. These grassroots strategies not only attract clinicians’ interest in adopting evidence-based practice (EBP), but also set as role model to stimulate more participants inside healthcare society.

On the national level, several clinical practice guidelines (CPG) were commissioned by governmental agencies and disseminated to healthcare profession through a platform (http://ebpg.nhri.org.tw) established by NHRI since 2009. Now there are more than 16 qualified guidelines on the free access website. An external quality appraisal for CPGs was gradually accepted by professional healthcare society as well. The National Health Insurance (NHI) also introduced health technology assessment (HTA) scheme in evaluating clinical effectiveness of new drug before reimbursement. The NHI also set up some evidence-based measurement to audit targeted diseases performance in its contracted healthcare organizations.

Although the importance of EBP was broadly realized by healthcare decision-makers, an integrated infrastructure to bring in all EBP related resources including top-down policy and bottom-up experiences and share with the whole society is even demanding. Besides, we also need more efforts to evaluate the long-term performance outcome of implementing EBP, to suggest what works in what situation and how it work, to demonstrate high healthcare quality we provided to patients and stakeholders.
Highlights of CPG development in Singapore
– past, present & future

Edwin Chan Shih-Yen
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An overview of the changes in CPG development in Singapore will be presented. A description of the situation in the past concerning the sponsorship of CPGs, the mono-disciplinary approach and the divergent methodologies used will be given. This will be followed by a summary of the present developments and some common mistakes encountered. Finally some of the problems, capacity building challenges and future trends will be discussed.

Application of Evidence Based Healthcare in Health Insurance Review & Assessment service (HIRA)

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In South Korea, there are several issues in the delivery of healthcare, such as the increasing costs of healthcare, the lack of capacity to pay for the totality of health services demanded by healthcare professionals and the general public. Many parts of these issues are related to the provision of inappropriate care. To make rational decision and to enhance acceptability of the HIRA’s decision-making in healthcare provision and to make transition from opinion-based decision making to evidence-based decision making.

The Health Insurance Review & Assessment service (HIRA) established Evidence Based Healthcare (EBH) team in 2006 to achieve evidence based decision-making derived from research. The EBH team consists of four researchers, an assistant manager, a manager and other staff who help administrative procedures. The important tasks of EBH team are performing systematic review for evidence based decision-making and educating both inside and outside staff who are interested in systematic review. For evidence based decision-making, the issues are chosen from committees which discuss healthcare policy or the criteria of healthcare benefits in the HIRA. After finishing systematic review in the EBH team, the results are fed back to the related committees. Through the results, the members of the committees are able to make decisions explicitly and openly.

Results

Since 2006, the EBH team has been performed about twenty-five systematic reviews. The results of SR has a large influence in the healthcare policy in South Korea. The repre-
sentative example would be the lawsuit about Iressa price reduction in 2006. The pharmaceutical company insisted that the Iressa had a very innovative effectiveness which was based on phase III result than other drugs therefore the drug was well worth the high price. The authority, however, ordered the reduction of the drug price and the company did not agreed with the authority's resolution and filed a lawsuit against the decision. The EBH team was asked to summit the evidence about the government's determination. The team reviewed the clinical effectiveness of the drug through SR and the court reflected the SR result and decided in the authority's favor. Through the lawsuit, the government was able to save about 1,300 million Korean Won in terms of finance of National Health Insurance..

The AGREE, an evaluation tool for clinical practice guideline (CPG), was introduced by a voluntary effort of the Korean Medical Association (KMA) in Korea a few years ago. As Korean CPG has relatively shorter history than western countries, the implementation of AGREE peer review system is quite challenging and still we are in the building process. Here we report our experience about the implementation of the AGREE peer review system in Korea.

