



THE TEACHING ACADEMY

Robert Larner, M.D. College of Medicine at The University of Vermont

Snow Season Education Retreat

January 15-16, 2020
Robert Larner, MD College of Medicine
& Dudley H. Davis Center
University of Vermont
Burlington, VT

Welcome to the Snow Season Education Retreat

Wednesday, January 15 ☯ Robert Larner, MD College of Medicine

5:00-6:30 PM **Teaching Academy Induction and Award Ceremony**
Sullivan Classroom (Med Ed 200)

6:30-8:00 PM **Snow Season Poster Session and Reception**
Larner Classroom (Med Ed 100)

Thursday, January 16 ☯ Dudley H. Davis Center

8:00-8:30 AM **Registration and Continental Breakfast**
Silver Maple Ballroom

8:30-8:40 AM **Welcome**
Kathryn N. Huggett, PhD, Director, Teaching Academy
Silver Maple Ballroom

8:40-9:15 AM **Oral Platform Presentations**
Moderator: Jesse Moore, MD
Use of Reflective Writing as an Educational Tool in Global Health Electives
Katherine Callahan; Mariah McNamara, MD, MPH; Prasanna Kumar; Molly Moore, MD;
Naomi Hodde, MD; Benjamin Clements, MD, FAWM
**Creation of a mock operating room environment for assessment of
orthopedic resident surgical skills: A starting point toward development
of deliberate practice curriculum**
Stephen Merena, DPM; Andrew Kaplan, MD; Lara Stone, DPM; Mark Charlson, MD;
James Michelson, MD; S. Elizabeth Ames, MD
Silver Maple Ballroom

9:15-10:30 AM **First Annual Snow Season Debate**
A Solution for Wellness: Making the USMLE Pass/Fail
Moderator: Lewis First, MD
Debaters: Richard Bounds, MD (Emergency Medicine Residency Program Director);
Melissa Davidson, MD (Associate Dean for Graduate Medical Education);
Elise Everett, MD (Clerkship Director, Ob/Gyn); Karen Lounsbury, PhD (Director of
Foundations); Chad Serels (Class of 2020); Kramer Wahlberg, MD (Chief Resident)
Silver Maple Ballroom

10:30-10:45 AM **Break**

10:45-12:15 PM **Breakout Session One**
**How to Harness “Expert-ise” in the Development of Evaluation
Tools**
Melissa Davidson, MD; Bridget Marroquin, MD
Sugar Maple Ballroom

Welcome to the Snow Season Education Retreat

10:45-12:15 PM

Breakout Session One (cont.)

Learner Assessment: The Fit for Interprofessional Education

Nancy Lemieux, MSN, RN, CHSE; Cate Nicholas, MS, PA, EdD

Williams Family Room

Constructive Feedback: Writing Narrative Assessment

Stephen Berns, MD; Christa Zehle, MD

Jost Foundation Room

Basics of Teaching Quality Improvement

Amanda G. Kennedy, PharmD, BCPS; Maria Burnett, MD; Preetika Muthukrishnan, MD;

Constance van Eeghen, DrPH, MHSA, MBA

Mildred Livak Ballroom

12:15-1:00 PM

Buffet Lunch

Interest group tables and open seating

Silver Maple Ballroom

Neuroscience Course Core Faculty Meeting (Invite Only)

*This session invites faculty from the Neuroscience course to review and discuss planned changes in the course curriculum and schedule.

Mildred Livak Ballroom

1:00-2:30 PM

Breakout Session Two

Building Tools for Competency-Based Medical Education:

Assessing a Learner at Any Level

Bronwyn Bryant, MD; Elise Everett, MD

Sugar Maple Ballroom

Writing Inclusive Cases

Karen Lounsbury, PhD; Timothy Lahey, MD

Williams Family Room

Faculty Resilience: Reframing the Narrative

Nathalie Feldman, MD; Rebecca Wilcox, MD

Jost Foundation Room

2:30-2:45 PM

Break

2:45-4:15 PM

Breakout Session Three

Teaching for Health Equity

Maria Mercedes Avila, PhD, MSW

Jost Foundation Room

CQI for YOU: Create a Plan to Improve your Educator “Self”

Jan Carney, MD, MPH; Kathryn Huggett, PhD; Leigh Ann Holterman, PhD

Sugar Maple Ballroom

4:15 PM

Conference concludes

Please check your email for an online evaluation of the program. Thank you for your participation; your feedback is important.

