ISEHC 2013 研習會心得分享

高雄長庚刁茂盟醫師

名稱及地點

- International Joint Conference

◆**2nd Conference of International Society for Evidence-based Health Care (ISEHC)**

◆**6th International Conference for EBHC Teachers and Developers**

(Challenges for Education and Research)

Place: Taormina (Italy)

Time: 30th October - 2nd November 2013


Taormina (Italy)

We hope that you will have an enjoyable time and make the most of this wonderful “the Mediterranean Sea”

Nino Cartabellotta
GIMBE Foundation (Italy)
Conference Chair

Paul Glasziou
Bond University (Australia)
Chair of the Scientific Committee

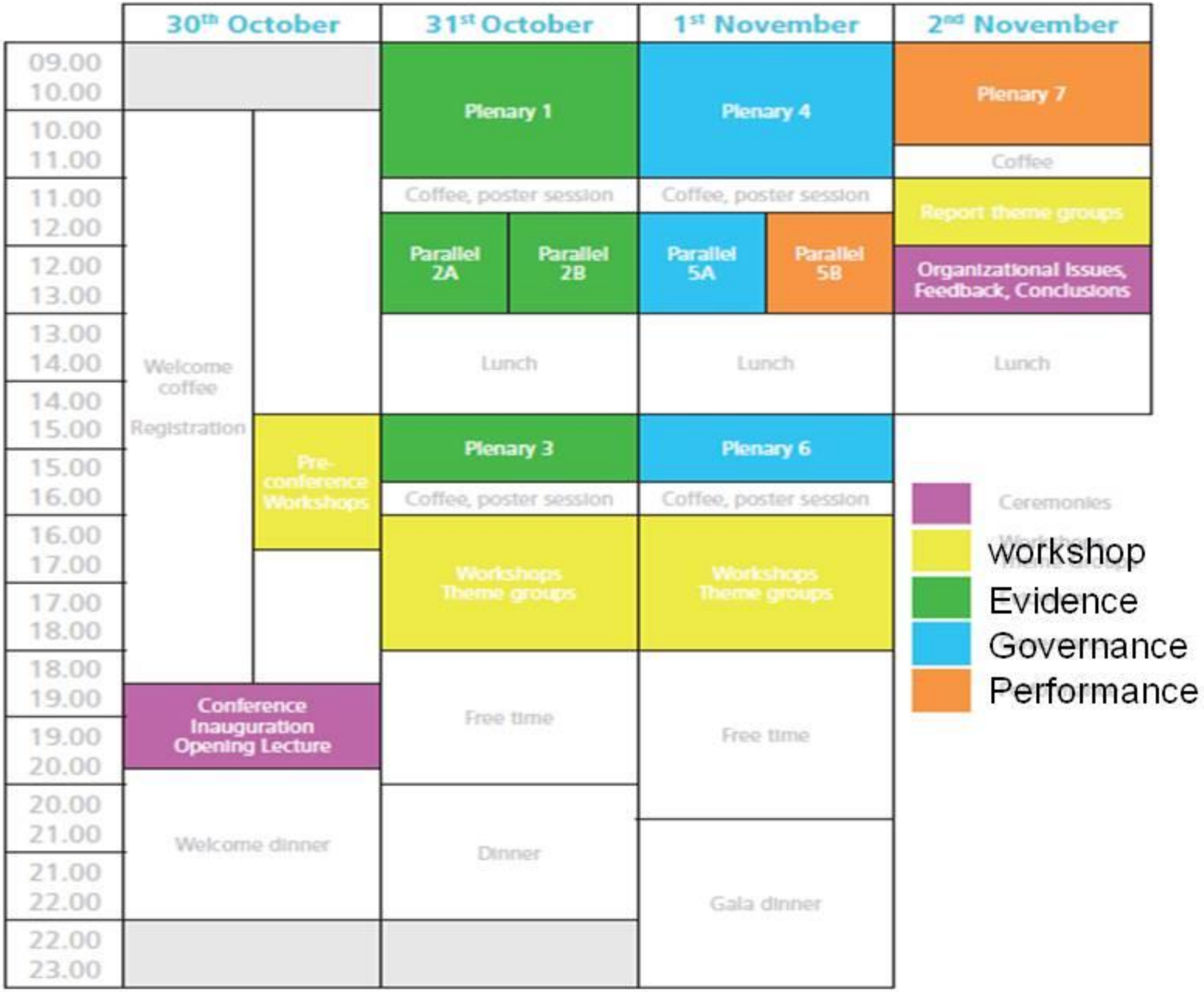
主要分三大主題

- **Evidence, Governance, Performance**

  證據，治理，績效

1. Evidence based approach to healthcare
2. Education
3. research

Schedule 清楚的用顏色區分



30TH OCTOBER

14.30 | Pre-conference Workshop (in parallel)

