



國泰綜合醫院

Cathay General Hospital

以醫療服務回饋社會

## EPAs評量前評核者之共識

- 1.如何建立評核教師的共識?
- 2.如何進行雙向回饋?

連恒輝 20230826



# Mental Models

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# Shared Mental Models are...

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“...**knowledge structures** held by members of a **team** that enable them to form **accurate explanations** and **expectations** for the **task**, and, in turn, **coordinate** their **actions** and **adapt their behavior** to demands of the task and other team members.”

J. A. Cannon-Bowers, E. Salas, and S. Converse. Shared mental models in expert team decision making. In N. J. Castellan, editor, Individual and group decision making, pages 221 – 245. Lawrence Erlbaum Associates, 1993.



# Key Thinking Concepts: Mental Models

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1. The Map is not the territory
  - “Maps are reductions of what they represent”
2. Circle of competence
  - “Understanding one’s own circle of competence improves decision making and outcomes”
3. First principles thinking
  - “A tool to help clarify complicated problems by separating underlying facts from any assumptions based on them.”

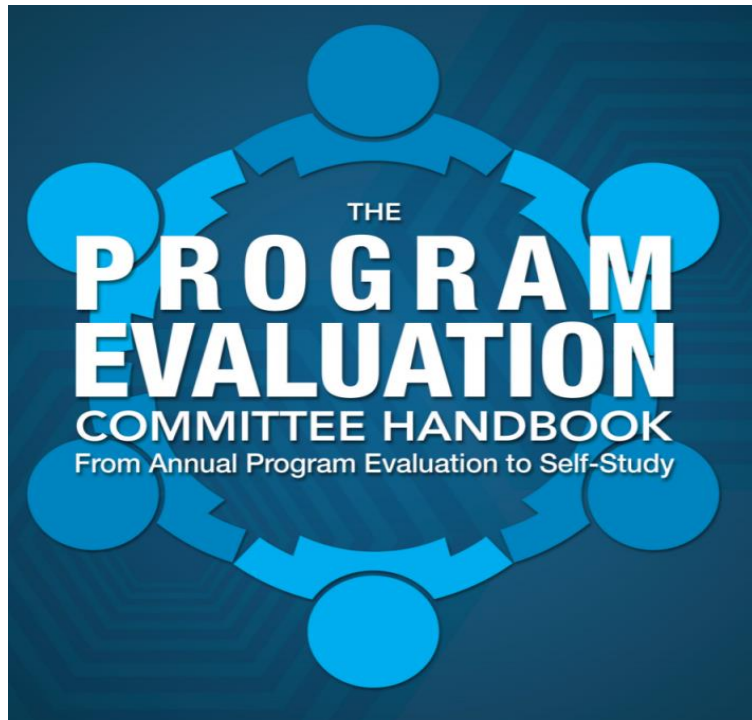


# 大綱

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- CBME為主軸之醫學中心教學任務 & 核心能力
- PEC
- 行動載具APP教學評量系統
- Milestone & EPA
- Core EPAs of each teaching program
- Clinical Competency Committee (CCC)
- 主動學習專區及其評量之建構(Moodle)

# PEC是甚麼?



Accreditation Council for  
Graduate Medical Education

What We Do

Designated  
Institutional Officials

Program Directors  
and Coordinators

Residents and Fellows

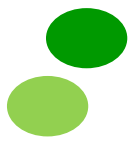
Educ

Home > Program Directors and Coordinators > Welcome > Program Directors' Guide to the Common Program Requirements

## Program Directors' Guide to the Common Program Requirements

- Launch an effective program evaluation committee
- Examine and complete the five areas of focus required by the ACGME
- Conduct the annual program evaluation
- Identify the strengths and weaknesses of your program and develop an action plan for improvement
- Understand the broad and loosely defined requirements for the program evaluation committee



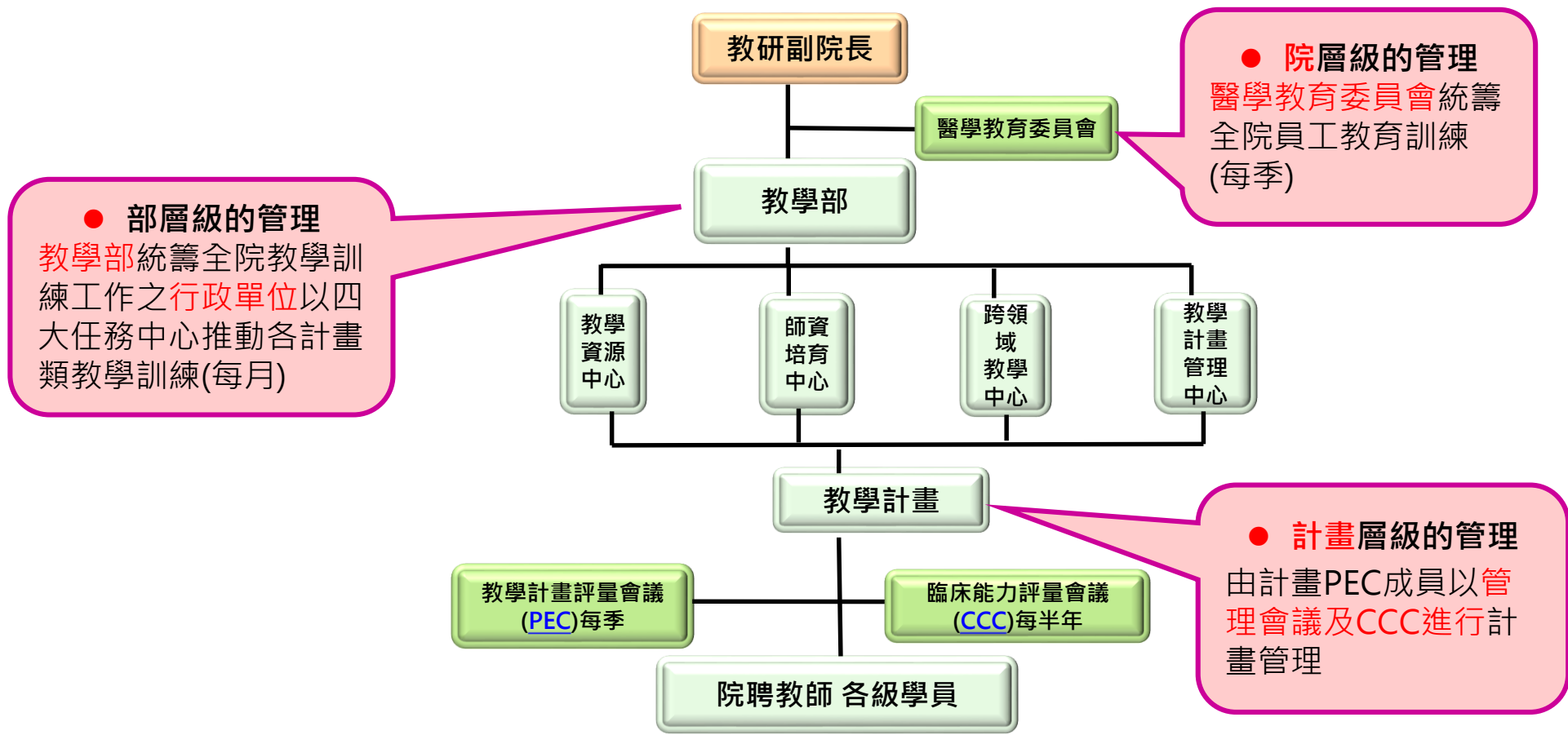


# Five Focus of PEC

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- Resident performance
- Faculty Development
- Graduate Performance, including performance on certification examinations
- Program quality using resident/fellow and faculty surveys plus other evaluation sources
- Progress on the previous year's action plan

The Program Evaluation Committee Handbook: From Annual Program Evaluation to Self-Study... Chapter 3: The APE Five Focus Areas .





# CGH PEC會議記錄全院共通範本

填表完成時，請將本文中紅字以及此框格刪除。

## 110年度第一次教學計畫評量會議 會議記錄

時間：110年00月00日(星期00)，00時00分。  
 地點：0000000。  
 主席：000主任(本教學計畫主持人，請附職稱)。  
 與會人員：000、000、000、000、000、000、000、000、000、000、000(所有院聘教師及至少一位受訓學員代表)。  
 記錄：000。

### 壹、上次會議決議事項追蹤報告

- 一、XXXXXXXXX  
 說明：XXXXXXXXX  
 擬辦：XXXXXXXXX  
 決議：XXXXXX
- 二、XXXXXXXXX  
 說明：XXXXXXXXX  
 擬辦：XXXXXXXXX  
 決議：XXXXXX

### 貳、評量事項

- 一、教學資源與管理

i. 本期(1~3月)網路教學平台課程建置情況及評量方式

職級	位於 Moodle 中之計畫課程建置		
	課程名稱	評量方式 (Ex.筆試)	對應六大核心能力
R	EX:值班交接班須知	360度評量	1-6
	EX:SDM須知	Mini-CEX	1-6
PGY	EX:工作須知(計畫、週工作表)P-1	360度評量	1-6
	病歷書寫須知 P-2	CbD	1-6
Student	EX:針扎預防須知	DOPS	1-6
	EX:值班工作須知 S-2	360	1-6

職級	位於 E-Learning 中之計畫課程建置			位於院內網站組織單位中之計畫翻轉學習課程		
	課程名稱	評量方式 (Ex.筆試)	對應六大核心能力	課程名稱	評量方式 (Ex.CbD)	對應六大核心能力
R	翻轉教學課程 R-1		1-6	翻轉教學課程 R-1		1-6
	翻轉教學課程 R-2		1-6	翻轉教學課程 R-2		1-6
PGY	翻轉教學課程 P-1		1-6	翻轉教學課程 P-1		1-6
	翻轉教學課程 P-2		1-6	翻轉教學課程 P-2		1-6
Student	翻轉教學課程 S-1		1-6	翻轉教學課程 S-1		1-6
	翻轉教學課程 S-2		1-6	翻轉教學課程 S-2		1-6

填寫說明：表中紅字為範例，請參照填寫。有疑問請致電教學部。

ix. 本期教師使用電子評量次數統計(1-3月獨立列表)

[110年1月]

教師姓名	CbD	Mini-CEX	DOPS	360度	單位使用率% (使用人數/總人數)

[110年2月]

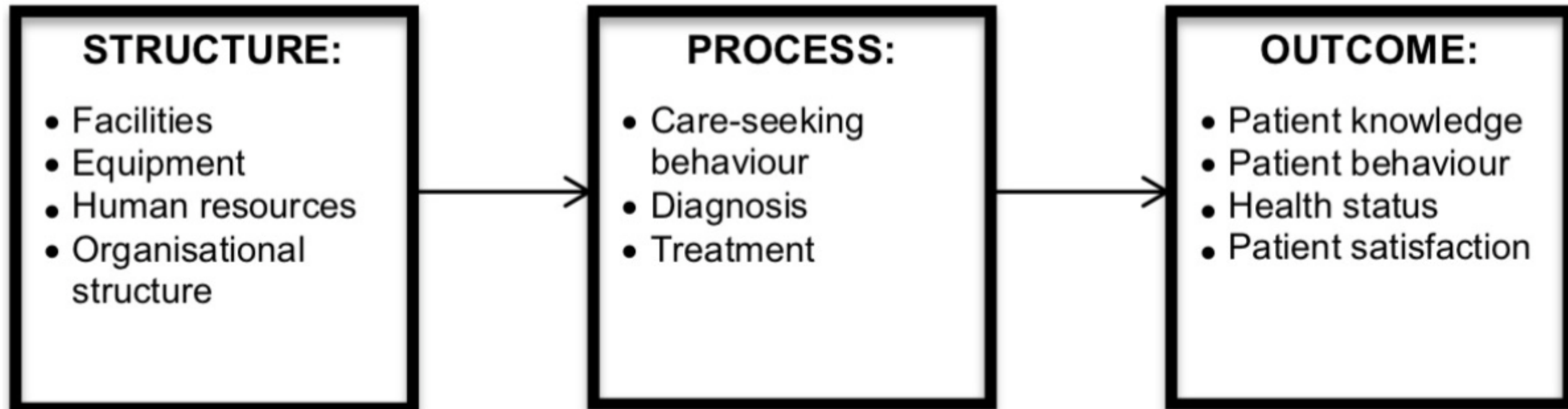
教師姓名	CbD	Mini-CEX	DOPS	360度	單位使用率% (使用人數/總人數)

[110年3月]

教師姓名	CbD	Mini-CEX	DOPS	360度	單位使用率% (使用人數/總人數)

	EPA1(一般病房照顧)	EPA2(程序 procedure)	EPA3(值班交班會診)	EPA4(會議表現；行政)
PC	◎	◎		
MK	◎	◎		
SBP			◎	◎
PBLI		◎		◎
P			◎	◎
ICS	◎		◎	

# The Donabedian Model 1988



Donabedian A. The quality of care: how can it be assessed? JAMA 1988; 260(12): 1743-1748.



