

# EBM 第五步驟 - 自我評估

## 教學評估

Taipei Medical University Wanfang Hospital  
Evidence-Based Medicine Center

李宜恭醫師

資料提供 陳杰峰醫師



- What is EBM?
- Why to Teach (learn) EBM?
- How to Teach (learn) EBM?



# ACGME 六大核心能力

- 病人照護 (Patient care)
- 醫學知識 (Medical knowledge)
- 從工作中學習及成長 (Practice-based learning and improving)
- 人際及溝通技能 (Interpersonal and communication skills)
- 制度下的臨床工作 (System-based practice)
- 專業素養 (Professionalism)

# Models of Education !!!



# Models of education 1

- Filling the empty vessel



## Models of education 2

- Learning is a natural process







## Models of education 2

- Learning is a natural process
- Teaching is facilitation of growth





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ZYGOPETALUM  
SKIPPY

ASCOCENDA  
MEML  
THUANCHAI

PHALAENOPSIS  
MIVA  
FRAGRANCE

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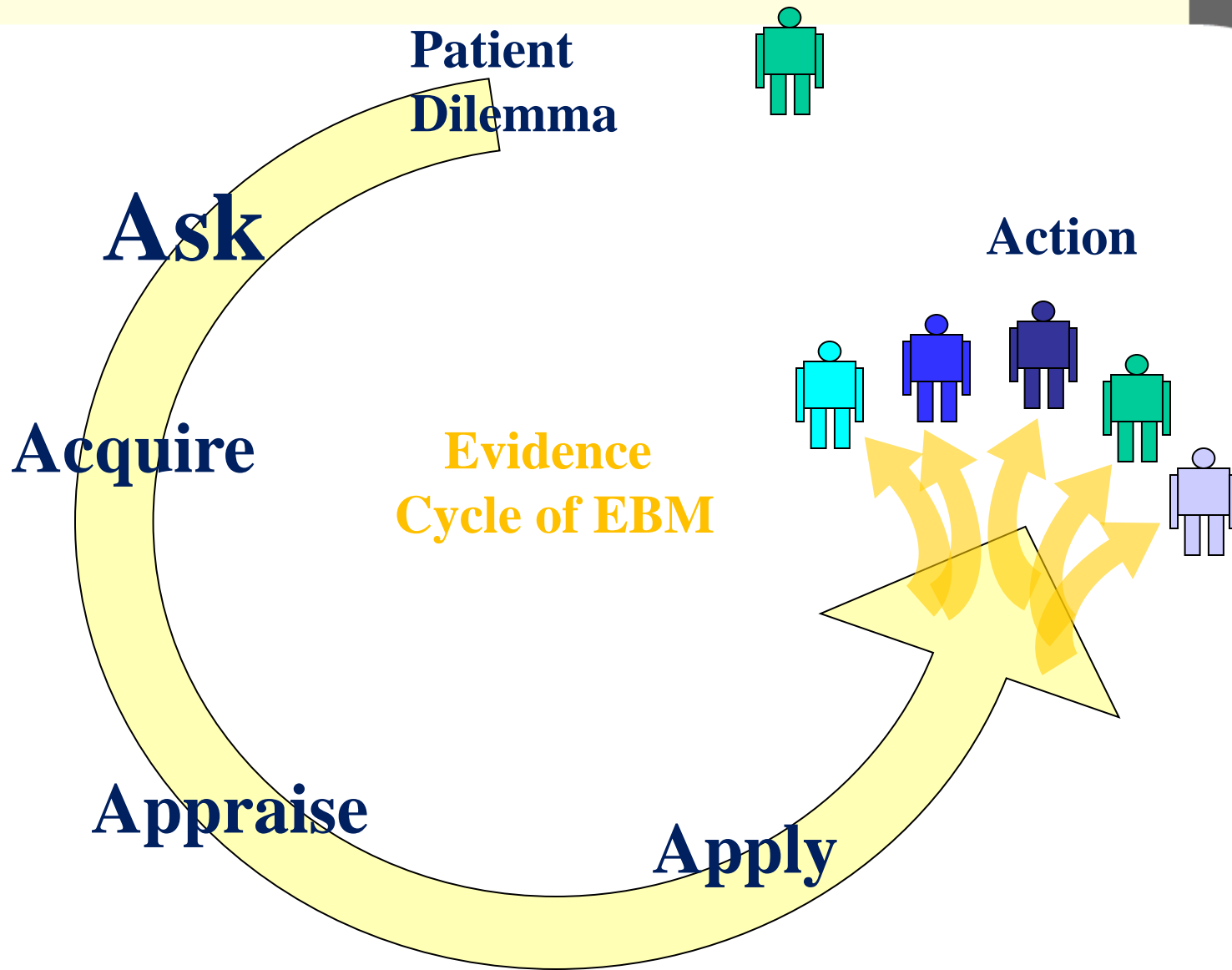
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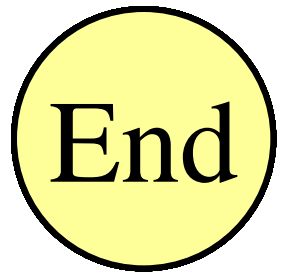
# 為什麼要評估?