Rating Confidence in Effect Estimates and Grading Strength of Recommendations using GRADE
Gordon Guyatt. McMaster University (Canada)

Making sense of results: statistics for the terrified
Amanda Burls. City University of London (United Kingdom)

18.30 | Conference Inauguration

Welcome to Sicily
Nino Cartabellotta. GIMBE Foundation (Italy)

OPENING LECTURE. Evidence-based Health Care: a look into the future
Gordon Guyatt. McMaster University (Canada)

- ceremonies
- Workshop, theme groups
- Evidence
- Governance
- Performance

31ST OCTOBER

9.00 | Plenary Session 1 - Evidence

KEYNOTE. Evidence, Governance, Performance: challenges for education and research
Nino Cartabellotta. GIMBE Foundation (Italy)

PLOT-IT: Public-Led Online Trials-Infrastructure and Technology for crowdsourcing health data
Amy Price. University of Oxford (United Kingdom)

Recent medical graduate's opinion on EBHC in Stellenbosch University's medical curriculum
Anke Rohwer. Stellenbosch University (South Africa)

Merging health and science education: a qualitative study of Norwegian science teachers
Lena Nordheim. Bergen University College (Norway)

Interventions to enhance the uptake of systematic reviews and meta-analyses
John Wallace. University of Oxford (United Kingdom)

Mapping from SORT to GRADE
Brian Alper. EBSCO (United States)

11.30 | Parallel Session 2A - Evidence

Provision of methodological knowledge for the quality assessment of primary studies
Barbara Buchberger. University of Duisburg-Essen (Germany)

Evidence-based Medicine interactive eBook learning effect
Mao-meng Tiao. Chang Gung Memorial Hospital (Taiwan)

Using the technology acceptance model to explore intention and barriers toward using the Cochrane Library among health professionals in regional hospitals in Taiwan
Chen Chiehfeng. Taipei Medical University (Taiwan)

PINET - Personalized Integrated EBM Teaching for trainees in general practice: a randomized controlled trial
Marlous Kortekaas. University Medical Center Utrecht (Netherlands)

Advancing evidence-based residency training
Kurt Hegmann. University of Utah (United States)