# Competency Frameworks

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# Competence-based medical education

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An observable ability of a health professional,  
integrating **multiple components** such as  
**knowledge, skills, values and Attitudes.**

# Core Components of CBME

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- An **outcomes** based **competency framework**
- **Progressive** sequencing of competencies
- **Learning** experiences tailored to competencies
- **Teaching** tailored to competencies
- **Programmatic** assessment

# 大綱

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# Competency Map

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- ACGME 六大核心能力
- 全人醫療 (body, mind, spirit, socioeconomic)
- Clinical thinking (Clinical reasoning)
- 病人為中心 (SDM)

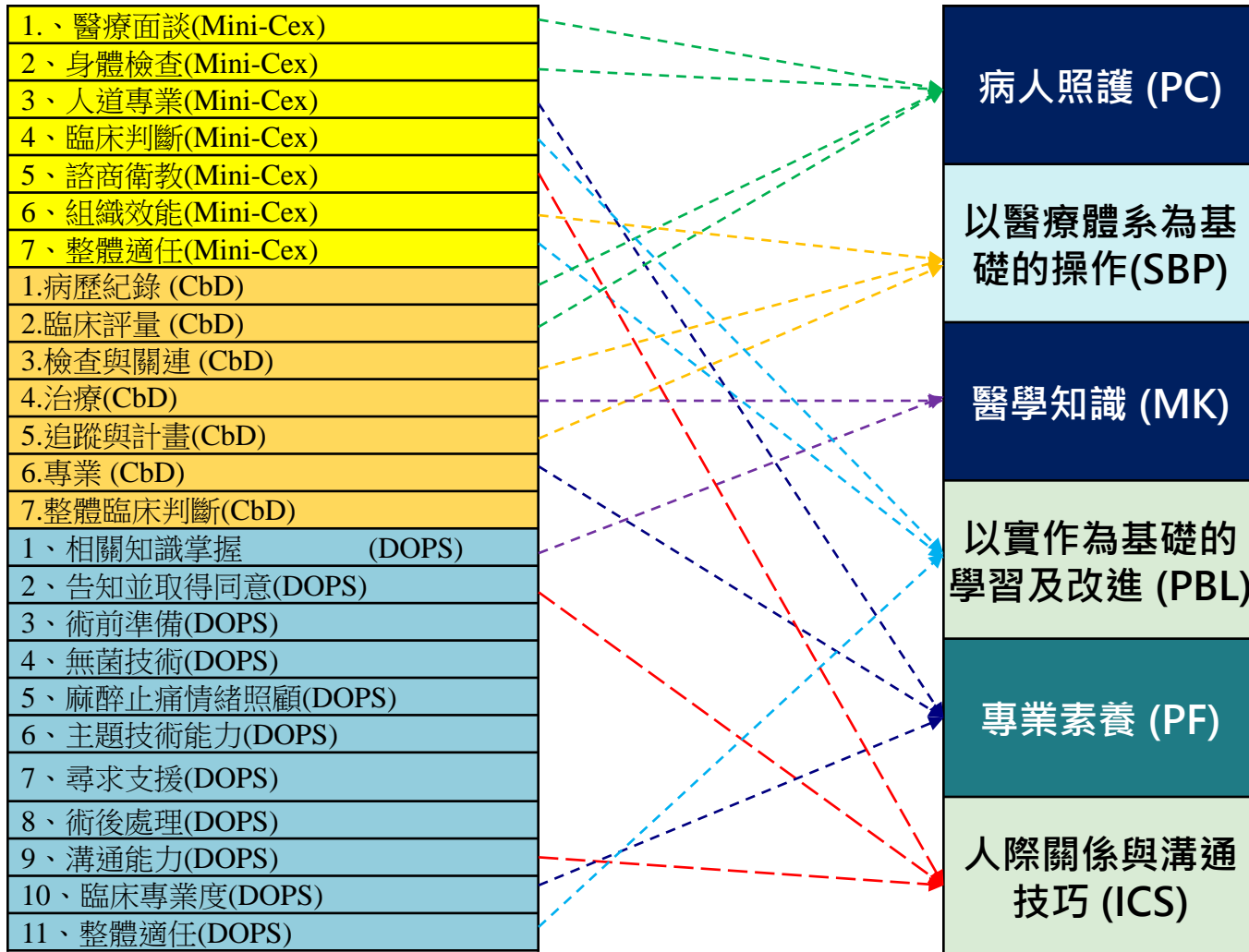
# 大綱

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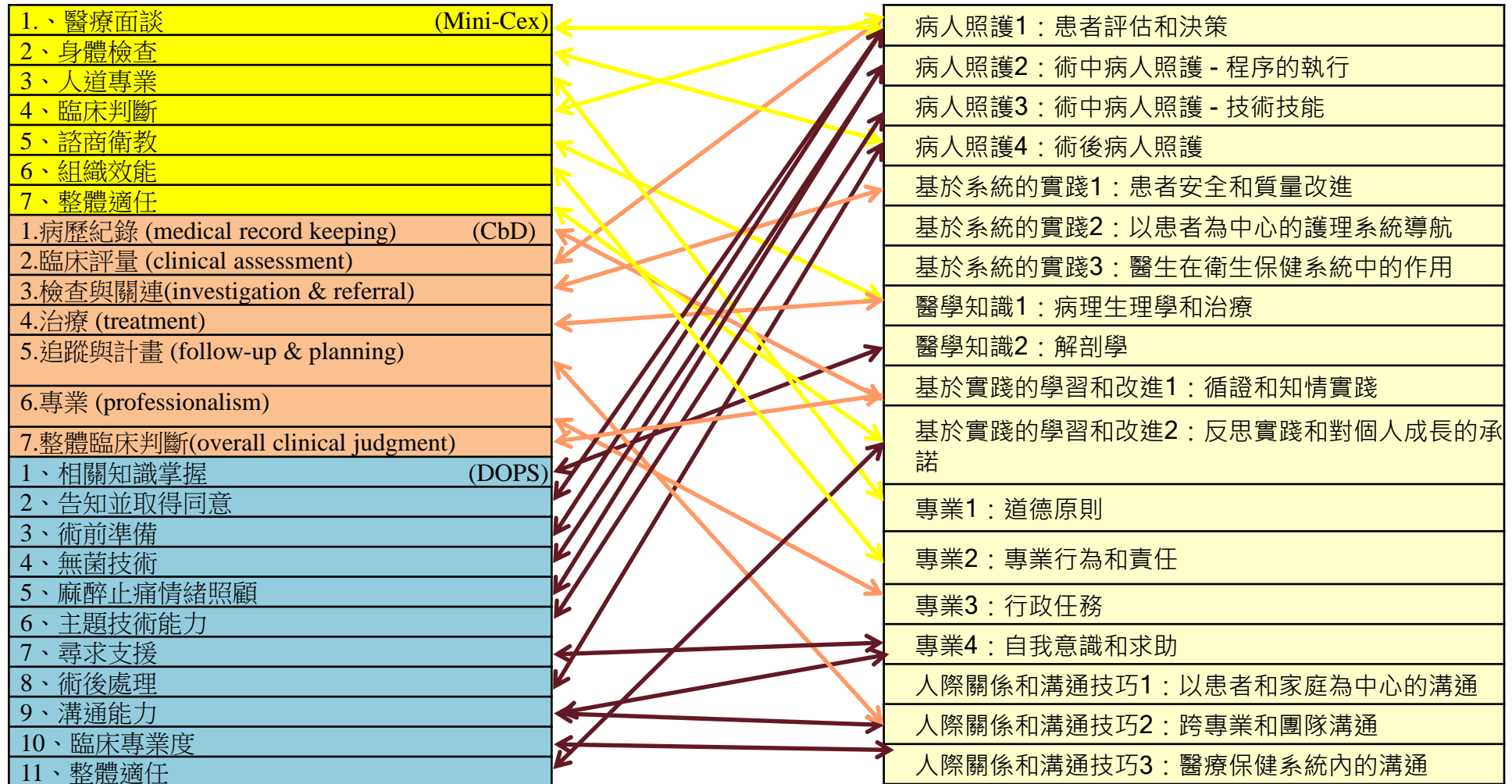
- CBME為主軸之醫學中心教學任務 & 核心能力
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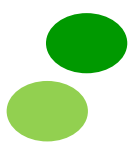


# Mini-Cex、DOPS、CbD、360度對應 ACGME 六大核心能力



# MDC360對應GS Milestone 18 Sub-Competencies





# 智慧化評量系統

總院 民國 108/01/17 星期四 15:39:31

基本資料

時間：  上午  下午  晚上

地點： 門診  急診  一般病房  加護病房  開刀房  恢復室

臨床問題： 疼痛  呼吸  心血管  精神行為  神經  消化  其他

診斷：

病情複雜度： 低  中  高

評量重點： 病歷紀錄  臨床評量  處置  專業

評量者： 簡志誠(235320)  主治醫師  總醫師  住院醫師  其他

受評者： M4  M5  M6  M7  PGY  PGY1  PGY2  R1  R2

受評者姓名： 請選擇

討論時間： 分鐘 回饋時間： 分鐘

**CbD 評量表**

	低於標準	邊緣	
1. 病歷紀錄 (medical record keeping)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	
2. 臨床評量 (clinical ASSESSMENT)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	
3. 檢查與關連 (investigation & referral)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	
4. 治療 (treatment)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	
5. 追蹤與計畫 (follow-up & planning)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	
6. 專業 (professionalism)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	
7. 整體臨床判斷 (overall clinical judgment)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	

\*U/C: behavior not observed, therefore unable to comment

本次評量中，教師指正教學內容：

1.病歷紀錄  2.臨床評量  3.檢查與關連  4.治療  5.追蹤與計畫  6.專業  7.整體

學員所學習之內容或需改進事項：

本次評量教師對於學員學習成效總評-此意見將用於CCC會議：

本次評量用於CCC會議的參考強度： 強  一般

評量者簽章： 受評者簽章：

資料暫存(T) 上一頁(B)

總院 民國 108/01/17 星期四 15:39:36

2. 臨床評量 (clinical ASSESSMENT)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>
3. 檢查與關連 (investigation & referral)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>
4. 治療 (treatment)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>
5. 追蹤與計畫 (follow-up & planning)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>
6. 專業 (professionalism)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>
7. 整體臨床判斷 (overall clinical judgment)	1 <input type="radio"/> 2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>

