Society for ACADEMIC
Continuing Medical Education

LEADERSHIP • SCHOLARSHIP • COLLABORATION

Celebrating SACME's

40TH
ANNIVERSARY

2017 ANNUAL CONFERENCE
Cutting Edge CPD/CME:
US and Beyond US Borders
May 16-20, 2017

Renowned Faculty
Best Practices and Research in CME
Networking with Colleagues
Hands On Workshops

This activity has been approved for AMA PRA Category 1 credit ™

Welcome Message from the President

Dear Colleagues,

I would like to cordially welcome you to the 2017 Annual Meeting of the Society for Academic CME (SACME). This landmark 40th Anniversary SACME Meeting truly establishes a new benchmark! The Program is spectacular and the sessions focus on the latest advances in the exciting field of Continuing Professional Development. There are also ample opportunities for exchange of ideas and networking.

The Meeting Program includes many new features. Preeminent national and international leaders from a variety of different backgrounds have been invited to deliver formal presentations and participate in open discussions. The Barbara Barnes Keynote Address will be delivered by Dr. George Thibault, President of the Josiah Macy Jr. Foundation, and the Opening Keynote Address will be delivered by Dr. James Bagian, Professor of Engineering Practice, Industrial and Operations Engineering at the University of Michigan. The Presidential Panel will focus on the role of key stakeholders in CPD/CME, and will include Dr. John Combes, Immediate Past Chief Medical Officer and Senior Vice President at the American Hospital Association; Dr. Julie Freischlag, Chief Executive Officer, Wake Forest Baptist Medical Center; Dr. Lewis Sandy, Senior Vice President for Clinical Advancement at UnitedHealth Group; and Dr. Luke Sato, Senior Vice President and Chief Medical Officer of CRICO (the liability insurer for the Harvard hospitals). Dr. Craig Campbell, Director of Continuing Professional Development at the Royal College of Physicians and Surgeons of Canada, will deliver a Special Presentation on the Top 5 Advances in CME/CPD. There will also be a formal Presidential Address.

A Plenary Presentation on "Education Around the World" will be delivered by Pamela Paulk, MSW, MBA, President of John Hopkins Medicine International. This will be followed by an exciting Panel on Bridging CME/CPD through National and International Health Education will include Dr. Todd Dorman, Past President of SACME, and Associate Dean for Continuing Medical Education at Johns Hopkins University School of Medicine; Dr. David Davis, Past President of SACME and Senior Consultant to the Association of American Medical Colleges; Dr. Don Moore, Director of the Division of Continuing Medical Education and Director of Evaluation and Education at Vanderbilt University; and Dr. Mary G. Turco, EdD, Immediate Past President of SACME and Consultant, Learning and Professional Development at the Geisel School of Medicine at Dartmouth. In addition, Dr. Graham McMahon, President and CEO of ACCME and Dr. Craig Campbell will present updates from US and Canadian Accreditors. Dr. David Price, Senior Vice President, American Board of Medical Specialties (ABMS) Research and Education Foundation will deliver a presentation on ABMS/SACME Collaborations for Systems-Based Practice and CPD Research.

The Abstract-driven scientific presentations will highlight cutting-edge scholarship in the field of CME/CPD, and the Workshop on Leadership to be conducted by Drs. Moss Blachman and Barbara Barnes will address a host of important topics. Special tributes are also being planned for two distinguished members of our community, Dr. Alex Djuricich and Dr. Karen Mann, who we lost over the past year.

I would like to express my sincere gratitude to Annette Donawa, PhD, Chair of the Program Committee, Members of the Program Committee and many SACME leaders who have worked tirelessly to make this a truly remarkable meeting. The exceptional efforts of Jim Ranieri in SACME's Executive Secretariat deserve special recognition. We encourage you to take full advantage of this stellar educational opportunity and look forward to receiving your feedback regarding the Program's continued evolution. I look forward to spending time with you in Scottsdale!

Ajit K. Sachdeva, MD, FRCSC, FACS
President, Society for Academic CME
Director, Division of Education, American College of Surgeons
Adjunct Professor of Surgery
Feinberg School of Medicine, Northwestern University

Welcome Message from the Chair, Program Committee

Welcome to SACME's 2017 Annual Conference: **Cutting Edge CPD/CME: US and Beyond US Borders.**

On behalf of the Program Committee, I am delighted you are attending our annual conference. The SACME membership is celebrating one of many "firsts" at this conference. This is SACME's first annual conference; the first SACME conference to register over 200 attendees; the first conference to receive over 70 research abstract submissions; the first conference to offer live streaming webcasts of plenary presentations to attendees around the globe; and the first conference to induct Fellows into the newly-formed SACME Academy.

There is something for everyone at this milestone conference. Sessions are designed to be interactive and engaging, so be sure to capitalize on the opportunities to chat with well-known international and national presenters. You will find the skill-building workshops referred to as "Fundamentals of Medical Education Scholarship (FuMES)" to be content-driven with the goal of building research capacity within academic medical institutions around the world.

If you are new to SACME, please consider joining one of the open committee meetings, such as Scholarship, Communications, Membership, and Program Committee meetings. Please be sure to visit the poster sessions and exhibit area as you network and connect with colleagues.

I would like to thank the Program Committee members for helping to design a meaningful and memorable annual conference. I am also most grateful to the Research Committee for reviewing numerous abstracts and for working within the constraints of the schedule.

It has been my pleasure to serve as the Chair of the Program Committee, and I look forward to working to create another stellar Program for the 2018 Annual Conference in San Antonio, TX.

Annette Mallory Donawa, PhD
Program Committee Chair,
Society for Academic CME

Assistant Dean, Office of Continuing Medical Education
Johns Hopkins University

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This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the University of New Mexico Office of Continuing Medical Education and the Society for Academic Continuing Medical Education. The University of New Mexico Office of Continuing Medical Education is accredited by the ACCME to provide continuing medical education for physicians.

The Office of Continuing Medical Education designates this live/enduring material/journal-based CME activity for a maximum of 24 *AMA PRA Category 1 Credit(s)™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

SCHEDULE OF EVENTS

TUESDAY, MAY 16, 2017

12:00 pm – 3:30 pm	Registration open (Peace Pipe patio)
12:00 pm – 7:00 pm	Exhibitor Set-up – (Cholla)

1:30 pm – 3:30 pm   SACME Skill Building Pre-Conference Sessions

1:30 pm – 3:30 pm **Fundamentals of Medical Education Scholarship: Tips & Tricks On Improving Scholarly Writing** (Town Hall)
Savithiri Ratnapalan, MBBS, MRCP, FAAP, FRCPC, MEd, and Curtis A. Olson, PhD

1:30 pm – 2:30 pm **Fundamentals of Medical Education Scholarship: How to Present Your Poster** (Ironwood)
Mary G. Turco, EdD and Betsy Williams, PhD, MPH

2:30 pm – 3:30 pm **Fundamentals of Medical Education Scholarship: How to Review Abstracts and Manuscripts** (Ironwood)
Curtis A. Olson, PhD, Mary G. Turco, EdD, and Betsy Williams, PhD, MPH

3:00 pm – 3:45 pm *Regional Representatives Meeting* (closed - Peace Pipe)

4:00 pm – 6:00 pm *Board of Directors Meeting and Dinner* (closed - Peace Pipe)

6:00 pm – 7:00 pm *Strategic Affairs Committee Meeting* (closed - Peace Pipe)

7:00 pm – 9:00 pm *Finance Committee Meeting* (closed - Peace Pipe)

WEDNESDAY, MAY 17, 2017

7:00 am – 12:00 pm	Registration open (Peace Pipe patio)
7:00 am – 8:00 am	*Breakfast, Visit Exhibits* (Cholla)

8:00 am – 12:00 pm SACME General Programming (Sunshine)

8:00 am – 8:15 am *Welcoming Remarks* by *SACME President*
Ajit K. Sachdeva, MD, FRCSC, FACS, President, Society for Academic CME, Director, Division of Education, American College of Surgeons

8:15 am – 8:30 am *Program Overview* by *SACME Program Chair*
Annette Mallory Donawa, PhD, Assistant Dean, Continuing Medical Education, Johns Hopkins University School of Medicine

8:30 am – 9:30 am *Keynote Address: Patient Safety - Getting Sustainable Improvement*
Moderator: Ajit K. Sachdeva, MD, FRCSC, FACS

James P. Bagian, MD, Professor of Engineering Practice, Industrial and Operations Engineering, Center for Healthcare Engineering and Patient Safety, University of Michigan

9:30 am – 9:50 am	***Break; Visit Exhibits*** (Cholla)
9:50 am – 11:00 am	***Presidential Panel: Role of Stakeholders in CPD/CME*** **Moderator: Ajit K. Sachdeva, MD, FRCSC, FACS** *Panelists*:

John R. Combes, MD, Past Chief Medical Officer and Senior Vice President, Center for Healthcare Governance, American Hospital Association

Julie A. Freischlag, MD, FACS, Chief Executive Officer, Wake Forest Baptist Medical Center

Lewis G. Sandy, MD, FACP, Senior Vice President, Clinical Advancement, UnitedHealth Group

Luke Sato, MD, Chief Medical Officer and Senior Vice President CRICO/Risk Management Foundation of the Harvard Medical Institutions, Assistant Professor of Medicine, Harvard Medical School

11:00 am – 11:30 am	***Presidential Panel Engagement and Q & A***
11:30 am – 12:30 pm	***Lunch*** (Sonoran Terrace)
	Key Stakeholder Lunch with Board of Directors (Closed – Town Hall)
	Visit Exhibits and Posters (Cholla)
12:30 pm – 1:00 pm	***Concurrent Moderated Poster Presentations – Session 1***

TOPIC 1: Curriculum, International (Sunshine)
Moderator: Betsy Williams, PhD, MPH

Curricula to Improve Education and Training of Emergency Providers Caring for Psychiatric Patients
Leslie Zun, MD, MBA

Transition To Practice Curriculum: The Unexplored Role Of CPD
Larissa Husarewych, MIR

Saudi Health Colleges Graduate Enhancement Program
Sami Ayed, MBBS

Designing Medical Education Programs For Chinese Physicians
Annette Mallory Donawa, PhD

Cutting Edge CME/CPD Accreditation, Certification and Licensure In The US And Other Countries
Mindi McKenna, PhD, MBA

TOPIC 2: Faculty Development (North Peace Pipe)
Moderator: Mary G. Turco, EdD

Enculturation Of Junior Faculty Through A Pilot Faculty Development Program
Adria Boucharel, MD

Creating a Culture of Feedback: Use of informal feedback sessions with pediatric residents to increase quality and quantity of feedback for faculty (Work in Progress)
Phillip Byrne, EdD

From Compliance to Education: Shifting Perceptions Of CME
Karen Mariano, MPH, CHES

12:30 pm – 1:00 pm	***Developing Activity Directors and Planners For IPE: Results Of A "CME/CE 101 Series" At An Academic Medical Center*** **Rob Armstrong Martin, MBA, CHCP**
	Improving Faculty Education through Hybrid Learning **Elizabeth Ott, MLIS, Jonathan Snyder, MBA**
	Continuing Professional Development Programs for Volunteer Medical School Faculty in New Mexico **William F. Rayburn, MD**

1:00 pm – 3:30 pm **Scholarship Workshop: A Scholarly Approach to CPD: Set Goals, Prepare, Approach Systematically, Share Learning** (Sunshine)

(Pre-reading: Olson C, On the need for scholarly practitioners in CPD, *JCEHP*, 31(3): 137-139, 2011))

1:00 pm – 1:05 pm	***Welcome, Overview of Workshop*** **Betsy Williams, PhD, MPH**
1:05 pm – 1:25 pm	***Plenary: What is Scholarly CPD? A Scholarly Practitioner, Office, Approach?*** **Don Moore, PhD**
1:25 pm – 1:35 pm	***Discussion and Response to Plenary*** **Curtis A. Olson, PhD**
1:35 pm – 1:55 pm	***Panel Discussion: Three Practitioners with a Scholarly Approach*** **Facilitator: Betsy Williams, PhD, MP**
	Panelists:
	Bruce A. Nitsche, MD, The Lewis and John Dare Center, Medical Director of Continuing Medical Education, Director of ABMS Portfolio Program at Virginia Mason Health System
	Mila Kostic, CHCP, FACEHP, Director of Continuing Medical Education, Perelman School of Medicine at the University of Pennsylvania, Co-Director of Continuing Interprofessional Education, Penn Medicine
	David Wiljer, PhD, Executive Director – Education, Technology & Innovation, University Health Network, Centre for Addiction and Mental Health, University of Toronto
1:55 pm – 2:10 pm	***Panel Engagement and Q & A*** **Facilitator: Betsy Williams, PhD, MPH**
2:10 pm – 2:20 pm	***Break; Transition to Two Breakouts*** Description: Workshop Breakouts will help participants apply principles of a scholarly approach (e.g., set goals, prepare, approach systematically, share learning) to their own activities. Participants will consider how to incorporate a scholarly approach in carrying out their work activities and will develop next steps for doing so. Individual reflection and discussions in small and large groups are used to develop and share ideas.
2:20 pm – 3:30 pm	**Breakout #1: Scholarly Performance Improvement/PI-CME/MOC Part IV** (Peace Pipe) **Facilitator: R. Van Harrison, PhD** Professor of Learning Health Sciences, The University of Michigan Medical School
	Co-Facilitators:
	Nancy Davis, PhD, Assistant Dean, Faculty Affairs and Development, The University of Kansas Medical School

Bruce A. Nitsche, MD, The Lewis and John Dare Center, Medical Director of Continuing Medical Education, Director of ABMS Portfolio Program at Virginia Mason Health System

David W. Price, PhD, Senior Vice President, ABMS Research and Education Foundation

Breakout 2: Scholarly Offices, Live Activities, RSSs, Enduring Materials (Sunshine)
Facilitator: Mary G. Turco, EdD
Co-Facilitators: Dave Davis, MD, Don Moore, PhD, Curtis A. Olson, PhD, and Betsy Williams, PhD, MPH

3:30 pm – 3:45 pm   *Break; Visit Exhibits and Posters* (Cholla)

3:45 pm – 5:15 pm   Concurrent Sessions

3:45 pm – 5:15 pm   *Session 1: Leadership* (Part 1) (North Peace Pipe)

Facilitators:

Barbara Barnes, MD, MS, Associate Vice Chancellor, Continuing Education and Industry Relationships, University of Pittsburgh; Vice President, Sponsored Programs, Research Support, and CME, and Director Health Professional Education Service Line, UPMC

Morris J. Blachman, PhD, FACEHP, Associate Dean, Continuous Professional Development & Strategic Affairs and Clinical Professor, Department of Neuropsychiatry and Behavioral Science, University of South Carolina School of Medicine

Session 2: Best Practice and Innovations (Sunshine)
Moderator: Betsy Williams, PhD, MPH

TOPIC 3: Collaboration, Outcomes

Collaborating To Implement & Sustain MOC Part IV Portfolio Program Through The American Board Of Medical Specialties
Leticia Z. Bresnahan, MBA, CHCP

MOC Multispecialty Portfolio Program: Opportunity To Integrate Continuing Professional Development (CPD) And Graduate Medical Education (GME)
Nancy Davis, PhD

Advancing Alignment Of CME With Maintenance Of Certification (MOC)
Susie Flynn, BS

Coalescence Of Physician Learning Program (PLP) With Lifelong Learning: A Symbiotic Partnership To Align Physicians' Learning For Quality In Alberta
Khurram Jahangir, MBChB

Hands-on Ultrasound Education: A Collaborative Model For The Rural CPD Landscape
Kathryn Young, MA

Economic Outcomes of An Intervention to Improve Early Testing and Treatment of HIV;
Rob Lowney, MBA, Dana Ravyn, PhD, MPH

Initial Results Of A Multi-faceted CME Intervention To Reduce Unnecessary Blood Transfusions
David Musick, PhD

Live Streaming of Grand Rounds: An Educational Delivery Model Between The University of New Mexico And Its Statewide Military Treatment Facilities (Work In Progress)
James Cox, MD

Session 3: Joint Accreditation from a Providers' Experience (South Peace Pipe)
Leticia Z. Bresnahan, MBA, CHCP, Annette Mallory Donawa, PhD

Facilitator: Mila Kostic, CHCP, FACEHP, Director of Continuing Medical Education, Perelman School of Medicine at the University of Pennsylvania, Co-Director of Interprofessional Continuing Education, Penn Medicine

Dion Andrew Richetti
Vice President of Accreditation and Recognition
Accreditation Council for Continuing Medical Education

Sally C. O'Neill, PhD
Associate Vice Provost
Creighton University Health Sciences

5:15 pm – 5:45 pm   *Moderated Poster Presentations – Session 2* (Sunshine)

<u>*TOPIC 4: Disease Specific Interventions and Collaboration and Feedback*</u>

Addressing the Heroin Epidemic
Karen Busse, MS, CCMEC

TPMG Opioid Initiative
Lisa O. Roberts, MAEd

Outcome Measurement And Feedback From Delivering Programmes Online In 7 Specialties In Cardiology
Celine Carrera, MBA, PMP

Peer Observation of Teaching and Feedback in Continuing Medical Education: A Work in Progress
Lori Newman, MEd

Collaborative Between Two CPD Offices For Accreditation of CME Programs Using A Peer-Review Buddy Process
Khurram Jahangir, MBChB

6:15 pm – 8:15 pm   Reception: SACME's 40th Anniversary Celebration and Book Signing
Location: JW Marriott Mummy Mountain: Wild-Wild West Theme

THURSDAY, MAY 18, 2017

7:00 am – 12:00 pm   Registration open

7:00 am – 8:00 am   *Breakfast; Visit Exhibits and Posters* (Cholla)

7:15 am – 8:00 am   *Communications Committee Meeting* (Open - North Peace Pipe)

8:00 am – 12:00 pm SACME General Programming (Sunshine)

8:00 am – 9:00 am	**SACME Presidential Address: The Three Pillars of Transformational Leadership in Continuing Professional Development: Leadership in CME/CPD**
	Introduction: William F. Rayburn, MD, President-Elect, Society for Academic CME, Associate Dean, Continuing Medical Education and Professional Development, Distinguished Professor and Emeritus Chair, Obstetrics and Gynecology, The University of New Mexico
	Ajit K. Sachdeva, MD, FRCSC, FACS, President, Society for Academic CME, Director, Division of Education, American College of Surgeons
9:00 am – 9:45 am	**Research in CME (RICME) Presentations from accepted abstracts** *(Sunshine)*
	Educational Technologies for Physician Continuous Professional Development: A Nationwide Survey **David Cook, MD, MHPE**
	Integrating Patient Safety Improvement with Simulation-based Education and Research: Innovative Initiatives at Dartmouth-Hitchcock's Patient Safety Training Center **Mary G. Turco, EdD**
	Validation of a Measure of Teaching Effectiveness in Psychiatry Continuing Medical Education **Christopher Wittich, MD**
9:45 am – 10:00 am	**Break; Visit Exhibits and Posters** (Cholla)
10:00 am – 11:00 am	**Education Around the World** **Pamela Paulk, MSW, MBA,** President of Johns Hopkins Medicine International
11:00 am – 12:00 pm	**Panel Discussion: Bridging CME/CPD to National & International Health Education** **Moderator: Annette Mallory Donawa, PhD**
	Panelists:
	Todd Dorman, MD, FCCM, President of the Society for Critical Care Medicine, Senior Associate Dean for Education Coordination, Associate Dean Continuing Medical Education, Johns Hopkins University School of Medicine
	Dave Davis, MD, Professor Emeritus, University of Toronto, Canada; Senior Consultant and Visiting Professor, Mohammed Bin Rashid University, Dubai, UAE
	Don Moore, PhD, Director, Division of Continuing Medical Education, Director of Evaluation and Education, Vanderbilt University School of Medicine
	Mary G. Turco, EdD, Consultant, Learning and Professional Development, Assistant Professor of Medicine, The Geisel School of Medicine at Dartmouth
12:00 pm – 1:00 pm	**Lunch: Meet Your Regional SACME Representatives** (Sonoran Terrace)
	Visit Exhibits and Posters (Cholla)
	Virtual Journal Club (VJC) Editorial Board Meeting (Closed/Lunch-South Peace Pipe)

