



---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

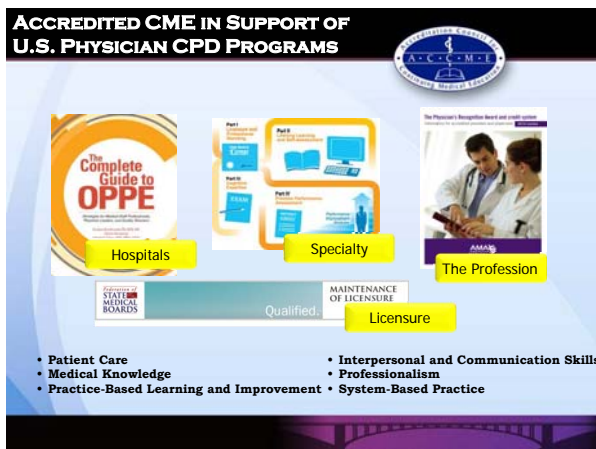
---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

### OUR REACH...



	Activities	Hours of Education	Physicians	Non Physicians
<b>TOTAL</b>	<b>138,196</b>	<b>1,010,301</b>	<b>13,764,896</b>	<b>10,929,217</b>



<b>All Participants</b>		<b>24,694,113</b>
-------------------------	--	-------------------

New York  
Los Angeles  
Chicago  
Houston  
Philadelphia

Phoenix  
San Antonio  
San Diego  
Dallas

---

---

---

---

---

---

---

---

### OUR REACH...



	Activities	Hours of Education	Physicians	Non Physicians
<b>TOTAL</b>	<b>138,196</b>	<b>1,010,301</b>	<b>13,764,896</b>	<b>10,929,217</b>



<b>All Participants</b>		<b>24,694,113</b>
-------------------------	--	-------------------

Kansas  
Nevada  
New Mexico  
Nebraska  
West Virginia

Idaho  
Hawaii  
Maine  
New Hampshire  
Rhode Island

Montana  
Delaware  
South Dakota  
Alaska  
North Dakota

---

---

---

---

---

---

---

---

### OUR REACH...



	Activities	Hours of Education	Physicians	Non Physicians
<b>TOTAL</b>	<b>138,196</b>	<b>1,010,301</b>	<b>13,764,896</b>	<b>10,929,217</b>



<b>All Participants</b>		<b>24,694,113</b>
-------------------------	--	-------------------

New Participants

**2,818 every hour**

**67,655 every day**

**2,057,842 every month**

---

---

---

---


---

---

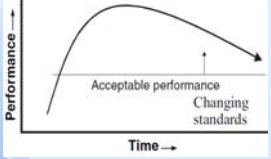
---

---

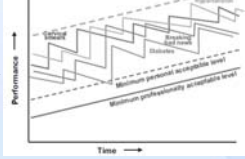
### WHAT PRACTICE IS SAYING



**Ballistic**



**Trajectory**



→

**Class, D.** Viewpoint: A Performance-Based Conception of Competence is Changing the Regulation of Physicians' Professional Behavior, *Academic Medicine*, Vol. 82, No. 6 / June 2007

---

---

---

---

---

---

---

---


---

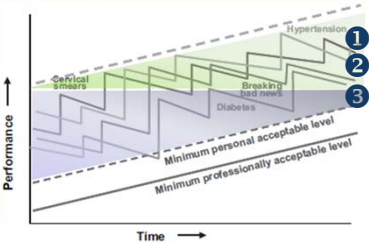
---

---

---

### FACTORS AFFECTING THE TRAJECTORY





**Factors in Play**

1. What we never knew.
2. What was not known at the time.
3. What should now be 'forgotten.'

**"Overuse, underuse and misuse"**

---

---

---

---

---

---

---

---

---

---

---

---



"Practice" is ....	Level of ....
• Research practice	• Populations
• Educational practice	• Communities
• Executive practice ...and	• Individuals
• Clinical practice	

---

---

---

---

---

---

---


---

---

---

---

---



**CPD as a Scholarly Pursuit**

*CME as the Academy*

- Discovery
- Integration
- Application

*Scholarship Reconsidered*  
PRIORITIES OF THE PROFESSORiate  
ERNEST L. BOYER  
1997  
THE CARNEGIE FOUNDATION  
FOR THE ADVANCEMENT OF TEACHING

“ I DON’T KNOW.....BUT I AM GOING TO FIND OUT!”