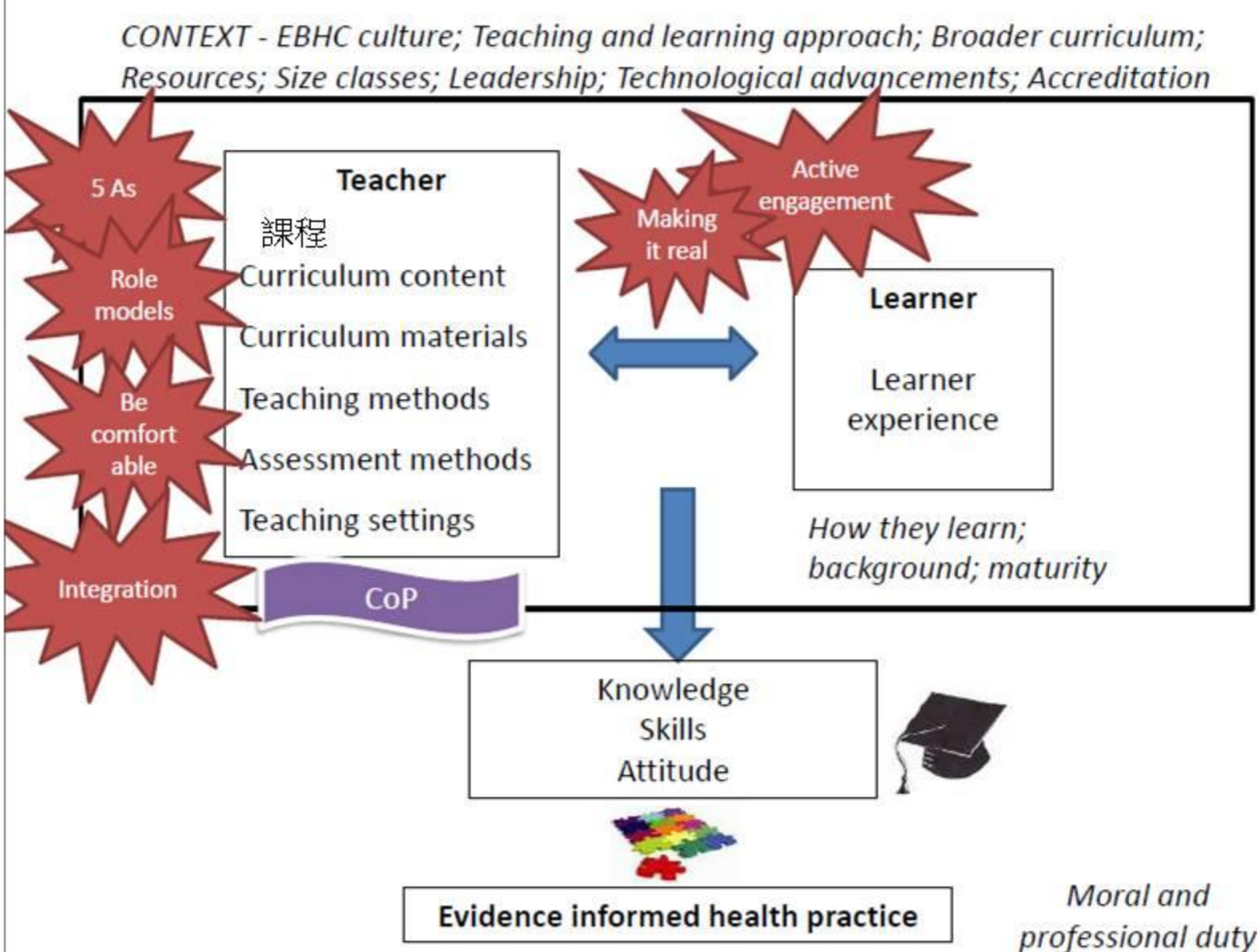
Contents

1. Learning EBHC at undergraduate level
2. Integration of EBM into undergraduate Medical Curriculum workshop
3. Real patient cases for teaching evidence based paediatrics
4. Advancing evidence based residency training
5. EBM e-learning (my report)

Theme group feedback

Learning EBHC at undergraduate level: what are the lessons learnt?

Multidisciplinary group involved in teaching EBP


CONTEXT - EBHC culture; Teaching and learning approach; Broader curriculum; Resources; Size classes; Leadership; Technological advancements; Accreditation
5 As
Role models
Be comfort able
Integration
Teacher
課程
Curriculum content
Curriculum materials
Teaching methods
Assessment methods
Teaching settings
CoP
Making it real
Active engagement
Learner
Learner experience
How they learn; background; maturity
Knowledge
Skills
Attitude
Evidence informed health practice
Moral and professional duty

Integration Of EBM Into Undergraduate Medical Curriculum Workshop

Nov 1 2013

Dr. Mazen Ferwana, MD, ABFM, JBFM, PhD
Consultant & trainer Family Medicine
Associate Prof. King Saud Bin Abdul Aziz University-HS
Co-Director, NGCEBHP
Chairman, COM EBM Committee

FOUR QUESTIONS

WHY?

WHAT?

HOW?

IMPACT?

Why

Managing Medical Information Explosion

At the individual level:

1. Which resources
2. Proper searching skills
3. Appraisal, Interpretation and use
4. Point of care
5. Mobile medicine
6. Push & Pull

What

2. Clinical EBM Practice

Unless taught in clinical settings, it doesn't work

Real Time EBM

- ✓ Post-call round
- ✓ Morning rounds
- ✓ Out-patient clinic

How

Teaching Patterns

Green's literature review of approaches to teaching EBM revealed few important modalities to teachers of EBM:

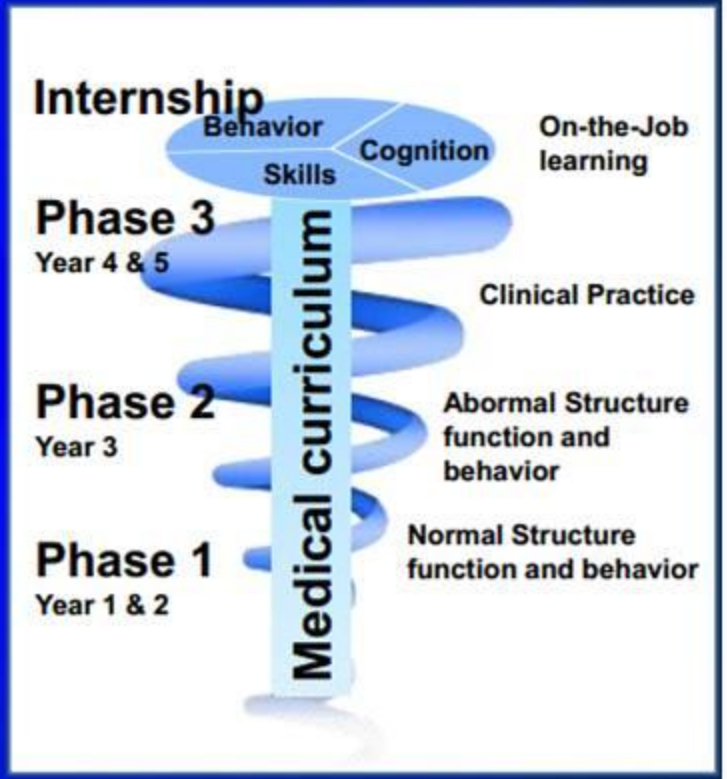
1. Small-group, learner-centered format
2. Immediate clinical relevance (Real time EBM)
3. Role modeling of EBM

Green 1997

Spiral Model

A spiral model is not simply the repetition of a topic taught.