# Disorder with this question on whether you neighbour grow

- X is a sexually transmitted disease
- With prevalence of 0.2%
- Fatal in 1 in 8 people
- Treatment prevents death
- Sensitivity of a test to detect X is 99%
- Specificity of a test to detect X is 99%
- 1 in 25 people diagnosed with X commit suicide
- **Will screening prevent more deaths than it causes?**



# Tell me

- How did this question make you feel?
- How did you feel when I went to get an answer?





What I hear I forget



What I see I remember



What I do I know

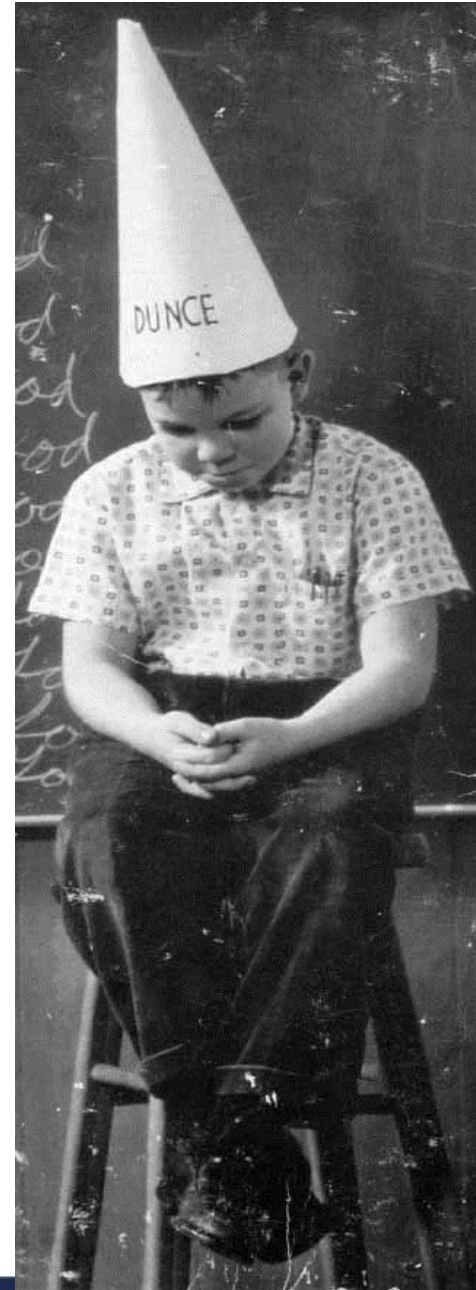


What I discover I use





Try and create a  
safe environment











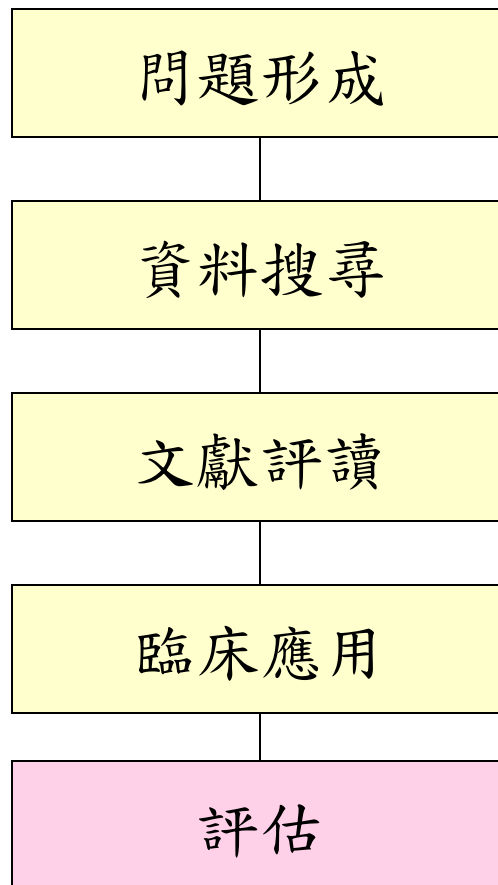


# 評估的項目及如何進行



# 實證醫學五步驟

那個步驟  
最難？





## 問題形成

評估小卡1-評估我們的表現：提出一個可以回答的問題	5 非常 同意	4 同意	3 普通	2 不同 意	1 非常 不同 意
我有提出任何臨床問題嗎？					
我提出的是焦點問題嗎？					
我可以使用“地圖”找出我的知識不足所在，並建構問題嗎？					
在提出問題時，我可以令自己毫不猶豫嗎？					
我有方法保留問題，以便稍後回答嗎？					