Session Descriptions and Learning Objectives

First Annual Snow Season Debate

A Solution for Wellness: Making the USMLE Pass/Fail

Moderator: Lewis First, MD

Debaters: Richard Bounds, MD (Emergency Medicine Residency Program Director); Melissa Davidson, MD (Associate Dean for Graduate Medical Education); Elise Everett, MD (Clerkship Director, Ob/Gyn); Karen Lounsbury, PhD (Director of Foundations); Chad Serels (Class of 2020); Kramer Wahlberg, MD (Chief Resident)

Learning Objectives:

1. Raise awareness of the work the NBME and its partner organizations are doing to look at how USMLE scoring might change (via the work of the Invitational Conference on USMLE Scoring (INCUS) and their forthcoming recommendations).
2. Determine the advantages of moving USMLE to a pass-fail examination.
3. Determine the disadvantages of moving USMLE to pass-fail scoring.
4. Engage the audience in thinking about the ramifications of a scored or pass-fail exam for the multiple stakeholders who are involved with the USMLE (e.g. faculty involved with UME, GME, as well as students and residents).

Breakout Sessions

How To Harness “Expert-ise” in the Development of Evaluation Tools

Melissa Davidson, MD; Bridget Marroquin, MD

Learning Objectives:

1. Discuss the challenges of creating evaluation tools and surveys.
2. Through active learning, gain knowledge and understanding of the modified Delphi method in creating evaluation tools and surveys.
3. Apply the modified Delphi method to create sample tools using a structured template, in small groups simulating the “expert panel”.
4. Using group report-out and debrief, discuss strategies, pitfalls and pearls for creating tools that will achieve the intended outcome (objective assessment of learners, programs, etc.) and stand up to rigorous external review (educational innovations and research).

Learner Assessment: The Fit for Interprofessional Education

Nancy Lemieux, MSN, RN, CHSE; Cate Nicholas, MS, PA, EdD

The purpose of the session is to explicate a variety of methods utilized to assess the knowledge, skills, and behaviors of students participating in interprofessional learning experiences and to promote the use of effective evaluation plans to ensure ongoing quality in those experiences.

Learning Objectives:

1. Distinguish between assessment and evaluation.
2. Examine a variety of methods used to assess learners engaged in an interprofessional education activity.

Session Descriptions and Learning Objectives

Constructive Feedback: Writing Narrative Assessment

Stephen Berns, MD; Christa Zehle, MD

Learning Objectives:

1. Describe what is a narrative assessment and discuss the role it has in medical education.
2. Discuss strengths and potential pitfalls for narrative assessments.
3. Practice developing a narrative assessment using a framework to guide feedback for learners.

Basics of Teaching Quality Improvement

Amanda G. Kennedy, PharmD, BCPS; Maria Burnett, MD; Preetika Muthukrishnan, MD; Constance van Eeghen, DrPH, MHSA, MBA

There is a recognized gap in faculty preparedness to teach and mentor Quality Improvement (QI) across various levels of learners, including medical and interprofessional students, residents, fellows, and clinicians. This workshop is designed to support faculty development in incorporating QI principles into educational settings. The workshop will include practical advice and resources for beginners.

Learning Objectives:

1. Discuss Quality Improvement (QI) terms, common frameworks, and principles.
2. Identify opportunities to integrate QI into teaching in a variety of settings.
3. Describe strategies to support QI projects.

Building Tools for Competency-Based Medical Education: Assessing a Learner at Any Level

Bronwyn Bryant, MD; Elise Everett, MD

Entrustable Professional Activities (EPAs) are a competency-based evaluation tool that can be applied to a learner at any level. In this session, you will have an opportunity to build an EPA-based assessment specific to the learning environment you work in.