It requires also the deepening of it, with each successive encounter building on the previous one



Impact


Coomarasamy A, Khan K , 2004
National & Gulf Center for Evidence Based Health Practice
King Saud bin Abdulaziz University for Health Sciences
Riyadh, Kingdom of Saudi Arabia
54
Classroom-based
Vs.
Clinical-based
Both improved knowledge
Clinically integrated improved attitude, behavior and skills
Coomarasamy A, Khan K , 2004
National & Gulf Center for Evidence Based Health Practice
King Saud bin Abdulaziz University for Health Sciences
Riyadh, Kingdom of Saudi Arabia
55

Sicily Statement

This statement was conceived by the delegates of the second international conference of EBHC Teachers and Developers held in Sicily in Sep 2003 **"Signposting the future of EBHC"**

5 EBM steps

This five-step model forms the basis for both clinical practice and teaching EBP

"An immediate attraction of evidence-based medicine is that it integrates medical education with clinical practice"

Rosenberg and Donald; BMJ, 1995

REAL PATIENT CASES FOR TEACHING EVIDENCE-BASED PAEDIATRICS: LONG-TERM COURSE SUSTAINABILITY

V. Mihál[1], J. Potomková[2], D. Šubová[2], J. Zapletalová[1]

[1]Department of Paediatrics, [2]Medical Library

Palacky University, Olomouc
Czech Republic

6th International Conference for EBHC Teachers and Developers
Taormina (Italy), 30th October - 2nd November 2013

AIM

- Assess 5-year experience on using real patient cases to teach evidence based paediatrics
- Propose innovative parameters for sustainability of undergraduate case-based paediatric courses
  - Training of trainers
  - Development of undergraduate elective courses
  - Improvement of evidence-based practice curricula

Acad Med 2010;85(2):370-377, Acad Med 2013;88(7):1022-1028.

METHODS (1)
SWOT Analysis (2009-2012)

Strength Points

- Acceptance of new paradigm (90% students)
- Increased motivation (70%)
- High perceived value of web materials (82%)
- Offer for mentoring (64%)

- Improved faculty-student communication
- Pro-active faculty-librarian cooperation
- More efficient use of information resources

Weak Points

- Epidemiological thinking gaps
- Problems asking clinical questions
- Insufficient search skills
- Critical reading medical articles
- Time-consuming

METHODS (2)
SWOT Analysis (2009-2012)

Opportunities

- New projects 2012-2014
  - Integration of interactive paediatric simulator in medical curriculum (SimJunior®)
  - Maintenance of education e-portal MEFANET
  - Virtual paediatric hospital development
  - Evidence-based information resources collection

Threats

- Lack of integration between basic science and clinical case-based courses
- Deficient strategy for staff development in fields of teaching EBM skills

RESULTS (1a)

Web List of Cases - in preparation

Paediatric cases completed by 5th-year medical students (2008-2013)

Organization of content

- Diagnosis
- Year of patient admission
- Patient/Age
- Clinical question
- PICO format
- PubMed links to relevant journal articles for critical appraisal

RESULTS (1b) : Examples
Specialties, Diagnoses & Clinical Questions

Specialties

Gastroenterology – (21)
Endocrinology – (17)
Haemato-oncology – (29)
Surgery – (23)
Infectious diseases – (17)
Cardiology – (8)
Neurology – (15)
Neonatology – (3)
ENT – (6)
Respiratory diseases – (26)
Social paediatrics – (8)
Urology, nephrology – (29)

Diagnoses, clinical questions

Inflammatory bowel diseases (IBD)

In children with IBD, does 5-aminosalicylic acid have a chemoprotective effect on colorectal carcinoma risk?

Can breastfeeding influence manifestation of IBD in children?

In children, could IBD be manifested with ocular extraintestinal disorders?

Is there a role for psychotherapy in adolescent IBD management?

Subtotal: 202 cases

RESULTS (2)
Innovative Solutions

PICO Workshop

- Framing of clinical question
  - Balancing teacher control and student autonomy

New Undergraduate Elective EBM Course

- 4-days of F2F training
- E-learning

Training of Trainers

- Evidence based journal club
  - AAP Grand Rounds (pre-appraised evidence)

J Paed Child Health 2008;44:661-664, AAP Grand Rounds;2008,19:2.

10

RESULTS (3)
Information Resources & Search Skills

Background questions

- (E)-textbooks
  - Elsevier e-library
  - Thieme e-book library
  - MIHAL V, et al. 2012 . Selected Chapters in Paediatrics [in Czech]. Palacky Univ Press. On-line: http://mefanet.upol.cz
- UpToDate

Foreground questions

- MEDLINE/PubMed
- Nursing@Ovid
- Fulltext Journal Collections
  - Annual Reviews, Blackwell, BMJ, Karger, LWW, Proquest, Springer,Thieme ....
  - Czech publishers
- Interactive training sessions, e-learning

Int Care Med 2003;*29:2119-2127.*

LIMITS

Stability and personal committment of training staff

Gaps in critical appraisal skills

Inter-professional collaboration

- Clinical teachers
- Information specialists
- Paediatric nurses

Student motivation and involvement

Adequate portfolio of information resources

CONCLUSIONS

Much of current research in teaching adults indicates that active participation is an important factor in increasing effectiveness of learning.