- Am I asking any clinical questions at all?
- Am I asking focused questions?
- Am I using a "map" to locate my knowledge gaps and articulate questions?
- Can I get myself “unstuck” when asking questions?
- Do I have a working method to save my questions for later answering?



# 在「提出臨床問題」方面的自我評估

- 我提出的問題是否具有臨床重要性？
- 我是否明確的陳述了我的問題？
  - 我的foreground question 是否可以清楚的寫成PICO？
  - 我的background question 是否包括what, when, how, who等字根？
- 我是否清楚的知道自己問題的定位？（亦即可以定位自己的問題是屬於診斷上的、治療上的、預後上的或流行病學上的），並據以提出問題？
- 對於無法立刻回答的問題，我是否有任何方式將問題紀錄起來以備將來有空時再找答案？



## 搜尋證據

評估小卡2-發現最佳外部證據的自我評估	5 非常 同意	4 同意	3 普通	2 不同 意	1 非常不 同意
我有全力搜尋嗎？					
我知道在我的臨床領域中現有的最佳證據來源嗎？					
我在每天工作中能輕鬆的找到最佳證據嗎？					
在搜尋方面我變得更有效率嗎？					
在搜尋MEDLINE時，我可以使用truncations、booleans、MeSH headings、thesaurus、limiters及intelligent free text嗎？					
和那些研究圖書館員，或是對提供最佳照顧給病患 有熱忱的同儕比起來，我的搜尋夠好嗎？					

- Am I searching at all?
- Do I know the best sources of current evidence for my clinical discipline?
- Do I have easy access to the best evidence for my clinical discipline ?
- Am I becoming more efficient in my searching ?
- Am I using truncations,Booleans,MeSH headings,thesaurus,limiters,and intelligent free text when searching MEDLINE ?
- How do my searches compare with those of research librarians or other respected colleagues who have a passion for providing best current patient care?



# 在「搜尋最佳證據」方面的自我評估

- 我是否已盡全力搜尋？
- 我是否知道我的問題的最佳證據來源？
- 我是否從大量的資料庫來搜尋答案？
- 我工作環境的軟硬體設備是否能支援我在遇到問題時進行立即的搜尋？
- 我是否在搜尋上愈來愈熟練了？
- 我會使用「斷字」、布林邏輯、同義詞、MeSH term，限制 (limiters) 等方法來搜尋？
- 我的搜尋比起圖書館人員或其他對於提供病人最新最好醫療有熱情的同事如何？





## 評讀證據

評估小卡3-自我評估：審慎評讀證據的正確性與實用性	5 非常 同意	4 同意	3 普通	2 不同 意	1 非常 不同 意
我可以審慎評估外部證據嗎？					
對我而言，應用“審慎評估指南”變得更簡單嗎？					
我可以更正確、更有效率地使用一些審慎評估度量工具（如，相似比(likelihood ratio)、益一需治數(NNT)等）嗎？					
我有製作一些評估摘要嗎？					

- Am I critically appraising external evidence at all?
- Are the critical appraisal guides becoming easier for me to apply?
- Am I becoming more accurate and efficient in applying some of the critical appraisal measures? (such as likelihood ratios, and NNTs and the like)?
- Am I creating any appraisal summaries?



## 關於「嚴格評讀文獻」方面的自我評估

- 我是否盡全力做評讀了？
- 我是否了解**Number need to treat**的意義？
- 我是否了解**Likelihood Ratios**的意義？
- 我是否了解**worksheet**每一項的意義？
- 評讀後，我是否做出了結論？



## 臨床應用

評估小卡4-一個文獻評讀跟臨床專業知識的整合及應用到臨床實務的自我評估表	5 非常同意	4 同意	3 普通	2 不同意	1 非常不同意
我有盡力將審慎評估的結果融入診療中嗎？					
爲了適用於我的病人（測前機率、NNT/f等），我在調整一些嚴格評讀的度量值方面越來越精準及有效率嗎					
我可以解釋（甚至解決）有關處置決策的爭議，也就是有整合的能力？					

- Am I integrating my critical appraisals into my practice at all?
- Am I becoming more accurate and efficient in adjusting some of the critical appraisal measures to fit my individual patients? (such as pretest probabilities, NNT/f, etc.)?
- Can I explain (and resolve) disagreements about management decisions in terms of this integration?