1:00 pm – 2:00 pm   Concurrent Sessions

1:00 pm – 2:00 pm	**Session 1: Leadership** (Part 2) (North Peace Pipe)

Session 2: **Research in CME (RICME) Presentations from accepted abstracts** (Sunshine)

Using Population Health Outcomes Data To Increase Immunization Rates: Two Providers Using the Same Project Design
Susan Tyler, MEd, CMP, CHCP, FACEHP

The development of a competency-based framework for the Medical Psychiatry Collaborative Care Competency Program (MP3C)
David Wiljer, PhD

The Complexity of Communicative Networks: A Reframing Of Physician Communication
Laura Nimmon, PhD

A Sociohistorical Exploration of Continuing Professional Development in Chronic Disease Management – A Critical Discourse Analysis
Rene Wong, MD, MMEd, PhDc

2:00 pm – 3:00 pm	*SACME Updates*

SACME Book Project: *Continuing Professional Development in Medicine and Health Care: Better Education, Better Patient Outcomes*
William F. Rayburn, MD

2:00 pm – 3:00 pm	*Journal of Continuing Education in the Health Professions (JCEHP)*

Curtis A. Olson, PhD

Virtual Journal Club
Mila Kostic, CHCP, FACEHP

3:00 pm – 3:20 pm	*Break; Visit Exhibits and Posters* (Cholla)
3:20 pm – 4:45 pm	*Research in CME (RICME) Presentations from accepted abstracts* (Sunshine)

Initial Results of a Multi-faceted CME Intervention to Reduce Unnecessary Neuroimaging Studies
David Musick, PhD

Value of Academic Detailing In Addition to Adaptive CPD Workshops in Stimulating Provider Behavior Change in Managing Chronic Pain (Work In Progress)
Robert Rhyne, MD

Primary Care Physicians' Perceptions of Part IV Maintenance of Certification as a Professional Responsibility
Christopher Stephenson, MD

Associations between Teaching Effectiveness and Participant Reflection in Continuing Medical Education
Christopher Wittich, MD

The Impact of Project Echo on Participant and Patient Outcomes: A Systematic Review
Sanjeev Sockalingam, MD, MHPE, FRCPC

4:45 pm – 5:20 pm	**Tribute to Alex Djuricich, MD and Karen V. Mann, PhD**

Moderator: Ajit K. Sachdeva, MD, FRCSC, FACS
In tribute to Dr. Djuricich: Drs. Mary Turco and Annette Mallory Donawa, and Stacey Samuels
In tribute to Dr. Mann: Drs. Dave Davis, Craig Campbell and Joan Sargeant

5:20 pm – 6:00 pm   *Program Committee Meeting* (Open - North Peace Pipe)

5:30 pm – 6:30 pm   **Moderated Poster Presentations – Session 3** (Sunshine & North Peace Pipe)

TOPIC 5: Online/Simulation
Moderator: Mary G. Turco, EdD

Collaboration Between CME and the Department of Environmental Health and Safety Leads to Innovative Online Approach
Jeffrey Bergen, MSN, RN, Fozia Ferozali, EdD, Megan K. Swartz, Eram Nasser

Optimizing Virtual Patient Simulation to Optimize Actual Patient Care
Cayla Cason, MHA

Simulation to Improve Teamwork in Acute Stroke Care
Stacy Sattovia, MD, MBA, FACP

Using Rapid Qualitative Analysis to Support The Development And Implementation of a Virtual World Training for Primary Care Providers on Caring for Veterans With Post-traumatic Stress Disorder Symptoms
Marianna Shershneva, MD, PhD

Advances in Treatment of Moderate to Sever Psoriasis: A Serious Gaming Approach
Marianna Shershneva, MD, PhD

Interprofessional Communication with AIDET and HCAHPS in Simulation
Samantha Singh, MSN, MSW

Using Simulation to Teach Injection Technique for Facial Rejuvenation
Annette Schwind, MS, Audrie Tornow, CHCP

A Phenomenological Study of the Self-directed Learning (SDL) Habits of Rural Physicians in a Digital Age
Lisa Fleet, MA, DipAdEd

Working Smarter
Sheila Newby, MBA

Incorporating Simulation into CME Courses
Mary Stevens

Technology Resolved Delay in Producing CME Records
Trisha Veenema

TOPIC 6: Outcomes, QI/PI, Self-Assessment
Moderator: Betsy Williams, PhD, MPH

What Price Continuing Medical Education (CME) Outcome Follow-up?
Jane Mihelic, MA

Guess Not: Confidence Measurement as a Means of Validating Knowledge Assessment
Denise LaTemple, PhD

Keeping With the Times: Offering and Tracking Credit to Address Regulatory Mandates
Alisa Nagler, JD, MA, EdD

Your Activity Improved Practice Behaviors. But Do You Know Why? Using Predictive Modeling to Inform Outcomes
Jamie Reiter, PhD

5:30 pm – 6:30 pm   **Addressing Physician Burnout through CPD: Successes from Workshops on Mindfulness**
Gurveen Grewal, MPH

Social Intelligence In CPD
Savithiri Ratnapalan, MBBS, MRCP, FAAP, FRCPC, MEd

Evaluation of Maintenance of Certification Performance Improvement Projects Based on Patient Satisfaction Surveys
Vallerie Kolasinski, MPH, CHES, Mary Choi, MPH

Finding the Intersection Between Quality Improvement and Continuing Medical Education Using a Mind Map: A Case Report
Cynthia Pineda, MD

The Value of a QI and CME Collaboration in The Portfolio Program
Emma Trucks, MPH

Three-factor Competency Self-Assessment: Annenberg Center Pilot Project
Charles Willis, MBA

FRIDAY, MAY 19, 2017

7:30 am – 12:00 pm   Registration open

7:00 am – 8:00 am   **Breakfast**

7:00 am – 8:00 am   **Research Committee Meeting** (Open - North Peace Pipe)

8:00 am – 12:00 pm SACME General Programming

8:00 am – 9:00 am   **Barbara Barnes Plenary: Continuing Professional Development in a Changing Health Care and Educational World**
Moderator: Ajit K. Sachdeva, MD, FRCSC, FACS

George E. Thibault, MD, President, Josiah Macy Jr. Foundation

9:00 am – 9:30 am   **Top Five Advances in CME/CPD**
Moderator: Ajit K. Sachdeva, MD, FRCSC, FACS

Craig Campbell, MD, Director, Continuing Professional Development, Office of Specialty Education, Royal College of Physicians and Surgeons of Canada

9:30 am – 9:50 am   **Break; Visit Exhibits and Posters** (Cholla)

9:50 am – 11:00 am   **Best Practices** (Sunshine)

Transformational Learning for Care of Chronic Lung Disease Using Interprofessional Pedagogies
Leticia Z. Bresnahan, MBA, CHCP

Morbidity and Mortality Conference: A Time for Redesign
William F. Rayburn, MD

Establishing a New Academic CME Entity at the University of Alberta: Envisioning a New Lifelong Learning System by Realizing Synergy & Creating Collaborations to Enhance Physician Learning
Khurram Jahangir, MBChB

Optimal Management of Co morbidities in Patients with Rheumatoid Arthritis: A Flipped Classroom Approach
Marianna Shershneva, MD, PhD

Building Mental Health Capacity in Primary Care: An Evaluation of an ECHO (Extension of Community Health Outcomes) Mental Health Provincial Pilot
Sanjeev Sockalingam, MD, MHPE, FRCPC

Relative Efficacy of Various Cognitive Process Foci and Instructional Methodologies in a PI-CME Activity (work in process)
Phillip Byrne, EdD

Using PI Principles to Execute a Performance Improvement CME Activity at Cedars-Sinai
Marta Betancourt, MSc

11:00 am – 12:00 pm	*Launch of the SACME Academy of Fellows and Recognition of Past Presidents* (Open Meeting- Sunshine) **Ajit K. Sachdeva, MD, FRCSC, FACS,** President, Society for Academic CME, Director, Division of Education, American College of Surgeons
12:00 pm – 1:00 pm	*Lunch: SACME Business Meeting* (Open Meeting – Sunshine)
1:00 pm – 3:00 pm	*Best Practices From Accepted Abstracts* (Sunshine)

Application of Rapid Product Development Approach in Continuous Professional Development
Jeannie Poterucha Carter

CPD in The Context of the Clinical Learning Environment: Application of the Service Line Concept
Barbara Barnes, MD, MS

Quality over Quantity: Let's Make Self-Assessment Credit Meaningfu
Alisa Nagler, JD, MA, EdD, Richard King, PhD

Continuing Professional Development (CPD) and Self-directed Learning (SDL) in a Digital Age: Implications for Health Professionals and CPD Providers
Lisa Fleet, MA, DipAdEd

Faculty Development "Small Bites" in Regularly Scheduled Departmental Meetings
Nancy Davis, PhD

Don't Forget the Map; Follow Directions to Triangulate Learning Needs, Methods, and Outcomes When Designing a Faculty Development Program
Paul Hendry, MD, MSc

Teach for UCSF Certificate Program: Encouraging Educational Skills Development in Faculty and Trainees
Victoria Ruddick

Getting Ready to Coach: A Novel Approach to Faculty Development for Medical Student Coaching Programs
Sandrijn van Schaik, MD, PhD

3:00 pm – 3:20 pm	*Break; Visit Exhibits and Posters* (Cholla)

3:20 pm – 4:15 pm	*Updates from ACCME and Canadian Accreditors* **Moderator: Annette Mallory Donawa, PhD**
	Graham McMahon, MD, President and CEO, Accreditation Council for Continuing Medical Education (ACCME)
	Craig Campbell, MD, Director, Continuing Professional Development, Office of Specialty Education, Royal College of Physicians and Surgeons of Canada
4:15 pm – 6:00 pm	*Update on 2015-16 Manning Award Project, Announcement of 2017 Manning Awards, Fahad Alam Manning Project Update*
	RICME and Young Investigator Award Presentations
	First Davis Mentor Fellowship Presentation **Betsy Williams, PhD, MPH**
6:15 pm – 6:45 pm	**Sunset Yoga/Meditation with Edeline Mitton** (Garden)
7:00 pm	**Free Time: Night on the Town, Old Town Scottsdale (shopping and dinner)**

SATURDAY, MAY 20, 2017

7:00 am – 8:00 am	*Breakfast; Visit Exhibits; View Posters* (Cholla)
7:15 am – 8:00 am	*Membership Committee Meeting* (Open - North Peace Pipe)
8:00 am – 12:00 pm	**SACME General Programming**
8:00 am – 9:00 am	*Innovative Assessments with ABMS Boards* **Moderator: Annette Mallory Donawa, PhD**
	David Swanson, MD, Vice President of Academic Programs, American Board of Medical Specialties
9:00 am – 10:00 am	**ABMS/SACME Collaborations for Systems-Based Practice and CPD Research** **Annette Mallory Donawa, PhD, Moderator**
	David Price, PhD, Senior Vice President, ABMS Research and Education Foundation
10:00 am – 10:15 am	*Break*
10:15 am – 11:00 am	**Committee Chair Updates**
11:00 am – 12:00 pm	*Presidential Closing and Conference Summary* **Ajit K. Sachdeva, MD, FRCSC, FACS**
	Program Chair Closing **Annette Mallory Donawa, PhD**
12:30 pm – 3:00 pm	*SACME Board Lunch/Meeting (Closed/Peace Pipe)*

Biosketches

George E. Thibault, MD

Bachrach ©

George E. Thibault, MD became the seventh president of the Josiah Macy Jr. Foundation in January 2008. Immediately prior to that, he served as Vice President of Clinical Affairs at Partners Healthcare System in Boston and Director of the Academy at Harvard Medical School (HMS). He was the first Daniel D. Federman Professor of Medicine and Medical Education at HMS and is now the Federman Professor, Emeritus. Dr. Thibault previously served as Chief Medical Officer at Brigham and Women's Hospital and as Chief of Medicine at the Harvard affiliated Brockton/West Roxbury VA Hospital. He was Associate Chief of Medicine and Director of the Internal Medical Residency Program at the Massachusetts General Hospital (MGH). At the MGH he also served as Director of the Medical ICU and the Founding Director of the Medical Practice Evaluation Unit. He was the Founding Director of the Academy at HMS, which was created to recognize outstanding teachers and to promote innovations in medical education. Dr. Thibault is Chairman of the Board of the MGH Institute of Health Professions, and the New York Academy of Medicine, and he serves on the Boards of the New York Academy of Sciences, The Arnold P. Gold Foundation and the Institute on Medicine as a Profession. He served on the President's White House Fellows Commission and is a member of the National Academy of Medicine. Dr. Thibault graduated from Georgetown University and from Harvard Medical School. He completed his internship and residency in Medicine and fellowship in Cardiology at Massachusetts General Hospital (MGH). He also trained in Cardiology at the National Heart and Lung Institute in Bethesda and at Guys Hospital in London, and served as Chief Resident in Medicine at MGH.

James P. Bagian, MD

Dr. James P. Bagian, MD, has extensive experience in the fields of human factors, aviation, and patient safety. Dr. Bagian is the Director of the Center for Healthcare Engineering and Patient Safety and is a Professor in the Department of Anesthesiology and the College of Engineering at the University of Michigan. Previously he served as the first and founding director of the VA National Center for Patient Safety and as the VA's first Chief Patient Safety Officer where he developed numerous patient safety related tools and programs that have been adopted nationally and internationally. A NASA astronaut for over 15 years, he is a veteran of two Space Shuttle missions including as the lead mission specialist for the first dedicated Life Sciences Spacelab mission. He also served as the Chief Flight Surgeon and Medical Consultant for the Space Shuttle Columbia Accident Investigation Board. He was elected to two terms as the Chair of the Joint Commission's Patient Safety Advisory Group is currently the Co-chair of the ACGME CLER Committee, a member of the DOD Trauma and Injury Subcommittee of the Defense Health Board, a founding member of the Tactical Combat Casualty Care Committee, as well as member of NASA's Aerospace Safety Advisory Panel. Dr. Bagian holds a B.S. degree in mechanical engineering from Drexel University and a doctorate in medicine from Thomas Jefferson University. He is a Fellow of the Aerospace Medical Association and member of the National Academy of Engineering, the National Academy of Medicine.

Craig M. Campbell, MD, FRCPC

Dr. Craig Campbell, MD, FRCPC is Director of Continuing Professional Development, Office of Specialty Education at the Royal College of Physicians and Surgeons of Canada. Dr. Campbell is a specialist in Internal Medicine and Associate Professor of Medicine at the University of Ottawa. Craig leads the Royal College's national Maintenance of Certification (MOC) Program, serves as Registrar for the Royal College and has oversight for the competency-based CPD development project within the Royal College's Competence by Design strategic initiative.

John R. Combes, MD

Dr. Combes is the retired chief medical officer and senior vice president of the American Hospital Association (AHA) and the former president of the Center for Healthcare Governance, an AHA affiliate organization. He currently serves as a visiting Scholar to Accreditation Council for Graduate Medical Education, where he studies GME and institutional integration, physician well-being and the health care governance of the clinical learning environment. He also serves as an advisor to the

American Board of Medical Specialties on health care policy issues and enhancing the value of board certification as a strategic resource for hospitals and health systems.

Currently, Dr. Combes is a Senior Advisor with the Southport Group, a firm specializing in health care leadership, governance, trustee and physician life-long development, and strategic planning. He writes and speaks frequently on governance, physician issues and quality and lectures nationally and internationally on healthcare leadership.

Dr. Combes received his medical degree from Cornell University in New York and received his post-graduate training from Boston City Hospital. He is certified in Internal Medicine by the American Board of Internal Medicine and has Management Certification from the American College of Physician Executives. Dr. Combes has held several senior management positions at a variety of healthcare organizations. He has served on several national advisory groups on medical ethics, palliative care and reduction of medication errors. Additionally, he has been the Principal Investigator for several Agency for Healthcare Research and Quality's national initiatives including the reduction of central line infections through the use of a comprehensive unit based patient safety approach pioneered by Johns Hopkins University and the development of palliative care services for hospitals and health systems.

Recently, Dr. Combes completed a 9-year term on the Board of the Hospital Sisters Health System, a 14-hospital health system in Illinois and Wisconsin where he also served as chair of the system wide quality committee. Currently he is a member of the board of Quality Insights, a multi-state Quality Improvement Organization and on the board of Salem Health in Salem Oregon, a clinical partner with the Oregon Health and Sciences University.

Todd Dorman, MD, FCCM

Dr. Dorman is Board Certified in Internal Medicine, Anesthesiology and Critical Care Medicine. He is the Senior Associate Dean for Education Coordination & Associate Dean for Continuing Medical Education for the Johns Hopkins School of Medicine. He is Professor and Vice Chair for Critical Care in the Department of Anesthesiology and Critical Care Medicine. He co-chairs the committee on interactions with industry and serves on the conflict of commitment committee. He also co-chairs the departmental associate professor mentorship committee.

Dr. Dorman has served on the Anesthesiology and Respiratory Device Committee of the FDA and was a member of the Institutes of Medicine Committee on Conflict of Interest in Education, Research and Practice. He serves on numerous editorial boards. He has served as the President of the American Society for Critical Care Anesthesiologists (ASCCA now SOCCA) and President of the Society for Academic CME (SACME). He is also a member of the American Society for Association Executives (ASAE). He serves on the Board of Directors of the Accreditation Council for CME (ACCME) and was recently elected by the board to serve as its Chair. Dr. Dorman serves on the Quality Improvement Committee for the American Association of Medical Colleges and the Pulmonary and Critical Care advisory board for the NQF. He just completed a term as President of the Society for Critical Care Medicine (SCCM). He also has participated in and helped lead guideline writing groups for the American College of Critical Care Medicine for which he was inducted as a member in 1997.

He has lectured extensively on leadership in the ICU, ICU organization as well as on provided numerous lectures in the field of medical education. Dr. Dorman served as co-PI for an AHRQ grant that led to the published monograph The Effectiveness of CME.

Julie A. Freischlag, MD, FACS

Julie A. Freischlag, M.D. joined Wake Forest Baptist Medical Center in April 2017 as Chief Executive Officer. Consistently ranked among the nation's top 50 medical centers, Wake Forest Baptist includes Wake Forest Baptist Health, a multi-hospital health system and physician network, the state-of-the-art Wake Forest School of Medicine, and Wake Forest Innovations, its technology transfer, commercialization enterprise. As CEO, she has the overall responsibility for the Medical Center's clinical, academic and innovation enterprises and its annual operating budget of $2.5B. Previously, Dr. Freischlag was Vice Chancellor for Human Health Sciences and Dean of the School of Medicine at UC Davis.

Dr. Freischlag has more than 30 years of experience leading patient-care services as chief of surgery or vascular surgery at nationally ranked hospitals. Dr. Freischlag served as a former governor and secretary of the Board of Governors and a regent and past chair of the Board of Regents of the American College of Surgeons. She is the immediate past president of the Society for Vascular Surgery, past president of the Association of VA Surgeons, the Society of Surgical Chairs, and the immediate past president of the Society for Vascular Surgery Foundation. Dr. Freischlag was the editor of JAMA Surgery for ten years (2005-2014) and is a member of the editorial boards of the Annals of Vascular Surgery, Journal of the American College of Surgeons, and British Journal of Surgery. She has published more than 250 manuscripts, abstracts and book chapters.

Dr. Freischlag has received numerous teaching awards, an achievement award from the Department of Veterans Affairs, and was elected to the National Academy of Medicine in 2015. Baltimore Magazine named her "Top Doctor", Working Mother Magazine selected her as one of the "10 most powerful moms in health care", and she was named one of the 2015-16 Best Doctors in America.

Graham McMahon, MD, MMSc

Graham McMahon, MD, MMSc, is the President and Chief Executive Officer of the Accreditation Council for Continuing Medical Education (ACCME®), which sets standards for high-quality continuing medical education (CME) that supports physicians' commitment to lifelong learning, improves their competence and performance, and drives healthcare improvement for patients and their communities.