The Advisory Committee for CPG (ACC) is organized by KMA which is representative academic organization of medical doctors in Korea, and dedicated to supporting CPG development and implementing AGREE peer review system. Implementing AGREE peer review system was led by the Expert Subcommittee of ACC (ECC). ECC recruited 14 members who majored in medicine and had an experience of CPG development. First step for the implementation was translation of the AGREE tool into Korean and achieving a consensus on draft scoring guide among members. We named the product as K-AGREE tool. We applied the draft version of K-AGREE to 16 Korean CPGs which were developed before 2009. Two peer reviewers assigned to each CPG, reviewed and scored for 23 AGREE items.

With the first pilot trial of K-AGREE, we identified there are considerable differences in score grading between peer reviewers. We assumed such difference come from the ambiguity of Korean expression for the AGREE item and scoring guide. We had a consensus meeting several times for resolving an inter-
preterational gap and expressional ambiguity, and made an upgraded version of K-AGREE tool. We carried out the second pilot trial for the same 16 CPGs, and got a satisfying result. Peer reviewers were trained spontaneously through these pilot processes. Also we opened a training workshop for K-AGREE for the expansion of reviewer resource and a continuous education for trained reviewers.

There are no doubts about the importance of CPGs in modern medicine. Our believing about the AGREE tool is not only an evaluation tool for CPGs but also a suggestion for good CPG. Now we believe the K-AGREE peer review system is in a course of stabilization. ECC will make unremitting efforts for the successful settlement for the K-AGREE peer review system in Korea.

For nearly 20 years the Cochrane Collaboration has been striving to make good its promise to help people – clinicians, policy makers and patients – make informed choices about health care. The focus of the Collaboration’s efforts is on producing high quality Cochrane Systematic Reviews published in The Cochrane Library. To achieve this, the Collaboration relies on the contributions of over 28,000 people, who come from more than 100 countries. Despite strong performance in terms of review output and journal impact factor, the Cochrane Collaboration is not immune to competition from other producers and providers of evidence-based resources. This presentation will focus on some of the key organisational challenges Cochrane faces and highlight several initiatives underway to support those doing the reviews and to improve the quality of The Cochrane Library.
Evidence-based Healthcare in Korea

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Although national medical expenditure have showed a steady and fast increase, studies of scientific evidence necessary for utilization of medical resources are insufficient. To contribute to the efficiency of health spending and the activation of the healthcare industry by providing objective and scientific evidence to consumers, insurers, and healthcare providers based on the economic evaluation and clinical efficacy of health technologies and products, NECA was established on December 23, 2008.

Our missions are as follows: 1) forming systematic structures in the area of healthcare research through new medical technology assessment projects, and the creation of criteria and national clinical trial projects, 2) establishment of measures linking research planning with consignment projects, 3) establishment of systems for responding to healthcare technology assessments, 4) establishment of a clinical practice research center, 5) strengthening the operation of committee to achieve social consensus.

In 2010, two national programs are working under the umbrella of NECA. One is the Center for New Health Technology Assessment. This center has been the core structure of evidence-based healthcare since 2007, working together with HIRA (Health Insurance Review &Assessment Service). The other program is the National Strategic Coordinating Center for Clinical Research (NSCR), which will coordinate clinical research for 11 major illnesses in Korea (cancer, ischemic heart disease, chronic obstructive lung disease, etc.). The scopes of NSCR encompass investigator-initiated clinical trials, clinical epidemiology studies utilizing patient registry data, and clinical practice guidelines.

Over the last two years, the representative topics covered by NECA are as follows:
- HTA report on robot surgery
- Long-term Safety and Stability of refractive surgery (LASIK, etc.) in myopia
- Long-term follow-up after endoscopic submucosal dissection for early gastric cancer
- Drug-Eluting Stents versus Bare-Metal Stents in Acute Myocardial Infarction
- Effectiveness of glucosamine/chondroitin in osteoarthritis
- Consensus development regarding the end-of-life decision on life-sustaining treatment
- Development of Empirical Treatment Guideline in Neutropenic Febrile Patients on the Bases of Korean Data