## 關於「應用到病人身上」的自我評估

- 我是否將搜尋到的最佳證據應用到我的臨床工作中？
- 我是否能將搜尋到的結論如NNT, LR用病人聽得懂的方式解釋給病人聽？
- 當搜尋到的最佳證據與實際臨床作為不同時，我如何解釋？





## 自我評估

評估小卡5-改變診療行為的自我評估	5 非常 同意	4 同意	3 普通	2 不同 意	1 非常不 同意
當一個新的證據建議改變診療習慣時，我是否能找出改變可能面臨的阻礙？					
針對已發現的障礙，我是否可以找到進行改善的策略呢？					
我能對自己的診斷、處置或其他EBM行為進行評估嗎？					
我有考慮過持續這些改變嗎？					

- When evidence suggests a change in practice, am I identifying barriers and facilitators to this change?
- Have I identified a strategy to implement this change, targeted to the barriers I've identified?
- Have I carried out any check, such as audits of my diagnostic, therapeutic, or other EBM performance including evidence use as well as impact on clinical outcomes?
- Am I considering sustainability of this change?

Evidence-based medicine-How to practice and teach EBM—Sharon E. Straus, et al, 4<sup>th</sup> ed. 2011



## 改變「醫療行為」的自我評估

- 當最佳證據顯示目前臨床策略需改變時，我是否遭遇任何阻止改變的阻力？
- 我是否因此搜尋結果而改變了原來的治療策略？做了那些改變？



評估小卡6-教授實證醫學的自我評估	5 非常 同意	4 同意	3 普通	2 不同意	1 非常不 同意
我最後一次提出教育處方是什麼時候？					
我可以幫助我的學員提出可以回答焦點的問題？					
我可以將提出問題與回答問題的模式運用在日常活動中？					
我的學員為我寫教育處方？					
我可以指導和示範搜尋技巧（或確定我的學員學會此一技巧）？					
我可以指導和示範嚴格評讀技巧？					
我可以指導和示範製作評讀摘要？					
我可以指導和示範如何整合最佳證據、臨床專業和病患偏好？					
我可以發展新方法來評估我的教學效果？					
我可以編寫新的實證醫學教材？					

- When did I last issue an educational prescription?
- Am I helping my trainees learn how to ask focused questions?
- Are we incorporating question asking and answering into everyday activities?
- Are my learners writing educational prescriptions for me?
- Am I teaching and modeling searching skills(and making sure that my trainees learn them)?
- Am I teaching and modeling critical appraisal skills?
- Am I teaching and modeling the generation of appraisal summaries?
- Am I teaching and modeling the integration of best evidence with my clinical expertise and my patients' preferences?
- Am I developing new ways of evaluating the effectiveness of my teaching?
- Am I developing, sharing and/or evaluating EBM educational materials?



# 教學評估-1

- 我最後一次提出教育處方是什麼時候？
  - When did I last issue an educational prescription?
- 我可以幫助我的學員提出可以回答焦點的問題？
  - Am I helping my trainees learn how to ask focused questions?
- 我可以將提出問題與回答問題的模式運用在日常活動中？
  - Are we incorporating question asking and answering into everyday activities?





## 教學評估-2

- 我的學員會為我寫教育處方？
  - Are my learners writing educational prescriptions for me?
- 我可以指導和示範搜尋技巧（或確定我的學員學會此一技巧）？
  - Am I teaching and modeling searching skills (and making sure that my trainees learn them)?



## 教學評估-3

- 我可以指導和示範嚴格評讀技巧？
  - Am I teaching and modeling critical appraisal skills?
- 我可以指導和示範製作評讀摘要？
  - Am I teaching and modeling the generation of appraisal summaries?
- 我可以指導和示範如何整合最佳證據、臨床專業和病患偏好？
  - Am I teaching and modeling the integration of best evidence with my clinical expertise and my patients' preferences?



## 教學評估-4

- 我可以發展新方法來評估我的教學效果？
  - Am I developing new ways of evaluating the effectiveness of my teaching?
- 我可以編寫新的實證醫學教材？
  - Am I developing, sharing and/or evaluating EBM educational materials?



## 效率評估

- 這篇報告，我總共花了多少時間？
- 我是否覺得這個進行實證醫學的過程是值得的？
- 我還有那些問題或建議？







**Thank you!**