Case-based teaching of evidence based healthcare skills may contribute to better interactions

- Teacher-student,
- Teacher-teacher,
- Teacher-student-librarian.

Advancing Evidence-Based Residency Training

Kurt T. Hegmann, MD, MPH
Professor and Center Director
Dr. Paul S. Richards Endowed Chair in
Occupational Safety and Health
University of Utah

ACGME slides courtesy of
Tom Nasca, MD
ACGME

Background

- Outstanding training programs
- Weaknesses in development of Evidence-based Medicine skills
  - Traditional n-of-1 article approach
  - Lack of systematic incorporation in training
  - Systematic article critiquing skills
  - Methods for incorporating new innovations
  - Journal Club methods
- Highest quality study **NOT** sought

- Ergo: Residents didn't learn much EBM

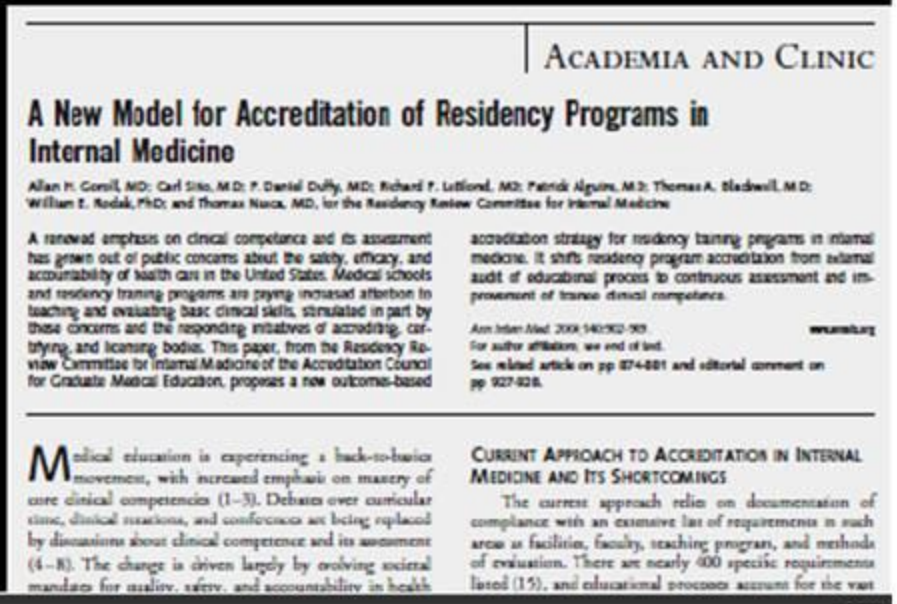
http://www.acgme-nas.org/assets/pdf/Nasca%20NAS%20June%202012%20Presentation%20Slide%20Show.pdf

AIMS

New Residency Accreditation System: using "Milestones"

- Apply to Learning EBM

Allan H. Goroll, MD; Carl Sirio, MD; F. Daniel Duffy, MD; Richard F. LeBlond, MD; Patrick Alguire, MD; Thomas A. Blackwell, MD; William E. Rodak, PhD; and Thomas Nasca, MD, for the Residency Review Committee for Internal Medicine
Ann Intern Med. 2004;140:902-909.



ACADEMIA AND CLINIC

A New Model for Accreditation of Residency Programs in Internal Medicine

Allan H. Goroll, MD; Carl Sirio, M.D; F. Daniel Duffy, MD; Richard F. LeBlond, MD; Patrick Alguire, M.D; Thomas A. Blackwell, M.D; William E. Rodak, PhD; and Thomas Nasca, MD, for the Residency Review Committee for Internal Medicine

A renewed emphasis on clinical competence and its assessment has grown out of public concerns about the safety, efficacy, and accountability of health care in the United States. Medical schools and residency training programs are paying increased attention to teaching and evaluating basic clinical skills, stimulated in part by these concerns and the responding initiatives of accrediting, certifying, and licensing bodies. This paper, from the Residency Review Committee for Internal Medicine of the Accreditation Council for Graduate Medical Education, proposes a new outcomes-based accreditation strategy for residency training programs in internal medicine. It shifts residency program accreditation from external audit of educational process to continuous assessment and improvement of trainee clinical competence.