Dr. McMahon directs the ACCME system for accrediting national and international CME providers, and the ACCME system for recognizing state and territory medical societies as accreditors for intrastate CME providers. In collaboration with the ACCME's colleague accreditors, the Accreditation Council for Pharmacy Education (ACPE) and the American Nurses Credentialing Center (ANCC), Dr. McMahon oversees the program of Joint Accreditation for Interprofessional Continuing Education™. He also administers the process for designating non-US accreditors as substantially equivalent to the ACCME.

A medical educator, researcher, and endocrinologist, Dr. McMahon joined the ACCME in April 2015 from Harvard Medical School, where he served as Associate Dean for Continuing Education and Associate Professor of Medicine. He taught extensively at Harvard Medical School and at Brigham and Women's Hospital in Boston, served as Editor for Medical Education at the New England Journal of Medicine, and as Executive Editor for the NEJM Knowledge+ program. He served as an endocrinologist in practice in the division of Endocrinology, Diabetes and Hypertension at the Brigham & Women's Hospital.

A native of Dublin, Ireland, Dr. McMahon earned his medical degree from the Royal College of Surgeons in Ireland, where he also received a doctoral degree in medical education from the National University of Ireland. He is board certified in internal medicine—as well as endocrinology, diabetes, and metabolism. He earned a Master of Medical Science in Clinical Research from Harvard Medical School.

Dr. McMahon is married to Joseph Guarino Jr., and they have two daughters.

Don Moore, PhD

Professor of Medical Education and Administration at Vanderbilt University where he is also course director for a semester long course Learning Theory and Teaching in the Masters of Health Professions Education (MHPE) program and course director for Health Sciences Education Grand Rounds. He is also Director of Evaluation, Office of Undergraduate Medical Education. He is Director, Office for Continuing Professional Development for the Vanderbilt University Medical Center. The office includes the Division of CME and the MOC Portfolio Program.

Don received his Ph.D. in education in 1982 and his Master's Degree in History in 1974 from the University of Illinois at Urbana-Champaign.

He has published over 40 articles and book chapters and made over 180 presentations at national and international conferences.

He received

- the ACCME Raszkowski Award in 2009.

- the Alliance for CME Distinguished Service Award in 2010

- the Society for Academic CME Research in CME Award in 2011.

He was inducted into the Academy for Excellence in Teaching at Vanderbilt University School of Medicine in 2013.

Don continues to work on the Outcomes Framework for planning and evaluating learning activities in CPD and assessing the performance of learners. He is also working on the emerging concept of the Master Adaptive (Workplace) Learner, global CPD, and continuing interprofessional education (CIPE).

Pamela Paulk, MSW, MBA

President, Johns Hopkins Medicine International (JHI)

Pamela Paulk oversees Johns Hopkins Medicine's international enterprises, including high-impact global health care collaborations and the provision of medical concierge services for thousands of international and out-of-state patients, as well as interpretation services for local patients. Johns Hopkins Medicine International (JHI) is responsible for developing and managing international priorities and strategies that advance the Johns Hopkins Medicine mission: to improve the health of the community and the world by setting the standard of excellence in medical education, research and clinical care. Prior to her current role, Ms. Paulk was the senior vice president for human resources (HR) for Johns Hopkins Medicine and the Johns Hopkins Health System, responsible for all HR functions for more than 40,000 employees. Before joining Johns Hopkins in 1998, Ms. Paulk worked mostly in the behavioral health field serving as a psychiatric hospital administrator, chief operating officer for a private psychiatric practice and national health care consultant.

A graduate of Florida State University with a master's in social work and The Johns Hopkins University with a master's in business administration, Ms. Paulk has been active in the community, including the Baltimore Alliance for Careers in Healthcare (past president and co-founder) and Baltimore City Community College (trustee). Ms. Paulk currently teaches graduate courses at the Johns Hopkins Bloomberg School of Public Health. Her many accomplishments have been recognized: 2009 Red Cross Good Samaritan, 2012 William J. Casey Award, National Kidney Foundation of Maryland's 2012 Santé Honoree and as one of Maryland's Top 100 Women in 2004 and 2010. In 2014, Ms. Paulk was honored at the White House for being a Champion of Change for her leadership and work bringing people with criminal backgrounds into the Johns Hopkins workforce.

Lewis G. Sandy, MD, FACP

Lewis G. Sandy MD FACP is Executive Vice President, Clinical Advancement, UnitedHealth Group (a diversified health and well-being company dedicated to helping people live healthier lives and helping make the health system work better for everyone). At UnitedHealth Group (UHG) he focuses on clinical innovation, payment/delivery reforms to modernize our health care system, and physician/health professional collaboration. He also is a principal in the UnitedHealth Center for Health Reform and Modernization, with a focus on payment/delivery innovation and policy. From 2003 to 2007, he was EVP and Chief Medical Officer of UnitedHealthcare, UHG's employer/individual health benefits business. From 1997 to 2003, he was EVP of The Robert Wood Johnson Foundation. At RWJF, he was responsible for the Foundation's program development and management, strategic planning, and administrative operations. Prior to this, Sandy was a program VP of the Foundation, focusing on the Foundation's workforce, health policy, and chronic care initiatives. An internist and former health center medical director at the Harvard Community Health Plan in Boston, Massachusetts, Sandy received his B.S. and M.D. degrees from the University of Michigan and an M.B.A. degree from Stanford University. A former RWJF Clinical Scholar and Clinical Fellow in Medicine at the University of California, San Francisco, Sandy served his internship and residency at the Beth Israel Hospital in Boston. He serves on a number of Boards and Advisory Groups, including the Board of the National Quality Forum (NQF) and Panel of Health Advisors for the Congressional Budget Office (CBO). He is a senior fellow of the University of Minnesota School of Public Health, Department of Health Policy and Management.

Luke Sato, MD

Chief Medical Officer and Senior Vice President
CRICO/Risk Management Foundation of the Harvard Medical Institutions
Assistant Professor of Medicine
Harvard Medical School

Dr. Sato is Chief Medical Officer (CMO) and Senior Vice President for CRICO/RMF (Risk Management Foundation of the Harvard Medical Institutions) and Assistant Professor of Medicine at Harvard Medical School (HMS). His current responsibilities include overseeing development of all Patient Safety, Risk Management and Loss Prevention programs for CRICO/RMF and coordinating these initiatives across the Harvard medical system. Dr. Sato's clinical training is in neurology and in computer science/medical informatics through the Division of Health Sciences and Technology at HMS and Massachusetts Institute of Technology, a National Library of Medicine sponsored post-doctoral fellowship program. He has applied industry principles and best practices to clinical risk management and patient safety and has developed several methodologies to analyze medical malpractice claims and patient safety data. One approach is to analyze malpractice data through the eyes of the patient by identify- ing care process failures which include individual risk and safety issues as well as systems-based process failures embedded in legal documents such as plaintiff depositions and claims adjuster reports.

Dr. Sato is developing methodologies that take various data sources outside of malpractice claims data, such as patient complaint and satisfaction data, demographic, root cause analysis, sentinel event data, as well as other publically available data sources to identify potential precursors or "leading indicators" to malpractice claims using decision analysis and statistical regression models. The extension of this method would be applied to update and generate new taxonomies, ontology, and coding structures at CRICO/RMF based on newly identified relationships between data attributes and to focus our limited resources on those areas of risk most likely to contribute to mal- practice. From a practical point of view, the value proposition of this approach is to help healthcare organizations prioritize interventions that would provide a clear return on investment as well as early identification of individual and systems/process-based issues that lead to risk, safety, and quality.

Prior to becoming CMO, Dr. Sato was the Chief Information Officer for RMF where he oversaw all system applica- tion development at CRICO/RMF. Prior to CRICO/RMF, he was staff at the Brigham and Women's Hospital (BWH) and held the position of associate director of a medical informatics research and development laboratory at BWH and Harvard Medical School.

Ajit K. Sachdeva, MD, FRCSC, FACS

Ajit K. Sachdeva, M.D., is the founding Director of the Division of Education at the American College of Surgeons. Dr. Sachdeva established this Division, which is responsible for the development and implementation of innovative education and training programs for surgeons, surgery residents, medical students, and members of surgical teams. Major initiatives launched under Dr. Sachdeva's leadership have established new national and international benchmarks. These include education and training programs to promote expertise and excellence in surgery; education and training programs aimed at the continuum of professional development, with specific focus on transitions; cutting-edge simulation-based education and training programs; transformational redesign of the Annual Clinical Congress; Program for Accreditation of Education Institutes (Simulation Centers); and Program for Validation and Verification of Surgical Knowledge and Skills. He has led several major national research and development projects in surgical education and training. Dr. Sachdeva also serves as Adjunct Professor of Surgery at The Feinberg School of Medicine at Northwestern University.

Prior to joining the College, Dr. Sachdeva was the Leon C. Sunstein, Jr., Professor of Medical and Health Sciences Education and Professor and Vice Chairman for Educational Affairs, Department of Surgery, at the MCP Hahnemann School of Medicine. He had also held the positions of Associate Dean for Medical Education and Director of the University's Academic Center for Educational Excellence, and served as Chairman of three successive medical school Education/Curriculum Committees for 12 years. He established a Division of Surgical Education and a Fellowship Program in Surgical Education.

Dr. Sachdeva served as Chief of Surgical Services at the Philadelphia Veterans Affairs Medical Center for over eight years, during which he planned and directed the expansion of tertiary care services staffed by two medical schools (University of Pennsylvania School of Medicine and MCP Hahnemann School of Medicine). He established a Regional Network Health Care Program for Women Veterans for which he received the Gold Medal in Excellence in Government Awards Program, National Performance Review Award of the Vice President of the United States, and Award of the Deputy Secretary, Department of Veterans Affairs.

Dr. Sachdeva was awarded the Distinguished Educator Award (a Lifetime Achievement Award) by the Association for Surgical Education, and the Margaret Hay Edwards, M.D. Achievement Medal for Outstanding Contributions to Cancer Education by the American Association for Cancer Education. Dr. Sachdeva has received the Award for Outstanding Contributions to Healthcare Simulation from the Society for Simulation in Healthcare, the Frances M. Maitland Award from the Alliance for Continuing Medical Education, the Theodore A. McGraw, M.D., Medal from The Detroit Surgical Association, and a Recognition of Excellence Award from the Society of American Gastrointestinal and Endoscopic Surgeons. He has also received the Lindback Award for Distinguished Teaching, the Blockley-Osler Award for Excellence in Clinical Teaching, the Board of Trustees' Award for Teaching Excellence, and several Golden Apple Awards for Teaching Excellence. He has delivered presentations and conducted courses on educational topics in the United States, Canada, Europe, Australia, and Japan. He has been the recipient of major educational grants and has published widely in peer-reviewed journals. Dr. Sachdeva is a member of the American Surgical Association and serves as a representative of this association to the Council of Faculty and Academic Societies of the Association of American Medical Colleges. He has chaired the Committee on Surgical Education of The Society of University Surgeons, and served on the Board of Governors of the American College of Surgeons. He has also served as Chairman of the Scientific Review Group Education Subcommittee (Study Section) of the National Cancer Institute, National Institutes of Health. Dr. Sachdeva has served as a member of the Executive Committee of the Board of Directors of the Accreditation Council for Continuing Medical Education, and as a member of the Board of Directors of the Accreditation Council for Graduate Medical Education.

Dr. Sachdeva has served as President of the Association for Surgical Education; President of the American Association for Cancer Education; President of the Alliance for Clinical Education; and President of the Council of Medical Specialty Societies. Dr. Sachdeva currently serves as President of the Society for Academic Continuing Medical Education.

Annette Mallory Donawa, PhD

Annette Mallory Donawa, Ph.D. is the Assistant Dean and Director of the Office of Continuing Medical Education at Johns Hopkins University School of Medicine. Dr. Donawa earned a Bachelor of Science Degree in Mass Communications with a minor in English from Towson University in Towson, Maryland. She subsequently earned a Master's Degree in education with a focus in instructional design and curriculum development from Northern Illinois University in DeKalb, Illinois. She continued her educational pursuits, earning a Ph.D. in Higher Education and Administration from Morgan State University (MSU) in Baltimore, Maryland. Dr. Donawa's experience in education and industry spans more than 30 years. She has served as the Director of an Accreditation Commission for alternative medicine (ACAOM), as well as the Deputy Director of a NASA-funded university research grant within the School of Engineering at MSU. Her doctoral research in critical thinking supported the Maryland State Department of Education's (MSDE) science, technology, engineering, and mathematics initiatives. She currently serves on the Johns Hopkins CME Advisory Board, and the MOC Portfolio Program Expert Reviewer Panel. She enjoys working with the CME office at Hopkins, which coordinates approximately 400 CME activities annually. She just recently authored her first poetry book: Blessings Beyond Measure.

Abstracts

SAUDI HEALTH COLLEGE GRADUATE ENHANCEMENT PROGRAM
Sami Ayed, MBBS

MOH CPD, therefore, plays a key role in the continuing education of MOH health professionals, aiming to provide highly relevant and accessible education. By reaching out to health professionals with diverse learning needs, MOH CPD strives to provide education and engage those in rural areas facing geographical barriers and professional isolation.

To mitigate this issue, the MOH is considering an enhancement program aimed at helping the professional reinsertion of inactive Allied Health Professionals.Demonstrate clinical competence, knowledge, and professionalism required to function effectively.Communicate effectively with patients and families. Able to work in a team with full appreciation to daily workflow. Apply learned experience in patient education considering ethical and cultural issues. Understand and apply quality and safety principles in their daily practice

OBJECTIVE: To describe the development, implementation and initial evaluation of a mass educational program for Allied Health Professionals in Saudi Arabia.

METHODS: On-Job-Training Program called Health Institute Graduates Professional Development Program (HIGPDP) was developed with 3 parts.The training program duration was 12 months divided into three main parts:

1. English and medical terminology Training: was contribute to around 6 months of the whole program duration preceded by English placement test and ended by trainees evaluation through ILETs exam.

2. Theoretical part contributed to 22 days of the whole program duration and shall include: General soft skills lectures, specialized Sessions, and workshops. Trainees shall spend a full day training composed of three sessions two hours each. Trainees shall be divided into groups of fifty.

3. The practical part of the program was contributed to 88 days of the program duration. Training shall be tailored to each specialty. Trainees shall be divided into groups of ten/ mentors.

Results: HIGPDP program was implemented in 2014 and has trained 6,487 (6%)of Allied Health Professionals in Saudi Arabia as of May 2014.   Initial assessments shows that after the HIGPDP programs show significant improvement of knowledge as pre-test examination scores of 49% improving to 93% post testing; more participants becoming comfortable to work in a team with full appreciation to daily workflow, communicate effectively with patients, families; and also changing their attitudes to favour patient involvement in management plans and inter-professional care.

Conclusion: The initial evaluations show that the HIGPDP program facilitates Allied Health Professionals' knowledge acquisition and provides skills that can be applied in practice.   Our results should prompt others to create similar HIGPDP programs based on their health care needs to improve health care delivery.

CPD IN THE CONTEXT OF THE CLINICAL LEARNING ENVIRONMENT: APPLICATION OF THE SERVICE LINE CONCEPT
Barbara E. Barnes, MD

In an era of healthcare delivery reform, practicing professionals must acquire new competencies related to quality, access and cost-effectiveness: issues common to all disciplines and levels of training.   The ultimate setting for improving care in new paradigms is in the practice environment where the entire care team, students, and trainees implement strategies and develop a culture to foster ongoing change and improvement.

Viewing education through the lens of the clinical learning environment requires collaboration among health educators and practitioners. UPMC adapted the service line structure, commonly used to coordinate clinical care, to the learning environment. We are identifying the current cohort of students across our large health

system to determine the most appropriate complement of learners in each setting.   We are creating coherence among the strategies used to improve competency in professionalism, systems-based practice, and practice-based improvement across the continuum and disciplines.   Maintenance of certification is also being incorporated into this process.

We have determined that the volume of students and trainees in certain settings are compromising the educational experience and, in some cases, the quality of care.   We are strategically revising our commitments to local educational institutions and developing curricula to be delivered to diverse learners in the practice setting. There are many educational and political barriers being encountered through this process and the engagement of senior institutional leadership and educators is critical to our success.   This is a critically important initiative for our success as a successful academic medical center in the new healthcare environment

USING PI PRINCIPLES TO EXECUTE A PERFORMANCE IMPROVEMENT CME ACTIVITY AT CEDARS-SINAI
Marta A. Betancourt, MS

BACKGROUND: Following a rigorous needs assessment in the area of Systemic Lupus Erythematosus (SLE), Cedars-Sinai and The France Foundation collaborated to offer a three-stage performance improvement (PI) continuing medical education (CME) initiative. Spanning two years, the initiative involved multiple stakeholders across Cedars-Sinai and required significant time and resources during development and implementation.

METHODS: A steering committee was formed to support this inaugural PI CME activity. A schematic of the PI CME process was created which gave rise to the formation of specific work groups. DMADV (Define/ Measure/Analyze/ Design/Verify) and PDSA (Plan/Do/Study/Act) quality improvement methodologies were used to ensure optimal design/execution. A working tactical plan and project timeline provided stakeholders with identified tasks, roles and responsibilities, milestones and project tracking. Working groups addressed identification and measurement of key behaviors, proper evaluation of suspected SLE, when to refer, and objective criteria for data collection.

RESULTS: DMADV was used to ratify educational gaps, learning objectives, performance metrics, and outcomes. PDSA was used extensively throughout execution. Original predictions regarding delivery format for certain content was modified based on test of change. PI principles also resulted in streamlining data collection and improving communication between departments and working groups. A final analysis of Stage C results is underway with the expectation of publishing findings in a clinical peer-reviewed journal in early 2017.

CONCLUSIONS: Applying fundamental principles of quality improvement allowed planners for this activity to respond quickly to meet the evolving educational needs and preferences of the physician learners over the course of a two-year long activity.

ENCULTURATION OF JUNIOR FACULTY THROUGH A PILOT FACULTY DEVELOPMENT PROGRAM
Adria Boucharel, MD

Faculty Advising Programs are a University of Colorado requirement, though campus rules are not prescriptive about program elements. This reality prompted the formation of the Department of Anesthesia's Faculty Development Committee and the interdepartmental Career Mapping Committee. Both aim to improve the advising process. Following a needs analysis it was determined that the best advising programs incorporated faculty development. This program was customized to meet the needs of a rapidly growing department with many faculty members facing promotions. The crucial question was whether we could create a program that improves the promotions experience and enculturation process while increasing engagement in four half-day sessions? Needs analysis results highlighted key topics including; Academic Identity Formation, Scholarship, Teaching & Leadership Development. Subsequent planning resulted in four workshops with planned delivery between December and August. Content and format were derived in concert with experts on campus and department stakeholders. Goals for participants are: improved understanding of the promotions process and expanded relational connections leading to more successful promotions navigation and an increased sense of engagement.

TRANSFORMATIONAL LEARNING FOR CARE OF CHRONIC LUNG DISEASE USING INTERPROFESSIONAL PEDAGOGIES
Leticia Z. G. Bresnahan, MBA, CHCP

Chronic Obstructive Pulmonary Disease (COPD) is a devastating lung condition with high morbidity & is the third leading cause of death in the US. Nationwide, <50% of primary care (PC) clinicians follow COPD guidelines.

Guidelines recommend spirometry to diagnose COPD and also annual influenza vaccination. We documented gaps in local COPD care using clinical data. To address this, we designed & implemented educational curricula & learning strategies at PC clinics. Using web-based, interactive CE courses, small group learning & one-on-one training, we delivered interventions to interprofessional teams (nurses, physicians, medical assistants, administrators) in order to increase knowledge, change behavior, & improve clinical practice for COPD patients.

We used a mixed-methods approach to assess educational impact, including direct observations, provider interviews, & clinical data analysis. Local COPD prevalence increased from 3.8% (baseline) to 4.4% (post-intervention). Clinician knowledge/application improved significantly (mean 54% to 89%). The baseline statistical process control limit (mean) was 64% (1103/1726) for spirometry & 56% (967/1726) for influenza vaccinations prior interventions & both increased to 79% (978/1236) and 99% (1223/1236) respectively during the 15 months post-interventions.