\*U/C: behavior not observed, therefore unable to comment

本次評量中，教師指正教學內容：

1.病歷紀錄  2.臨床評量  3.檢查與關連  4.治療  5.追蹤與計畫  6.專業  7.整體

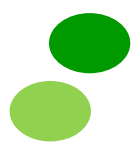
學員所學習之內容或需改進事項：

本次評量教師對於學員學習成效總評-此意見將用於CCC會議：

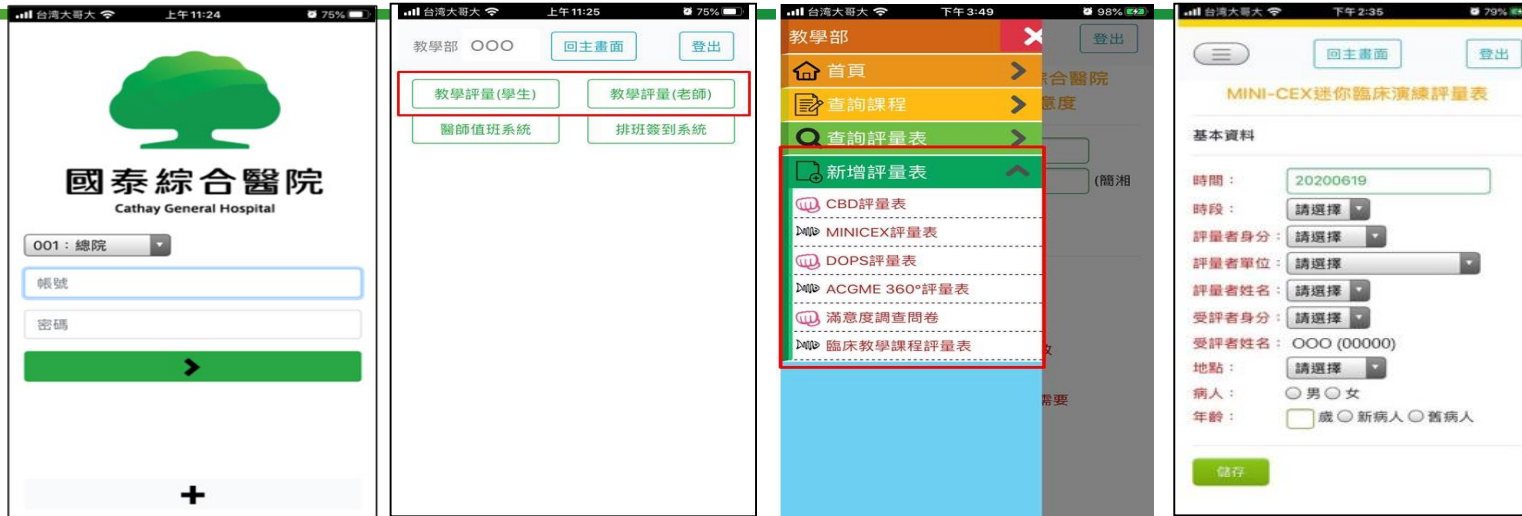
本次評量用於CCC會議的參考強度： 強  一般

評量者簽章： 受評者簽章：

資料暫存(T) 上一頁(B)



# 行動智慧化評量系統



## 每月追蹤PGY學員教學評量各科完成率(11207)

科別	4月(完成人數/ 輪訓人數(%))	5月(完成人數/ 輪訓人數(%))	6月(完成人數/ 輪訓人數(%))	科別	4月(完成人數/ 輪訓人數(%))	5月(完成人數/ 輪訓人數(%))	6月(完成人數/ 輪訓人數(%))
內科	12/13(92%)	13/14(93%)	7/13(54%)	放射線科	3/3(100%)	2/3(67%)	2/3(67%)
外科	12/12(100%)	10/12(83%)	11/11(100%)	家庭醫學科	2/2(100%)	1/1(100%)	1/2(50%)
婦產科	4/4(100%)	4/4(100%)	3/4(75%)	皮膚科	1/1(100%)	1/1(100%)	1/1(100%)
兒科	4/4(100%)	4/4(100%)	3/3(100%)	精神科	1/1(100%)	1/1(100%)	1/1(100%)
急診	3/3(100%)	4/4(100%)	4/5(80%)	耳鼻喉科	1/1(100%)	1/1(100%)	0/1(0%)
老年醫學科	2/2(100%)	2/2(100%)	0/2(0%)	眼科	NA	NA	1/1(100%)
麻醉科	1/1(100%)	1/1(100%)	1/1(100%)	核子醫學科	1/1(100%)	0/1(0%)	1/1(100%)
神經內科	NA	NA	NA	復健科	NA	NA	NA

# 每季各教學計畫PEC統計計畫教師為各級學員評量份數

○○科

教師完成各級學員電子評量次數統計(主持人應確認各級學員皆完成表定評量項目並確認計畫教師皆依醫院聘教職要求完成具信效度之評量)

教師姓名	CbD	Mini-CEX	DOPS (NA)	360度	單位使用率 % (使用人數/總人數)
A	0	0	0	0	90%
B	1	0	0	0	
C	1	1	0	1	
D	0	0	0	2	
E	1	1	0	3	
F	1	3	0	0	
G	4	3	1	0	
H	1	1	0	1	
I	1	1	0	0	
J	1	1	0	6	
完成份數/ 須完成份數	11/5份	11/5份	1/0份	13/2份	

科別	M	D	C	360
家醫科R(1位)	1次/月	NA	1次/月	NA
家醫科PGY(2位) (至該科僅1個月)	1次/月	NA	1次/月	1次/月

## 職能治療

教師姓名 (應包含計畫 院聘教師)	CbD	Mini-CEX	DOPS	360度	單位使用率 % (使用人數/ 總人數)
1	6	0	0	9	100% (7/7)
2	0	3	0	6	
3	0	3	6	4	
4	0	5	0	6	
5	0	7	4	2	
6	0	2	0	2	
7	5	7	0	5	
完成份數/ 須完成份數	11/8份	27/20份	10/8份	34/16份	

每學員本期應完成次數

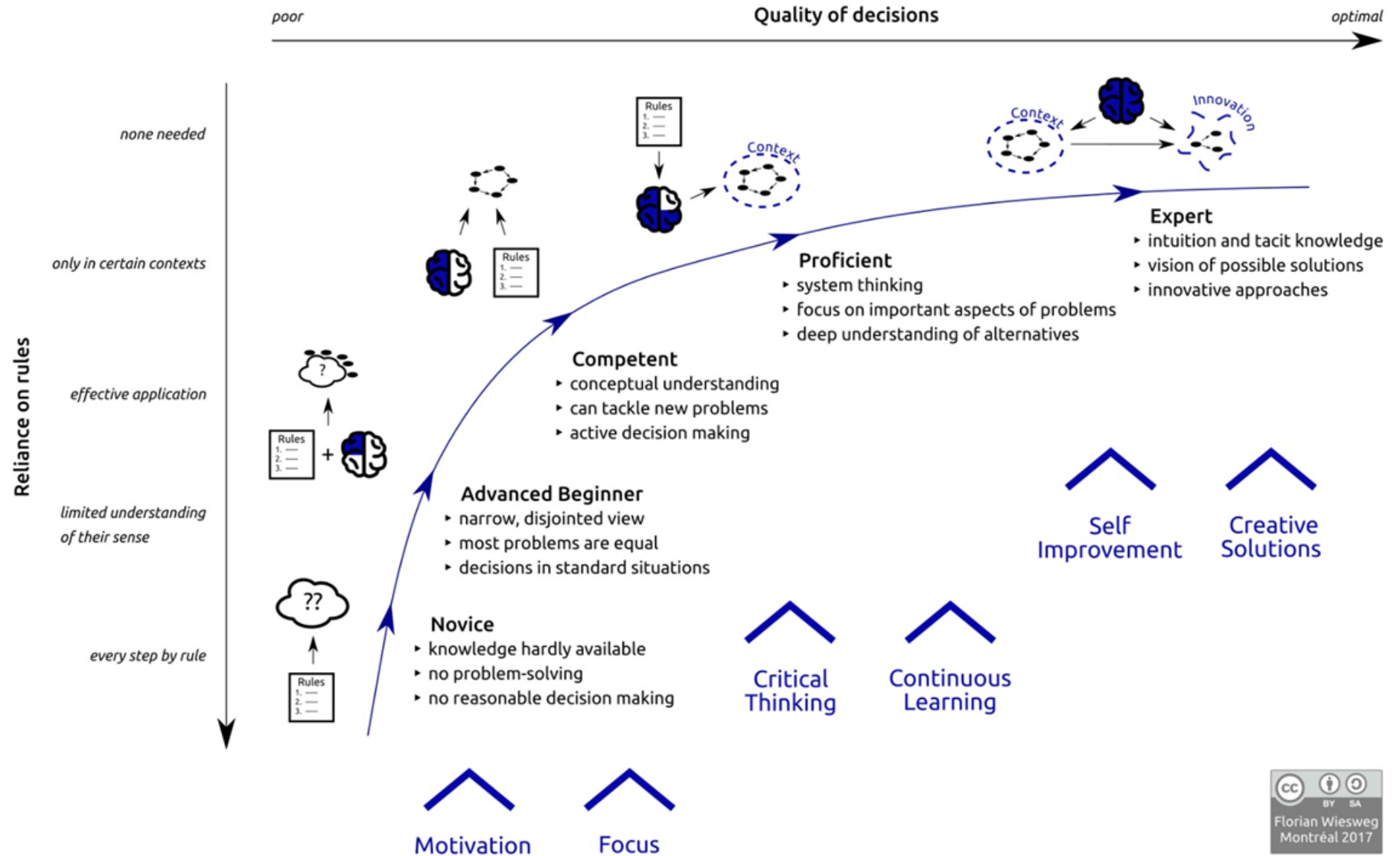
職能治療	M	D	C	360
PGY2(2位)	1	NA	1	1
實習學生(生理)(2位)	4	4	1	2
實習學生(兒童)(3位)	2	NA	1	2
實習學生(心理)(2位)	2	NA	1	2

# 大綱

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# Dreyfus Model of Skill Acquisition





# What is a Milestone?

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The Milestones provide the narrative descriptions of behaviors that represent the developmental progression of performance along a continuum from student to expert practitioner and should be used to guide learner assessment and ultimately entrustment decisions."