---

---

---

---

---

---

---

---

---

---



**DOES THIS WORK TO  
CHANGE PRACTICE ?**

---

---

---

---

---

---

---

---

---

---



JULY 2014

**EFFECTIVENESS OF  
CONTINUING MEDICAL  
EDUCATION:  
UPDATED SYNTHESIS OF  
SYSTEMATIC REVIEWS**

RONALD M. CERVERO, PH.D.  
and JULIE K. GAINES, MLIS  
University of Georgia

---

---

---

---

---

---

---

---

---

---



“We now have 39 systematic reviews that present an evidence-based approach to designing CME so that it is more likely to achieve the outcomes of improved physician performance and patient health outcomes.”

JULY 2014  
EFFECTIVENESS OF CONTINUING MEDICAL EDUCATION:  
UPDATED SYNTHESIS OF SYSTEMATIC REVIEWS  
RONALD M. CERVERO, PH.D. and JULIE K. GAINES, MLIS  
University of Georgia

---

---

---


---

---

---

---

---



“ With this significant scientific evidence base in tandem with numerous reports of practical strategies for effective CME, **reforming CME is less a knowledge problem than a political problem of changing the systems of which CME is an important constituent element.**”

JULY 2014  
EFFECTIVENESS OF CONTINUING MEDICAL EDUCATION:  
UPDATED SYNTHESIS OF SYSTEMATIC REVIEWS  
RONALD M. CERVERO, PH.D. and JULIE K. GAINES, MLIS  
University of Georgia

---

---

---


---

---

---

---

---



“ As this system continues to be negotiated amidst the struggle between the educational agendas and political-economic agendas, it will be important to incorporate the insights from the scientific study of CME effectiveness.”

JULY 2014  
EFFECTIVENESS OF CONTINUING MEDICAL EDUCATION:  
UPDATED SYNTHESIS OF SYSTEMATIC REVIEWS  
RONALD M. CERVERO, PH.D. and JULIE K. GAINES, MLIS  
University of Georgia

---

---

---

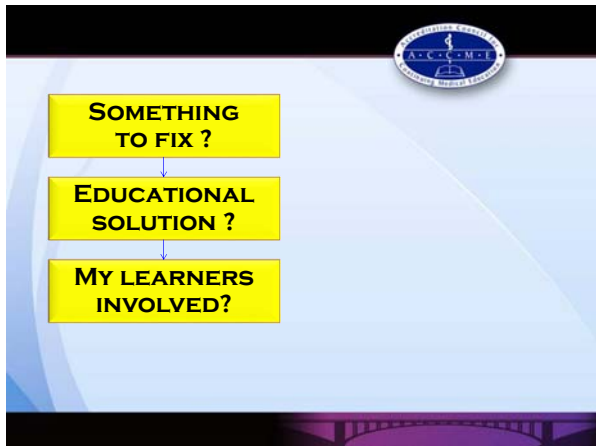
---

---

---

---

---



---

---

---

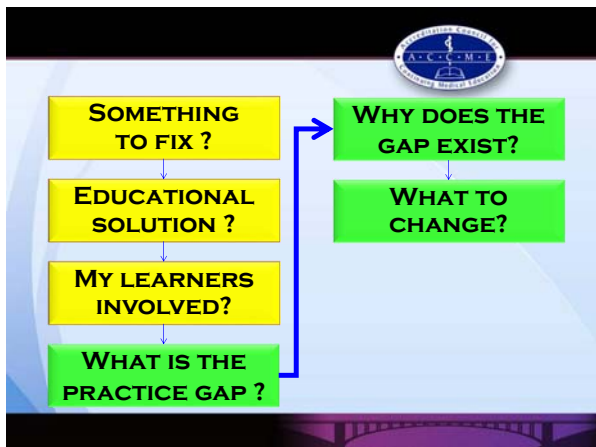
---

---

---

---

---



---

---

---

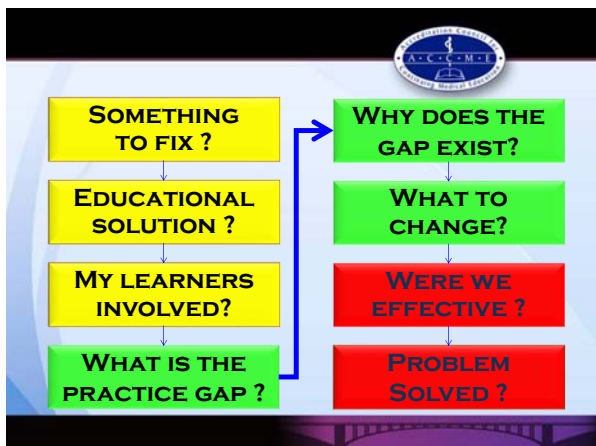
---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---


---

---

---

---

**CME AS A STRATEGIC ASSET**



“Rigorous measurement of the magnitude of particular problem” **Professional Practice Gaps (C2)**

“Meticulous determination of all of the causes of the problem” **Needs that Underlie Practice Gaps (C2)**

“Focused ...interventions targeted to the most important causes” **Designed to Change Comp, Perf or PO's (C3)**

“Careful attention ...to sustaining effective interventions.” **Analyze for Change (C11)  
Change Practice (C16)  
QI Systems (C21)**

---

---

---

---

---

---

---

---



**FACTORS IN PLAY ....**

---

---

---

---


---

---

---

---

**INTERVENING VARIABLES...**



Number of Intervening Variables

All Adults in the US

Variation for Colonoscopy

Readmission Rates

Hand washing

\* My personal approach to...