Staff had not been trained in spirometry; clinical leadership underwent transition during interventions. We facilitated implementation by online training, face-to-face flipped classroom sessions addressing barriers to applying to clinical practice, and dedicated FTE funding.

Interactive & high-quality CE and QI interventions applied to PC are associated with real clinical practice changes to improve patient care. These well-defined techniques may be disseminated to other practices.

COLLABORATING TO IMPLEMENT & SUSTAIN MOC PART IV PORTFOLIO PROGRAM THROUGH THE AMERICAN BOARD OF MEDICAL SPECIALTIES
Leticia Z. G. Bresnahan, MBA, CHCP

Many health systems have pursued becoming a Portfolio Sponsor through the American Board of Medical Specialties (ABMS) for MOC Part IV. Resources are dedicated to submitting the application in a timely fashion.

Johns Hopkins University CME office developed a five-step process to implement the Portfolio program and UTHSCSA CME Office created an internal process in which MOC submissions are limited to projects completed through the institutional quality improvement, project-based, course.

It was challenging to penetrate through a large health system. Faculty are engaged and participate in quality improvement efforts throughout several departments and on various unit levels. With full implementation, the CME office can become a central repository for quality improvement initiatives.

Creating a consistent message and marketing campaign has been challenging due to the size of the health system and generational factors. These must be considered when creating messaging, policies, and forms.

Processes and work flows for the MOC Part IV Portfolio programs are being examined and evaluated at both institutions. Increased volume in the submissions of quality improvement efforts for physicians to obtain MOC Part IV credits will assist in verifying /validating internal processes. May physicians have shared that going through a local review/approval process has streamlined their own processes to receive MOC Part IV credit, which enabled them to have more time to work in their clinics.

Implementing and sustaining a Portfolio program at academic medicine institutions requires dedicated personnel and monetary resources to ensure that this streamlined approach will be effective, with successful outcomes.

ADDRESSING THE HEROIN EPIDEMIC
Karen Busse, MS, CCMEC

As a result of the increasing trend of heroin addiction in Kentucky, it was determined to create a program that would provide healthcare practitioners with the tools to identify and recognize signs and symptoms of abuse and to provide information about community resources. To engage learners, a multi-faceted program was created that utilized presentations, panel discussion and resource exhibits. Additionally, strategies were utilized to engage learners prior to the program and following the program.

CREATING A CULTURE OF FEEDBACK: USE OF INFORMAL FEEDBACK SESSIONS WITH PEDIATRIC RESIDENTS TO INCREASE QUALITY AND QUANTITY OF FEEDBACK FOR FACULTY (WORK IN PROGRESS)
Phillip Byrne, EdD

Creating a Culture of Feedback: Use of informal feedback sessions with pediatric residents to increase quality and quantity of feedback for faculty (work in progress)

BACKGROUND: Previously our clinical faculty's teaching effectiveness has been assessed with resident end of rotation and annual evaluations of faculty. Like many evaluations, end-of-rotation evaluations result in generic data with little differentiation between highest and lowest performers. However, anecdotal discussions highlight teaching disparities amongst faculty. Because of the large number of faculty who work with residents, there cannot be resident assessment of all faculty. Typically residents comment on outliers who are exceptional or poor performers. Individual results are shared with faculty members and their division directors. As such, this tool has served the function of identifying trends amongst struggling and high performing faculty. The lack of explanatory comments makes it difficult to formulate an improvement plan or assist the average performer in his/her development.

RESEARCH QUESTIONS
1. Can comments from optional resident feedback sessions be used as a needs assessment for faculty development?

METHODS: We are conducting open-ended discussions with residents to explore and describe faculty members' teaching aptitude. Sessions are one hour. Facilitators take notes on content. Qualitative data will be used to augment data collected through existing surveys administered by the ACGME. Using a phenomenological research approach we will identify themes and gaps in faculty knowledge and skills.

IMPACT/SO WHAT?: Using obtained data, a continuous professional development program will be designed. We anticipate implementing a professional development activity as well as individual faculty mentoring with content and delivery method based on our needs assessment. Actionable feedback is critical to their goal of improving faculty performance.

RELATIVE EFFICACY OF VARIOUS COGNITIVE PROCESS FOCI AND INSTRUCTIONAL METHODOLOGIES IN A PI-CME ACTIVITY
(work in process)
Phillip Byrne, EdD
Betsy W. Williams
Michael V. Williams

BACKGROUND: Continuing medical education (CME) is an important contributor to physicians' currency. Studies of CME activity design have demonstrated a number of potentially useful characteristics that appear to improve program efficacy. This study investigates participant and instructional design variables to study the relative efficacy of a CME/CPD intervention aimed at improving division functioning.

RESEARCH QUESTION: Research into the process of learning employing a social cognitive model has identified a number of variables including self-efficacy, resilience, and personal knowledge. Studies of educational delivery identified didactic and small group discussion, and self-reflective instruction as candidate instructional approaches. This study investigates the relative efficacy of these processes/approaches.

METHODS: The intervention is being delivered to three divisions within a large mid-western teaching hospital. The program is designed as a performance-improvement CME activity that is part of the hospital's quality improvement efforts. The program will be delivered in a sequence that allows for testing for main and order effects. The outcome variables are quality measures, team/social cohesion and self-report measures of self-efficacy, resilience, and knowledge.

RESULTS: Stage A measures for all departments have been completed. Three departments with relatively low levels of team cohesion, high levels of burnout and low levels of job satisfaction were identified.

IMPACT (SO WHAT?): CME is the core method for professional development for physicians. By improving understanding of methods that promote instructional effectiveness and participant learning, future CME/CPD activities have the potential to more effectively improve physician knowledge, attitudes and behaviors and ultimately the health of the population they serve.

OUTCOME MEASUREMENT AND FEEDBACK FROM DELIVERING PROGRAMMES ONLINE IN 7 SPECIALTIES IN CARDIOLOGY
Celine Carrera, MBA, PMP

Deployment of e-learning programmes started in 2012 at ESC. The purpose of this study is to reflect on lessons learned and to measure outcomes since launch.

A curriculum based learning programme was developed for each specialty. To answer respective requirements, a modular approach was adopted. Programmes were deployed to the membership base and through the ESC network of national cardiac societies. Some programmes were submitted for accreditation. The outcome measurement was performed combining findings from a quantitative survey and a qualitative usability testing during ESC Congress 2016.

3,000+ users from over 40 countries took part in an online quantitative survey and 30 persons (users and non users) took part in the usability testing (in person interviews). Tracking data from the 7 specialties, representing over 550 courses with self-assessment throughout, provided insights into learners' interaction with content.

Outcomes: 'One size fits all' does not work.

- Programmes deployment had to take into account specialty specificities. The modular approach was put to the test.
- Different national systems led to tailored programme implementation at national level.
- Technology-wise the learning curve was steep and rich in lessons learned. Scope creep and budget overrun were tackled thanks to robust project management. Over emphasis on technology to be balanced by sound requirement.
- Content development and update requires expert support.

CONCLUSION: engaging in eLearning brings a lot of potential for delivering training and lifelong learning to a wide audience. However, there are a few hurdles to take into account early on.

OPTIMIZING VIRTUAL PATIENT SIMULATION TO OPTIMIZE ACTUAL PATIENT CARE
Cayla Cason, BSPH, MHA

BACKGROUND: Virtual patient simulation (VPS) is a relatively new, rapidly developing, teaching instrument with demonstrated effectiveness in medical education. By using a simulated treatment setting that seeks to replicate real-life clinical practice as closely as possible in a consequence-free setting, recommended practice changes are brought more quickly to actual patient care. Despite this, there is little data available to inform optimization of VPS functional capabilities.

OBJECTIVE: To analyze empirical data collected from VPS to determine how interaction with the enhanced, more accessible electronic health record (EHR) improves and, more importantly, how this affects learner decision-making and performance.

METHODS: Interaction and performance data was collected from the MedSims VPS platform. Time-series analysis was performed using interaction data collected from an external database that was cleaned and analyzed using Tableau Desktop. Aggregate learner performance data was collected from MedSims outcomes reports from July 2014 to February 2016, and analyzed using averages across key clinical decisions. Data was compared prior to MedSims EHR enhancement and after.

RESULTS: After the enhancement of the EHR, the data shows an exponential increase in learner interaction. The same is true when segmented across multiple devices (i.e. desktop, mobile, and tablet). The overall percentage of correct clinical decisions (tests, diagnoses, treatments, and non-medication orders) increased with the enhancement EHR. In particular, learners making correct diagnoses increase by 14% for all programs prior to its launch, a significant increase especially given that there was not an associated increase in tests ordered.

CONCLUSION: This study highlights how availability of EHR, in addition to Present Complaint information, in VPS can positively affect learner performance in making key clinical decisions and inform future research on optimal design of EHR as well as on the impact of well-designed medical EHR on treatment decisions in the clinical setting.

EDUCATIONAL TECHNOLOGIES FOR PHYSICIAN CONTINUOUS PROFESSIONAL DEVELOPMENT: A NATIONWIDE SURVEY
David A. Cook, MD, MHPE

BACKGROUND: Emerging educational technologies such as online learning and technology-enhanced simulation offer new tools with which physicians might meet professional development (PD) needs. Technologies can support training and can also identify gaps in knowledge, skill, and practice performance.

QUESTION: What do physicians believe about the use of educational technologies for PD, including current and anticipated future use, and how do these beliefs vary by age and specialty?

METHODS: From September 2015 to March 2016 we administered an Internet and paper survey to randomly sampled US physicians (any specialty).

RESULTS: We received 988 responses (22% response rate). Of those with prior experience with a given technology, 77% agreed that online learning had been effective, vs 54% for simulation-based education. 75% agreed that point-of-care learning is vital to effective patient care. 65% believed that patient outcomes information would be useful in guiding their PD choices. 55% agreed that they would like to use more online learning, whereas 46% would like to use more simulation-based education. Most believed they have the skills (88%) and access to technology (82%) needed for online learning. Physicians under 45 indicated stronger preference for information on patient outcomes (p=.009). Generalists and other specialists rated point-of-care learning higher than surgeons (p=.0005). We found no other significant differences by age or specialty.

CONCLUSIONS: Most practicing physicians (regardless of age and specialty) have favorable impressions of educational technologies, would like more online learning, and believe they possess needed technology skills. Most anticipate that practice data would help guide their PD choices.

FACULTY DEVELOPMENT "SMALL BITES" IN REGULARLY SCHEDULED DEPARTMENTAL MEETINGS
Nancy Davis, PhD

PROBLEM STATEMENT: Medical school faculty have significant time constraints and find it difficult to participate in on-going faculty development activities. Attendance at full- or half-day workshops is waning.
APPROACH USED: We have created a menu of "small bites" faculty development activities, which offers 15- to 60- minute sessions on numerous topics.* These topics can be delivered in regularly scheduled faculty meetings, grand rounds or other departmental venues. Internal faculty experts have been identified to facilitate each session which have a standardized template: 1) mini didactic providing key points; 2) brief exercise/activity; 3) discussion/debrief; 4) take home points and materials.
*Topics list will be available to participants of this session

RESULTS/FINDINGS: Department chairs and residency program directors have welcomed this opportunity to include faculty development in their regularly scheduled meetings and have included it in residents' conferences to enhance residents as teachers.

BARRIERS AND FACILITATORS: One disadvantage of this format is the lack of networking and integration across departments and specialties. The decreased time allowed for this type of faculty development may serve as introduction only and preclude a deeper understanding of the topics. Facilitators of the program include resolution of time constraints issues and opportunity for better team-building within departments/residency programs.

IMPACT: We are able to reach more faculty in less time using this method of department/residency program faculty development and had the unexpected benefit of residency education.

MOC MULTISPECIALTY PORTFOLIO PROGRAM: OPPORTUNITY TO INTEGRATE CONTINUING PROFESSIONAL DEVELOPMENT (CPD) AND GRADUATE MEDICAL EDUCATION (GME)
Nancy Davis, PhD

PROBLEM STATEMENT: GME faculty are inconsistent in quality improvement (QI) principles and practice causing challenges in teaching these topics to residents. The MOC Multispecialty Portfolio Program (MPP) offers a framework for teaching QI skills as well as incentives through MOC credit.

APPROACH USED: We have integrated our QI faculty development and GME in two important ways: 1) a central QI basics workshop; and 2) a process for using a residency program's annual program evaluation (APE) in the Portfolio Program to provide MOC credit for the Program Evaluation Committee.

RESULTS/FINDINGS: Our initial QI Basics workshop was highly rated. The only complaint was full day format. Subsequently we revised it into two, half-day sessions. A planning group made up of two residency program directors (Family Medicine and Psychiatry) translated elements of the APE template into credible quality measures for the MPP. A pilot is underway utilizing their programs' APE measures for credit through the MPP.

BARRIERS AND FACILITATORS: Barriers include the lack of perceived value by older faculty; time constraints for new training; translating program evaluation metrics into the MPP format; and resistance to MOC in general. Facilitators include requirements by ACGME and the certifying boards that promote and incentivize participation in QI. Also, enthusiasm by champions has been infectious.

IMPACT: We anticipate more residency programs will be interested in both these initiatives. They have requested involvement of residents in the training programs; and the use of the Portfolio template for annual program evaluation has promoted the value of continuous quality improvement.

DESIGNING MEDICAL EDUCATION PROGRAMS FOR CHINESE PHYSICIANS
Annette Mallory Donawa, PhD

Continuing Medical Education (CME) as a discipline, has grown and matured over the past few decades. The primary target audience for designing CME has been physicians in the United States and Canada. To broaden its educational impact, Johns Hopkins University School of Medicine's CME office designs medical education programs for Chinese physicians.

Using constructivism theory and adult learning pedagogy, 70 Chinese physicians and healthcare administrators visited Johns Hopkins University where Hopkins faculty delivered interactive lectures on medical education leadership, quality and patient safety, economics of healthcare, and diabetes. Participants reflected on their own hospital environments and culture and constructed new knowledge based on the concepts learned during the week-long educational program. Time was devoted to small group discussions where participants addressed outcomes questions focused at the individual, department, hospital, and community levels.

Quantitative and qualitative data were collected from each group of participants using surveys. Based on Likert Scale rating from 1-5, 5 being the highest rating, the average ranking for speakers was 4.2. Qualitative data

gathered from written narrative comments conveyed that Chinese physicians were committed to quality driven patient and family centered care and improving their hospital culture.

Challenges and barriers included conducting a formal needs assessment to help design the educational. Building on the existing relationships and conducting outcomes evaluations will be ideal, but barriers from geographic distance, culture, and language exist.

Designing education using educational and adult learning theory beyond US borders has broadened and enlarged the educational impact of Hopkins faculty and the CME office.

COLLABORATION BETWEEN CME AND THE DEPARTMENT OF ENVIRONMENTAL HEALTH AND SAFETY LEADS TO INNOVATIVE ONLINE APPROACH

Fozia Ferozali, EdD

The Cedars-Sinai Office of CME in partnership with the Department of Radiation & Environmental Safety has developed 4 one-hour online courses focusing on radiation safety for the clinical use of fluoroscopy. This was a result of a new California requirement for physicians who are radiation operator/supervisors. The new requirement mandates that 4 of the 10 CME credits, required every 2 years, in fluoroscopy must be specific to radiation safety for the clinical use of fluoroscopy.

Initially these were planned as live courses that would be offered to the medical staff. After facilitating a few live sessions, it became apparent that hosting live meetings in order to provide this education to the 600 plus physicians that have operator/supervisor licenses, would put a huge strain on employee resources in the Department of Environmental Health and Safety as well as the physicians schedules. This coupled with the renovation of many of the conference spaces and the general increase in requests for conference rooms made booking space, at a time that physician were available, very challenging. The Office of CME proposed making the courses available online via their new CME portal. The Office of CME connected with their colleagues in the Simulation Center to record and edit 4-one hour CME activities with the course faculty from the Department of Environmental Health and Safety.

Now physicians can take these activities based on their schedules and needs. In addition, the staff in EH&S do not have to be facilitating multiple live meetings to review the same content. Since the activities went live in mid-June we have awarded 135 hours of AMA PRA Category 1 credit.

These activities are now available online at http://cedars.cloud-cme.com/.

A PHENOMENOLOGICAL STUDY OF THE SELF-DIRECTED LEARNING (SDL) HABITS OF RURAL PHYSICIANS IN A DIGITAL AGE

Lisa Fleet, MA, DipAdEd, BEd
Vernon Curran
Karla Simmons
Mohamed Ravalia
Pamela Snow

BACKGROUND: SDL is one way in which physicians can plan, manage and evaluate their own learning. There are numerous barriers reported to SDL, including the ability to efficiently search and locate information relevant to one's needs. The latter is particularly important given the increasing use of digital, social media and mobile technologies (DSMTs) by physicians.

RESEARCH QUESTION: What are the SDL experiences, habits, needs and perceptions of rural physicians in a digital age?

METHODS: Semi-structured interviews. Verbatim transcription of interview data; analysis using N-Vivo analytical software and thematic analysis.

RESULTS: Fourteen (N=14) interviews; thematic categories that emerged: key triggers, methods of undertaking SDL, barriers and supports. Rural physicians reported greater usage of mobile phones, tablets, and laptop computers (and associated resources) for updating their knowledge and skills and in responding to patient questions/problems. A level of scrutiny and ambivalence towards the use of social media was highlighted by respondents, in particular, for SDL.

IMPACT: DSMTs are growing in popularity as a key resource to support the SDL needs of physicians and appear to be of particular importance to rural physicians. Mobile technologies are facilitating greater 'point-of-care' learning and enabling more efficient ways of seeking out information. Effective use of these technologies for SDL has implications for enhancing just-in-time learning and augmenting quality of care, as well as implications for our systems of CPD accreditation and the roles of CPD providers in supporting SDL using DSMTs.

CONTINUING PROFESSIONAL DEVELOPMENT (CPD) AND SELF-DIRECTED LEARNING (SDL) IN A DIGITAL AGE: IMPLICATIONS FOR HEALTH PROFESSIONALS AND CPD PROVIDERS

Lisa Fleet, MA, DipAdEd, BEd
Vernon Curran
Karla Simmons
Lauren Matthews
Karine Bernard
Diana Gustafson
Lyle Wetsch

BACKGROUND: Self-directed learning (SDL) activities are a recognized type of informal adult learning across many CPD systems. The expansive growth of digital and mobile technologies has created new opportunities for connecting with information and colleagues.   As CPD providers, how these technologies are being used has important implications for supporting the SDL of health professional learners.

RESEARCH QUESTION: How are adult learners using digital and social media technologies for their continuing professional education?

METHODS: Scoping review

RESULTS: Approximately N=421 articles reviewed. Majority reflect commentaries and focus mainly on satisfaction evaluative outcomes. Key themes emerging from the literature include: use of digital, social and mobile technologies as learning tools; key considerations for use; and benefits/successes of best practices.

IMPACT: There are limited models describing the SDL habits of adult learners in a digital age and there is limited evidence surrounding the use of social media and mobile technologies in mandatory CPD delivery systems. The CPD field is at an early stage of exploring the purpose and role of DSMTs in lifelong learning pursuits. Early evidence suggests health professional learners find DSMTs useful in accessing and sharing information. Particular issues surrounding information credibility and digital professionalism arise with greater usage of these technologies in practice, and further evaluation of the effect of DSMTs on learning outcomes, performance improvement and impact on health outcomes is warranted.

ADVANCING ALIGNMENT OF CME WITH MAINTENANCE OF CERTIFICATION (MOC)
Susie Flynn, BS

The MOC Directory was created in response to a need identified by our Member Boards and their diplomates for a system that would offer a consistent submission and process that improves access to relevant, accredited CME MOC activities. In addition to increasing the overall inventory of relevant MOC activities, it has reduced the administrative burden for physicians participating in MOC by identifying activities approved by multiple ABMS Member Boards in one central location.