Learning Objectives

1. Define Entrustable Professional Activities.
2. List advantages of using EPAs for the learner and the evaluator.
3. Build an EPA-based assessment for a specific task in your learning environment.

Writing Inclusive Cases

Karen Lounsbury, PhD; Timothy Lahey, MD

Writing inclusive cases for teaching in the preclinical curriculum can be a powerful method of signaling the importance of equity, diversity and inclusion in patient care and health care professions. Done clumsily, such cases can alienate learners and perpetuate maladaptive stereotyping. We will discuss pitfalls in writing and selection of cases for the clinical curriculum, practice ways of writing better cases, and review effective responses to feedback from learners about stereotyping in case content.

Session Descriptions and Learning Objectives

Writing Inclusive Cases (continued)

Karen Lounsbury, PhD; Timothy Lahey, MD

Learning Objectives:

1. Understand the importance of presenting cases that include diverse populations as part of a comprehensive medical curriculum
2. Outline the obstacles to using inclusive clinical cases in medical education
3. Identify stereotypes within case examples and apply best practices to write inclusive cases
4. Critique responses to student feedback on inclusivity of case writing and devise ways to communicate respectful responses

Faculty Resilience: Reframing the Narrative

Nathalie Feldman, MD; Rebecca Wilcox, MD

In this interactive session, participants will engage in a novel way of looking at faculty wellness and resilience.

Learning Objectives:

1. Recognize that given the uncertainty and complicity of the twenty-first century, fear often biases our mind's focus toward negativity.
2. Describe three specific situations in which good stress turns to bad (maladaptive) stress.
3. Identify 3 innovative approaches to living with intentionality, kindness, and gratitude and appraise their link to building resilience.
4. Select one personally resonating intentional practice and vow to give it a try!

Teaching for Health Equity: Understanding Structural Competence and Cultural Humility

Maria Mercedes Avila, PhD, MSW

During this workshop, attendees will better understand structural competence and cultural humility definitions and principles. In the context of health disparities and health equity teaching, Dr. Avila will address race, culture and systems of generational oppression in our country. She will present best practices approaches to advance health equity, improve quality, and help eliminate health care disparities.

Learning Objectives:

1. Describe the implications of demographic trends for health disparities and health equity.
2. Integrate structural competence and cultural humility principles into teaching.
3. Describe how cultural beliefs shape clinical encounters and patients' health outcomes.

CQI for YOU: Create a Plan to Improve your Educator "Self"

Jan Carney, MD, MPH, Kathryn Huggett, PhD, Leigh Ann Holterman, PhD

In this session, participants will identify their educator strength and opportunities for improvement and create a data-informed personal improvement plan.

Learning Objectives:

1. List 2-3 purposes of CQI for the educator.
2. Apply a Continuous Quality Improvement (CQI) model to their educator work.
3. Identify 2-3 sources of data to inform their CQI plan.
4. Develop a personal improvement plan for their educator work.

CME Information



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, The Robert Larner College of Medicine at The University of Vermont is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

The University of Vermont designates this live activity for a maximum of 6.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Meeting Disclaimer: Regarding written materials and information received, written or otherwise, during this Conference: The scientific views, statements, and recommendations expressed during this activity represent those of the authors and speakers and do not necessarily represent the views of The Robert Larner College of Medicine at The University of Vermont.

Interest Disclosures: As a joint accredited organization for interprofessional education, The Robert Larner College of Medicine at The University of Vermont Medicine is required to disclose any real or apparent conflicts of interest (COI) from anyone who has control of the content (speakers, planners, moderators).