Carol Carraccio, MD, MA Chair, Pediatric Milestones Working Group



# ACGME Milestones since 2007(GS)

	Level 1	Level 2	Level 3	Level 4	Level 5		Level 1	Level 2	Level 3	Level 4	Level 5
Patient Care 1: Patient Evaluation and Decision Making	Gathers necessary information and develops a differential diagnosis for patients in all clinical settings	Evaluates patients; orders and interprets diagnostic testing	Develops a plan to manage healthy patients with straightforward conditions (e.g., colon cancer, breast cancer)	Develops a plan to manage patients with complex conditions (e.g., patient with multiple comorbidities) and conditions (e.g., neurologic stroke)	Develops a clinical pathway or guideline for the management of patients with complex conditions	System-Based Practice 3: Physician Role in Health Care Systems	Describes basic health payment systems, including government, private, public, and uninsured care as well as different practice models	Describes how working within the health care system impacts patient care	Analyzes how personal practice affects the system (e.g., length of stay, readmission rates, clinical efficiency)	Uses shared decision making in patient care, taking into consideration costs to the patient	Advocates or leads change to enhance systems for high-value, efficient, and effective patient care
Describe full picture of competency						Factor-Based Learning and Improvement 1: Evidence-Based and Informed Practice	Describes the key components of documentation for billing and coding	Assesses the key components required for billing and coding	Describes basic elements needed to transition to practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance, Medicare Access and CHIP Reauthorization Act)	Identifies resources and effectively plans for transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Participates in advocacy activities for health policy
						Factor-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth	Demonstrates how to access and use available evidence, and incorporate patient preferences and values into the care of patients with routine conditions	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Locates and applies the best available evidence, integrated with patient preference, to the care of patients with complex conditions	Critically appraises and applies evidence, even in the face of uncertain and/or conflicting evidence, to guide care, tailored to the individual patient	Coaches others to critically appraise and apply evidence for patients with complex conditions and/or participates in the development of guidelines
						Professionalism 1: Ethical Principles	Establishes goals for personal and professional development	Identifies opportunities for performance improvement design a learning plan	Integrates performance feedback and practice data to develop and implement a learning plan	Revises learning plan based on performance data	Coaches others in the design and implementation of learning plan
						Professionalism 2: Professional Behavior and Accountability	Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics	Analyzes straightforward situations using ethical principles	Recognizes need to seek help in managing and resolving complex ethical situations	Recognizes and uses appropriate resources for managing or resolving ethical dilemmas, as needed (e.g., ethics consultations, literature review, risk management/legal consultation)	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution
						Professionalism 3: Administrative Tasks	Completes patient care tasks and responsibilities, identifies potential barriers, and describes strategies for ensuring timely task completion	Performs patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations	Performs patient care tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations	Recognizes situations that may impact others' ability to complete patient care tasks and responsibilities in a timely manner	Develops systems to enhance others' ability to efficiently complete patient care tasks and responsibilities
Patient Care 4: Post-Operative Patient Care	Evaluates simple post-operative problems (e.g., fever, bleeding, hypotension, diarrhea)	Evaluates complex post-operative problems (e.g., sepsis, anatomical leaks)	Evaluates complex post-operative problems in patient with complex conditions (e.g., renal failure, congestive heart failure, cirrhosis)	Anticipates and mitigates post-operative problems in patient with complex conditions	Develops a clinical pathway or guideline for management of complex post-operative problems	Professionalism 4: Self-Awareness and Help-Seeking	Recognizes limits in the knowledge/skills of self and seeks help	Recognizes limits in the knowledge/skills of team and seeks help	Exhibits appropriate confidence and self-awareness of limits in knowledge/skills	Appropriately reports lapses in professional behavior (suspected or actual)	Coaches junior learners in recognition of limits in knowledge/skills
Medical Knowledge 1: Pathophysiology and Treatment	Demonstrates knowledge of pathophysiology and treatments of patients with common surgical conditions	Demonstrates knowledge of pathophysiology and treatments of patients with complex surgical conditions	Demonstrates knowledge of the impact of patient factors on pathophysiology and the treatment of patients with surgical conditions	Demonstrates comprehensive knowledge of the varying patterns of disease presentation and alternative and adjuvant treatments of patients with surgical conditions	Contributes to peer-reviewed literature on the varying patterns of disease presentation, and alternative and adjuvant treatments of patients with surgical conditions	Professionalism 5: Interpersonal and Communication Skills 1: Patient and Family-Centered Communication	Takes responsibility for failure to complete administrative tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future	Performs administrative tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations	Performs administrative tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations	Recognizes situations that may impact others' ability to complete administrative tasks and responsibilities in a timely manner	Develops systems to enhance others' ability to efficiently complete administrative tasks and responsibilities
Medical Knowledge 2: Anatomy	Identifies normal anatomy (e.g., inguinal canal) during common operations	Identifies variations in anatomy (e.g., bile duct anatomical variations) during common operations	Identifies normal anatomy (e.g., gastric blood supply) during complex operations	Identifies variations in anatomy (e.g., replace right hepatic artery) during complex operations	Develops simulation models for teaching anatomy and operations	Professionalism 6: Interpersonal and Communication Skills 2: Interpersonal and Team Communication	Identifies the institutional resources available to manage personal, physical, and emotional health (e.g., acute and chronic disease, substance abuse, and mental health)	Monitors his or her own personal health and wellness and appropriately mitigates fatigue and/or stress	Promotes healthy habits and creates an emotionally healthy environment for colleagues	Recognizes and appropriately addresses signs and symptoms of burnout, depression, suicidal ideation, potential for violence, and/or substance abuse in other members of the health care team	Coaches others when their behavior fails to meet professional expectations
Systems-Based Practice 1: Patient Safety and Quality Improvement	Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages teams and processes to modify systems to prevent patient safety events	Professionalism 7: Interpersonal and Communication Skills 3: Communication within Health Care Systems	Recognizes when and how to appropriately report lapses in professional behavior	Takes responsibility for his or her own professional behavior	Increases to prevent and correct lapses in professional behavior in self and others	Coaches others when their behavior fails to meet professional expectations	
Systems-Based Practice 2: System Navigation for Patient-Centered Care	Demonstrates knowledge of how to report patient safety events	Reports patient safety events through institutional reporting systems (simulated or actual)	Participates in disclosure of patient safety events to patients and families (simulated or actual)	Discloses patient safety events to patients and families (simulated or actual)	Mentors others in the disclosure of patient safety events	Professionalism 8: Interpersonal and Communication Skills 4: Communication with Patients and Families	Articulates the steps of common operations	Articulates the implications of varying anatomy on the steps of common operations	Articulates the steps of complex operations	Articulates the implications of varying anatomy on the steps of complex operations	Leads anatomy instruction for students and x0-residents
	Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives (e.g., infection rate, hand hygiene, opioid use)	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level	Professionalism 9: Interpersonal and Communication Skills 5: Communication with Patients and Families	Articulates the steps of common operations	Articulates the implications of varying anatomy on the steps of complex operations	Articulates the steps of complex operations	Articulates the implications of varying anatomy on the steps of complex operations	Leads anatomy instruction for students and x0-residents
	Demonstrates knowledge of care coordination	Coordinates multidisciplinary care of patients in routine clinical situations (e.g., dressing change)	Coordinates and/or leads multidisciplinary care of patients in complex clinical situations (e.g., home parenteral nutrition, postoperative intravenous feeding, intensive care unit)	Coordinates care of patients with barriers to health care access (e.g., trauma patient with no access to care) or other disparities in care	Leads in the design and implementation of improvements to care coordination	Professionalism 10: Interpersonal and Communication Skills 6: Communication with Patients and Families	Articulates the steps of common operations	Articulates the implications of varying anatomy on the steps of complex operations	Articulates the steps of complex operations	Articulates the implications of varying anatomy on the steps of complex operations	Leads anatomy instruction for students and x0-residents
	Performs safe and effective transitions of care/hand-offs in routine clinical situations	Performs safe and effective transitions of care/hand-offs in complex clinical situations	Supervises safe and effective transitions of care/hand-offs of junior residents	Resolves conflicts in transitions of care between teams	Leads in the design and implementation of improvements to transitions of care	Professionalism 11: Interpersonal and Communication Skills 7: Communication with Patients and Families	Articulates the steps of common operations	Articulates the implications of varying anatomy on the steps of complex operations	Articulates the steps of complex operations	Articulates the implications of varying anatomy on the steps of complex operations	Leads anatomy instruction for students and x0-residents
						Professionalism 12: Interpersonal and Communication Skills 8: Communication with Patients and Families	Articulates the steps of common operations	Articulates the implications of varying anatomy on the steps of complex operations	Articulates the steps of complex operations	Articulates the implications of varying anatomy on the steps of complex operations	Leads anatomy instruction for students and x0-residents

(18/161)

2007 Olle ten Cate, Academic Medicine, Can We Bridge the Gap between Theory and Clinical Practice?

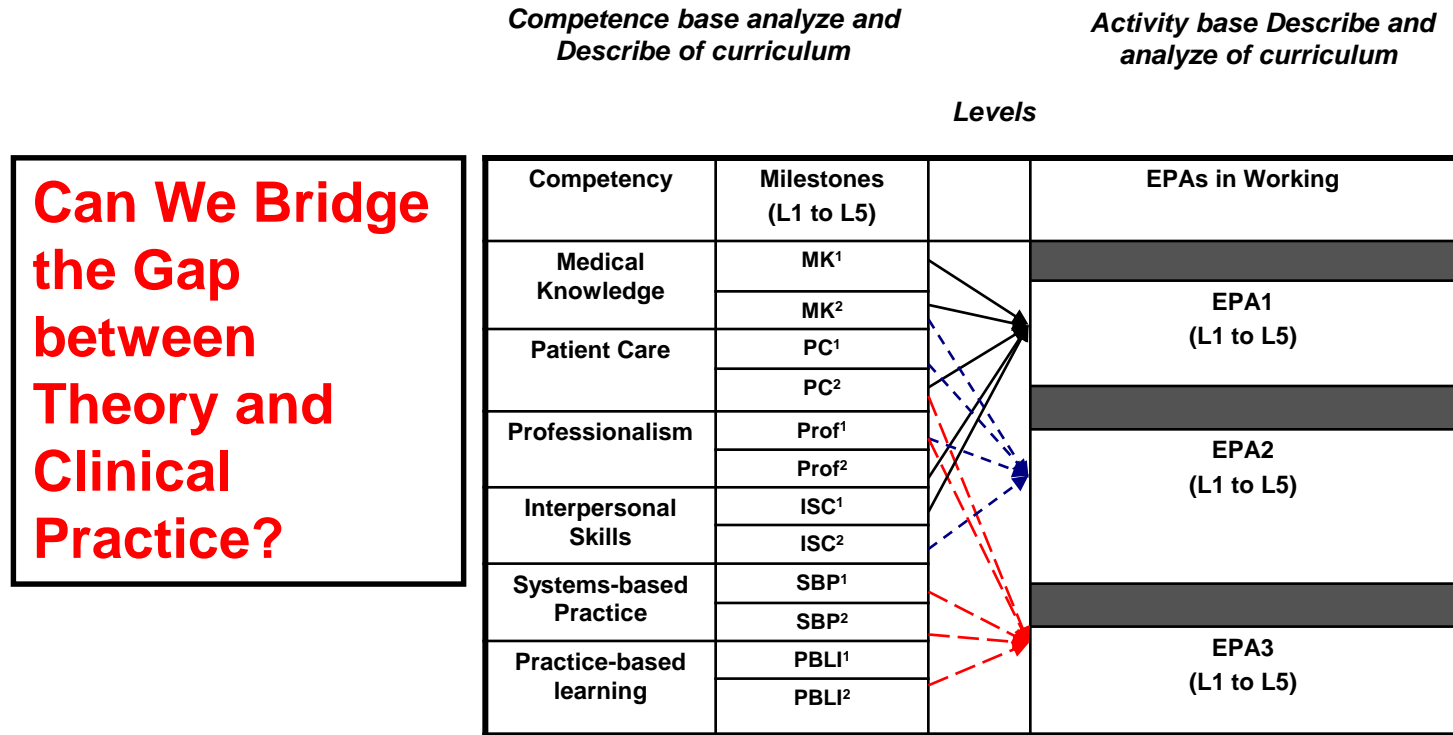
# What is a EPA?

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“We should only **fully trust** colleagues or trainees to carry out a critical **activity** once they have **attained all the competencies** that are needed to adequately complete this activity..”