This session will discuss the MOC Directory's common submission form which offers continuing medical education (CME) providers a single pathway to submit and receive MOC approvals from multiple Member Boards. Additionally this presentation will engage and support SACME members who are interested in submitting accredited CME activities to the MOC Directory.

ADDRESSING PHYSCIAN BURNOUT THROUGH CPD: SUCCESSES FROM WORKSHOPS ON MINDFULNESS
Gurveen Grewal, BA, MPH

Numerous studies report moderate to high levels of work-related burnout among Canadian physicians which can negatively impact quality of care and personal relationships. In partnership with the Vancouver Division of Family Practice, UBC Continuing Professional Development (CPD) delivered a series of mindfulness education workshops - unconventional to most CPD activities - to support physician self-awareness and prevent burnout.

Two 2.5 hour interactive workshops were offered to urban family physicians (FPs) to determine physician interest level in this novel CPD topic and introduce mindfulness as a strategy to prevent burnout. Workshops were facilitated by a professional coach or a Mindfulness-based Cognitive Therapy (MBCT) expert and covered early signs of burnout, neuroscience of mindfulness, and key concepts in MBCT. Additionally, participants were led through various mindfulness exercises. Pre/post evaluation measured participants' understanding of mindfulness and awareness of daily stressors and their impact on patient care.

The workshops were well attended (n=125). Participants reported an increased awareness of the impact of daily stressors on patient care, and participants' understanding of mindfulness increased significantly from before (M= 3.38/5, SD=.95) to after the workshop (M=4.33/5, SD=.37); $t(95)=11.63$ $p<.001$.

Guided in-session mindfulness exercises and resource materials provided were identified as effective parts of the workshops. Participants felt additional mindfulness sessions and training on introducing mindfulness practices to patients would be beneficial.

The workshops were successful in gauging interest in mindfulness techniques and introducing mindfulness as a strategy for preventing burnout among urban FPs. The well-attended and successful workshops indicate a need for non-traditional CPD topics supporting physician well-being.

Keywords: CME Workshop, Mindfulness, Physician Health

WHAT PRICE CONTINUING MEDICAL EDUCATION (CME) OUTCOME FOLLOW-UP?
David Hak, MD, MBA, FACS

INTRODUCTION: Obtaining follow-up data regarding CME attendee's long-term changes in competence, performance, or patient outcomes presents a significant challenge. The purpose of this study was to examine whether a small financial incentive could improve follow-up response rates in a group of adult surgeons that attended one of our live CME activities.

METHODS: 532 surgeons were sent a standard email request to complete a follow-up on-line survey 6 months following their attendance at a CME event. Participants were randomly assigned to receive no financial incentive, a $10 Starbucks gift card, or a $25 Starbucks gift card for follow-up evaluation completion. Participants received the same survey that included 7 standard questions regarding their practice changes, comfort and confidence, barriers encountered to change, and patient outcomes.

RESULTS: Overall 17.7 % of individuals completed the follow-up survey. Follow-up survey completion rate was lowest in the no financial incentive group (10.7 %). The follow-up survey rate was 20 % in the $10 incentive group, and 23.2 % in the $25 incentive group. These differences were statistically significant (Chi-Square p = 0.007). There was no significant difference in survey response rate between the $10 and $25 groups (Fisher exact test, p = 0.515).

CONCLUSIONS: Providing a modest conditional financial incentive is useful in increasing the survey follow-up rate following a live CME event. Increasing the incentive from $10 to $25 did slightly increase the survey response, but this increase was not statistically significant.

DON'T FORGET THE MAP; FOLLOW DIRECTIONS TO TRIANGULATE LEARNING NEEDS, METHODS AND OUTCOMES WHEN DESIGNING A FACULTY DEVELOPMENT PROGRAM
Paul Hendry, MD, MSc, FRCSC

PROBLEM STATEMENT: How can a faculty development programmer ensure the learning needs of faculty members align with current programming offered, objectives mandated for accreditation, while ensuring outcomes are measured and achieved? Curriculum mapping is commonly used for these purposes in the domain of undergraduate medicine. High stakes accreditation criteria underpin the need for a sophisticated faculty development curriculum and abandonment of the opportunistic approach..

APPROACH USED: Curriculum mapping complemented a needs assessment with broad stakeholder input. Recognizing this "backward mapping" as a tool to move programs forward, we analyzed our programming over the prior 2 years with regard to topics, degree of difficulty, learning formats, evaluation tools and assessment of impact including whether measuring impact is possible

FINDINGS; mapping exercises provided an easy to interpret compendium of data. Presenters provided the details about their sessions using a survey tool. The variety of programming and learning styles and evaluation tools was surprising. The difficulty of programs included basic to advanced and served the needs of teachers, researchers and clinicians.

BARRIERS AND FACILITATORS TO IMPLEMENTATION (if applicable). Having an education specialist with experience in curricular mapping who championed the process was key. Online surveys completion rates were, to our surprise, very high reflecting a high degree of engagement by those involved in faculty development.

IMPACT: Our curriculum mapping exercise will influence program development, has served to identify gaps and target areas that require innovation, advanced offerings and higher level assessment strategies. Curriculum maps will provide valuable information for use in accreditation.

TRANSITION TO PRACTICE CURRICULUM: THE UNEXPLORED ROLE OF CPD
Larissa Husarewych, MIR

BACKGROUND: The need for practice management (PM) training for medical residents is well-established in the literature as a requisite step in preparing trainees for their transition to independent practice. What has been less explored is the need to extend this support to new-to-practice physicians. Since published PM curriculum is predominately informed by residents and clinician educators, it is important to explore the needs of early career physicians in pursuit of developing responsive Continuing Professional Development (CPD) programming.

RESEARCH QUESTION: What PM topics should be taught by CPD providers to adequately support physicians during their transition to practice?

METHOD: A literature review and focus groups were used to identify 11 PM survey topics. Recent graduates from Schulich Medicine's residency programs were invited to complete a needs assessment survey (73/648[11.3%]). For each topic, respondents scored their perceived knowledge and importance from 1-7.

RESULTS: The mean rating across the 11 topics for participants' current knowledge was 4.79. Contract negotiation, M=3.88, 95%CI[3.52,4.24], and quality improvement, M=4.33, 95%CI[3.98,4.68], were rated as significantly lower from the mean. The standard deviation for each topic ranged from .95 (privacy and confidentiality) -1.54 (contract negotiation). The mean rating for importance across all topics was 5.89.

IMPACT: New-to-practice physicians identified priority PM topics that can be used to inform curriculum development. Variability in responses suggests the need for more consistent PM training for residents and early career physicians. In order to fully support physicians in their transition to practice, PM training is required at both Postgraduate and CPD levels.

ESTABLISHING A NEW ACADEMIC CME ENTITY AT THE UNIVERSITY OF ALBERTA: ENVISIONING A NEW LIFELONG LEARNING SYSTEM BY REALIZING SYNERGY & CREATING COLLABORATIONS TO ENHANCE PHYSICIAN LEARNING

Khurram Jahangir, MBChB, CCFP(EM)

There is a recognized need and compelling arguments for an academic continuing professional development (CPD) unit to provide opportunities and support for practicing healthcare practitioners to fulfil their lifelong learning needs and to promote a culture of improvement, accountability and assessment.

Lifelong Learning (L3) was established October 2015, at the University of Alberta, mandated to undertake Lifelong Learning for healthcare professionals, geared towards changing and optimizing healthcare quality and patient outcomes. Realizing factors: Creating a new scientific foundation for CPD, integrating research methods and findings from all disciplines and professions, generating research directions to understand linkages between CPD and patient / population health status, transforming knowledge into tools and methods to improve patient care, promoting development of measurement instruments to evaluate CPD effectiveness and efficiency, encouraging development and use of health information technology, and by fostering inter-professional collaboration. With inclusion now of Physician Learning Program (PLP) under the portfolio of Associate Dean Lifelong Learning, real opportunities exist to further develop, collect, analyze and disseminate performance metrics to enhance and align physicians' learning for quality.

It is time to think of learning as a continuum. Physicians must consider themselves as "lifelong learners of medicine" rather than viewing medical education in terms of silos. Medical education establishments must provide meaningful, relevant opportunities for adult learning that are contextual, occur in real time, and are measurable in terms of improving patient outcomes and value and cost-effectiveness of CPD delivery.

COLLABORATIVE BETWEEN TWO CPD OFFICES FOR ACCREDITATION OF CME PROGRAMS USING A PEER-REVIEW "BUDDY" PROCESS

Khurram Jahangir, MBChB, CCFP(EM)

Lifelong Learning, a new academic CPD unit at the University of Alberta, was required to have processes in place to facilitate accreditation of University of Alberta's CME programs, as well as fulfill standards for accreditation by the national accrediting body. CPD, University of Toronto, having attained accreditation by the national body, agreed to provide mentorship and coaching, as well as accredit UofA CPD programs facilitated by L3, upon fulfillment of its standards. This involved peer review of the academic process, certifying programs that met administrative, educational and ethical standards as defined by RCPSC, CFPC and other governing bodies.

This process ensures that curriculum is rigorous, scientifically sound, and qualifies for maintenance of certification credits in keeping with core values of lifelong learning, critical inquiry and scholarship. Furthermore, this provides opportunity for fusion of knowledge and skills of individuals into vastly more competent unit; providing opportunities for teamwork, increased output, optimal use of resources and enhancement of health professional learning.

Willingness to engage is essential for collaboration. The four key principles being: Interacting, Appreciative Understanding, Integrating and Implementing. We recognize & value our distinct physician and patient populations as well our workspace environments.

We hope to combine our diversity and views into mutually supportive patterns for thinking & acting in creative ways. Active planning, goal setting, discipline and consistent application of various change facilitating methods is expected to be the key to our success.

COALESCENCE OF PHYSICIAN LEARNING PROGRAM (PLP) WITH LIFELONG LEARNING (L3): A SYMBIOTIC PARTNERSHIP TO ALIGN PHYSICIANS' LEARNING FOR QUALITY IN ALBERTA
Khurram Jahangir, MBChB, CCFP(EM)

PLP was established in 2009 as a grant agreement between University of Alberta, University of Calgary and Alberta Medical Association. Its mandate was to be a resource for physicians to learn collaboratively and to enable them in assessing their practice and performance data. Such a vision, though, was difficult to achieve, with no association between the PLP and Lifelong Learning, University of Alberta's academic CME/CPD unit, leading to loss of many vital opportunities to undertake QI initiatives and in achieving PLP's envisioned objectives.

Recently, PLP in Edmonton was moved under the portfolio of Associate Dean Lifelong Learning. This, to ensure a culture of accountability and to help our physicians in achieving and maintaining competence, promoting a culture of self-assessment, measuring outcomes, auditing practice and doing impact assessment.

The objectives were to create synergy, promoting effective teamwork and increased output, providing opportunities to fuse knowledge and skills of individuals into a vastly more competent unit and for optimal use of resources for enhanced physician learning. Other advantages include incorporating needs assessments ensuring QI activities are controlled by and meet the needs of physicians; generating research directions to advance understanding of linkages between CPD and patient and population health status; promoting development of measurement instruments to evaluate CPD effectiveness and efficiency; transforming new knowledge into tools and methods to improve patient care; develop, collect, analyze and disseminate performance metrics.

Creating synergy, though often difficult to achieve, is worth the investment of time and effort when applied to critically important change endeavors.

EVALUATION OF MAINTENANCE OF CERTIFICATION PERFORMANCE IMPROVEMENT PROJECTS BASED ON PATIENT SATISFACTION SURVEYS
Vallerie Kolasinski, MPH, CHES

The Permanente Medical Group (TPMG) created the Member and Patient Satisfaction Improvement (MPS) Maintenance of Certification (MOC) project in August 2012. This project is based on our patient survey, and provides both MOC and Performance Improvement (PI) CME credits to physicians that complete the project. Our goal was to ascertain whether participants observed improvement in patient satisfaction and what barriers to improvement they encountered, if any.

We analyzed projects that were completed between 2012 and 2015. Improvement was calculated based on self-reported scores at the beginning and end of the improvement project, and we stratified the results based on participant board membership. We also completed a qualitative analysis of the open-ended answers on barriers to improvement.

From August 2012 December 2015, 377 TPMG physicians completed this project. Most physicians saw an improvement in MPS scores with an average improvement of 6.26 percentage points. In contrast, during the same period, the average MPS score fluctuated by only 0.2 percentage points for all physicians. We found no significant difference between specialties.

Top 10 barriers to improvement were: time, workload, competing priorities, staffing, new patients, patient expectations, system, access, discipline, and low response rate. Workload, competing priorities, and staffing barriers were common in 6 of the specialties, or 22% of responses.

This preliminary analysis illuminates some of the challenges that our participants encountered while implementing this project. Despite those challenges, the high rate of participation and success for project participants indicates that PI CME and MOC projects can improve patient satisfaction.

GUESS NOT: CONFIDENCE MEASUREMENT AS A MEANS OF VALIDATING KNOWLEDGE ASSESSMENT
Denise C. LaTemple, PhD

PROBLEM STATEMENT: Traditionally, CME knowledge change is evaluated using multiple-choice questions before and after an activity. Limitations of this approach are (1) it equates respondents' correct-but-unsure answers and lucky guesses with responses of learners who are correct and sure of it; (2) it labels respondents who provide incorrect answers as simply uninformed. It does not identify respondents who are sure of their incorrect answer (misinformed), a group at risk for using erroneous beliefs in making clinical decisions.

APPROACH USED: YouKnowIt!, an e-learning game created to record learners' answers to multiple-choice questions and rate confidence (using a three-point scale), was used to conduct pre- and posttests for four symposia and one online activity. Knowledge and knowledge-plus-confidence data were reported as mean pre-to-post percent correct answers based on the pooled analysis of all questions asked during each activity. Paired data were analyzed using the Wilcoxon test.

RESULTS/FINDINGS: All activities yielded a median of 70 matched pairs (range, 34-214) for responses to all questions. Traditional knowledge analyses (percent correct) showed a median pre-to-post change of 31% (range, 24%-44%), whereas knowledge-plus-confidence analyses (percent confidently correct) showed a median pre-to-post change of 76% (range, 51%-163%).
Barriers and Facilitators to Implementation: Adding confidence assessments to knowledge questions is easily implemented regardless of format (ie, electronically or paper survey).

IMPACT/SO WHAT? YOUKNOWIT! results consistently show greater improvements when knowledge-plus-confidence is assessed, and also identifies several knowledge/confidence combinations of potential significance. These combinations have implications for identifying educational gaps and potentially dangerous clinical misunderstandings.

ECONOMIC OUTCOMES OF AN INTERVENTION TO IMPROVE EARLY TESTING AND TREATMENT OF HIV
Rob Lowney

BACKGROUND: Little is known about the economic impact of continuing medical education.

RESEARCH QUESTION: What are the predicted economic outcomes of a CME activity to improve early testing and treatment of HIV?

METHODS: We executed one online and two live continuing educational activities designed to enhance competence in testing and treating HIV. Costs averted when participants implemented learning into their clinical practice were estimated using the outcomes impact analysis model. We modeled 1) decreased transmission resulting from awareness of infection and 2) earlier initiation of antiretroviral therapy (ART). Perspective was that of the health care payer and the time span was one year.

RESULTS: Evaluations demonstrated a strong commitment to change and intent to incorporate learning into practice. For the first model, the estimated costs averted were $10,731,517 when testing-related awareness led to decreased transmission. For earlier treatment, comparing ART initiation at 351-500 cells/μL vs 201-350 cells/μL the estimated costs averted were $11,685,686. When we compared initiating ART at 351-500 cells/μL vs < 200 cells/μL the costs averted were estimated to be $39,521,676.

IMPACT: An educational intervention improved competence in testing, linkage to care, and treatment of HIV. Estimates of the economic impact suggest that implementation of learning from the activity should be associated with substantial cost savings. The model may be used to predict the economic impact of CME activities as appropriate and can demonstrate the value of CME to stakeholders.

FROM COMPLIANCE TO EDUCATION: SHIFTING PERCEPTIONS OF CME
Karen Mariano, MPH, CHES

Changes in attitudes and perceptions never occur overnight. In our case, it took about a year to transform the perception that CME should be grounded in education, rather than focused on compliance. This change was jarring and controversial for the 16 accredited CME programs and their coordinators that make up Kaiser Permanente Northern California's Physician Education group.

Illuminating this transition is our conversion to a CME application without CME jargon, and instead focused on the education. In theory, everyone had agreed that the change was necessary in order to make it easier for planners to understand the application and to capture necessary information. In reality, the conceptual framework was getting in the way of the adoption of the new application.

After several failed attempts to bring the coordinators around to our perspective, we realized that we needed to rethink our training strategy. In this case study, we explore our challenges with converting our coordinators to this new mindset, and the interventions we used to address those challenges. Specifically, we focused on knowledge acquisition, attitude modification, and communication skills, using a variety of interactive methods, including: case studies, games, role play, small group work, debate, and demonstrations.

Participants will be able to discuss challenges with updating perceptions of clinical education, identify ways in which interactive training sessions can improve those perceptions, and apply similar strategies with their own education programs.

DEVELOPING ACTIVITY DIRECTORS AND PLANNERS: RESULTS OF A "CME/CE PLANNING 101" SERIES AT AN ACADEMIC MEDICAL CENTER
Rob Armstrong Martin, MBA, CHCP

PROBLEM STATEMENT: Based on a needs assessment of 17 live course applications and 35 Regularly Scheduled Series annual recertification applications, existing and aspiring Course Directors lack the ability to plan comprehensive CME/CE activities, so the closing of accreditation gaps in planning materials often falls to an over-committed staff in the CME/CE office. Acquiring these requisite skills provides essential leadership abilities in curriculum, resource and assessment development.

APPROACH USED: We designed and implemented a seven-part, one-hour interactive and flipped classroom model to train directors and planners in accreditation standards. Content included: needs/gap analysis ("What to teach"); instructional design elements ("How to teach"); adult and IPE learning principles ("Will they retain it?"); test and outcome measurements ("What will we know?"); accreditation standard validation ("Can it be accredited?"); resource/budget planning ("What will it cost?) and measuring practice change impacts ("Will it make a difference?").

RESULTS/FINDINGS: Forty inter-professional directors increased their proficiency with positive self-reliant follow-up ratings. Self- efficacy in participant leadership for CME activity development was achieved. Additionally, video-recorded sessions created future online learning modules.

Learners self-assessed via written pre/post evaluation on a 5-pt. Likert Scale

Mean Scores: Pre-session = 3.15; Post-session = 4.65 (> 1.50)

Post session effectiveness (Moore's Level 1): unanimous agreement at 5.00/5.00

Therefore, participants increased their knowledge and self-efficacy in CME activities and agreed unanimously that these instructional modules were effectively organized and conducted, thus increasing the series value for inter-professional development. Further ongoing analysis will be reported for individual sessions and longitudinal retention of knowledge.

IMPACT: Directors advanced their self-reliance when organizing and leading activities further reducing CME staff burden. This instructional model demonstrates best practices in activity leadership among inter-disciplinary course directors.

CUTTING EDGE CME/CPD ACCREDITATION, CERTIFICATION, AND LICENSURE IN THE US AND OTHER COUNTRIES
Mindi K. McKenna, PhD, MBA

PROBLEM: Requirements for CME/CPD accreditation, certification, and licensure are sometimes criticized as being excessively complex, ever changing, non-aligned, and a contributor to clinician burnout. An objective review is needed of evolving trends and the degree to which innovation have been implemented among oversight bodies, to discern whether harmonization of requirements is occurring.

APPROACH: We identified emerging trends through a historical review and thematic analysis of regulatory boards' enabling legislation; and identified innovations in CME/CPD accreditation/certification through a review of the policies of oversight bodies in the USA and 6 other countries (Australia, Canada, Ireland, Japan, New Zealand, and the United Kingdom.)

FINDINGS: CME/CPD Accreditation, Certification, and Licensure worldwide are generally demonstrating the following trends:

- Expectation that practice gaps will be addressed via: 1) Ongoing cycles of assessment and learning; 2) Participation in practice-relevant educational activities; and 3) Use of practice data for learning and improvement.