No Interests to Disclose:

- Maria Mercedes Avila, PhD, MSW
- Stephen Berns, MD
- Richard Bounds, MD
- Bronwyn Bryant, MD
- Maria Burnett, MD
- Jan Carney, MD, MPH
- Melissa Davidson, MD
- Elise Everett, MD
- Nathalie Feldman, MD
- Lewis First, MD
- Leigh Ann Holterman, PhD
- Kathryn Huggett, PhD
- Amanda G. Kennedy, PharmD
- Tim Lahey, MD, MMSc
- Nancy Lemieux, MS, RN, CHSE
- Karen Lounsbury, PhD
- Bridget Marroquin, MD
- Preetika Muthukrishnan, MD
- Cate Nicholas, PA, EdD, MS
- Chad Serels
- Constance van Eeghen, DrPH, MHSA, MBA
- Kramer Wahlberg, MD
- Rebecca Wilcox, MD
- Maura Barry, MD
- Dennis Beatty, MD
- Lewis First, MD
- Pamela Gibson, MD
- Kathryn Huggett, PhD
- Amanda G. Kennedy, PharmD, BCPS
- Karen Lounsbury, PhD
- Alan Rubin, MD
- Michael Upton, MD
- Christa Zehle, MD

Interests to Disclose/COI/Bias Resolved*:

**Note: UVM CME Staff who reviewed this activity had no interests to disclose.*

Commercial Support Received:

- We have not received any commercial support for this activity

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*Having a financial interest or other relationship with a corporate organization, **or discussing an unlabeled use of a commercial product**, may not prevent a speaker from making a presentation. However, the existence of the relationship must be made known to the planning committee prior to the conference, so that any possible conflict of interest may be resolved prior to the talk.

4/2017

CME credit is available and can be claimed online. Directions to claim credit through the MyCredits system are available at the registration table.

Snow Season Education Retreat

Workshop Presenters and Facilitators

Maria Mercedes Avila, PhD, MSW, Pediatrics

Stephen Berns, MD, Family Medicine*

Richard Bounds, MD, Surgery

Bronwyn Bryant, MD, Pathology and Laboratory Medicine*

Maria Burnett, MD, Medicine

Jan Carney, MD, MPH, Medicine

Melissa Davidson, MD, Anesthesiology*

Elise Everett, MD, Obstetrics, Gynecology, and Reproductive Sciences*

Nathalie Feldman, MD, Obstetrics, Gynecology, and Reproductive Sciences*

Lewis First, MD, Pediatrics*

Leigh Ann Holterman, PhD, The Teaching Academy

Kathryn Huggett, PhD, Medicine, The Teaching Academy*

Amanda G. Kennedy, PharmD, Medicine*

Tim Lahey, MD, MMSc, Medicine

Nancy Lemieux, MS, RN, CHSE, Nursing

Karen Lounsbury, PhD, Pharmacology*

Bridget Marroquin, MD, Anesthesiology*

Preetika Muthukrishnan, MD, Medicine

Cate Nicholas, PA, EdD, MS, Obstetrics, Gynecology, and Reproductive Sciences*

Chad Serels, Class of 2020

Constance van Eeghen, DrPH, MHSA, MBA, Medicine

Kramer Wahlberg, MD, Medicine*

Rebecca Wilcox, MD, Pathology and Laboratory Medicine*

Christa Zehle, MD, Pediatrics*

Planning Committee

Maura Barry, MD, Medicine*

Dennis Beatty, MD, Medicine*

Lewis First, MD, Pediatrics*

Pamela Gibson, MD, Pathology and Laboratory Medicine*

Kathryn Huggett, PhD, Medicine, The Teaching Academy*

Amanda G. Kennedy, PharmD, BCPS, Medicine*

Karen Lounsbury, PhD, Pharmacology*

Alan Rubin, MD, Medicine*

Michael Upton, MD, Psychiatry*

*Indicates Teaching Academy Member

**Teaching Academy
New Members Inducted in January 2020**

Distinguished Educator

Douglas Johnson, PhD	Professor	Microbiology and Molecular Genetics
Amanda G. Kennedy, PharmD	Associate Professor	Medicine
Molly Rideout, MD	Associate Professor	Pediatrics

Master Teacher

Naiim Ali, MD	Assistant Professor	Radiology
Richard Bounds, MD	Associate Professor	Surgery
Keith Curtis, MD	Assistant Professor	Surgery
Nathalie Feldman, MD	Assistant Professor	Obstetrics, Gynecology, & Reproductive Sciences
Peter Holoch, MD	Assistant Professor	Surgery
Macaulay Onuigbo, MD	Professor	Medicine
Mitchell Tsai, MD	Associate Professor	Anesthesiology
Bei Zhang, MD, PhD	Associate Professor	Pathology & Laboratory Medicine