Ann Intern Med. 2004;140:902-909. www.annals.org

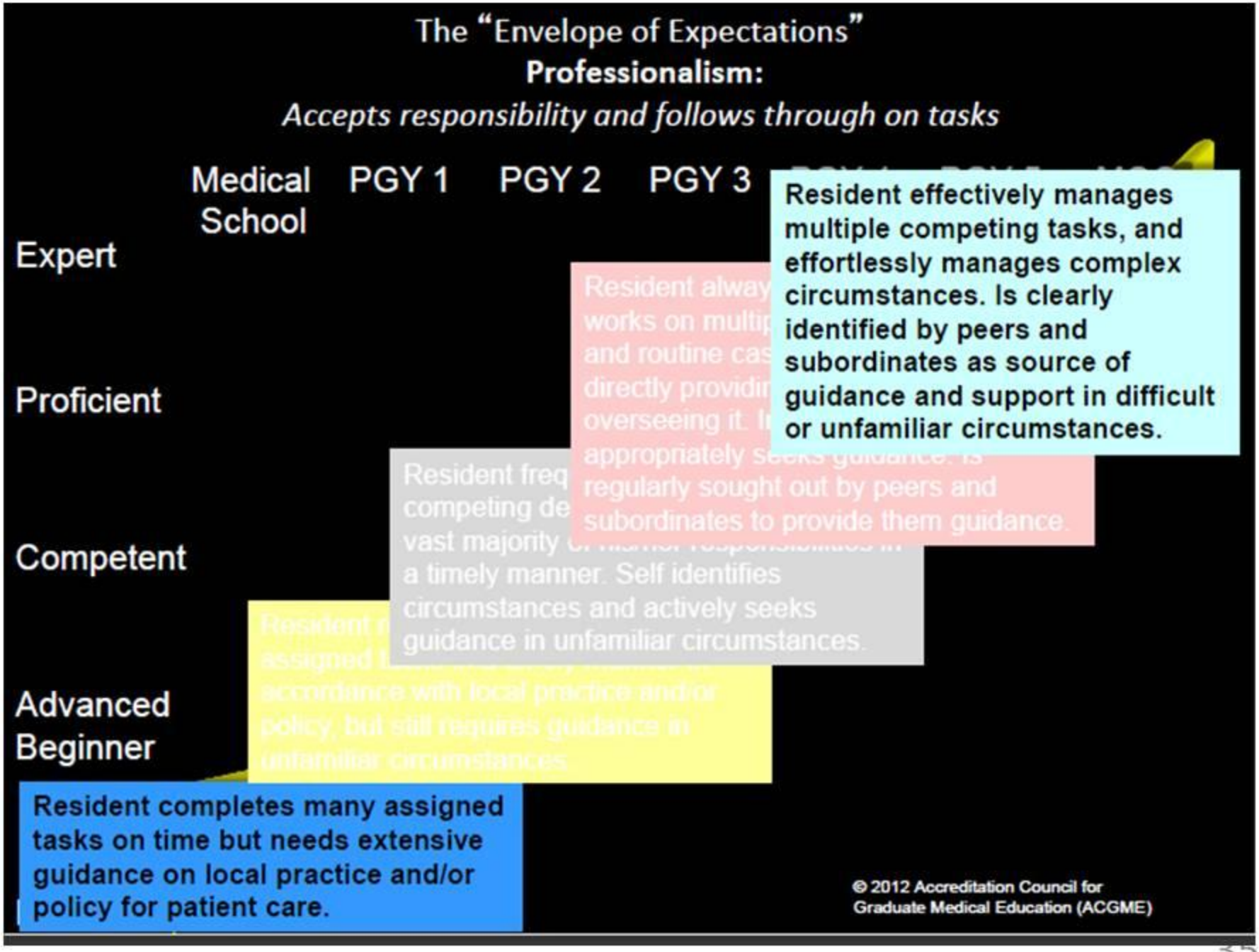
For author affiliation, see end of text.

See related article on pp 874-881 and editorial comment on pp 927-928.

Medical education is experiencing a back-to-basics movement, with increased emphasis on mastery of core clinical competencies (1–3). Debates over curricular time, clinical rotations, and conferences are being replaced by discussions about clinical competence and its assessment (4–8). The change is driven largely by evolving societal mandates for quality, safety, and accountability in health

CURRENT APPROACH TO ACCREDITATION IN INTERNAL MEDICINE AND ITS SHORTCOMINGS

The current approach relies on documentation of compliance with an extensive list of requirements in such areas as facilities, faculty, teaching program, and methods of evaluation. There are nearly 400 specific requirements listed (15), and educational processes account for the vast


The "Envelope of Expectations"
Professionalism:
Accepts responsibility and follows through on tasks
Medical School
PGY 1
PGY 2
PGY 3
Expert
Proficient
Competent
Advanced Beginner
Resident effectively manages multiple competing tasks, and effortlessly manages complex circumstances. Is clearly identified by peers and subordinates as source of guidance and support in difficult or unfamiliar circumstances.
regularly sought out by peers and subordinates to provide them guidance.
a timely manner. Self identifies circumstances and actively seeks guidance in unfamiliar circumstances.
Resident completes many assigned tasks on time but needs extensive guidance on local practice and/or policy for patient care.
© 2012 Accreditation Council for Graduate Medical Education (ACGME)