**Elements of the system that need to be engaged**

---

---

---

---

---

---

---

---





“CME changes things one person at a time”

Murray Kopelow, 2105

---

---

---


---

---

---

---

---



Probability of a Behavior

$(\text{Habit} + \text{Intention}) \times (\text{Motivation} \times \text{Facilitating Conditions})$

*Triandis' Theory of Social Behavior* in Winzenberg, T and NHigginbotham, BMC Education, 14 December 2003

---

---

---


---

---

---

---

---



Probability of a Behavior

$(\text{Habit} + \text{Intention}) \times (\text{Motivation} \times \text{Facilitating Conditions})$

*Triandis' Theory of Social Behavior* in Winzenberg, T and NHigginbotham, BMC Education, 14 December 2003

---

---

---

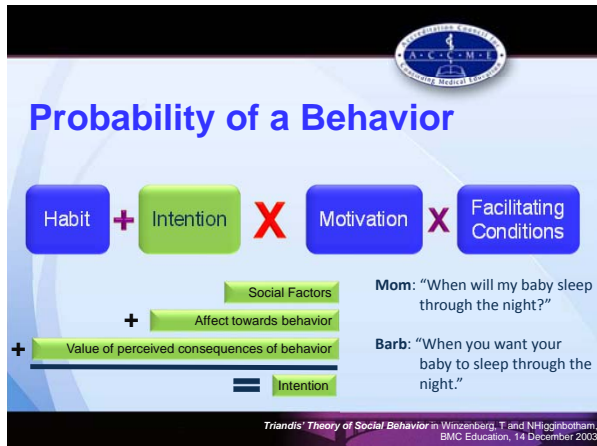
---

---

---

---

---




---

---

---

---

---

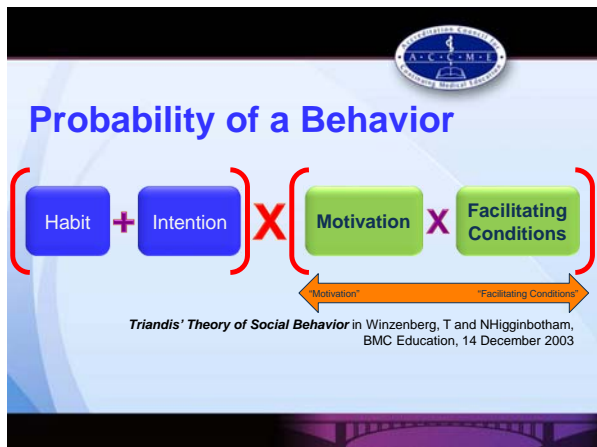
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