Member

Mark Bisanzo, MD	Associate Professor	Surgery
Eike Blohm, MD	Assistant Professor	Surgery
Carolyn Boscia, MD	Assistant Professor	Family Medicine
Leigh-Anne Cioffredi, MD, MPH	Assistant Professor	Pediatrics
Justin DeAngelis, MD	Assistant Professor	Obstetrics, Gynecology, & Reproductive Sciences
Katherine Dolbec, MD	Assistant Professor	Surgery
Kelsey Donovan, ScD	Assistant Professor	Medicine
Eric Ganguly, MD	Associate Professor	Medicine
Emily Greenberger, MD	Assistant Professor	Medicine
Rebecca Guy, PhD	Instructor	Microbiology and Molecular Genetics
Emily Hadley Strout, MD	Assistant Professor	Medicine
Victoria Hart, PhD	Assistant Professor	Medicine
Naomi Hodde, MD	Assistant Professor	Medicine
Elizabeth Hunt, MD	Assistant Professor	Pediatrics
Jennifer Kelly, MD	Associate Professor	Medicine
Benjamin King, MD	Assistant Professor	Surgery
Erin Morris, MD	Assistant Professor	Obstetrics, Gynecology, & Reproductive Sciences
Katelin Morrissette, MD	Assistant Professor	Medicine
Mirabelle Sajisevi, MD	Assistant Professor	Surgery
Marie Sandoval, MD	Associate Professor	Medicine
Sarah Schlein, MD	Assistant Professor	Surgery
Alissa Thomas, MD	Assistant Professor	Neurological Sciences
Tina Thornton, PhD	Assistant Professor	Medicine

Protégé

Alison Brandeis Johnson, MD	Resident	Surgery
Sarah Kelso, MD	Resident	Surgery
Adrienne Pahl, MD	Fellow	Pediatrics
Elly Riser, MD	Resident	Medicine
Benjamin Sanofsky, MD	Resident	Anesthesiology
Elizabeth Wahlberg, MD	Resident	Medicine

Teaching Academy Members January 2020

Distinguished Educator

Jan Carney, M.D.
Melissa Davidson, M.D.
Lewis First, M.D.
Pamela Gibson, M.D.
Ann Guillot, M.D.
Mark Hamlin, M.D.
Kathryn Huggett, Ph.D.
Charles Irvin, Ph.D.
Douglas Johnson, Ph.D.
Amanda Kennedy, PharmD
John King, M.D.
Mark Levine, M.D.
Judith Lewis, M.D.
Cate Nicholas, ED.D., P.A.
Mark Plante, M.D.
Molly Rideout, M.D.
Martha Seagrave, PA-C
Douglas Taatjes, M.D.

Master Teacher

Varun Agrawal, M.D.
Naiim Ali, M.D.
S. Elizabeth Ames, M.D.
Scott Anderson, M.D.
Dennis Beatty, M.D.
Patrick Bender, M.D.
Stephen Berns, M.D.
Anant Bhave, M.D.
Richard Bounds, M.D.
Stephen Contompasis, M.D.
Keith Curtis, M.D.
Robert D'Agostino, M.D.
Kristen DeStigter, M.D., FACR
Stephen Everse, Ph.D.
Nathalie Feldman, M.D.
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Andrea Green, M.D.
Laura Greene, M.D.
Andrew Hale, M.D.
Pete Holoch, M.D.
Friederike Keating, M.D.
Jay Kikut, M.D.
Patricia King, M.D., Ph.D.
Michael LaMantia, M.D.
Karen Lounsbury, Ph.D.
Bridget Marroquin, M.D.
Christopher Morris, M.D.
Janet Murray, Ph.D.
Macaulay Onuigbo, M.D.

Master Teacher

Deirdre O'Reilly, M.D., MPH
Mark Pasanen, M.D.
Richard Pinckney, M.D.
Lee Rosen, Ph.D.
Jay Silveira, Ph.D.
Mitchell Tsai, M.D.
Rebecca Wilcox, M.D.
Christa Zehle, M.D.
Bei Zhang, M.D., Ph.D.