NECA contributed many aspects of healthcare in Korea with HTA reports, and clinical practice guidelines. However, evidence-based healthcare in Korea is still in infancy.
MINDS (Medical Information Network Distribution Service) is an information service provided by the Japan Council for Quality Healthcare, a public interest incorporated foundation. The aim of MINDS project is to help medical practitioners to fully utilize the information related to the evidence-based medicine (EBM) in their practice. MINDS functions as a guideline clearinghouse; clinical practice guidelines (CPGs) developed in Japan are formally evaluated by the guideline evaluation committee, and only those CPGs which meet with the quality standard are disseminated through the MINDS website. Currently, 71 CPGs are placed on the website. Some guideline developers translated their guidelines into English to share with medical professionals abroad, and MINDS also provides these English-translated CPGs developed in Japan (http://minds.jcqhc.or.jp/st/english.aspx).

Additional information resources on MINDS website are Japanese-translated abstracts of Cochrane Reviews, MINDS Abstracts of recently published RCT studies, and CPG Reviews which compare CPGs developed in Japan with those in other countries. It is hoped that these additional information resources provide up-to-date evidence worldwide to Japanese practitioners.

MINDS also provides patients and the public with information to help understand the basics of diseases and to share with their practitioners the evidence, on which modern medical practices are based.

In 2011, MINDS project has been approved as a 5-year consignment project for the Ministry of Health, Labor and Welfare. As a new mission, MINDS is supposed to strengthen the international collaborations with institutions dedicated to EBM implementation, and health policy development in various countries will be reviewed in relation to current evidence presented by CPGs. In this regard, the Asian Pacific EBM Network Meeting offers us a great opportunity to make a good start.
The history of evidence-based ODA and the current debates

Ryo Sasaki, International Development Center of Japan, Japan

“Evidence-based Development Aid Evaluation” is a hot topic in the aid evaluation field and this movement has been led by Poverty Action Lab (J-PAL) since its establishment. The key of this movement is application of randomized experimental design, or randomized controlled trial (RCT). In this design, participants are divided into two groups by randomization (by chance alone), one of which receives treatment and the other of which does not. Since the characteristics and backgrounds are identical (or very closely similar) between two groups, difference on the outcome indicators between two groups after intervention is regarded as purely caused by the intervention. We call it is impact.

Three origins can be identified about this movement. The first is the evaluation study which root is deeply embedded the Campbell and Stanley’s proposal (1966); the second one is the aid evaluation which has been uniquely developed due to the unique characteristics of the field; and the third one is relatively newcomer which is development economics field.

After discussing each origin, the thoughts of Michael Scriven, program director of the Evaluation Center, Western Michigan University (-2008), and Abhijit Banerjee, director of J-PAL, are examined about advantages and constrains of RCT. Michael Scriven is a philosopher and sometime called as one of the initiators of evaluation research field, and Abhijit Banerjee is a founder of J-PAL and a true pioneer of this movement. The main points of examination are as follows.

1. The RCT design that has been employed by J-PAL lacks double-blind procedure.
2. “Statistically significant” is very different from “Socially significant”.
3. Ethical issue exist for dividing people who may have same needs by chance alone and it is truly difficult to obtain approval from those people about result of randomization before randomization.
4. The word “evidence” is dominated or hijacked by quantitative researchers.
5. There exists some types of intervention on which RCT is not appropriate or simply meaningless.

One conclusion of this academic examination is: there are some rooms for employing RCT even though it cannot be dominant. It should be considered to put some more resources on the aid activities which effectiveness may be verified by this approach.
Evidence based ODA: Japanese Experience

Yusuke Kamiya,
Health sector at the Human Development Department of the Japan International Cooperation Agency (JICA)
Japan

With the growing worldwide concern on aid effectiveness, international development organizations, beginning with the World Bank, as well as bilateral aid agencies have promoted Impact Evaluation that precisely estimates the effects of development projects. To provide useful references for future ODA project formation and operation, JICA is also presently making efforts to promote Impact Evaluation. In addition to producing its own scientific evidence, JICA is encouraging to utilize the existing evidence to raise aid effectiveness.