Olle ten Cate, PhD, and Fedde Scheele, PhD. Viewpoint:  
Competency-Based Postgraduate Training: Can We Bridge the Gap  
between Theory and Clinical Practice? *Academic Medicine*. 2007:  
82(6)

# Frameworks of Milestone and EPA



2007 Olle ten Cate, Academic Medicine, Can We Bridge the Gap between Theory and Clinical Practice?



Competency	Milestones		EPA in Training	EPA in Practice
Medical Knowledge	MK <sup>1</sup>	→		
	MK <sup>2</sup>			
Patient Care	PC <sup>1</sup>	→	"Lead" and work with IP care team	Lead & work within IP health care teams.
	PC <sup>2</sup>			
Professionalism	Prof <sup>1</sup>	→	Care for patients with chronic illness with indirect supervision	Care for patients with chronic diseases
	Prof <sup>2</sup>			
Interpersonal Skills	ISC <sup>1</sup>	→		
	ISC <sup>2</sup>			
Systems-based Practice	SBP <sup>1</sup>	→		
	SBP <sup>2</sup>			
Practice-based learning	PBL <sup>1</sup>	→	Participate in QI and pt. safety initiatives	Enhance patient safety. Improve quality of health care
	PBL <sup>2</sup>			

# Work place base teaching & learning

時間\日期	一	二	三	四	五
7:30~8:30	<p>大外科</p> <p><b>Morning Meeting</b></p> <p>國壽 B1 第 31 會議室</p>	<p><b>Journal Meeting</b></p> <p>(每月第一、二週)</p> <p>國壽 B1 第 33 會議室</p> <p><b>M &amp; M Conference</b></p> <p>大外科每月最後一週</p> <p>國壽 B1 第 31 會議室</p>	<p><b>GS Grand Round</b></p> <p>國壽 B1 第 33 會議室</p>	<p>外科部</p> <p><b>教學專題演講</b></p> <p>國壽 B1 第 31 會議室</p>	<p><b>外科部手術麻醉審查會議</b></p> <p>國壽 B1 第 31 會議室</p> <p>(每月第一、二週)</p> <p>SPC/CPC (倒數第二週)</p> <p>全院演講 (最後一週)</p> <p>本館七樓會議室</p>
8:30~12:00	<p><b>Orientation</b></p> <p>課表介紹</p> <p>確認刷手無菌穿手術衣</p> <p>排定 primary care 病房</p> <p>/教學總醫師</p>	<p><b>手術教學及討論</b></p> <p>開刀房</p> <p>黃清水顧問/</p> <p>連恒輝醫師</p>	<p>9:00~12:00</p> <p>每小時一名學員輪流</p> <p><b>門診教學</b></p> <p>連恒輝醫師</p> <p>101 診察室</p> <p>or <b>手術教學及討論</b></p>	<p>9:00~12:00</p> <p>隔週</p> <p><b>教學門診</b></p> <p>連恒輝醫師/第 329 診察室</p> <p>or <b>手術教學及討論</b></p> <p>蔡明霖醫師</p> <p>蔡欣恬醫師</p>	<p><b>手術教學及討論</b></p> <p>黃清水顧問/</p> <p>戴鋒泉主任</p> <p>開刀房</p>
12:00~13:00	中午休息				
13:00~14:00	<p><b>GI-GS</b></p> <p><b>Combine meeting</b></p> <p>(每月第一、三週)</p> <p>國壽 B1 第 31 會議室</p>	<p>14:00~17:00</p> <p>每小時一名學員輪流</p> <p>門診教學</p> <p>蔡明霖醫師</p> <p>123 診察室</p> <p>or 手術教學及討論</p>	<p>1400</p> <p>病房教學迴診</p> <p>連恒輝醫師</p> <p>教學總醫師</p>	<p>Primary care</p> <p>Or 返校授課</p>	<p>1400</p> <p>病例討論</p> <p>25 病房</p> <p>連恒輝醫師</p> <p>教學總醫師</p>
14:00~17:00	<p>14:00~17:00</p> <p><b>門診教學</b></p> <p>戴鋒泉醫師</p> <p>123 診察室</p> <p>Or 病房 primary care</p>				

# Entrustment decisions

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- I Can be an observer only
- II Can practice this skill with direct supervision (supervisor in room)
- III Can practice this skill with indirect supervision  
(supervisor close by- e.g. conference room)
- IV Can perform skill unsupervised

# Novice To Expert :

## Level description of EPA and milestone

Level	Milestone	EPA	執行臨床任務 受信任程度	概略對應學員層級
1	incoming resident	Observation no execution	操作於病人時必由教師在旁直接協助逐步共同操作	實習醫學生
2	not yet mid level	Execution with direct supervision	教師直接/完全督導下必要時介入之操作	PGY PGY1
3	demonstrates majority target	supervision quickly available	教師間接/應學員請求督導下允許執行 教師隨時侯傳，再度確認 (double checked)	PGY2 R1 R2
4	graduation goal	Supervision at a distance	允許獨立操作執行， 教師事後確認即可	R3 R4
5	expert resident	Supervision junior	允許督導與教導其他資淺學員同儕	R4~

# What we had done for CBME

Core Components	Current status	
Framework	ACGME competencies; complete milestones or EPAs	
Progressing	Time-base with regular formative & summative assessments with certificate examination	
Tailored learn	Work place learning Monthly Assess	Mini-Cex DOPS CbD Multi-Source Feedback(360)
Tailored Teach	Observe and feedback Monthly Assess	
Programmatic assessment	Taiwan pilot Milestone project(RRC) since 2013 and EPA (PGY)since 2018	



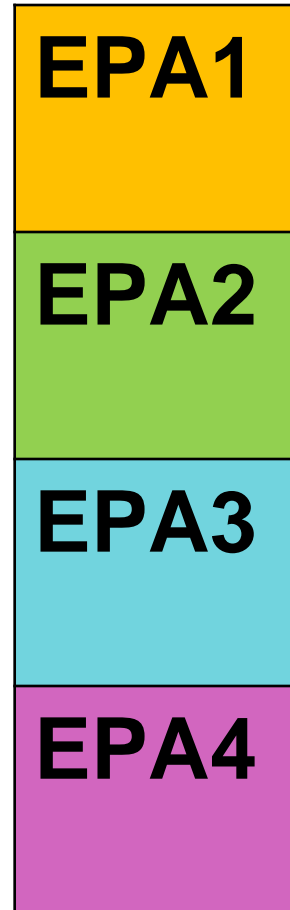


# EPA share same sub-Competencies with milestone

		EPAs			
		Ward care	operation	值班, OPD & consultation	Meeting & Administration
ACGME milestone subcompetencies	PC1	◎		○	○
	PC2		◎		
	PC3		◎		
	PC4	◎		○	○
	MK1	◎		○	◎
	MK2		◎		○
	SBP1	○		◎	◎
	SBP2	○		○	○
	SBP3	○		○	○
	PBLI1	○		○	◎
	PBLI2		◎		○
	P1	○	○	◎	○
	P2	○	○	◎	
	P3				◎
	P4	○	○	○	◎
	ICS1	○		◎	
	ICS2	○		◎	○
	ICS3	◎		○	○

# Same Goals of EPAs & Milestones

PC 1:					
PC2					
PC3					
PC4					
MK1					
MK2					
SBP1					
SBP2					
SBP3					
PBLI 1					
PBLI2					
Prof1					
Prof2					
Prof3					
Prof4					
ICS1					
ICS2					
ICS3					



PC 1:					
PC4					
MK1					
ICS3					
PC2					
PC3					
MK2					
PBLI2					
SBP2					
Prof1					
Prof2					
ICS1					
ICS2					
SBP1					
SBP3					
PBLI 1					
Prof3					
Prof4					

**Competence  
Framework**

**Sequential  
Progression**

**Tailored  
Learning  
Experiences**

**Competency-  
focused  
Instruction**

**Programmatic  
Assessment**

# 大綱

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- CBME為主軸之醫學中心教學任務 & 核心能力
- PEC
- 行動載具APP教學評量系統
- Milestone & EPA
- Core EPAs of each teaching program
- Clinical Competency Committee (CCC)
- 主動學習專區及其評量之建構(Moodle)

# EPA 1 = 4 sub-Competencies = 27 milestones)

## 外科可信賴專業活動 EPA1：手術前後病人照護

Title of the EPA	Pre-operative evaluation, preparation and management
Specification and limitations	Risk assessment, pre-OP preparation, informed consent, communication with patient & family, preparation of hemodynamic monitors, inotropic agents, blood components Limitations: non
Most relevant domains of competence	PC1,4; MK1; ICS3
Required experience, knowledge, skills, attitude, behavior for entrustment	K: pre OP prepare; Post OP complication, pathophysiology, differential diagnosis and management of shock, fluid and blood transfusion management S: physical examination for airway, hemodynamic stability, re-check and interpretation of pre-operative examinations, hemodynamic monitoring and assessment, preparation of blood components, change dressing, communication skills A: responsibility, alertness, efficiency
Sources of information to assess progress and ground a summative entrustment decision	1. Peri-OP bedside procedure (DOPS x1); 2. Interpretation of clinical record (CbD x1); 3. MSF(x1) 4. global rating (x1);
Entrustment for which level of supervision is to be reached at which stage of training?	Levels of entrustment: Achieve level 4 at the end of R4 1. Observe, not act 2. Direct supervision (present in the room, proactive) 3. Indirect supervision (not present; quickly available; reactive) 4. Unsupervised practice - only clinical oversight 5. Permission to supervise junior learners
Expiration date	2years