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Abigail Adler, M.D.
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Robert Low, Ph.D.
John Lunde, M.D.
Lauren MacAfee, M.D.
Isaura Menzies, M.D.
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Jesse Moore, M.D.
Molly Moore, M.D.
Erin Morris, M.D.
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Sharon Mount, M.D.
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Julie Phillips, M.D.
Marios Prikis, M.D.
David Rand, M.D.
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Alan Rubin, M.D.
Matthew Saia, M.D.
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Halle Sobel, M.D.
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Jillian Sullivan, M.D.
Alissa Thomas, MD
Tina Thornton, Ph.D.
Sarah Twichell, M.D.
Michael Upton, M.D.
Eline van den Broek-Altenburg, Ph.D.
Constance van Eeghen, Dr.P.H.
Stanley Weinberger, III, M.D.
Leslie Young, M.D.

Protégé

Hillary Anderson, M.D., M.P.H.
Tess Aulet, M.D.
Nicholas Bedrin, M.D.
Alison Brandeis Johnson, M.D.
James East, M.D., Ph.D.
Johanna Kelley, M.D.
Sarah Kelso, M.D.
Sherrie Khadanga, M.D.
Rachel McEntee, M.D.
Adrienne Pahl, M.D.
Stephen Ranney, M.D.
Elly Riser, M.D.
Benjamin Sanofsky, M.D.
Elizabeth Wahlberg, M.D.
Kramer Wahlberg, M.D.
Patrick Zimmerman, D.O.

Teaching and Educational Excellence Awards

**Conferred at the Teaching Academy Induction and Award Ceremony
on January 15, 2020**

Innovation in Curriculum Development or Pedagogy Award

Elise Everett, MD

Associate Professor, Obstetrics, Gynecology, and Reproductive Sciences

Learner Assessment Award

William Raszka, Jr. MD

Professor, Pediatrics

Educational Scholarship

Elise Everett, MD

Associate Professor, Obstetrics, Gynecology, and Reproductive Sciences

Outstanding Contribution Award

Garth Garrison, MD

Associate Professor, Medicine

Frederick C. Morin, MD Educational Leadership Award

Jan Carney, MD, MPH

Professor, Medicine

Abstract: Gratitude in Medical Education: Antidote to Burnout?

Author: Belser, Abigail; Griffin, Summer; Feldman, Nathalie; Holterman, Leigh Ann

Background

- Student's reflections on positive experiences can increase school enjoyment and engagement¹
- Educators who receive positive feedback on their teaching demonstrate improved work engagement and well-being^{2,3}
- An evaluation system focused on the positive has the potential to favorably impact both faculty and students
- Learning environment for medical trainees contributes to professional identity formation (PIF)
- Covert influences (e.g., "hidden curriculum")
- Includes incivility or unprofessional behaviors
- May negatively impact trainees
- Identifying role models can lead to positive PIF

Description of project/program/innovation

- The Larner College of Medicine at the University of Vermont's (LCOM) goal: uncover the "hidden curriculum"
- Identify positive and negative influences via confidential online reporting system
- Measure the impact of the new reporting system

Methods

- LCOM implemented a confidential web-based reporting system for students to report professionalism accolades in addition to mistreatment concerns
- Accolades were collected and emailed to faculty, resident, and staff recipients at the completion of the course
- A copy of the accolades were also emailed to supervisors of recipients
- An additional question was added to clerkship evaluations querying students about professionalism role models:
- "Please identify one individual who demonstrated exemplary professionalism"
- We calculated frequencies on total number of reported accolades
- We identified prominent themes in the accolades
- We collected responses from faculty who received accolades to determine impact

Results

- During the 2018-2019 academic year, students submitted 851 clerkship evaluations.
- 574 (67%) contained one or more accolades
- Themes included:
- Compassionate patient care
- Providing constructive feedback
- Respectful interactions with patients, staff, colleagues, and students
- Faculty expressed gratitude in their responses to receiving accolades