Impact Evaluations are conducted at various stages of the project. Ex-post impact evaluations are mainly conducted by Evaluation Department by adopting quasi-experimental methods. In view of the recent interests of the international development community and JICA’s project experience and evaluation needs, infrastructure projects such as irrigation construction project in Sri Lanka, Thailand, Philippines, and Indonesia, were rigorously evaluated so far.

In the operation side, Health Group of the Human Development Department is now accelerating the use of empirical evidence for the design, planning and implementation of its cooperation to improve the quality of its assistance. There is a large body of evidence at the level of efficacy and effectiveness attained by various health-related interventions in low and middle income countries. Given its limited budget, human resources and time, such global intellectual property should be intensively utilized to maximize the effectiveness of JICA’s cooperation in the health sector. The monitoring and evaluation of JICA’s assistance in the health sector are gradually being undertaken using appropriate evaluation frameworks and indicators to measure the progress and impacts of interventions. Impact evaluation, which uses experimental or quasi-experimental design, and operational research are also being designed in Bangladesh, Vietnam, Tanzania, Kenya, and Ghana.
APEBMN Poster 1

Possibility of modeling approach for evaluation of screening for hepatitis-related diseases

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Background, Purpose (Introduction): In Japan, screening for hepatitis B and C virus infections in the general population was started in 2003. There is no evidence to evaluate the incidence and mortality reduction.

Objectives: The possibility of using modeling to connect the chain of evidence was investigated.

Methods: A systematic literature review was conducted by two authors. A search of the literature published from January 1980 to June 2010 was performed using MEDLINE. To select literature using a model to evaluate cost-effectiveness of screening for hepatitis B and C virus infections and screening for hepatocellular carcinoma, the following exclusion criteria were used: vaccination, HIV infection, specific target (such as prisoners), and evaluation of safety of blood donation.

Results: Out of 169 studies, 11 articles was selected as follows: 7 for hepatitis C virus infection screening, 2 for hepatitis B infection screening, and 2 for hepatocellular carcinoma screening that targets patients of liver cirrhosis. When the target group was limited to a group at high risk of hepatitis C virus infection, the 5 articles selected had disparate results. Two articles were selected for hepatitis B infection screening and 2 for hepatocellular carcinoma screening that targeted patients with liver cirrhosis. Based on the present systematic review, following problems were clarified: model development, insufficient data and ignorance of harms.

Discussion (Conclusion): It is difficult to make any conclusions about the efficacy of screening based on the modeling approach alone.

Implications for guideline developers, users: An appropriate analysis should involve consideration of a modeling method and selection data for adaptation of guideline development.
**Background, Purpose (Introduction)**: Drug abuse problem is a significant health problem, particularly among adolescents and adults, causing a significant morbidity and mortality. The study focuses on the serious issue related to the adolescents and adults behavior and health.

**Objectives**: It aims to identify the risk factors for drug abuse from samples taken from a town of Eastern Nepal.

**Methods**: This is a matched case-control study. An adequate sample of 150 matched pairs was recruited from Dharan municipality in 2006. Samples were collected using snowball-sampling method. The conditional logistic regression method was adopted for data analysis. The diagnosis cut off was determined by Receiver Operating Characteristic curve.

**Results**: The univariate analysis revealed that those who were below age 20 years, hill natives, students, married, stayed in joint/extended families, and whose father had below 10 years of education were independently associated with drug abuse. The final model after adjusting 17 possible variables each other, detected some factors like education, domination, undeniability, short temper, depression, etc. that were significantly associated with drug abuse, but shy behavior was not a significant predictor for drug abuse among the study sample. However, univariate analysis showed it was independently associated with drug abuse.

**Discussion (Conclusion)**: Drug abuse is a serious and growing public health problem. The level of education, occupation and depression were the strong predictors as identified by the model.