- Expectation that educational activities will: 1) Be linked to a competency framework (e.g., ACGME/ABMS, IOM); 2) Include a range of activity formats; and 3) Be independent from commercial influence.

CONCLUSION: Medical licensing boards have typically relied upon participation in CPD education activities to help ensure that physicians remain competent to practice medicine. CPD accreditation / certification, and licensure requirements are harmonizing worldwide. They are increasingly designed to ensure physicians continuously assess, learn and improve in the competencies associated with quality care. Those involved in Academic CME should adopt these cutting edge innovations and trends.

INITIAL RESULTS OF A MULTI-FACETED CME INTERVENTION TO REDUCE UNNECESSARY BLOOD TRANSFUSIONS
David W. Musick, PhD

We implemented a two-year CME intervention designed to educate physicians from several specialties about the risks of transfusion, and to assess the impact of the intervention. Our research question was: can a multi-faceted CME program impact transfusion practice, thus decreasing significantly the number of unnecessary transfusions? Our CME intervention was as follows: 1) STAT (short, timely and topical) education consisting of targeted email, web-based and brief printed communications; 2) pre- and post-intervention knowledge tests; 3) didactic presentations to physician groups in high-use specialties; and 4) modification of the electronic medical record (EMR) transfusion ordering protocol to include decision-support "pop up" boxes that served as reminders of indications/contraindications for transfusion. Preliminary findings focused on the impact of the CME intervention on transfusion rates by Internal Medicine resident physicians (N=55). Residents rated the education materials favorably. The number of transfusion orders was reduced by 69% for a six month period during year one of the project. Documentation for transfusion orders also increased by two-fold. Associated costs experienced a corresponding decrease, resulting in a reduction of $38,000 in the cost of red blood cell units. Targeted CME intervention suggests a dramatic impact on the transfusion practices of resident physicians in a single department. Further study is needed to determine whether this impact will be observed across our entire system.

INITIAL RESULTS OF A MULTI-FACETED CME INTERVENTION TO REDUCE UNNECESSARY NEUROIMAGING STUDIES
David W. Musick, PhD

Unnecessary use of imaging studies (CTs, MRIs) has received national attention due to concerns over increasing health care costs, and avoidable radiation and contrast exposure. As many as a third of hi-tech imaging studies may be unnecessary, and 20% to 60% may be inappropriate or of uncertain value. When imaging is ordered without compelling clinical justification, this contributes to significant cost, quality, safety, and patient satisfaction concerns. Our research question was: can a multi-faceted CME intervention simultaneously reduce the number of unnecessary neuroimaging studies ordered and increase the supporting documentation for those studies? We implemented a CME intervention which combined online educational modules, modifications to our EMR and live presentations. Approximately 123 resident and 145 attending physicians in ten clinical departments completed the modules, which covered three related content areas pertaining to neuroimaging: medical appropriateness, common indications and supporting documentation. We collected baseline (3 months) and post-intervention follow up (3 months) data pertaining to the number of ordered scans and appropriateness of clinical documentation. Data analyses were based on descriptive statistics and costs savings. Across all departments, when comparing baseline data to post-CME intervention data, we found a 31% reduction in the overall number of tests ordered (range = 5% to 63%). Clinical documentation scores improved by an average of 8% (range = 3.5% to 57.5%). A CME-based intervention resulted in an avoidance of significant exposure to radiation for patients and a reduction in billing of approximately $1.24 million, resulting in safer patient care and improved financial performance.

KEEPING WITH THE TIMES: OFFERING AND TRACKING CREDIT TO ADDRESS REGULATORY MANDATES
Alisa Nagler, JD, MA, EdD

In addition to AMA PRA Category 1 Credit™ and Self-Assessment Credits, state licensing boards and other regulatory bodies have established specific content requirements such as Patient Safety, Ethics, End-of-Life Care, Trauma. There is great variability (which states require what content) and in some cases limited guidance on how to meet these licensure or certification requirements. Beginning in 2015, the American College of Surgeons (ACS), Division of Education began providing CME activity planners with the opportunity to formally designate content that may meet regulatory mandates. Required content areas were identified with a thorough search of individual State licensure/CME requirements. In 2015, the ACS approved Credit to Address Regulatory Mandates for 10 educational activities (7 internally sponsored and 3 JPP). For 2016, 20 have already been approved and this is expected to total more than 40 by the end of the year. The MyCME platform was enhanced to document these hours for individuals, and the CME Certificates and transcripts were changed accordingly. Within the ACS MyCME program, more than 30,000 regulatory mandated content areas have been documented in College member portfolios, totaling more than 100,000 hours thus far. The College has been careful to express that it's the individual practicing physician and the Regulatory Body, which must verify content that does and does not meet requirements. It is critical for those involved in CME to be open and flexible in helping practicing physicians meet their changing CME requirements while fostering meaningful life long learning.

QUALITY OVER QUANTITY: LET'S MAKE SELF-ASSESSMENT CREDIT MEANINGFUL
Alisa Nagler, JD, MA, EdD

While relatively easy to develop, offer and track Self-Assessment Credit, the challenge is to ensure a meaningful assessment process that fosters lifelong learning, helps individuals identify strengths and deficiencies, and promotes opportunities for personal and professional growth.

The American College of Surgeons (ACS), Division of Education sought to enhance its offerings of Self-Assessment Credit. The ACS implemented an elaborate process of collecting, reviewing (by ACS staff and surgeon content experts), utilizing and evaluating Self-Assessment Credit questions and results for its Annual Meeting – the ACS Clinical Congress. The varied requirements pertaining to Self-Assessment across specialties and Boards was reviewed. For surgery, at least 60 of the 90 Category I CME hours completed over a 3-year Maintenance of Certification (MOC) cycle must have Self-Assessment, which includes a question-answer exercise to assess

understanding of CME program content. A score of 75% or higher must be achieved. The American Board of Surgery (ABS) provides no approval process for Self-Assessment activities. Thus, the ACS developed a process guided by Adult Learning Theory.

Preliminary results of the ACS effort have brought structure to CME program planners and suggest an enhanced experience for learners and opportunities for a more meaningful Self-Assessment program, including self-reflection and personalized learning plans. The challenge remains finding the balance between a process which is too cumbersome and time-consuming (for the program planners and learners) with one which is feasible and a meaningful component of a physicians' CME requirements.

The ACS effort and findings can provide guidance to others working to achieve a meaningful Self-Assessment experience for those planning educational activities and ultimately learners.

WORKING SMARTER
Sheila Newby, MBA

PROBLEM STATEMENT: Having multiple individuals working on different aspects of planning for CME courses made it challenging to find information; such as, registration, grants, exhibits, marketing etc. It is necessary to access information in a timely manner which was not an option in our previous system.

APPROACH USED (WHAT DID YOU DO?): An excel spreadsheet was developed called the Dashboard allowing individuals to enter information for the course. The document has various worksheets allowing staff to access course information at a glance; such as grants, exhibits, registration, faculty and marketing.

RESULTS / FINDINGS: We found that this tool saved time for CME staff and made CME planning more efficient. Instead of having to search for registration numbers or whether a grant application was submitted; members of our team are able to open the document now called the "Dashboard" and have immediate access to course information.

IMPACT/SO WHAT? The Dashboard is an invaluable tool allowing staff to find information quickly while providing an overview of the course. It is useful in the event a staff member is out of the office allowing the information to be readily accessible and enabling CME staff to know where the individual is in the planning process to continue with their work load.

PEER OBSERVATION OF TEACHING AND FEEDBACK IN CONTINUING MEDICAL EDUCATION: A WORK-IN-PROGRESS
Lori Newman, MEd

BACKGROUND: Providing peer observation and feedback to colleagues leads to immediate and long-term improvements in teaching skills. We piloted a program to conduct peer observation of continuing medical education (CME) using teaching effectiveness criteria.

RESEARCH QUESTIONS: (1) Does having trained course participants conduct peer observations of CME presenters increase the presenters' reflections about teaching and willingness to apply peer feedback? (2) Do peer observers identify areas in their own teaching they plan to change as a result of the experience?

METHODS: We trained course attendees to conduct peer observation of CME presenters at a radiologists' national meeting and an international pediatrics course. Observers used 11 criteria of teaching effectiveness. Prior to their sessions, presenters identified criteria about which they wanted feedback. Observers met with presenters following their teaching to provide feedback on specific teaching behaviors. Afterwards, presenters and observers completed a survey to rate the benefits of peer observation and if they planned to make changes to their teaching.

RESULTS: 14 presenters and 10 observers participated in the pilot study. 79% of presenters agreed that "peer observation encourages reflection about best teaching strategies," and 93% planned to apply changes to their teaching. 90% of observers agreed they would make changes to their teaching as a result of participating in the program.

IMPACT: Initial data indicate peer observation enhances awareness of effective teaching strategies and increases presenters' and observers' willingness to make changes to their CME presentations. Based on this pilot, further integration of peer observation into CME settings seems warranted.

THE COMPLEXITY OF COMMUNICATIVE NETWORKS: A REFRAMING OF PHYSICIAN COMMUNICATION
Laura E. Nimmon, PhD

BACKGROUND: Discussions in the field of CME/CPD tend to implicitly depict a restricted, technical model of communication as a transaction between a physician and patient at a single moment in time.

RESEARCH QUESTION: How to do social network interactions contextualize meaning making around the health information delivered in a physician-patient communication?

METHODS: Using an ethnographic research design and a social network analysis orientation, lay people's patterns of social interaction around health information were investigated over a one year period in a rural community in Canada. Data included: individual interviews, focus groups, and field notes. Data were analyzed in three stages: (a) item analysis, (b) pattern analysis, and (c) structural level analysis.

RESULTS: As participants interacted with a range of individuals in their social networks, health information flowed rhythmically through a complex temporal system of interpersonal ties. It was repeatedly constructed, shared, elaborated, interpreted, and reconstructed. This iterative, social process of knowledge construction situated and transformed physician-provided knowledge and communication in patients' construction of their own health and health care.

IMPACT: This research highlights how communication is an iterative meaning making process that is embedded in a multiperson network, always imbued with relations of power. Patient-physician communication is not an isolated knowledge transmission process that produces a stable conceptual artifact in the mind of a patient. Physicians are only one nodal point in patients' broad multilayered networks of communication. Teaching physicians this construction of communication will enable them to more effectively engage as a participating member of patients' social communication network.

IMPROVING FACULTY EDUCATION THROUGH HYBRID LEARNING
JOINT FACULTY DEVELOPMENT PROGRAM:

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Alexzandra Hollingworth
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PROBLEM STATEMENT: Community preceptors are generally experts in clinical practice, however, when placed in an educator role many struggle with the basics of teaching due to little or no experience or formal training in educating residents and medical students. Clinical faculty should be proficient with the fundamental knowledge, skills, and abilities to effectively teach and evaluate medical students and residents. Additionally, they should be well versed in content delivery strategies, teaching tools, learning theories, effective communication, and providing appropriate feedback – among other skills. Faculty development on these basic principles is difficult for busy clinicians to access but offering hybridized delivery methods may assist in bridging this learning gap.

APPROACH USED: HonorHealth and the University of Arizona College of Medicine - Phoenix collaborated to develop and implement an 8-month faculty development program with flexible online learning modules and

two in-person sessions. The curriculum was collaboratively developed in partnership with the U of A to cultivate physicians as educators.

EXPECTED RESULTS / FINDINGS: 10 clinical faculty participated in the 2015-2016 program.We found, through the first cohort that physician educators concluded the program with a better understanding of learning theories and methods. Faculty who completed the course feel they are prepared to effectively teach medical students and residents.

IMPACT/SO WHAT? We are in the planning and preparation stage for the 2016-2017 program, and based on suggestions from the previous cohort we are making improvements and changes for this year's program. Changes include inviting core residency program faculty and senior residents to participate, integrating interactive software, and rearranging content to focus on the practical application of skills.

FINDING THE INTERSECTION BETWEEN QUALITY IMPROVEMENT AND CONTINUING MEDICAL EDUCATION USING A MIND MAP: A CASE REPORT
Cynthia Pineda, MD

PROBLEM STATEMENT: Our institution identified the lack of a systematic process of integrating quality improvement (QI) into continuing medical education (CME) activities.

EDUCATIONAL APPROACH USED: Building on efforts to become a high-reliability organization, a QI-CME mind map was created to guide CME planning. The mind map served as a visual diagram utilizing the concept of hierarchy, branching and sequential arrangement showing relationships among pieces of the whole. The aim was to ensure that CME activities aligned with our institution's mission and addressed our learner's gaps in practice. Focus groups were conducted and the mind map served as a trigger for brainstorming on CME topics relating to patient safety and QI.

RESULTS: Since the implementation of the mind map, opportunities for QI-focused CME are growing. Outputs include: (1) penetration of institutional priorities and successful integration into CME; (2) increased efforts of quality metrics use to build educational programs and demonstrate their effects; (3) increased attention in providing alternatives to traditional lectures (i.e. panel discussions/role playing/case-based presentations/ workshops consistent with adult learning techniques; (4) shift of focus of topics to team-based competencies and interprofessional continuing education.

BARRIERS/FACILITATORS TO IMPROVEMENT: QI in healthcare is an evolving and dynamic process. Institutional and learner needs/gaps change over time. The QI/CME mind map must be updated as needed with the guidance of the institution's QI team and stakeholders.

IMPACT: A QI/CME mind map can be used as a tool for strategic planning for successful implementation of relevant interprofessional continuing education with the ultimate goal of improving patient care and outcomes.

APPLICATION OF RAPID PRODUCT DEVELOPMENT APPROACH IN CONTINUOUS PROFESSIONAL DEVELOPMENT
Mary J. Poterucha Carter

PROBLEM STATEMENT: Online learning is now well-accepted and adopted as an important continuing professional educational approach. Innovations in online learning are common, but often require extended periods to develop and evaluate.

APPROACH USED (WHAT DID YOU DO?): Mayo Education Innovation (MEI) uses a rapid-cycle approach including customer discovery, iterative «Build-Measure-Learn» minimum viable product development, and «fail fast» project decisions.

RESULTS / FINDINGS: In a five-month pilot phase, MEI interviewed dozens of potential customers (nurse practitioners, physician assistants, and physicians) about their continuing education needs and, in response to needs thus determined, developed and tested three online learning innovation prototypes:

1. **CasesApp**: Mobile based platform for peer groups to share and discuss cases; 4 weeks from idea to minimum viable product, participants reluctant to utilize video or share cases.
Decision: terminate.

2. **360 Video:** Capture simulated clinical scenarios with 360 video; 9 days from idea to minimum viable product; available technology did not support complexity of clinical care. Decision: terminate.

3. **OnPar:** Clinical reasoning game; 3 weeks from idea to minimum viable product; participants highly engaged, asked for more, shared with friends.

Decision: Pursue further development.

• **Barriers and facilitators to implementation (if applicable) :**   Barriers included competing resource needs, obtaining buy in and support on the approach and changes in top leadership.

• **Impact/So what?:** This approach to product creation and evaluation allows efficient testing, validation and decision-making.

TPMG OPIOID INITIATIVE
Diane Purcille-Eubanks, MAEd

PROBLEM STATEMENT : The impact of the opioid epidemic has been well documented. To change physicians opioid prescribing practices, barriers to change must be identified, addressed and reinforced. One barrier identified by our physicians was communication with patients about risks and benefits of opioids, goal setting, ongoing monitoring and when tapering was recommended.

APPROACH USED: We developed a multi interventional strategy to facilitate practice changes which included addressing patient clinician communication. We implemented an innovative approach to the design utilizing videos as part of communication training. The viewer follows a physician as he is implementing the components of the new regional workflow. The physician is confronted with common challenges in implementing the workflow including communicating with his patient about the purpose of the workflow step. At critical junctions the physician "stops" the interaction and asks for advice from a mentor, who helps him communicate with the patient. The video concludes with the physician implementing the recommendations and summarizing key learnings from the interaction. The videos demonstrated an innovative way to address communication skills training that was entertaining and authentic to struggles experienced by physicians implementing the workflow. These videos were designed to be used in a live presentation to stimulate discussion and practice demonstrated skills.

IMPACT: Following the implementation of our multi interventional strategy, objective results included; on use of high dose opioids, average MMEs/patient, use of medication agreements and urine drug screens as well as anecdotally increased comfort and confidence of our physicians in communicating with patients.

SOCIAL INTELLIGENCE IN CPD
Savithiri Ratnapalan, MBBS, MEd, MRCP, FAAP, FRCPC

Teaching and learning in group settings is a social encounter where the educator assumes a leadership position to facilitate knowledge exchange. As educators, we have to be aware that our brains are getting connected to each other and emotions are contagious. We have to become socially intelligent about how others affect us and socially responsible as to how we affect others. The concepts of social intelligence theories used to develop and implement a 'Train the trainer program in Paediatric Emergency Medicine' for consultant emergency physicians will be discussed to illustrate concepts.

Learning Objectives
At the end of this session participants will be able to

1. Describe social intelligence and its components

2. Discuss the low and high neural pathway functions

3. Apply social intelligence to analyze a social interaction

4. Discuss use social intelligence in CPD.

TIPS & TRICKS ON IMPROVING SCHOLARLY WRITING
Savithiri Ratnapalan, MBBS, MEd, MRCP, FAAP, FRCPC

Goal: This interactive workshop aims to give participants hands on practice both in writing up their academic work for peer review and scientifically analyzing scholarly presentations and publications.

Objectives:
At the end of this workshop, participants will be able

1. List and describe the 3 types of scholarly writing

2. Discuss 3 principles of writing a manuscript

3. Write an abstract of their educational project to clearly articulate the message

4. Scientifically critique scholarly presentations and publications.

Description
Almost all educators involved in continuing education are expected to read scholarly articles and disseminate their work in peer reviewed platforms. This practical workshop will help participants apply basic principles of manuscript writing to their current work. Participants are encouraged to bring a completed or ongoing project to work on and share with the class.

YOUR ACTIVITY IMPROVED PRACTICE BEHAVIORS. BUT DO YOU KNOW WHY? USING PREDICTIVE MODELING TO INFORM OUTCOMES.
Jamie Reiter, PhD

Introduction. In medical education, we often ask whether or not an activity was successful, that is, whether it improved outcomes. But rarely do we ask why. If an activity was successful, do we know the factors contributing to its success so that we can repeat them for future activities? Conversely, if an activity was less than successful, do we know what prevented improvements? Factors such as learner demographics, activity format, therapeutic area, question wording, knowledge, and confidence can influence responses to behavior questions or other endpoints. Being able to answer the "why" related to educational outcomes success is an important component of developing activities that ensure best practices are being implemented, resulting in improved patient outcomes.

The medical education industry is starting to appreciate the value in predictive modeling. Linear and logistic regression are among the more widely used methods, but they have some limitations. PredictCME utilizes a form of predictive modeling known as CHAID (chi-square automatic interaction detection) and applies it to data from medical education activities. Although frequently used in data mining, CHAID has not been utilized in medical education. CHAID has advantages over linear and logistic regression, including the ability to incorporate both continuous and categorical data, as well as output in the form of a classification (or decision) tree which provides a visual representation of interplay between predictor and response variables as well as the breakdown of responses. This presentation provides results from a PredictCME analysis of real-world data from an educational activity.

METHODS. Data from 262 healthcare providers (HCPs) participating in an educational activity on Alzheimer's Disease (AD) were analyzed using PredictCME. A question related to practice behavior was entered into the model as the response variable, with variables such as knowledge, number of patients seen with AD, years in practice, and confidence entered as predictor variables.

RESULTS. Results showed that the strongest predictor of practice behavior was confidence. A secondary predictor was the number of patients with AD seen by the learners.

DISCUSSION. For future activities, it will be important to consider ways to improve HCP confidence as well as address the needs of HCPs who don't see a large number of patients with AD.

CONCLUSION. These findings demonstrate the utility in using predictive modeling to better understand the influences of practice behavior, which in turn will help maximize the impact of future activities, and ultimately patient outcomes.