Discussion/Conclusions/Lessons Learned

- Experiences of receiving accolades was positive and impactful
- Investigate the relationship between engagement in teaching and burnout, and explore the potential role of accolades
- Explore the impact on students of expressing gratitude

Previous dissemination

Learn Serve Lead: AAMC the Annual Meeting 2019

Abstract: Implementation of a Multidisciplinary, Interprofessional Simulation-Based Pediatric Trauma Curriculum

Authors: Brandeis Johnson, Alison; Kelso, Sarah; Ranney, Stephen; Bedrin, Nicholas; Toedt-Pingel, Iris; Sartorelli, Kenneth; Nicholas, Cate; Forgione, Patrick; Trevisani, Gino

Trauma remains the primary cause of morbidity and mortality in the pediatric population. Severe pediatric traumas are high-stakes, low frequency events at the University of Vermont Medical Center. Pediatric trauma care requires a multidisciplinary, interprofessional team. Simulation has been used in pediatric trauma centers to enhance teamwork, communication, and effectiveness of care. The aim of our study is to evaluate implementation of a simulation-based pediatric trauma curriculum at our level 2 pediatric trauma center.

A local need for improved interprofessional, interdisciplinary communication and pediatric trauma care was identified. Simulation curricula were created using Kern's 6-step approach or modified from peer-reviewed publications. In-situ simulations were performed quarterly and include resident and attending physicians in emergency medicine, trauma surgery, pediatric surgery, and pediatric intensive care, as well as emergency room nurses, emergency medical technicians, patient care assistants, and appropriate additional resource teams (e.g. blood bank or radiology technicians). An objective-based debrief was performed immediately after each simulation. Learners complete an evaluation after each simulation using a 5-point Likert scale, which was averaged.

Three in-situ pediatric trauma simulations were performed from April to November 2019, each with approximately 15 learners. Most reported they enjoyed the simulation and would recommend the session to a colleague (4.7, 4.7). Additionally, most learners felt the program met their expectations/educational needs (4.7), reporting improved understanding of the management of pediatric trauma patients (4.38) and recognition of differences between pediatric and adult trauma scenarios (4.38). Participants endorsed good understanding of interdisciplinary communication (4.57), effective teamwork and closed-loop communication (4.57), and definition of roles and responsibilities (4.54).

In-situ pediatric trauma simulations are an important adjunct to traditional experiences in pediatric trauma care, especially for improving interprofessional and interdisciplinary communication. Next steps include analyzing the effects of our simulation curriculum on the outcomes of these rare events at our institution.

Abstract: Use of Reflective Writing as an Educational Tool in Global Health Electives

Authors: Callahan, Katherine; McNamara, Mariah; Kumar, Trasanna; Moore, Molly; Hodde, Naomi; Clements, Benjamin

Background

Narrative medicine has been shown to improve communication, collaboration, and professional development. Although the literature is sparse regarding narrative medicine in global health, potential benefits exist for medical students participating in global health electives (GHEs). Narrative medicine has helped physicians overcome differences in beliefs between physicians and patients. Given the various cultural and socioeconomic differences medical students experience during a GHE, written reflections may have a positive impact. Additionally, narrative content provides educators with the opportunity to respond to student concerns and improve curricular offerings.

Program Description

The University of Vermont Larner College of Medicine (LCOM) Global Health Program oversees GHEs that include clinical rotations, fields trips, seminars, and family host experiences abroad. During the GHE, students are required to complete weekly reflections as well as after their return.

Methods

GHE student reflections were reviewed by Global Health faculty. Thematic analysis of the reflections was used for program improvement and curricular development.

Results

In response to commonly identified challenging scenarios and safety concerns, faculty created a series of safety and ethics case discussions and simulation sessions for preparation of students for GHEs. The sentinel event of a needlestick injury led to a program-wide policy on pathogen exposures. Curricular gaps were identified leading to iterative improvements in pre-departure preparation. Lastly, thematic analysis showed a temporal pattern to students' feelings during the GHEs which led to a series of encouraging essays to address the most common concerns experienced by students in each week of the GHE.