**Implications for guideline developers, users**: The findings may have implications to aware families and schools in developing countries like Nepal.
Background, Purpose (Introduction): Smoking and health are intimately related and thus, smoking among future health care personnel is an important issue. As future physicians and dentists who will witness the continued burden of smoking-related diseases among their patients, they represent a primary target for smoking prevention program.

Objectives: To know the magnitude of smoking problem among medical and dental students. To find the major causes aggravating the burden of smoking among students.

Methods: Questionnaires were distributed among 400 students of MBBS and BDS, among them 292 return the questionnaire. Pre-designed and pre-tested questionnaire were used to study the problem and various correlates of smoking. Data was entered and analyzed using Excel and SPSS software.

Results: Prevalence of smoking was 38.4%, among whom majority started smoking in the age 15-19 years of life. Regarding the cause peer pressure was the major cause accounting 29.2%. Where 65% of students took alcohol along with smoking.

Discussion (Conclusion): Tobacco smoking is a significant health problem among students. Medical and dental students are approached as they are the treatment provider for smoking and disease related to it in future.

Implications for guideline developers, users: We need to reduce the habit of smoking among students so that the general public can accept them as their role models in the smoking cessation activities. Specific training and counseling of the students on a regular basis to help them overcome the desire to indulge in this deadly habit.
Is a routine pre-operative electrocardiogram necessary for patients over 40 years attending the preanaesthetic checkup clinic?

Ashish Ghimire, BPKIHS, Nepal
Balkrishna Bhattarai, Nepal

**Background, Purpose (Introduction)**

Preoperative 12-lead electrocardiogram (ECG) can provide important information on the state of the patient’s myocardium and coronary circulation. At the outset, screening ECG preoperatively in all adult patients seems cumbersome and unnecessary.

**Objectives**: To find out the ECG pattern of patients above 40 yrs of age presenting in the preanaesthetic check up (PAC) clinic and to observe any associated co-morbid conditions.

**Methods**: This is a prospective observational study done in the PAC clinic of the department of Anaesthesiology and Critical Care, at B. P. Koirala Institute of Health Sciences, Dharan from July 2010 to August 2010 over a period 3 months. The study enrolled 360 patients aged 40 years and above. Laboratory investigations such as hemoglobin, blood grouping, urine routine and microscopic examinations; biochemical parameters like urea, creatinine, fasting and post prandial blood sugar were reviewed. A 12-lead ECG was obtained for all patients above 40 years of age and findings were interpreted.

**Results**: Out of 360 patients 168 were male and 192 female. Abnormal ECG was observed in 38 (10.5%) patients. Frequency of abnormal ECG increased with increasing age. Diabetic, hypertensive and smokers had higher incidence of abnormal ECG.

**Discussion (Conclusion)**: Patients with history of smoking in our study similarly had higher incidence of abnormal ECG than non-smokers. Smoking is known to stimulate sympathetic system and release of catecholamine from adrenal medulla. Moreover, prolonged smoking is associated with ischemic and consequent ECG changes. Diabetic patients also showed more than 3 fold higher incidence of abnormal ECG in the present study as compare to non-diabetic patients. Two of the diabetic patients had ST segment depression suggestive of ischemia. Myocardial ischemia frequently occurs without pain in diabetic patients.

**Implications for guideline developers, users**: A preoperative screening ECG for all adult patients visiting PAC clinic is relevant and desirable for risk-stratification.
Background, Purpose (Introduction): Diabetic patients often require multiple medications for adequate glycemic control and the prevention of associated complications. The physiological changes in patients aged over 65 make them at risk of having adverse outcomes associated with inappropriate medicine use. More attention should be paid to medication use among this population.

Objectives: To determine the prevalence of potentially inappropriate medications (PIMs) in elderly Thai diabetic patients.

Methods: We retrospectively examined an electronic database in a university-affiliated hospital. Population included aged 65 years and older and visited in 2008. We adopted the evaluation criteria for high-risk medication use. The criteria identify potentially inappropriate medication use in Thai older patients. Outpatient database, patient demographic, and diagnosis database containing ICD-10 (International Classification of Diseases ??Version 10) were linked using a hospital number. Descriptive statistics were used to describe patient demographic, co-morbidities, health insurance scheme, and to determine the prevalence of PIMs among the included subjects.