Milestone Framework for Laparoscopic Surgery

Level 1 (Entry)	Level 2	Level 3	Level 4 (Expectation for a graduating resident)	Level 5 (Post-residency or More Advanced than Expected of a Graduating Resident)
Steps are omitted, partially completed, or done out of sequence and/or done with too much or too little force, speed, depth, distance.	A step is repeated or done out of sequence. A step is done with too much or too little force, speed, depth, distance.	Steps are completed in sequence and done with appropriate force, speed, depth, and distance for routine cases.	Steps are completed in sequence and done with appropriate force, speed, depth, and distance for routine and complicated cases.	Technical performance for complicated cases, including improvised movements, is fluid and error free.

Comments:

RCT Scoring Metrics

1. Randomization (0, 0.5, 1.0 pts.)
2. Allocation concealed (0, 0.5, 1.0)
3. Baseline comparability of groups
4. Blinding of patients
5. Blinding of provider
6. Blinding of assessor
7. Avoid co-interventions
8. Compliance Rate
9. Dropout Rate
10. Timing of Assessments
11. Intention to Treat Analysis

Low Quality:	**0 - 3.5 points**
Moderate Quality:	**4.0-7.5 points**
High Quality:	**8.0 + points**

EBM Methods

- Teach systematic review techniques
- Teach quality/scoring criteria

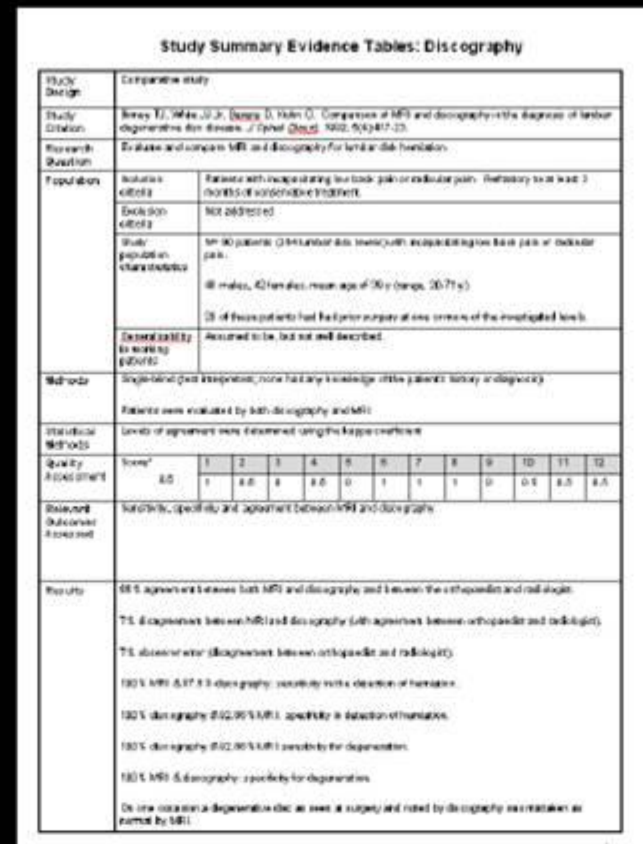
    for RCTs

Hierarchy of evidence

- Leads to evaluative tool

    for residents in

    Journal Club and classes.



Study Summary Evidence Tables: Discography

Study Design	Comparative study	
Study Citation	[illegible]	
Research Question	[illegible]	
Population	Inclusion criteria	[illegible]
	Exclusion criteria	Not addressed
	Study population characteristics	[illegible]
	Generalizability to working patients	Assumed to be, but not well described.
Methods	[illegible]	
Statistical Methods	[illegible]	
Quality Assessment	[illegible]	
Relevant Outcomes Assessed	[illegible]	
Results	[illegible]	

EBM evaluations in "Milestones"

- Level 1. Obtain 1 article relevant to patient.
- Level 2. Obtain more important articles
  - Preliminary abilities to score articles, critique
- Level 3. Obtain all relevant articles.
  - Moderate abilities to score articles, critique.
- Level 4. All articles. Score articles. Effectively critique them. Sort high/low quality. Synthesize the topic.
- Level 5. Develop high-quality guidelines.

Success??