LIVE STREAMING OF GRAND ROUNDS: AN EDUCATIONAL DELIVERY MODEL BETWEEN THE UNIVERSITY OF NEW MEXICO AND ITS STATEWIDE MILITARY TREATMENT FACILITIES (WORK IN PROGRESS)

Robert L. Rhyne, MD
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Shayne Stokes, MD
Joann B Couch, MD
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27th Special Operations Medical Group, Cannon AFB; 377th Medical Group, Kirtland AFB; 49th Medical Group, Holloman AFB; and Office of Continuing Medical Education and Professional Development, University of New Mexico School of Medicine, Albuquerque, New Mexico

PROBLEM/PURPOSE. Military clinicians must remain current and obtain CMEs for readiness and licensure. Many military treatment facilities (MTFs) are outpatient clinics or remote from academic health centers. We sought to develop a sustainable virtual CME model fostering partnerships between a state medical school and MTFs.

METHODS/APPROACHES. Beginning in 2015, webcasting technology delivered live grand rounds sessions from the University of New Mexico (internal medicine, pediatrics, psychiatry, ethics institute) to the three in-state Air Force bases. Clinicians participated in a "lunch and learn" fashion. The technology approach employed a traditional lecture followed by a real-time dialogue between participants. Data from post-lecture surveys were collated and analyzed.

RESULTS. A total of 93 healthcare providers (physicians, nurses, nurse practitioners, pharmacists) viewed the 42 grand round sessions, earning 3,906 CME credits with no registration charge. Surveys demonstrated a high degree of satisfaction without commercial bias. The program boosted interdisciplinary comradery via scholarly discussions and clinical protocol revisions.

BARRIERS/FACILITATORS TO IMPLEMENTATION. Variations in adoption between the bases related to staff turnover and different proximities from medical centers. The technology and equipment already existed at the MTFs.

IMPACT. Participants gained free educational credits and knowledge to more optimally care for patients at their MTF or abroad. Cost savings resulted from less travel and professional time away for CME. Further collaboration was invited; for example, Cannon clinicians are presenting military-medicine topics in return. This innovation could serve as an educational delivery model for other medical schools and MTFs in their state.

VALUE OF ACADEMIC DETAILING IN ADDITION TO ADAPTIVE CPD WORKSHOPS IN STIMULATING PROVIDER BEHAVIOR CHANGE IN MANAGING CHRONIC PAIN (WORK IN PROGRESS)

Robert L. Rhyne, MD

PROBLEM/PURPOSE. Traditional methods for disseminating evidence-based (EB) information to rural providers have not worked well to stimulate provider behavior change. Health extension methods, combined with academic detailing (AD), may be a viable method for disseminating adaptive continuing professional development (CPD). The purpose of this study was to test the feasibility and effectiveness of 1) adaptive CPD based on the evolving educational needs of providers, and 2) disseminating CPD using academic detailing methods, in assessing provider behaviors in managing patients with chronic non-cancer pain (CNCP).

METHODS/APPROACHES. A mixed method, comparative effectiveness study in two rural federally qualified health center (FQHC) systems in New Mexico included a full intervention FQHC group (INT) that received clinically-oriented workshops with EB algorithms and toolkits plus 12 months of individual AD for providers, and a control FQHC group (CTRL) that received only the workshops.

RESULTS. Among all 35 provider participants (10 physicians, 25 advanced practice providers) the proportion managing CNCP increased from 71% to 96%. Those reporting never prescribing opioids decreased from 30% to 10% in the INT and from 50% to 21% in the CTRL. Those comfortable with initiating and managing CNCP with opioids increased from 40% to 80% in the INT and 21% to 36% in the CRTL. There was a high degree of receptivity with AD visits and iterative, adaptive CPD.

IMPACT. Adaptive academic detailing plus evidence-based CPD workshops stimulated provider prescribing change in CNCP management. A priori, adaptive CPD with AD will be conducted on a larger scale to address this major health problem.

TEACH FOR UCSF CERTIFICATE PROGRAM: ENCOURAGING EDUCATIONAL SKILLS DEVELOPMENT IN FACULTY AND TRAINEES
Victoria J. Ruddick

In this presentation, the author shares UCSF's experience with designing and implementing Teach for UCSF Certificate Program, initial outcomes, and future plans.

To address faculty development needs, UCSF offers over 60 free, CME-accredited workshops annually with overall participation nearing 1000. With so many options, we recognized that faculty needed an approach to navigate through offerings, advance toward a goal, and receive recognition of their efforts.

Enrollment of 500 faculty suggests a flexible, structured path allows faculty to develop teaching skills according to their needs, schedules, and interests. Participants list the certificates on their CVs. The focused approach allows us to meet evolving teaching needs. Our progress with data management may inform other institutions considering similar programs.

One abstract reviewer commented, "This is a well-written abstract describing a faculty development program focused on educational skills. This example of the best practice is relevant to academic institutions that are looking for ways to enhance and streamline faculty development."

Future directions include a program evaluation, which will be touched on for this presentation and implemented in the coming months, and expansion to include additional certificate tracks such as Teaching Quality Improvement/Patient Safety, and Education Leadership.

SIMULATION TO IMPROVE TEAMWORK IN ACUTE STROKE CARE
Stacy Sattovia, MD, MBA, FACP

PROBLEM: Memorial Medical Center (MMC), a training site for Southern Illinois University School of Medicine, is a Joint Commission certified Advanced Comprehensive Stroke Center, reflecting a ability to treat complex stroke cases. At baseline, MMC stroke team was achieving arrival to revascularization goals of 45 minutes or less in only 54.9% of cases and identified teamwork and communication failures as barriers to optimal performance.

APPROACH: Members from all disciplines of the stroke team participated in two blinded simulations while remaining attendees watched a live feed. Timeliness of stroke care, knowledge, teamwork, confidence and understanding of roles were evaluated. Continuing education credits were awarded.

RESULTS: Communication during handoffs improved. 85% of respondents felt the simulation improved understanding and confidence in their role, and 94% of respondents felt the simulation improved their appreciation of the complexity of team communication in this critical clinical process.

IMPACT: Our stroke simulation was a highly interactive, multidisciplinary, blinded simulation designed to address performance gaps in acute stroke. The stroke team had identified issues of teamwork pre-simulation as a barrier to high performance. The same members subsequently demonstrated a statistically significant improvement in two key areas of team communication. In addition, the attendees appreciated the complexity of the entire process and felt more confident in their own roles within this critical clinical situation. When moved to the entire healthcare system, this simulation has the potential to improve acute stroke care at MMC.

USING SIMULATION TO TEACH INJECTION TECHNIQUE FOR FACIAL REJUVENATION
Annette Schwind, MS, CHCP

PROBLEM: Aesthetic medicine training is highly variable based on the scope of a residency program. Some trainees are unable to practice injection technique to either obtain initial experience or gain proficiency for neuromodulators and soft tissue fillers for facial rejuvenation.

APPROACH USED: Resident physician workshops with realistic head models were implemented using a Tell - Show - Do - Feedback framework. A didactic overview was followed by demonstrations by expert faculty on the head models and actual patients. Participants engaged in hands-on practice using the head models in small groups led by faculty who gave feedback during and after each injection attempt.

RESULTS/FINDINGS: 96% of participants indicated increased confidence in their ability to inject neuromodulators and soft tissue fillers. Learner feedback strongly emphasized the uniqueness of the opportunity for hands-on practice.

BARRIERS AND FACILITATORS TO IMPLEMENTATION: Leveraging faculty relationships at respected academic institutions and presenting CME-certified, commercial bias free activities of helped Paradigm overcome the barrier of buy-in from residency directors. Additionally, head models simulating typical patients were not available, so we had to create and manufacture our own models for use in the hands-on activities. Some grantors now provide head models as in-kind support for CME activities, eliminating the equipment barrier.

IMPACT/SO WHAT?: Facilitating uptake of new skills by clinicians requires the opportunity to practice without risks to patients; CME is perfectly positioned to do this. CME can also be an asset to supplement graduate medical training programs that do not provide hands-on training in particular areas and skills (ie, aesthetic medicine).

OPTIMAL MANAGEMENT OF COMORBIDITIES IN PATIENTS WITH RHEUMATOID ARTHRITIS: A FLIPPED CLASSROOM APPROACH
Marianna Shershneva, MD, PhD

PROBLEM STATEMENT: Some rheumatologists provide suboptimal screening and management of comorbidities in patients with rheumatoid arthritis (RA). Given rapidly evolving evidence in this clinical area and the complexity of treating patients with RA and comorbidities, education is needed to help clinicians close practice gaps. To increase learner engagement and education effectiveness, we developed innovative educational interventions and comprehensive outcomes assessments to evaluate them.

APPROACH USED: We designed a flipped classroom approach, including a reverse-enduring activity - a didactic component based on audio-recorded TED-style presentations, and a workshop - a live activity involving work in small groups on clinical cases and feedback from the facilitators and the audience.

RESULTS: The reverse-enduring activity launched June 2016. Within the first two months, 186 clinicians actively participated, and 18 of 24 who claimed credit expressed interest in the workshop. The average posttest score was 62%, confirming the need for further learning; and 22 of 24 planned practice changes. These outcomes informed development of the workshop. The workshop was implemented in November 2016: 16 participated but only a few completed posttest and evaluation. A total of 27,631 participated in the enduring activity in June-April 2017.

BARRIERS AND FACILITATORS TO IMPLEMENTATION: We were challenged to design a feasible approach for offering the reverse-enduring activity as a prerequisite for the workshop. We also had to overcome logistical and other project execution barriers that will be discussed.

IMPACT: This project offers an example of how several innovative educational strategies – a flipped classroom approach and a TED-style presentation – may be used within the field of continuing education. Learnings from this project will also be included in our presentation to inform future education.

USING RAPID QUALITATIVE ANALYSIS TO SUPPORT THE DEVELOPMENT AND IMPLEMENTATION OF A VIRTUAL WORLD TRAINING FOR PRIMARY CARE PROVIDERS ON CARING FOR VETERANS WITH POST-TRAUMATIC STRESS DISORDER SYMPTOMS
Marianna Shershneva, MD, PhD

BACKGROUND: Military veterans with post-traumatic stress disorder (PTSD) symptoms receive care from primary care providers (PCPs) who often lack basic skills in detecting and managing PTSD and in using effective communication techniques. We received Department of Defense funding (1) to develop an innovative, Virtual World (VW) training for PCPs to address this gap, and (2) to compare its effectiveness with a traditional web-based course covering similar content.

RESEARCH QUESTION: In our developmental formative evaluation we used qualitative methods to explore perspectives of PCPs, educators, health care leadership, and information technology specialists on the relevance, acceptability, and feasibility of the VW training.

METHODS: Data are collected through semi-structured interviews and analyzed using rapid qualitative analysis, a collaborative process involving triangulation, iterative data collection and analysis procedures to quickly develop an understanding of a target area from stakeholders' perspectives. Structured templates are used to summarize themes from each interview.

Themes are then categorized into a matrix to display convergent content, compare findings across participant groups, and document implications.

RESULTS: Data from 10 PCPs revealed diverse challenges and expectations in caring for veterans with PTSD and in utilizing VW trainings. Other interviews are in progress. We will present our methodology and major findings, and discuss how these data systematically influence the development and implementation of the training and the novel technology, e.g. the design accounting for generational differences in learners' resistance to VW environments.

IMPACT: Rapid qualitative analysis is well-suited for needs assessment, evaluation and research projects that have pragmatic need for qualitative data, constricted timeframe, and rigorous findings.

ADVANCES IN TREATMENT OF MODERATE TO SEVERE PSORIASIS: A SERIOUS GAMING APPROACH
Marianna Shershneva, MD, PhD

PROBLEM STATEMENT: Despite the availability of improved therapies, many patients with moderate to severe psoriasis receive inadequate treatment, unnecessarily experiencing multiple negative impacts of the disease. Knowledge gap with respect to how improved understanding of psoriasis pathogenesis informs the development of increasingly efficacious psoriasis treatments contributes to the above practice gap. Traditionally, this knowledge gap was addressed by a lecture-based approach, which often resulted in low knowledge retention and application. In order to increase the educational impact, we designed an interactive approach using serious gaming to educate dermatologists on this topic.

APPROACH USED: A75-minute live workshop was conducted in conjunction with the 2017 Maui Derm for Dermatologists meeting in March 2017. It included (1) a presentation on advances in treatment of psoriasis, (2) an Immunology Game using a facilitator to challenge participant teams on a topic of psoriasis pathogenesis, and (3) a roundtable discussion and question-and-answer session.

RESULTS: Outcomes assessment includes pre- and posttests, commitment to practice change with follow-up, and phone interviews with a sample of participants. Available results will be reported during the presentation.

BARRIERS AND FACILITATORS TO IMPLEMENTATION: Will be addressed.

IMPACT: Games provide a novel way of organizing CME/CPD events. Serious games build adaptive expertise through teamwork and empathy, problem-solving, and improved self-confidence and emotion management. Well-designed game sessions use non-threatening competition to capitalize on heightened learner arousal and to facilitate high-level engagement and dynamic group discussion. We will discuss whether these benefits of serious gaming were realized in our educational approach.

INTERPROFESSIONAL COMMUNICATION WITH AIDET AND HCAHPS IN SIMULATION
Samantha Singh, MSN, MSW, PhD (A)

INTRODUCTION: The Center for Medicare and Medicaid Services (CMS) has linked reimbursement with the Hospital Consumer Assessment of Providers and Systems (HCAHPS) to measure patient satisfaction. The survey asks healthcare patients to rate their physician and nurse on how often the physician and nurse treated them with courtesy and respect, listened carefully to them and explained things in a way they could understand. The result of the patient satisfaction survey is stored in a national data base and can impact the hospital every year financially.

METHOD: Conducted a 45 minutes to an hour one-to-one training with three colleagues from different disciplines and levels.

RESULTS: The session provided the opportunity for feedback, coaching, and validating the need of participants to model the content in their practices. The participants left with a sense of understanding themselves and communication styles from the combination of their own perspective, the perspectives of a coach and a patient, and visual record of their performance from the video.

CONCLUSION: Communication and being self-aware are skills that need to be practiced with feedback before these can be hardwired into practice. Healthcare professionals will benefit from more role-playing of "what right looks like" with Interprofessional training. This session provided content with application which helped the participants to begin metacognitive hardwiring the content of patient interaction skills. A follow up survey will be sent to participants to assess if the content provided in the training impacted their practice.

BUILDING MENTAL HEALTH CAPACITY IN PRIMARY CARE: AN EVALUATION OF AN ECHO (EXTENSION OF COMMUNITY HEALTH OUTCOMES) MENTAL HEALTH PROVINCIAL PILOT
Sanjeev Sockalingam, MD, MHPE, FRCPC

BACKGROUND: Project Extension for Community Healthcare Outcomes (Project ECHO©) seeks to reduce disparities in healthcare delivery between urban centres and rural communities by building primary care provider (PCP) capacity through a virtual 'Hub' and 'Spoke' tele-education model. The model supports PCP development through co-management of complex real-world patients with a specialist team; learning from community-based providers practicing in similar settings; and focused didactic presentations. Current evidence demonstrating the effectiveness of this model is limited, particularly in the context of mental health.

RESEARCH QUESTION: Does a pilot program in mental health and addictions improved PCP practice outcomes, as measured by participation rates, learner satisfaction, knowledge change and self-efficacy?

METHODS: ECHO Ontario Mental Health was evaluated using Donald Moore's Continuing Education evaluation framework; outcomes corresponded to Moore's Level 1 (number of participants) to Level 4 (perceived competence). Participants completed pre - post multiple choice tests and self-efficacy scales. Weekly questionnaires assessed satisfaction with the setting and program delivery.

RESULTS: Spoke retention rate was 92.3%; an average of 34 providers representing 26 sites participated weekly. Satisfaction ratings were consistently high across all domains. Knowledge scores significantly improved post-ECHO ($p < .001$). Perceived self-efficacy also increased over time and approached significance ($p = .053$).

IMPACT: This is the first study to report on mental health outcomes related to Project ECHO. The results indicate that high participant retention rates are achievable, and provide evidence for increased knowledge and self-efficacy in participants. Although preliminary, these findings support the use of this intervention to improve PCP management of mental health.

THE IMPACT OF PROJECT ECHO ON PARTICIPANT AND PATIENT OUTCOMES: A SYSTEMATIC REVIEW
Sanjeev Sockalingam, MD, MHPE, FRCPC

BACKGROUND: Project Extension for Community Healthcare Outcomes (Project ECHO©) is a capacity building model that uses videoconferencing technology to bridge knowledge gaps between specialists in academic centres and primary care providers in remote communities. This model has been implemented worldwide to leverage scarce resources and support the management of various chronic medical conditions in primary care settings.

RESEARCH QUESTION: What is the current evidence to indicate that the ECHO model is feasible and effective as a continuing medical education program?

METHODS: PubMed, MEDLINE, EMBASE, PsychINFO and ProQuest databases were used to identify peer-reviewed articles related to Project ECHO published between January 2000 and August 2015. Additional articles were generated through reference searches. Excluded works included: editorials, commentaries, grey literature, non-peer reviewed, or non-English. Donald Moore's continuing medical education evaluation framework was used to review and organize available literature.

RESULTS: 39 papers were identified that described Project ECHO's involvement in 17 different medical conditions and met all inclusion criteria. ECHO evaluation has been largely limited to Levels 1-4 (spanning evaluations of participation to competency) of Moore's framework (n= 38 studies, some reported data from multiple levels). Preliminary data from 9 studies suggest that ECHO can be cost-effective (n=2), and can lead to changes in provider behavior (n=1) and patient outcomes (n=6).

IMPACT: This is the first systematic review of Project ECHO and has recently been published in Academic Medicine. This review will help to generate discussion and guide future research on the efficacy of the ECHO model.

PRIMARY CARE PHYSICIANS' PERCEPTIONS OF PART IV MAINTENANCE OF CERTIFICATION AS A PROFESSIONAL RESPONSIBILITY
Christopher Stephenson, MD

Lifelong learning is a core component of medical professionalism. In recent years, a lively debate has emerged about the requirements of Maintenance of Certification (MOC), particularly in Internal Medicine. Little is known about how practicing primary care physicians view their responsibilities to participant in quality improvement components of MOC.

The objective of this study is to describe primary care physicians self-reported impressions of the American Board of Medical (ABIM) Specialties' Part IV "practice performance assessment" component of MOC.

This is a cross sectional study of primary care physicians. We surveyed 1500 primary care physicians with 627 returning the survey (response rate 42%). Group comparisons were performed using chi-square tests

Forty-seven percent (273/627) were family practitioners and fifty percent (289/627) were internists. Internists were more likely to view part IV MOC as too time consuming (82.0% v 70.3%, p=0.0011), too expensive (50.9% v 38.8%, p=0.0041), and not relevant to practice (39.1%, 23.8%, p<0.0001). Family medicine practitioners were more likely to view part IV MOC as improving patient care (64.5%, 48.8%, p=0.0002) and as a professional responsibility (48.7%, 32.5% p<0.0001).

Family medicine practitioners were more likely to view part IV MOC as a professional responsibility. Conversely, internists held more negative views. Internists were more likely to view part IV as too expensive and timing

consuming with less relevance to daily practice. This difference could be related to the controversial ABIM MOC requirements. Future research examining internists attitudes towards part IV MOC should be pursued to better address these differences.

INCORPORATING SIMULATION INTO CME COURSES
Mary Stevens

PROBLEM STATEMENT: Simulation-based training has evolved and is a prevalent method of training physicians, nurse practitioners and other health care providers; however, it has not been applied to many continuing medical education (CME) courses. According to research, simulation-based training has increased in medical education; however, the benefits are less established in CME. Educating the positive impact simulation has on CME courses by providing hands-on workshops and visual learning tools not provided by traditional lectures is imperative to the future of CME.

APPROACH USED (WHAT DID YOU DO?): Mayo Clinic Jacksonville campus has incorporated simulation-based training into seven CME courses. Courses have used an Anatomage table, mannequins, pig tracheas and Simulation models for injection workshops to name a few as a demonstration of hands-on learning or create visual tools for attendees.