Results: Of 15,418 elderly patients in pharmacy database, 1,697 were identified as diabetes mellitus (DM) and included in our analysis. The mean age was 72 years and 60% was under Civil Servant Medical Benefit Scheme (CSMBS). This study revealed that 84% of elderly diabetes patients were prescribed at least one PIMs.

Discussion (Conclusion): The prevalence of PIMS in the elderly patients with diabetes was high. Future research is needed to target extended, chronic duration of use and persons at highest risk.

Implications for guideline developers, users: Careful management is needed in DM especially among those with co-morbidities. It is important to the intervention reducing PIMs.
Antagonist-mediated Down-regulation of the Expression of Intracellular Toll-like Receptors Increases the Prevalence of Human Papillomavirus Infection in Systemic Lupus Erythematosus

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Background, Purpose (Introduction) : The prevalence of abnormal Papanicolaou (Pap) smear was significantly increased in systemic lupus erythematosus (SLE) compared with healthy controls (HCs).

Objectives : To investigate the association between the expression of TLR-3, -7, -8 and -9 in cervical epithelial cells (EPs) and in SLE with or without HPV infection compared to HCs.

Methods : The expression of TLR-3, -7, -8 and -9 was assessed by flow cytometry in cervical EPs in SLE patients with or without HPV infection compared with HCs, as well as in HPV infected EP cell lines.

Results : For subjects without HPV infection, the decreased expression of TLR-3 in SLE patient without HPV infection was associated with the use of hydroxychloroquine (HCQ) (p=0.031). In SLE patients with HPV infection, HPV infection was found to be an independent risk factor for the down-regulation of the TLR-7 expression in SLE (p=0.004).

Discussion (Conclusion) : TLR antagonist, such as HCQ may decrease the expression of TLR-3 in SLE, thereby increasing the risk of acquiring HPV infection. Moreover, hr HPV infections may play a predominant role in further down-regulating the expression of TLR-7 in SLE with HPV infection resulting in a higher prevalence of persistent infection.

Implications for guideline developers, users : HPV in SLE
Background,Purpose(Introduction) : Anxiety disorders are among the most prevalent mental health problems in the community. Yoga is an ancient discipline designed to bring balance and health to the physical, mental, emotional and spiritual dimensions of the individual. There are a number of studies that look at the effects of yoga on anxiety, but only one systemic review was found specifically on this topic. However, owing to the poor quality of most of the studies, there was no strong evidence to prove that yoga is effective in treating anxiety.

Objectives : As some researches accumulated since last systemic review, this study systematically explores the possibilities for the use of yoga therapy as effective means of reducing anxiety.

Methods : Fifty studies were retrieved from MEDLINE (from 1966), PsycARTICLES (from 1988), ProQuest (from 1982) and CINAHL (from 1982), through December 2011, using randomized control trials, anxiety, yoga as keywords. These retrieved papers were screened via Jadad score criteria by two independent reviewers. This systematic review included ten randomized control trials that assessed the efficacy of yoga. There were 449 participants. The effect size, Hedges’d, was used to compare the magnitudes of the treatment effects across studies.

Results : Yoga therapy is usually provided to the healthy or diseased populations. The duration of intervention of yoga is about 5-12 weeks. On average, 18.7% of the participants did not complete the intervention. The overall effect size for ten selected studies was -0.33(95% CI, -0.67~0.04), and was clinically significantly effective of yoga on anxiety in general. The effect size for patient with disease was -0.35(95% CI, -0.67~0.03).

Discussion(Conclusion) : This study suggests that yoga can be considered as a complementary therapy or an alternative method for medical therapy in the treatment of anxiety.