**WILL THIS ALWAYS WORK TO CHANGE PRACTICE ?**

---

---

---

---

---

---

---

---

---

---



---

---

---

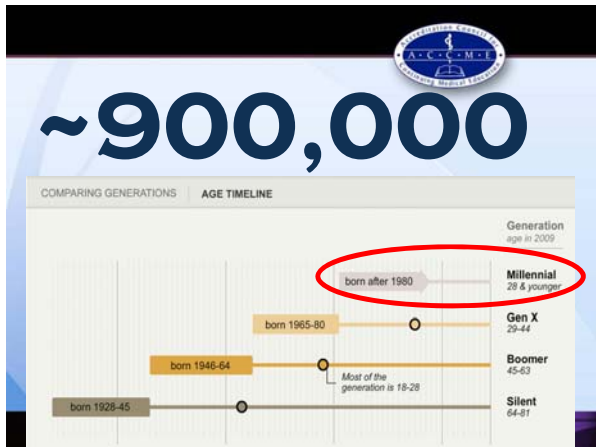
---

---

---

---

---



---

---

---

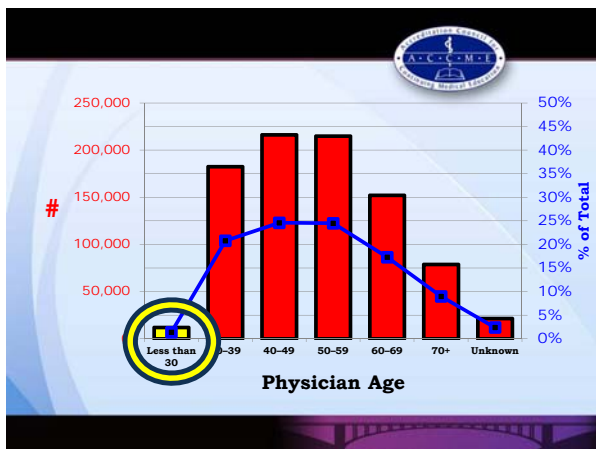
---

---

---

---

---



---

---

---

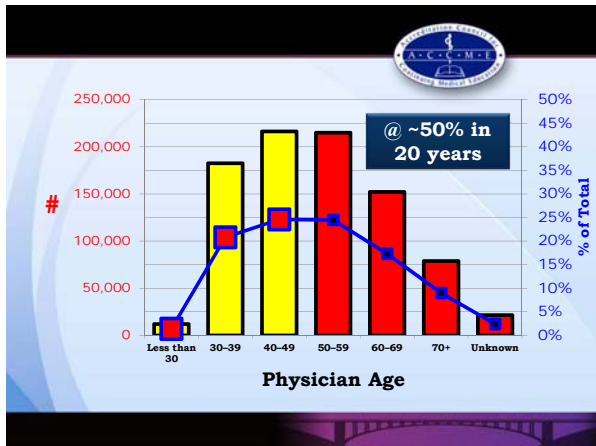
---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

### DIGITAL NATIVE

“ It is now clear that as a result of this ubiquitous environment and the sheer volume of their interaction with it, **today’s students think and process information fundamentally differently from their predecessors.**”

Marc Pensky, 2001

---

---

---

---

---

---

---

---

---

---

“ To ensure quality [CPD] opportunities, ... [We] require that accredited CPD providers approve **group learning activities**”

*A CME/CPD ACCREDITOR*

---

---

---

---

---

---

---

---

---

---

“ To ensure quality [CPD] opportunities, ... [We] require that accredited CPD providers approve **group learning activities** ” A CME/CPD ACCREDITOR

**THE POLARIZED CROWD**      **TIGHT CROWD**

**BROADCAST NETWORK**      **SUPPORT NETWORK**

**How are we going to ‘approve’ this ?**

---

---

---

---

---

---

---

---

# I keep saying....

**People who learned like this.....**

**...should be careful when they design systems for people who learn like this**

---

---

---

---

---

---

---

---

ACCMED

“SUBJECT”

A COMPETENCY

K vs. C vs. P

**IN 2014**  
My  
PROFESSIONAL  
PRACTICE GAP

---

---

---

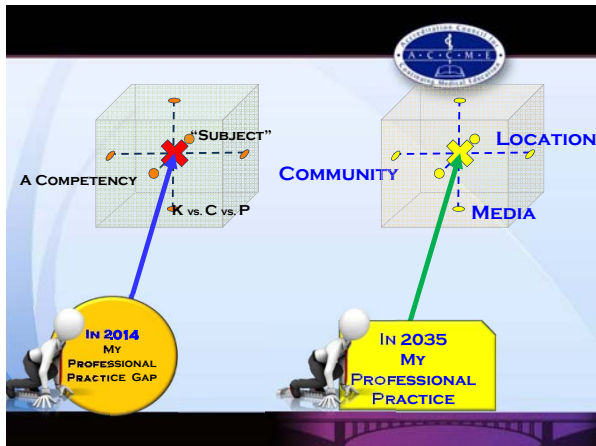
---

---

---

---

---



---

---

---

---

---

---

---

---



**“...reforming CME is less a knowledge problem than a political problem of changing the systems of which CME is an important constituent element.”**

Cervero and Gaines, Effectiveness of Continuing Medical Education: Updated Synthesis of Systematic Reviews, 2014

---

---

---

---

---

---

---

---



**IN THE FUTURE ...**

**Think and Say ...**

- “ Yes ” – we can help with that....
- “ I have an educational solution...”
- “ CME can be a strategic asset ...”
- “ We are part of the solution ...”
- “ CME **is** effective in changing practice...”

---

---

---

---

---

---

---

---



**“Accredited Continuing  
Medical Education is  
perfectly positioned to  
step up and lead.”**

---

---

---

---

---

---

---

---



**You are  
perfectly positioned to  
step up and lead**

---

---

---

---

---

---

---

---



**You are  
perfectly positioned to  
step up and lead  
... and don't ever let  
anyone tell you differently**

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---