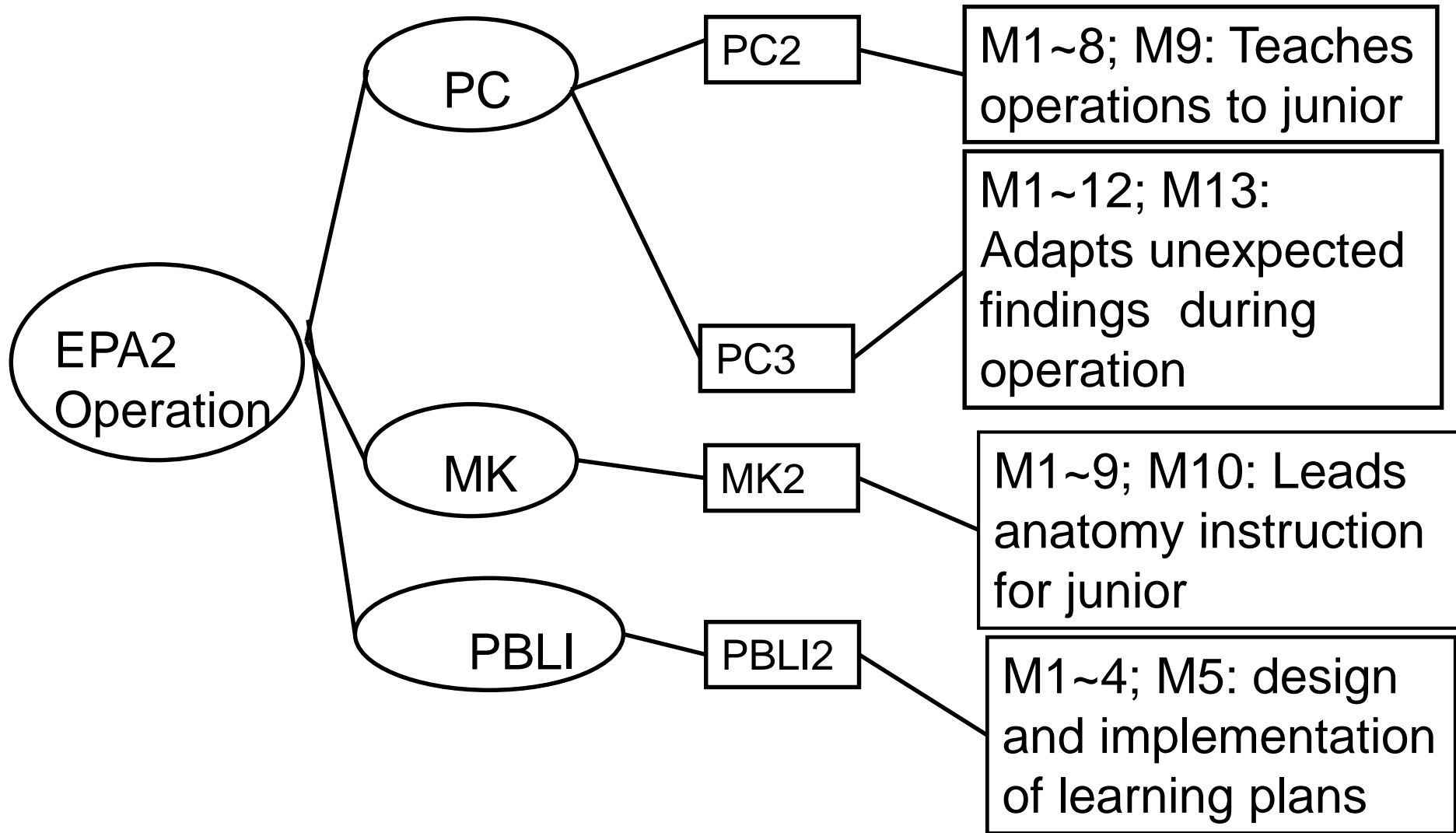
### 外科 EPA1：手術前後住院病人照護

被評者姓名 \_\_\_\_\_ 職級 \_\_\_\_\_

EPA1 Peri-Operative Patient Care 手術前後病人照護	ACGME Subcompetence 項目編號	Level 1	Level 2	Level 3	Level 4	Level 5
病人照護 1： 患者評估和決策		收集患者必要的資訊並列出鑑別診斷	評估患者、開立診斷或處治之醫囑	針對病情單純健康患者制定計劃（如結腸癌，前列腺肥大）	對病情複雜的患者制定計劃（如多種併症患者失血性休克）	為複雜病情患者制定治療計劃或臨床路徑
		<input type="checkbox"/>	處理病情簡單直接的非手術患者（如腸梗阻，憩室炎）	處理不斷變化的臨床情況（例如肛門膿腫引流的治療計劃）	處理病情複雜的非手術患者如重症胰臟炎	<input type="checkbox"/>
		(部分完成)		(線左項目全部完成)		
病人照護 4： 術後病人護理		評估簡單的術後問題如發燒，出血，低血壓，少尿	評估複雜的術後問題如敗血症，吻合滲漏	評估複雜病情如緊要，心衰竭，肝硬化，患者的複雜術後問題	預測和緩解複雜病情患者的術後問題	為複雜的術後問題制定臨床路徑或指南
		常規術後處置如，疝氣，膽囊切除術，闌尾切除術	簡單的術後處置	複雜手術的常規術後處置如 Whipple，食道切除術，口腔癌	複雜的術後問題處置	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
醫學知識 1： 病理生理和治療		展示常見手術的病理生理學和治療知識	展示複雜手術的病理生理學和治療知識	展示患者因素對病理生理和手術治療影響的知識	展示對疾病的表現和替代及輔助治療的不同模式的全面了解	依實證文獻對同一疾病不同模式患者（如手術條件）安排替代和輔助治療
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
人際關係和溝通技巧 3： 醫療保健系統內的溝通		能使用適當文件格式準確記錄患者的訊息	能有效利用電子病歷與醫療團隊溝通	能將外部和之前的相關資訊數據整合到病歷記錄中	能依情境緊迫性選擇適當的溝通形式	能指導政策和程序相關的部門或機構溝通
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

請於方框中打勾評量 EPA 1~5 Level

Rotate R: PGY goal level 1/R1 goal level 2/R2 goal level 3/Fix R (3~) goal level 4



EPA2 = 4 sub-competencies = 37 milestones

# EPA 1 Ward care = 4 sub-Competencies = 27 milestones)

EPA1 Peri-Operative Patient Care 手術前後病人照 護	ACGME Subcompetence 項目編號	Level 1	Level 2	Level 3	Level 4	Level 5
病人照護 1： 患者評估和決策		收集患者必要的資訊並 列出鑑別診斷	評估患者開立診斷或處 治之醫囑	針對病情單純健康患者 制定計劃（如結腸癌， 乳腺癌）	對病情複雜的患者“制 定計劃（如多種合併症 患者失血性休克）	為複雜病情患者制定治 療計劃或臨床路徑
			處理病情簡單直接的非 手術患者（如腸梗阻， 憩室炎）	處理不斷變化的臨床情 況（例如憩室膿腫引 流）的治療計劃“	處理病情複雜的非手術 患者如重症胰臟炎）	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		(部分完成)		(線左項目全部完成)		
病人照護 4： 術後病人照護		評估簡單的術後問題如 發燒，出血，低血壓， 少尿	評估複雜的術後問題如 敗血症，吻合滲漏）	評估複雜病情如腎衰 竭，心衰竭，肝硬化） 患者的複雜術後問題	預測和緩解複雜病情患 者的術後問題	為複雜的術後問題制定 臨床路徑或指南
		常規術後處理如，疝 氣，膽囊切除術，闌尾 切除術）	簡單的術後問題處理	複雜手術的常規術後處 理如 Whipple，食道切 除術）	複雜的術後問題處理	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
醫學知識 1： 病理生理和治 療		展示常見手術條件患者 的病理生理學和治療知 識	展示複雜手術條件患者 的病理生理學和治療知 識	展示患者因素對病理 生理和手術治療影響 的知識	展示對疾病的表現和替 代及輔助治療的不同模 式的全面了解	依實證文獻對同一疾病 不同模式患者(如手術 條件)安排替代和輔助 治療
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
人際關係和溝 通技巧 3： 系統內的溝通		準確記錄患者的訊息， 包括適當使用文件格式	證明有效利用電子病歷 與醫療團隊溝通	將外部和之前的相關數 據整合到病歷記錄中	能依情境緊迫性選擇適 當的溝通形式	指導政策和程序相關的 部門或機構溝通
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# EPA 2 OP = 4 sub-Competencies =37 milestones)

	Level 1	Level 2	Level 3	Level 4	Level 5
病人照護 2： 執行手術	展示基本手術技能如打結，縫合	執行床邊程序如 CVC，插胸管	執行常規手術如疝氣，膽囊切除術，闌尾切除術	執行複雜手術如低位前切除，食管旁疝，腹壁重建	執行罕見的複雜手術（例如 Whipple，食道切除術）
		傳授醫學生和初級住院醫師基本技能如打結，縫合	教授初級住院醫師床邊操作如 CVC，插胸管	教授初級住院醫師的常見手術如疝氣，膽囊切除術，闌尾切除術	教授初級住院醫師複雜的手術如低位前切除，食管旁疝，腹壁重建
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
病人照護 3： 手術技能	組織處理技能有限	組織處理技能有時仔細有時粗糙	始終如一地仔細的組織處理	根據組織情況調整組織處理	創新技術、儀器，或重大的改進
	需要提示識別適當的手術切面(plane)	能識別適當的手術切面(plane)，但需要重新定向以保持最佳組織面的解剖位置	正常解剖結構術中手術切面(plane) 和相關結構都能看得很清楚	異常解剖結構術中手術切面(plane) 和相關結構都能看得很清楚	
	手術進行中總是須直接告知下一步驟	手術進行中可以進行手術步驟但過程需要提示以完成步驟	在整個手術過程流暢地進行並可以預測後續步驟	在手術過程中適當處理意外的發現和事件	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
醫學知識 2： 解剖學	在常規手術中識別正常解剖結構（如腹股溝）	在常規操作期間識別解剖結構的變化(如膽管解剖變化)	識別複雜手術中的正常解剖結構（如胃血液供應）	識別複雜手術中解剖結構的變化（如異位右肝動脈）	開發教學解剖和操作手術模型
	闡明常見手術的步驟	闡明不同解剖對常見手術步驟的影響	闡明複雜手術的步驟	闡明不同解剖對複雜手術步驟的影響	為學生和住院醫師提供解剖學指導
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
基於實踐的學習和改進 2：	為職涯及生涯設定目標	善用機會設定學習計畫促進成長	可以整合工作成果及回饋數據以設計和調整學習計畫	根據表現數據修改學習計畫	指導他人設計和實施學習計畫



# EPA 3值班及會診 = 5 sub-Competencies = 52 milestones)

	Level 1 ◦	Level 2 ◦	Level 3 ◦	Level 4 ◦	Level 5 ◦
基於系統的實踐 2： 以患者為中心的護理系統導航◦	具備跨域協調的知識◦	在常規狀況下（如換藥）協調患者的跨團隊或跨領域照護◦	在複雜情況下協調或領導跨領域照護（如家庭腸外營養，加護病房照護）◦	協調缺乏醫療保險患者的照護（如無保險的患者）◦	領導協調改進照護的設計和實施◦
	在常規情況下執行安全有效的照護/交接班◦	在複雜的臨床情況下執行安全有效的照護/交接班◦	監督安全有效的初級住院醫師照護/交接班◦	解決團隊之間交接班的衝突◦	領導照護交接班流程的設計改進和實施◦
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
專業 1：道德原則 專業 2：專業行為和責任◦	展示知情同意，代理決策，預立醫囑，保密，錯誤披露，有限資源管理以及相關主題的道德原則知識◦	使用道德原則分析面臨的狀況	根據需要尋求協助處理和解決複雜的道德情況◦	依需要確認並使用適當的資源來管理和解決道德困境（例如，道德諮詢，文獻審查，風險管理/法律諮詢）◦	確定並尋求解決導致或加劇道德問題或阻礙其解決的系統因素◦
	完成患者照護職責，識別潛在障礙，並描述確保即時完成任務的策略◦	在日常情況下適當注意細節，及時執行患者照護任務和職責	在複雜或緊張的狀況下適當關注細節，及時執行患者照護職責	認識可能影響他人完成及時患者照護職責的狀況◦	開發系統以提高其他人有效完成患者護理任務和職責的能力
	描述何時以及如何恰當地報告職業行為的失誤◦	對自己的職業行為負責◦	複雜或緊張情況下展現專業行為◦	糾正自我和他人的專業行為以預防失誤◦	教導其他人的專業行為以符合專業期望◦
	認識到自我知識/技能的限制並尋求幫助◦	認識到團隊知識/技能的限制並尋求幫助◦	表現出對知識/技能限制的適當信心和自我意識◦	適當報告職業行為失誤（模擬或實際）幫助初學者認識其知識/技能的限制◦	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
人際關係和溝通技巧 1：以患者和家為中心的溝通◦	以可理解和尊重的方式與患者及其家屬進行溝通◦	在患者和家屬的個人偏見和障礙（例如，年齡，識字，認知障礙，文化差異）的背景下游行溝通◦	向患者和家屬提供複雜和困難的信息◦	安排針對困難議題（如死亡，解釋併發症，治療不確定性）的家庭會議◦	指導其他人進行關鍵對話◦
	能對患者和家屬進行及時有效之訊息更新◦	積極傾聽患者和家屬的意見以符合患者的偏好和期望◦	使用共享決策制定個性化的照護計劃◦	有效地協商和管理患者，家屬和醫療團隊之間的意見衝突◦	指導其他人解決意見衝突◦
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
人際關係和溝通技巧 2：跨專業和團隊溝通◦	尊重請求並接受諮詢◦	明確而簡要地請求及回應諮詢	在提供或接受諮詢時驗證對建議的理解◦	協調醫療團隊不同成員的建議解決衝突優化患者照護◦	靈活運用溝通策略，重視所有醫療團隊成員的意見◦
	尊重醫療團隊所有成員的意見◦	與所有醫療保健團隊成員有效溝通信息◦	使用積極的傾聽來調整溝通方式以適應團隊需求◦	在危機情況下保持有效溝通◦	在複雜情況下促成醫療團隊的意見回饋◦
		蒐集對醫療保健團隊的回饋◦	傳達關注並向同伴和學習者提供反饋◦	向上級傳達建設性的反饋意見◦	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# EPA 4 會議及行政 = 4 sub-Competencies = 37 milestones)