Implications for guideline developers,users : This study suggests that yoga can be considered as a complementary therapy or an alternative method for medical therapy in the treatment of anxiety.
Background, Purpose (Introduction): Despite the approved positive relationship between education and medical-care productivity, education is mostly not discussed as a differentiated input. This paper tries to fill this gap also connected to patient empowerment.

Objectives: I divide into different kinds of investments: prevention and preventive education (SP) and education for increasing self-care competence (SI). These are analyzed in a framework of a severe and banal illness and a decision structure of ambiguity. The individual can choose between self-care and consultation as imperfect treatment alternatives.

Methods: A decision-tree framework given a lump-sum insurance and a decision under ambiguity is used to describe the individual behavior.

Results: There is trade-off between SP and SI in which self-care is crucial, also related to the initial health levels and the degree of risk-aversion. Insurance can be a complement or substitute to SP and SI. Based on ambiguity, SP and SI, but also the insurance can be used to inhibit self-care and to induce dominance of consultation as second- or third-best. A neglect of SP and SI to support self-care can also be optimal.

Discussion (Conclusion): It is of importance to realize a mix of measures. It can be optimal to influence the subjective degree of pessimism and to induce dominance and avoid self-care et vice versa. Predictions according to the relation between moral-hazard and market-insurance strongly depend on the specification of the scope of the individual's action.

Implications for guideline developers, users: Variable insurance contracts should be offered. It is important to identify clearly the individual situation to realize the optimal form of investment. Self-care is element.
**Background, Purpose (Introduction)**: Best Practice Clinical Intervention Guidelines tailored per clinical risk profile to prevent preventable morbidity and mortality and support a sustainable health system, linking practice evidence to policy, need to be transparently and continuously updated by world-wide clinical risk management knowledge, aggregated from scientific and observational findings. A semantic web international collaboration application to develop a shared health thesaurus and knowledgebase will enable real-time data mining of what works best for whom, when, where, why and if.

**Objectives**: An international collaboratively updated digitalised de-identified health knowledgebase, indexed in a problem-solution framework using a shared health thesaurus, aggregating scientific and observational findings International clinical practice and scientific research collaboration to poll agreement of risk factors and satisfaction with intervention guidelines per clinical risk profile, per level of evidence Applied epidemiology and point-of-care expert clinical decision support through automated patient risk alerts Improved Patient Privacy Law to enable international multi-disciplinary care team risk management collaboration using SMART shared electronic health records An international collaboratively updated digitalised de-identified health knowledgebase, indexed in a problem-solution framework using a shared health thesaurus, aggregating scientific and observational findings International clinical practice and scientific research collaboration to poll agreement of risk factors and satisfaction with intervention guidelines per clinical risk profile, per level of evidence Applied epidemiology and point-of-care expert clinical decision support through automated patient risk alerts Improved Patient Privacy Law to enable international multi-disciplinary care team risk management collaboration using SMART shared electronic health records Transparency of health research and service funding efficiency and efficacy in the health knowledgebase International Health Informatics Service Architecture Guidelines to achieve this.

**Implications for guideline developers, users**: 1. Brainstorming obstacles to achievement, do-able project tasks, and project funding 2. Identifying international project collaborators 2. Drafting project timeframe, accountability and tasks 3. Brainstorming project quality and risk indicators and risk mitigation tasks
Background, Purpose (Introduction): General and family practitioners vary greatly in their clinical management of type 2 diabetes for poorly understood reasons, therefore the aim of this study was to explore barriers to implementation of guidelines in management of type 2 diabetes for health care policy makers and also medical educationists.

Objectives: To explore Iranian GPs’ awareness and agreement of current diabetes guidelines and their self-reported implementation of them in clinical practice.

Methods: We employed a questionnaire based on the ‘awareness-to-adherence’ model of behavioural change. This questionnaire was completed by 1103 Iranian GPs who were registered by Iranian General Medical Council.