RESULTS / FINDINGS: Although there has been no significant findings reported for simulation-based training in CME, there has been positive feedback from each course and attendees indicate their desire to attend the following year due to the innovative method of teaching.

Barriers and facilitators to implementation: Barriers include a lack of resources that are not available at all institutions and cost associated may be a substantial barrier without grant or in-kind funding/donations (i.e. an Endovascular Simulator is around $2500).

IMPACT/SO WHAT?: Although there are no significant findings to simulation-based training, it is the future of CME and educating learners. The hands-on and visual experience cannot be experienced in traditional lectures. Providing innovative methods of teaching will entice learners to share their experience within their field.

INNOVATIVE ASSESSMENTS WITH ABMS BOARDS
David B. Swanson, PhD

Similar to initial certifying examinations, the MOC Part III exams of most ABMS Member Boards are high-stakes summative assessments taken by diplomates every 10 years at secure testing centers. Research has demonstrated positive relationships between performance on certifying exams and quality of care, supporting the validity of the initial certification process, and there is general support in the medical community for the overall goals of MOC. However, some have criticized MOC exams as not measuring knowledge relevant in day-to-day clinical practice, not providing performance feedback useful in guiding ongoing learning, and not promoting long-term retention of information.

Inspired by the recently announced MOCA program of the American Board of Anesthesiology, many ABMS Member Boards are piloting a new approach: longitudinal assessment programs (LAPs). Like the progress tests used in undergraduate medical education and the in-training examinations used in graduate medical education, LAPs use a system of more frequent, lower-stakes assessments to assist diplomates in learning and retaining practice-relevant information. Most Boards piloting LAPs are also exploring the use of information derived from these assessments in making summative decisions regarding continuing certification.

In addition to describing the LAPs currently under development, the presentation will also highlight opportunities for collaboration that these programs may create for the continuing medical education community, as well as several other assessment innovations under development by ABMS Member Boards.

CHANGING HEALTHCARE PROFESSIONALS' PERCEPTIONS REGARDING THE INTEGRATION OF QI AND CPD: RESULTS FROM A PSYCHIATRY EDUCATION INITIATIVE

Marlene Taube-Schiff

BACKGROUND: In order to align continuing professional development (CPD) and quality improvement (QI) within psychiatry, increased training and practice of both QI and CPD has been suggested 1. At the University of Toronto, we developed an education day to foster collaborations between QI and CPD faculty and identify barriers to QI and CPD alignment. Research Question: How did participants' perceptions towards aligning CPD and QI change after this event and will faculty more easily identify facilitators and address barriers? Methods: Participants were surveyed before and five months following the event. Frequency scores were tallied and a thematic analysis was conducted. Results: A total of 25 and 21 participants completed the survey pre- and post-event, respectively. Participants were more certain (Pre-event=47%, Post-event=64%) they could use a QI model for improvement. They also indicated being 38% certain they could use QI tools prior to the event and 63% afterwards. Major themes endorsed prior to the event regarding alignment included: "feeling optimistic" (25%); "feeling it is integral" (21%); "lacking knowledge" (13%) and "leads to change" (13%). Major themes identified following the event included barriers: "lacking QI experience" (21%) and "lacking time" (32%) and facilitators: "professional development" (37%) and "colleagues/organizations showing QI interest" (21%). Post- event, 32% of participants underwent additional QI training. Impact: A one day event can have a meaningful impact on increased confidence to use QI skills and tools, enable identification of key barriers and facilitators to aligning CPD and QI and encourage CPD in QI.

Sockalingam S, Tehrani H, Lin E, Lieff S, Harris I, Soklaridis S. Integrating quality improvement and continuing professional development: a model from the mental health care system. Acad Med 2016; 91(4):540-7

THE VALUE OF A QI AND CME COLLABORATION IN THE PORTFOLIO PROGRAM

Emma Trucks, MPH

PROBLEM STATEMENT: Quality and CME professionals struggle to meaningfully engage physicians in QI efforts due to the existence of silos, time constraints and lack of experience or skill among physicians in QI methodology. Physician engagement is essential to foster a QI culture that aligns with the growing significance of performance and patient outcomes in healthcare.

APPROACH USED: Boston Medical Center's Department of Quality partnered with the Boston University School of Medicine CME Office to become a Portfolio Sponsor. We are building a QI culture at BMC, managing individual QI projects, offering targeted education to build QI skills and maintaining compliance with Portfolio accreditation status. Supplemental project management and the combination of MOC Part IV, PI-CME and a Massachusetts specific risk management credit act as incentives to encourage participation.

RESULTS: Since our approval on December 1st, 2015, the BMC Portfolio Program has approved 8 projects representing 130 physicians eligible to claim MOC and/or CME credit.
Our collaborative approach to launching this program has garnered support across the hospital from GME, the ACO, the Faculty Practice Foundation, and hospital quality leaders.

CONCLUSIONS: Quality and Patient Safety Departments across institutions around the country are making important strides in the improvement of medical practice. CME professionals are uniquely positioned to assist with physician engagement in local QI efforts through management of Portfolio Accreditation and QI initiatives, which includes the sponsoring of training to enhance QI skills and clinical education related to Portfolio projects.

USING POPULATION HEALTH OUTCOMES DATA TO INCREASE IMMIUNIZATION RATES: TWO PROVIDERS USING THE SAME PROJECT DESIGN

Susan P. Tyler, MEd, CMP, CHCP, FACEHP

Population health data is not widely used by physicians to benchmark current performance. To demonstrate the potential of population health data and CME integrated with quality improvement, two projects were

undertaken by two providers using population health outcomes data to increase immunization rates. Using health system data to establish individual physician immunization rate data compared to clinic, regional, and national data via an individualized clinical performance dashboard, QI/PI activities were undertaken to improve immunization rates in two diverse populations, older and immunocompromised adults, and adolescents. CME activities were integrated into the clinical performance dashboards. In each project, about one third of participants completed all three stages of their PI projects, impacting 61,808 patients. Physicians who completed both the CME and QI components showed greater improvement in immunization rates.

GETTING READY TO COACH: A NOVEL APPROACH TO FACULTY DEVELOPMENT FOR MEDICAL STUDENT COACHING PROGRAMS.
Sandrijn van Schaik, MD, PhD

Increasingly, medical schools are implementing coaching programs to assist students throughout their education. While institutions vary in expectations of coaches, a common theme is the need for comprehensive faculty development to ensure that coaches are ready for their new role. At UCSF, the faculty coaching role combines clinical skills teaching with support for learning planning and career advice.

We designed a half-day faculty development session with simulation scenarios that allowed coaches to practice skills in student-coach interactions. In small groups, coaches rotated through scenarios and engaged in role-play interactions with "standardized students" portrayed by professional actors. The scenarios focused on: 1) establishing the coaching relationship; 2) approaching a student with a potential disability needing accommodations; 3) clinical skills teaching and feedback; 4) interpretating assessment data and learning planning; 5) approaching a student dissatisfied with their educational experience. Each scenario had specific learning objectives and debriefing guidelines. After each scenario, content experts facilitated performance feedback for the coach and a group discussion about scenario-related topics. We surveyed participating coaches after the session regarding their perceptions of of the training's usefulness.

In June 2016, 24 coaches participated in 5 groups of 4-5 coaches, and 20/24 completed the survey. Usefulness ratings for the cases averaged between 4.6 and 5 on a 5-point scale. Comments indicated that coaches appreciated the opportunity to practice and get feedback in the simulated setting. This constitutes a novel, feasible and effective approach to prepare coaches for new teaching and advising roles that can be adapted to other institutions.

TECHNOLOGY RESOLVED DELAY IN PRODUCING CME RECORDS
Trisha Veenema

PROBLEM STATEMENT: Attendance records were processed on a department time-available basis and recorded manually via paper self-reporting attendance forms (SRAF) submitted by the learner. The amount of SRAFs processed by the University of Utah Continuing Medical Education (UUCME) department in 2015 was 45,000 +. There was an immense delay in providing CME records to the learner because of the massive amount of SRAFs received. The mean delay for UUCME producing CME records of attendance was 37+ days and a maximum of 131 days. The amount of time an employee spent processing paperwork was on average 5 hours a day which was the equivalent of 0.63 FTE/year.

APPROACH USED: UUCME aligned their tracking system with a software company, which allowed a learner to pre-register and claim credit themselves. UUCME created a pilot program, strategized a timeline for rollout and slowly integrated the new system to all RSS activities.

RESULTS/FINDINGS: Now fully implemented, UUCME has seen a 0.50 savings in FTE. Learners were served better, as well, receiving their CME records within 24 hours. There was reduction in human error, increased job satisfaction and the ability to focus on the value of continuing education.

BARRIERS:
Implementation issues
Learners used the wrong Event Code
Learners call from a land line
Duplicate names and information

IMPACT:
Significant reduction in time learners received their CME records
Saved 0.50 FTE
Job improvement and satisfaction
Extremely cost effective

THREE-FACTOR COMPETENCY SELF-ASSESSMENT: ANNENBERG CENTER PILOT PROJECT
Charles E. Willis, MBA

In an effort to expand its evaluation methodology capabilities and better inform program planning efforts, the Annenberg Center pulled from the assessment literature to develop a tool that might provide a better understanding of learner needs and their readiness for change. The tool focused on the assessment of complementary domains to prepare an individual for learning and change; i.e., determine 1) how important is a given topic to their clinical practice, 2) how proficient does a learner perceive themselves in this area, and critically, 3) how motivated are they to implement changes that improve clinical practice. The value of this self-assessment rests on the assumption that the importance of the topic to the learner, as well as his or her motivation to change, will drive an increase in proficiency. If need is the measurable discrepancy between desired status ("what should be") and current status ("what is"), then our need gap is importance less proficiency. In turn, our motivation gap equals motivation less proficiency. We are employing this self-assessment tool with four different types of activities: long format live programs, short didactic presentations, small group meetings and online enduring materials. We will also evaluate learner participation levels and potential survey barriers, in an effort to better understand how learner motivation and the perceived importance of an educational activity's content feed into its subsequent impact. Beta tests are being conducted to establish and validate data relationships among importance, proficiency and motivation.

VALIDATION OF A MEASURE OF TEACHING EFFECTIVENESS IN PSYCHIATRY CONTINUING MEDICAL EDUCATION
Christopher M. Wittich, MD

BACKGROUND: There is little known about factors associated with effective continuing medical education (CME) in psychiatry. AIMS: We aimed to 1) validate a method to evaluate psychiatry CME teaching effectiveness and 2) determine associations between CME teaching effectiveness scores and characteristics of presentations, presenters and participants.

METHODS: This was a cross-sectional study conducted at the Mayo Clinic Psychiatry Clinical Reviews (2015) and Psychiatry in Medical Settings (2016) conferences. All presentations were evaluated using an 8-item CME teaching effectiveness instrument. Content was based on previously published instruments. Factor analysis, internal consistency and interrater reliabilities, and temporal stability reliability were calculated. Associations between teaching effectiveness scores and characteristics of presentations, presenters and participants were determined.

RESULTS: A total of 364 participants returned 246 surveys (response rate, 67.6%). Factor analysis revealed a uni-dimensional model of psychiatry CME teaching effectiveness. Cronbach's alpha for the instrument (all 8 items) was excellent (0.94). Item mean scores (SD) ranged from 4.33 (0.92) to 4.71 (0.59) on a 5-point scale. The overall interrater reliability was 0.84 (95%, CI 0.75-0.91) and temporal stability was 0.89 (95% CI, 0.77-0.97). There were no associations between teaching effectiveness scores and characteristics of presentations, presenters, and participants.

DISCUSSION: This study provides a new, validated measure of CME teaching effectiveness that could be used to improve psychiatry CME. Contrary to prior research in other medical specialties, CME teaching effectiveness scores were not associated with the use of case-based or interactive presentations. This suggests the need for unique considerations regarding psychiatry CME, and that a singular approach to CME teaching may not apply to all medical specialties.

ASSOCIATIONS BETWEEN TEACHING EFFECTIVENESS AND PARTICIPANT REFLECTION IN CONTINUING MEDICAL EDUCATION

Christopher M. Wittich, MD

BACKGROUND: Effective medical educators can engage learners through self-reflection. However, little is known about the relationships between teaching effectiveness and self-reflection in continuing medical education (CME). AIM: We aimed to determine associations between presenter teaching effectiveness and participant self-reflection in conference-based CME. METHODS: This cross-sectional study evaluated presenters and participants at a national CME course. Participants provided CME teaching effectiveness (CMETE) ratings and self-reflection scores for each presentation. Overall CMETE and CME self-reflection scores (five-point Likert scale with one as strongly disagree and five as strongly agree) were averaged for each presentation. Correlations were measured among self-reflection, CMETE, and presentation characteristics. RESULTS: In total, 624 participants returned 430 evaluations (response, 68.9%) for the 38 presentations. Correlation between CMETE and self-reflection was medium (Pearson correlation, 0.3-0.5) or large (0.5-1.0) for most presentations (n=33, 86.9%). Higher mean (SD) CME reflection scores were associated with clinical cases (3.66 [0.12] vs 3.48 [0.14]; P=.003) and audience response (3.66 [0.12] vs 3.51 [0.14]; P=.005). DISCUSSION: To our knowledge, this is the first study to show a relationship between teaching effectiveness and participant self-reflection in conference-based CME. Presenters should consider using clinical cases and audience response systems to increase teaching effectiveness and promote self-reflection among CME learners.

A SOCIOHISTORICAL EXPLORATION OF CONTINUING PROFESSIONAL DEVELOPMENT IN CHRONIC DISEASE MANAGEMENT - A CRITICAL DISCOURSE ANALYSIS

Rene Wong, MD, MMEd, PhD (Candidate)

BACKGROUND: Specialist-primary care collaboration is crucial in chronic disease management. Continuing professional development (CPD) is considered an effective means to improve implementation of clinical practice guidelines in primary care, yet little research has examined the assumptions that inform CPD practices in chronic disease management.

RESEARCH QUESTION: How do contextual factors such as structure, culture or history may help enhance our understanding of what forms of CPD work, under what conditions and why?

METHODS: We used diabetes as a case study to explore the relationships between power, knowledge and identity as they are manifest in CPD. We conducted a critical discourse analysis of policy documents, professional and CPD literature to describe the language and practices of diabetes care and the implications for CPD.

RESULTS: We identified two main discourses. The discourse of targets is based on the notion that achieving numeric disease targets improves care. Specialists use CPD as a discursive vehicle to address gaps in family physicians' care. The self-managerial discourse is characterized by the concept that patients living with diabetes should assume management of their own care. Family physicians support and empower patients to live with chronic disease, but the role of specialists and CPD is unclear. Each discourse has been more prominent at different times, placing tension on clinicians and their scopes of practice.

IMPACT: This analysis suggests a need to rethink how CPD creates identities of family physicians and specialists in chronic disease management. This information could be used to reimagine what is and who possesses expertise and inform new models of intraprofessional collaboration and education.

HANDS-ON ULTRASOUND EDUCATION: AN INNOVATIVE MODEL FOR THE RURAL CPD LANDSCAPE
Kathryn Young MA

Physicians delivering care in rural Canada have unique CPD needs due to isolation, accessibility, and their role as a generalist. Responding to gaps identified in a Rural Emergency Medicine Needs Assessment, the Hands-On Ultrasound Education (HOUSE) Program ensures that all physicians in British Columbia have access to high quality, closer to home point-of-care ultrasound (POCUS) training.

HOUSE improves physicians' confidence to integrate POCUS into their practice. This skill improves patient care by facilitating early diagnosis of multiple conditions, and sometimes, a change in the management plan. Stable patients avoid transfers, while unstable patients experience quicker diagnoses and expedited urgent care.

HOUSE is a scalable, customizable program delivered locally. The agenda maximizes time spent at the bedside practicing hands-on skills, which can be difficult to access in rural settings and may become a limiting step in ultrasound skill acquisition. Central to the program are best practices in adult learning, including flipped classroom, "learning by doing", and an informal environment.

Implementation is on-going, allowing structure and tools to continuously evolve. Takeaways from the pilot phase include the 1) decision to group POCUS applications into thematic learning modules with scenarios to enhance clinical relevance, 2) optimal participant to instructor ratio (2:1), and 3) importance of community and local physician involvement to the success of each course.

Of participants who completed the survey, 91% reported more frequent use of the ultrasound machine and 93% reported increased confidence in using POCUS in practice. Through flexible, customized education, HOUSE continues to adapt to the changing landscape of rural CPD.

CURRICULA TO IMPROVE EDUCATION AND TRAINING OF EMERGENCY PROVIDERS CARING FOR PSYCHIATRIC PATIENTS
Leslie Zun, MD

Even though emergency departments across the country see approximately 9% of all the visits are related to a mental health issue, few emergency physicians and psychiatrists are educated in emergency psychiatry. The Coalition for Psychiatric Emergencies developed a basic and advanced of curriculum to teach emergency physicians psychiatry and psychiatrists to learn emergency medicine. This course will present the current education on behavioral emergencies in both specialties and the new education program to provide competency in behavioral emergencies.

SACME PAST PRESIDENTS

2015   Mary Turco, EdD; Geisel School of Medicine at Dartmouth

2014   Ginny Jacobs, MEd, MLS, CHCP; University of Minnesota Medical School

2013   Deborah Samuel, MBA; American Academy of Pediatrics

2012   Pam McFadden; University of North Texas Health Science Center
Gordon West, PhD; Annenberg Center for Health Sciences at Eisenhower

2011   Gabrielle Kane, MB,EdD, FRCPC; University of Washington School of Medicine

2010   Todd Dorman, MD; Johns Hopkins University School of Medicine

2009   Lois Colburn; University of Nebraska Medical Center

2008   Melinda Steele, MEd; Texas Tech University Health Sciences Center

2007   Jocelyn Lockyer, PhD; University of Calgary

2006   Michael Fordis, MD; Baylor College of Medicine

2005   Martyn O. Hotvedt, PhD; St. John Health

2004   Craig M. Campbell, MD; Royal College of Physicians and Surgeons of Canada/
Le Collège royale des médecins et chirurgiens du Canada

2003   Nancy Davis, PhD; American Academy of Family Physicians

2002   John R. Kues, PhD; University of Cincinnati

2001   Barbara E. Barnes, MD; University of Pittsburgh

2000   Paul J. Lambiase; University of Rochester

1999   John T. Parboosingh, MD; University of Ottawa

1998   Meryl H. Haber, MD; Rush Presbyterian, St. Lukes Medical Center

1997   David Davis, MD; University of Toronto

1996   William E. Easterling, Jr., MD; University of North Carolina, Chapel Hill

1995   Gloria Allington, MSEd; University of Miami

1994   George Smith, MD; University of Alabama

1993   R. Van Harrison, PhD; University of Michigan

1992   Martin P. Kantrowitz, MD; University of New Mexico

1991   Jack L. Mason, PhD; University of Maryland

1990   James C. Leist, EdD; Bowman Gray School of Medicine

1989   Robert J. Cullen, PhD; Case Western Reserve University

1988   D. Dale Dauphinee, MD; McGill University

1987   Dennis K. Wentz, MD; Vanderbilt University

1986   Harold A. Paul, MD; Rush Medical College

1985   Julian S. Reinschmidt, MD; Oregon Health Sciences University

1984   Oscar A. Thorup, MD; University of Virginia

1983   Gerald H. Escovitz, MD; Medical College of Pennsylvania

1982   George J. Race, MD; University of Texas, Dallas

1981   Richard M. Caplan, MD; University of Iowa

1980   Malcolm Watts, MD; University of California, San Francisco

1979   Gail Bank, PhD; Wayne State University

1978   Robert C. Combs, MD; University of California, Irvine

1977   Phil R. Manning, MD; University of Southern California

1976   Phil R. Manning, MD; University of Southern California

Notes

SAVE THE DATE

SACME 2018 ANNUAL MEETING

San Antonio Marriott Riverwalk

889 East Market Street | San Antonio, TX 78205

APRIL 24-28
2018

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