	Level 1 ◁	Level 2 ◁	Level 3 ◁	Level 4 ◁	Level 5 ◁
基於系統的實踐 1,3: 建構以患者為中心的 <u>照護系統</u> 及醫師在健保系統中的作用 ◁	俱備常見病人安全事件的知識 ◁	確定導致病人安全事件的系統因素 ◁	參與病人安全事件的分析 ( <u>模擬或實際</u> ) ◁	對病人安全事件進行分析並提供錯誤預防策略 ( <u>模擬或實際</u> ) ◁	積極參與團隊和流程以修改系統以防止病人安全事件發生 ◁
	俱備如何報告病人安全事件的知識 ◁	通過機構報告系統 ( <u>模擬或實際</u> ) 報告病人安全事件 ◁	參與向患者和家屬披露患者安全事件 ( <u>模擬或實際</u> ) ◁	向患者和家屬披露病人安全事件 ( <u>模擬或實際</u> ) ◁	指導其他人披露病人安全事件 ◁
	俱備基本質量改進方法和指標的知識 ◁	描述當地質量改進舉措 ( <u>如感染率, 手部衛生, 阿片類藥物使用</u> ) ◁	參與當地的質量改進計劃 ◁	展示識別, 開發, 實施和分析質量改進項目所需的技能 ◁	在機構或學會層面創建, 實施和評估質量改進計劃 ◁
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	描述基本的健保支付系統, 包括政府, 私人, 公共和未保險的護理以及不同的實踐模型 ◁	描述醫療保健系統內的工作如何影響患者護理 ◁	分析個人實踐如何影響系統 ( <u>例如, 住院時間, 再入院率, 臨床效率</u> ) ◁	在患者護理中使用共同決策, 同時考慮患者的費用 ◁	倡導者或領導者改變以增強高價值, 高效和有效的患者護理系統 ◁
描述了計費和編碼文檔的關鍵組件 ◁	記錄計費和編碼所需的關鍵組件 ◁	瞭解過渡到實踐的基本要素 ( <u>如合同談判, 醫療事故保險, 政府監管, 醫療保險和授權</u> ) ◁	確定過渡到實踐的資源和有效計劃 ( <u>例如, 信息技術, 法律, 計費和編碼, 財務, 人事</u> ) ◁	參與衛生政策的宣傳活動 ◁	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
基於實踐的學習和改進 1: <u>循證和知情</u> 實踐 ◁	演示如何訪問和使用現有證據, 並將患者偏好和價值觀納入常規病情患者的護理中 ◁	闡明臨床問題和價值觀, 以 <u>指導循證護理</u> ◁	找到並應用與患者偏好相結合的最佳證據, 以便為患有複雜病症的患者提供護理 ◁	面對不確定或相互衝突的證據應用實證嚴格評估形成患者照護方針 ◁	指導其他人批判性地評估和應用複雜病症患者的證據和/或參與製定指南 ◁
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
專業 3,4: 行政任務, 自我覺察和求助 ◁	能了解管理任務和職責潛在的影響因素, 並描述確保即時完成任務的策略 ◁	在日常情況下適當注意細節, 及時執行管理任務和職責 ◁	在 <u>複雜或緊張</u> 的情況下適當關注細節, 及時執行管理任務和職責 ◁	認識到可能影響他人及時完成管理任務和責任的能力的情況 ◁	開發系統以提高其他人有效完成管理任務和職責的能力 ◁
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	了解有助於協助個人身心靈社經問題的機構資源 (例如急性和慢性疾病、藥物濫用和心理健康問題) ◁	監控自己的健康和安適程度, 並適當減輕自己的疲勞和/或壓力 ◁	察覺並適當地解決團隊其他成員的倦怠, 抑鬱, 自殺意念, 暴力或藥物濫用的跡象和症狀 ◁	指出團隊成員不符專業期望之情緒反應或知識/技能的不足 ◁	教導團隊成員控制不當情緒改進知識技能以符合專業之水準 ◁
具備醫療人員健康和疲勞管理的知識 ◁	適當管理個人時間和工作安排	主動修改或調整應變班表, 確保在其監督下人員保持個人健康並且不損害患者安全 (例如, 需要小睡, 諮詢服務, 向計劃主管報告) ◁	能修改時間表或以其他方式進行調整以確保其監督下的團隊人員保持個人健康維護病人安全 (例如, 需要小睡、諮詢服務、向主管報告) ◁	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



# 大綱

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- CBME為主軸之醫學中心教學任務 & 核心能力
- PEC
- 行動載具APP教學評量系統
- Milestone & EPA
- Core EPAs of each teaching program
- Clinical Competency Committee (CCC)
- 主動學習專區及其評量之建構(Moodle)

# ACGME CCC Guidebook 2017

The CCC serves several purposes, for the program director, the program itself, the faculty, the residents/fellows, the ACGME, and the specialty.

The ultimate purpose is to demonstrate our **accountability** as medical educators to the public, that our graduates will provide high quality, safe care to our patients and maintain the standards of the health care system."



Accreditation Council for  
Graduate Medical Education

## Clinical Competency Committees

A Guidebook for Programs  
3<sup>rd</sup> Edition

Kathryn Andolsek  
Duke University

Jamie Padmore  
Medstar-Georgetown

Karen E. Hauer  
University of California at San Francisco

Andem Ekpenyong  
Rush University Hospital

Laura Edgar  
ACGME

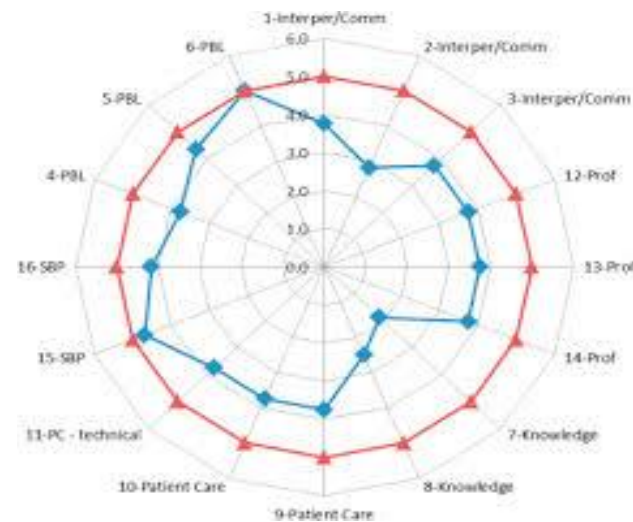
Eric Holmboe  
ACGME

This information is current as of January 2020

# What is a Clinical Competency Committee (CCC)?

- “A CCC is a required body comprising *three or more* members of the *active teaching faculty* who is advisory to the program director and reviews the progress of all residents in the program.”

(ACGME Glossary of Terms 7/1/2013)



## CCC Role

Problem Identification Model	Developmental Model
<ul style="list-style-type: none"><li>• Focus on identifying struggling learners</li><li>• More common</li></ul>	<ul style="list-style-type: none"><li>• Discuss all residents</li><li>• Assist all residents on their learning trajectory</li></ul>

Acad Med 2015 Hauer et al. Reviewing Residents' Competence: A Qualitative Study of the Role of Clinical Competency Committees in Program Assessment,

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## CCC purposes

- For the program director, the program itself, the faculty, the residents/fellows, the ACGME, and the specialty.
- The ultimate purpose is to demonstrate our **accountability** as medical educators to the public
- Our graduates will provide high quality, safe care to our patients and maintain the standards of the health care

**Andolsek et al. ACGME CCC Guidebook 2017**

# 111 年度外科教學計畫臨床能力評量會議 會議記錄表

時間：111 年 4 月 15 日，上午 8 時 30 分

地點：第 33 會議室

主席：

與會人員：

記錄： 管理師

討論對象：R4

R3

R2

R1



# 各級學員訓練與評量結果: 多元評量考核統計

學員姓名	職級	多元評量工具(至少兩種，列出單次成績或多次平均成績並註明是否符合教學目標，只列出所實施之評量)					
		病歷寫作 評核	mini-CEX	DOPS	CbD	MSF 360度	RRC住院醫師 評分表
1	R2	7.5		4.7	4.3	7.4	87.7
2	R2	8.0		4.3	4.8	6.3	90.7
3	R2			5.0	4.7	7.9	86.3
4	R2	7.1	7.9		4.6	7.4	88.3
5	R2	7.3			4.6	7.6	90.6
6	R2	7.3			4.3	7.7	87.6
7	R2	7.0			4.8	7.7	89.3
8	R2	7.1	8	4.1	4.5	8.6	90.3
9	R1	7.8	7.7	5.0	5.1	7.8	88
10	R1	7.1		5.3	4.0	8.3	87.3
11	R1	6.4			5.0	7.2	86.3
12	R1	7.4		5.2	4.6	7.3	90
13	R1	7.3		4.0	4.0	7.7	84.3



# 可信賴專業活動考核情形統計

		R2:1		R2: 2		R1:1		R1:2	
		自評	委員共識	自評	委員共識	自評	委員共識	自評	委員共識
E1	病人照護1	5	3.8	5	3.8	3	2.5	3	2.1
	病人照護4	4	3.8	4	3.5	3	2.3	2	1.9
	醫學知識1	4	3.6	4	3.3	5	2.2	2	1.7
	人際關係溝通3	4	4.1	4	3.5	5	2.3	3	1.9
E2	病人照護2：	5	3.6	5	3.4	3	2.2	3	2.0
	病人照護3：	4	3.5	4	3.4	3	2.2	2	1.8
	醫學知識2：	4	3.5	5	3.5	3	2.1	1	1.7
	實踐學習改進2	4	4.0	4	3.5	5	2.5	1	1.9
E3	系統實踐2：	5	3.9	5	3.5	3	2.1	4	1.9
	專業1,2	5	3.7	5	3.3	5	2.0	4	1.9
		4	4.3	4	3.5	6	2.1	3	1.8
	人際關係溝通1：	4	3.7	5	3.7	4	2.1	4	1.8
人際關係溝通2：	4	3.8	3	3.3	4	2.2	2	1.8	
E4	系統實踐1,3：	4	3.7	4	3.7	3	2.1	1	1.9
		4	3.8	4	3.5	3	2.1	1	1.7
	實踐學習改進1：	5	3.9	4	3.5	4	2.1	4	1.8
	專業3,4：行政	4	3.9	5	3.4	5	2.1	3	1.5
4		3.7	4	3.5	5	2.3	5	1.8	
		4.3	3.8	4.3	3.5	4	2.2	2.7	1.8

# 各級學員學習成果回饋(請由教師填寫)

學員姓名	職級	回饋及改善
1	R2	<p>CbD 準備詳盡 DOPS 學習認真，能勝任交付之任務 360度評量 同僚人際關係協調能力佳，專業素養醫學知識優，病人照護態度佳(同儕)</p> <ul style="list-style-type: none"> <li>▶工作認真負責，聰明伶俐(主治醫師)</li> <li>▶學姊工作認真，好相處，願意給予學弟妹協助(同儕)</li> </ul>
2	R2	<p>CbD 分析有條理，診斷和評估得宜</p> <ul style="list-style-type: none"> <li>▶本病例為38歲之年輕男性，PSA超過4ug/ml，為少見之病例，學習內容為Biopsy之決定施行與否，本病例PSA追蹤一年仍見上升，因此TRUS--Bx indicated。學習PSA高之病人何時應予施行TRUS-Bx。</li> <li>▶foley沒尿除了血塊造成的阻塞之外，還有很多其他原因，需先排除病人因為腎臟功能受損或sepsis造成沒尿，可由bedside echo或PE做鑑別診斷</li> </ul> <p>DOPS 達文西手術準備有一定的程度，無菌觀念好</p> <ul style="list-style-type: none"> <li>▶可以正確判讀腎臟缺損影像，並適切說出鑑別診斷</li> <li>▶攝護腺手術後之導管放置並不容易，要多次學習才能避免錯置。</li> <li>▶學員有認真在教師指導下學習。</li> <li>▶尿路動力學的判讀很重要，需注意病人檢查時的情緒。</li> </ul> <p>360度評量 學習能力很強表現稱職中規中矩期望在未來能夠加強教學與研究的表現(主治醫師)</p> <ul style="list-style-type: none"> <li>▶積極參與臨床照護，與團隊成員及同儕討論及個案檢討，能及時處置病患問題，與團隊其他成員互動良好，能適時解除護理人員的疑惑(資深護理師)</li> </ul>