RESULTS

- Residents able to develop EBM skills
  - *Rapidly* develop skill to rate RCTs
    - Group rating for Journal Club facilitates scoring skills/convergence
  - Can rate within ±1.5/11 pts.
  - Improves ability to critique articles
    - Improved weaknesses identification
      - Sequential, methodological approach
    - Quantification of weaknesses
      (e.g., <20% dropout rate)

- **LIMITS**
  - Testing needed to determine *systematic review* skills (not yet developed)
  - Need further work to develop EBM *synthesis* skills
  - Need more time to ascertain resident ability to develop *guidelines*
  - Time to achieve

- **BOTTOM LINE**
  - Benchmarking EBM skills works for resident training
  - Specificity (training & eval.) is important

Evidence-based-medicine Interactive eBook learning effect

Mao-meng Tiao

Chang Gung Memorial Hospital (Taiwan)

Background

- **Students learn the "evidence-based medicine" (EBM) often feel boring**
- **not catching an important connotation of the study**
- **as a starting point to design clinical practical problems**

Aims

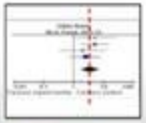
- **Students feel interesting in learning the EBM**
- **catching the important connotation of the case apprach**

Methods

- **In the outpatient period**
- **introduced in “e-book” interactive with the skills of EBM to the students**
- **to solve the question from the real patient**
- **practice five steps of EBM**
  - **to search and analysis of focus**
  - **determine the level of evidence they found the article**
- **e-book was designed via adobe flash professional CS6**

- included an introduction to the
  - basic concepts of EBM
  - EBM databases
  - database literature search skills
  - critical appraisal methods
  - clinical application
  - effectiveness evaluation.
- assessed by questionnaires, a five-point Likert item, both before and after the class.
- searched answers for the questions were discussed based on the video-recorded.

實 證 醫 學



刁茂盟製作

EBM

目錄

1. 實證醫學簡介
2. 實證五大步驟
3. 搜尋技巧
4. 隨機對照試驗
5. 系統性回顧
6. test 1
7. test 2
8. test 3
9. test 4

步驟一： 形成一個可以回答的臨床問題

對病人有幫助的問題？問題的重點為何？
可以試著將問題分成四個部分(PICO)：

P：病人或問題
I：介入：某種治療、檢查、危險因子...
C：比較：和P相比？
O: 結果：您想要達成或避免什麼？

EBM

Q: 實證醫學五大步驟?

1 2 3

4 5

應用證據 評讀 提問 搜尋 評估

EBM

Q: 實證醫學五大步驟?

1 提問 2 3

4 評估 5

應用證據 評讀 搜尋

是否有足夠的確認和追蹤？
幾%以上的人完成研究的結果，的研究才是可信的?

1. 80% ✓
2. 70% ✗
3. 50%

Q: 探討statin是否可以減少蜘蛛膜下腔出血後的預後

使用statin 100人中發生7人慢發性缺血傷害，對照組 100人中發生17人慢發性缺血傷害; 慢發性缺血傷害的發生率(incidence of delayed ischemic deficits)

相對風險(RR)= [redacted]

0.07 0.1 0.4
0.17 9 10

絕對風險降低率(ARR)= [redacted]

number need to treat (NNT) = [redacted]

Q: 探討statin是否可以減少蜘蛛膜下腔出血後的預後

使用statin 100人中發生7人慢發性缺血傷害，對照組 100人中發生17人慢發性缺血傷害; 慢發性缺血傷害的發生率(incidence of delayed ischemic deficits)

相對風險(RR)= [redacted]

0.07 0.1 0.4
0.17 9

絕對風險降低率(ARR)= [redacted]

number need to treat (NNT) = 10

Q:同質性和異質性(heterogeneity)?

Heterogeneity: Chi² = 1.38, df = 3 (P = 0.71); I² = 0%
Test for overall effect: Z = 3.55 (P = 0.0004)

Heterogenity p= [redacted]

Q= [redacted]

Q/df= [redacted]

I^2= 0%

<0.1 >0.1
>0.05
< 1 >1
1.38 4%
3.55

Results

- **total of 30 students completed the questionnaire with the video recording.**
- **average satisfaction score of the students was 92.1 points**
  - **felt e-books interactive mode is interesting and could improve the learning effect**
- **database literature search skills scored from 3.0 to 4.3**
- **critical appraisal from 3.1 to 4.2.**

Limits

- Time limit
- Sometimes can not have a good answerable question immediately
  - Patient has no further question
  - No definite diagnosis at that time
  - Background question (ex. constipation has more allergy rhinitis?)
- No good evidence level journal found

Bottom line

- **e-books interactive mode integrated into the clinical case**
- **improve the skills of the students' interest in learning**
- **it is clinical useful**

Language Barrier

3rd International Society for Evidence-Based Health Care Conference 2014

Knowledge Translation and Decision Making for Better Health: Challenge of Glocalization

ISEHC TAIPEI, TAIWAN

WELCOME TO TAIWAN

Taipei, Taiwan
November 6-9, 2014

Important dates

Abstract submission from 15 Feb, 2014
Very early registration by 31 March, 2014
early registration by 30 June, 2014

MORE INFORMATION, PLEASE SEE

www.isehc2014.tw

Host: Taipei Medical University
Taiwan Evidence-Based Medicine Association (TEBMA)