Results: The mean age of participants was 41.2 (9.8) years, 61.2% were male, 63% graduated more than 10 years and only 42.3% had any CME before completing this questionnaire. Their awareness of recommendations about the control of type 2 diabetes in overall was low. Almost 32% of practitioners were aware of the guidance about HbA1c as control index of diabetes. This was almost similar for other biochemical indexes like lipid profiles FBS and normal range of SPB and DBP. Only 50% of GPs adhered to the recommendation of statin therapy in their practice. While near 75% of GPs knew the treatment of hypertension in diabetic patients, only 29% measured blood pressure in their first visit. Overall approximately 10% was uncertain about their decision. No significant association was found among age, sex, however year of graduation was correlated with low awareness in control of diabetes.

Discussion (Conclusion): The findings of this study highlight need of appropriate actions to enhance awareness and encourage practitioners to adopt and implement in their daily practice. However, high adherence requires a reflective workforce that can respond to the scientific evidence underpinning the guidance.

Implications for guideline developers, users: Guideline developers should take into account
stakeholders' awareness and agreement levels when developing specific guideline recommendations. Appropriate analysis should be done for any possible barriers be healthcare policy makers and for low awareness by medical educational policy makers as well to change current curriculum.

**Backgrounds** : Health Insurance Review and assessment service(HIRA) is a statutory public corporation for the purpose of improving national healthcare and developing social security through fair and efficient execution of healthcare review and evaluation. The HIRA was established to review medical fees and to evaluate the appropriateness of healthcare benefits. In addition to reviewing and evaluating healthcare, the HIRA performs development of information concerning clinical, social and economic implications of healthcare.

**Objectives** : The HIRA has several committees to determine the scope of healthcare benefits. The committees have to decide rational and reasonable decision-making because their decision-making can affect not only health providers behaviors but also healthcare consumers attitudes.

In Evidence Based Healthcare(EBH) system terms, the HIRA has established two ways of EBH methods), one is Evidence Based Healthcare Evaluation using systematic review and the other is Evidence Based Review Manual(EBRM) for preparing handouts for committee meetings in the HIRA.

**Methods** : Evidence Based Healthcare Evaluation is performed with usual systematic review(SR) for more complicated issues. The EBRM, on the other hand, is indigenous method of the HIRA. The reason why the HIRA has developed the EBRM was the SR usually requires much time therefore meeting organizers can not prepare meeting handouts in a limited time. By using the EBRM, they can save time and effort to prepare meeting materials.

The EBRM is characterized by limited databases searching and step down classification method of clinical study according to its design. In other words, the EBRM recommends only three databases(PubMed, Cochrane library and KoreaMed) for searching relevant articles and divides clinical articles into four categories, for example the first category in-
<Table1> The categories of clinical studies according to its design

<table>
<thead>
<tr>
<th>categories</th>
<th>study designs</th>
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<tbody>
<tr>
<td>1</td>
<td>· Systematic review with RCT</td>
</tr>
<tr>
<td>2</td>
<td>· RCT</td>
</tr>
<tr>
<td></td>
<td>· SR with studies belong to category 3</td>
</tr>
<tr>
<td>3</td>
<td>· Quasi-RCT</td>
</tr>
<tr>
<td></td>
<td>· Cohort study)</td>
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<tr>
<td></td>
<td>· Case control study</td>
</tr>
<tr>
<td></td>
<td>· Other observational, analytic study</td>
</tr>
<tr>
<td>4</td>
<td>· Cross-sectional study</td>
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<tr>
<td></td>
<td>· Case series, Case report</td>
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<tr>
<td></td>
<td>· Before/after study</td>
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<tr>
<td></td>
<td>· Non-analytic study</td>
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</tbody>
</table>

includes only SR with RCT, the second category encompasses RCTs and SR with the third category studies. If the meeting organizers can retrieve the relevant articles in the first category, they are able to finish the literature searching process although there would be other articles belonged to the rest categories.

**Results**: The introduction of the EBRM satisfies both meeting organizers and committee members. The EBRM has been regarded as a main and important method to prepare committee meeting handouts and it enables operators to make efficient and organized meeting materials in a short time which is able to provide scientific evidences for healthcare policies.