	R1		R1		R2		R2		R3		R3		R3		R4		R4	
	自	評	自	評	自	評	自	評	自	評	自	評	自	評	自	評	自	評
EPA1:病人照護 1：評估和決策	4	3	4	3.6	5	4.8	5	4.9	4	6	7	6	7	7	6	6.5	7	7
病人照護 4：術後照護	4	2.9	3	3.5	5	4.5	4	4.9	4	6	7	6	7	7	6	7.0	7	8
知識 1：病理生理和治療	4	3	3	3.5	5	4.7	5	5.2	4	6	7	6	7	7	6	6.5	7	8
溝通 3：醫療系統內溝通	4	3	3	3.5	5	4.6	5	5.2	4	6	7	6	7	7	6	7.0	7	7
EPA2 病人照護 2：執行手術	4	2.8	3	3.2	6	4.7	5	4.9	6	6.3	5	6.5	7	6.5	6	6.7	5	7
病人照護 3：手術技能	4	2.8	3	3.3	5	4.6	4	5.1	5	6.3	6	6.5	7	7	6	7.0	5	7.5
醫學知識 2：解剖學	4	2.8	3	3.3	5	4.6	4	4.9	5	6.7	6	6.5	7	7	6	6.7	5	7
學習和改進 2：個人成長	4	3.2	4	3.3	6	4.6	5	5.3	5	6.7	6	6.5	7	7	6	7.0	5	7
EPA3 SBP 2：以患者為中心系	4	3.2	3	3.5	5	4.5	5	5.0	6	6.5	7	7	7	7	6	6.5	7	8
專業 1,2：道德專業責任	4	3.3	3	3.8	6	4.6	5	5.3	6	7.0	6	8	7	6	6	6.5	7	8
	4	3.2	3	3.6	6	4.6	5	5.2	6	6.5	6	7	7	7	6	6	7	7
溝通 1：患者及家屬溝通	4	3.0	3	3.4	6	4.6	5	5.0	6	6	7	7	7	7	6	6.5	7	8
溝通 2：跨團隊溝通	4	3.2	3	3.7	5	4.7	5	5.2	6	6	7	7	7	7	6	6.5	7	8
EPA4: SBP 1,3	4	3.2	4	3.7	5	4.4	5	5.1	4.5	6	6	7	7	7	6	6.5	8	8
學習和改進 1：循證和實踐	4	2.9	3	3.6	6	4.6	5	4.6	5	6	6	7	7	7	6	6.5	8	8
專業 3,4：行政任務	4	3	3	3.3	5	4.7	5	5.1	4	6	6	7	7	7	6	6	8	8



## ● 如何進行雙向回饋

6.2.3 評估教學成效及訓練成果，並提供新進醫事人員適當之反映管道

(學生填寫)本次評量中，教師指正教學內容：

1.醫療面談 2.身體檢查 3.人道專業 4.臨床判斷 5.諮商衛教 6.組織效能 7.整體適任 8.其他

(學生填寫)學員所學習之內容或需改進事項:

(老師填寫)本次評量教師對於學員學習成效總評:

帶入片語

門診注意親切態度為病人服務

(老師填寫)本次評量用於CCC會議的參考強度：強 一般

臨床教師簽章：連恒輝(229151)(2023/08/10)

學員簽章：

 暫存

 完成

 結案

 教學部完成

 修改記錄

 列印

# What is Feedback?

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“**Feedback** is defined as a regulatory mechanism where the **effect of an action** is fed back to **modify and improve future action**” (Ramani, JGIM 2019)

- Learner centered
- Social context is key



# Why is it important?

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- Feedback keeps learners on course towards their goals
  - Correct problems
  - Reinforce effective performance
  - Helps learner become competent

# Characteristics of effective feedback

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- Specific
- Timely
- Based on behaviors/observations
- Non-judgmental
- Action plan with learner involvement

*What does the learner do with the feedback?*



# Factors influencing learners' acceptance of feedback

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“Credibility:

- learner-teacher relationship
- the manner of delivery
- perceived intentions of feedback providers
- direct observation of performance
- congruence of data with self-assessment, and perceived threat to self-esteem or autonomy”

# ADAPT

## ■ Ask

### ● Self-assessment



## ■ Discuss

- ◆ What was done well?
- ◆ What could be done more effectively?

## ● Ask

- ◆ Get response to the feedback
- ◆ ? Receptivity

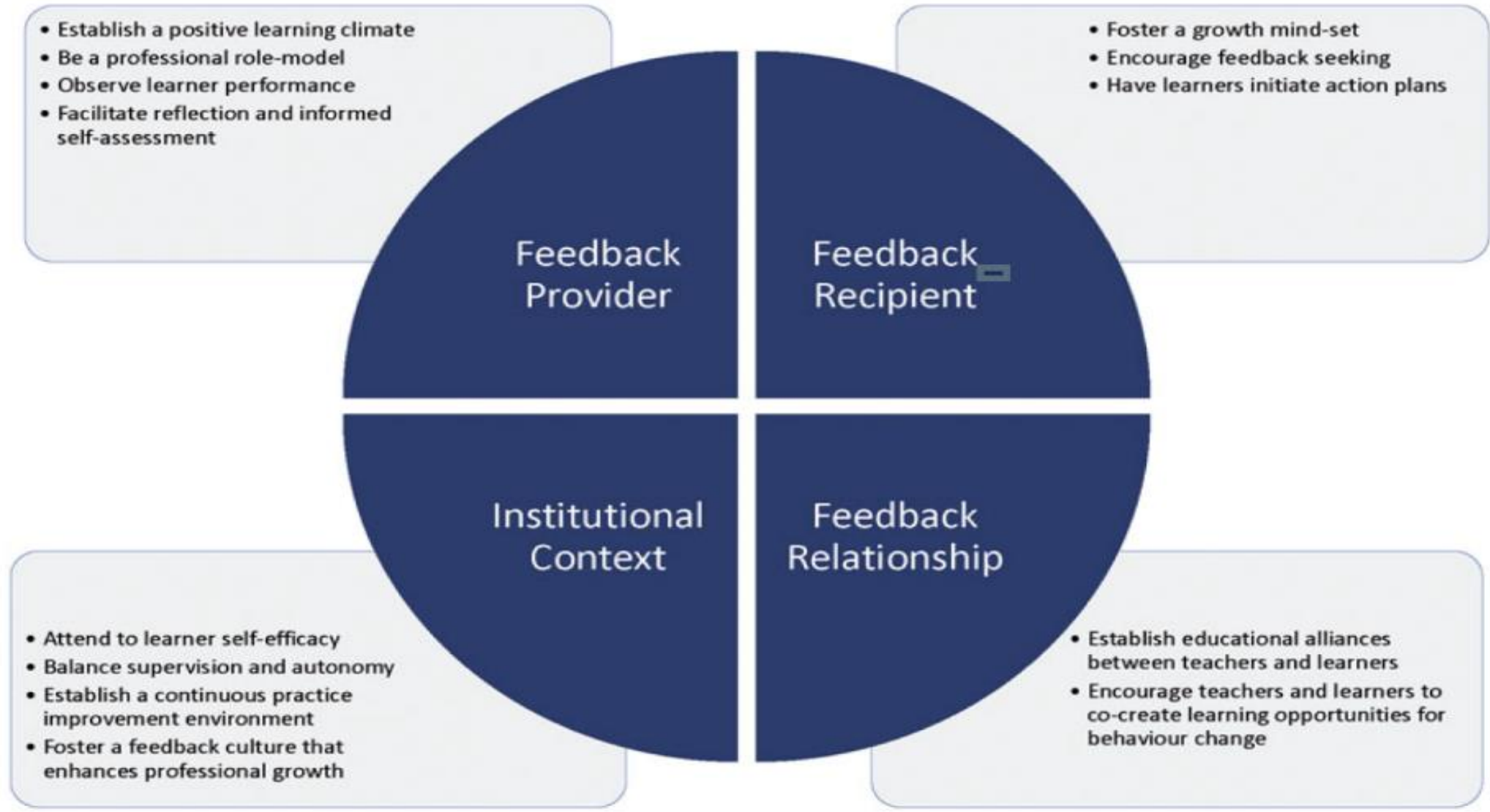
### Learner Engagement



## ● PT Plan Together

- ◆ Engage the learner in developing an action plan
- ◆ Feasible?
- ◆ Follow up?

# Twelve tips to promote a feedback culture with a growth mind-set



# Share mental model of Faculty

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- Faculty need to be able to:
  - Develop a shared understanding of the milestones/EPAs
  - Use a variety of teaching methods
  - Assess clinical skills
    - ◆ Observe
      - ◆ Know what to look for
      - ◆ Develop language to describe that which is observed
  - Engage in feedback dialogues with learners

	教師評分	學生評分	教師回饋	學生回饋
EPA1				
EPA2				
EPA3				
EPA4				

國泰綜合醫院  
外科住院醫師可信任專業活動(EPAs)

基本資料

評量日期： 20230617

時段：○上半年 ●下半年

評估期間： 20220701 ~ 20221231

受評者： 施星羽(388333) 受評者職級： OM OPGY ●R OR1 OR2 OR3 OR4 OCR ○主治醫師(二) ○主治醫師(一) · 第1-5年 ○主治醫師(一) · 第6-10年 ○主治醫師(一) · 第10年以上

評核者： 連恒輝(229151)

	EPA代號	名稱	評核者	受評者分數	狀態
<input type="radio"/>	EPA1	外科 EPA1：手術前後住院病人照護	連恒輝(229151)	Level3	完成
<input type="radio"/>	EPA2	外科 EPA2：執行手術	連恒輝(229151)	Level3	完成
<input type="radio"/>	EPA3	外科 EPA3：值班及會診	連恒輝(229151)	Level3	完成
<input type="radio"/>	EPA4	外科 EPA4：會議及行政Meeting & Administration	連恒輝(229151)	Level3	完成

排序	MileStone	MileStone名稱	MileStone項目

者	等級	名稱
<input type="checkbox"/>	1	收集患者必要的資訊並列出鑑別診斷
<input type="checkbox"/>	2	評估患者、開立診斷或處治之醫囑 處理病情簡單直接的非手術患者(如腸梗阻、憩室炎)
<input type="checkbox"/>	3	針對病情單純健康患者制定計劃(如結腸癌、前列腺肥大) 處理不斷變化的臨床情況(例如肛門膿腫引流的治療計劃)
<input checked="" type="checkbox"/>	4	對病情複雜的患者制定計劃(如多種合併症患者失血性休克) 處理病情複雜的非手術患者(如重症胰臟炎)
<input type="checkbox"/>	5	為複雜病情患者制定治療計劃或臨床路徑
受評者分數：4		

評核者	等級	名稱
<input type="checkbox"/>	1	評估簡單的術後問題如發燒、出血、低血壓、少尿 常規術後處置(如疝氣、膽囊切除術、闌尾切除術)
<input type="checkbox"/>	2	評估複雜的術後問題(如敗血症、吻合滲漏) 簡單的術後處置
<input checked="" type="checkbox"/>	3	評估複雜病情(如腎衰竭、心臟病、肝硬化)患者的複雜術後問題 複雜手術的常規術後處置(如Whipple、食道切除術)口腔癌
<input type="checkbox"/>	4	預測和緩解複雜病情患者的術後問題 複雜的術後問題處置
<input type="checkbox"/>	5	為複雜的術後問題制定臨床路徑或指南

# 反思

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- 強化學員學習自覺
- 強化教學評量中之描述性(narrative description)回饋
- 各級學員EPA符合標準設定
- 對未達期待學員之輔導機制