Discussion

Student reflections during GHEs provide a wealth of information for medical educators and can be used for iterative curriculum improvement, identification of sentinel safety events, and to gain insight into students' experiences. Additional study is needed of the students' perspective on the impact of narrative medicine during GHEs.

This abstract has been submitted to the 2020 IAMSE conference.

Abstract: Choosing Wisely in the Second Year: Student & Faculty Perceptions of a Pre-Clinical High Value Care Curriculum

Authors: Carey, Maggie; Hale, Andrew; Repp, Allen

While there have been calls to incorporate high value care (HVC) curricula into undergraduate medical education,¹ the optimal time and method by which to introduce HVC principles to medical students remain unclear. We sought to introduce students to HVC concepts by integrating recommendations from the Choosing Wisely (CW) campaign² into core content presented in the Cardiovascular, Respiratory and Renal Pathophysiology course (CRR) taken by all second-year medical students (n=120) at the Larner College of Medicine. Thirteen members of the CRR faculty were provided with CW recommendations directly related to their content and were invited to share the information with students via their preferred method. All invited faculty incorporated the CW recommendations into their sessions or pre-session preparatory reading materials. Faculty and students were then invited to participate in an IRB-exempt electronic survey following completion of the CRR curriculum.

The response rate was 69% for faculty members (n=9) and 42% for students (n=49). When asked whether it was valuable to discuss CW recommendations during the second year of medical school, 98% of students and 56% of faculty agreed (Table 1). Similarly, 82% of students and 44% of faculty agreed that the initiative increased student awareness of HVC, and 88% of students and 56% of faculty agreed that CW recommendations should be included in future CRR curriculum.

The optimal time and format for teaching principles of HVC to medical students has yet to be determined; however, integration of CW recommendations into the existing active learning curriculum at LCOM was well received by students. Student and faculty perspectives of the initiative differed across most questions, with students perceiving the content as more valuable than faculty. Future work is necessary to determine the long-term impact of this curricular intervention on clinical practice patterns.

The authors have no conflicts of interest to disclose.

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Abstract: A Novel and Interdisciplinary Approach to Deepen Medical Student Understanding of Adverse Childhood Experiences (ACEs), Their Health Impact and Management

Author: Cook, Marlijne; Wilson, Faith

Adverse childhood experiences (ACEs) have recently come to light as a major contributor to a span of chronic health issues, such as cardiovascular disease, diabetes, autoimmune disease, pregnancy complications, and many more. Improved understanding of ACEs, their implications on health outcomes, and how healthcare professionals can help patients with a high ACE score is elemental for providing support in this public health crisis.

Our goal was to implement curriculum changes at UVM LCOM to increase student exposure to the concept of ACEs. We generated a session that defined ACEs, reviewed ACE scoring, and explored the physical and emotional impact of ACEs on health. We also wanted students to understand their various roles in patient care and the locally available resources.

We established an Interprofessional Event with medical and nursing students to cover the aforementioned goals. We divided students into groups of 10, each with a health care preceptor who was selected based on an extensive clinical history of working with patients with ACEs. We developed pre-learning materials and a case study that lead the groups through a clinical story of a patient with ACEs, as well as a student evaluation to assess the session.

We found that the majority of students felt positively about the session, agreed that the information will be helpful in their future careers and that working with other healthcare professional students was valuable. Most students also preferred the facilitated small groups over other session formats. Our results are preliminary and we will complete a statistical analysis in the near future.

There is a strong consensus among health care providers that ACEs is a significant public health concern. We hope that continuing to expose student healthcare professionals to the complexity of ACEs and how to manage them will be a step forward in combating this issue.

Abstract: Development of a Mental Status Exam e-Module

Authors: Dickerson, Jeremiah; Curtis, Erin; Lewis, Judith

Background

Learning how to perform a mental status exam (MSE) and appreciate findings for diagnostic relevance is fundamental to the psychiatric curriculum. The MSE is a complex exam with many nuanced findings and abstract concepts that are difficult to learn via standard lecture format. E-learning is effective for exposing trainees to complex clinical scenarios¹ and a multimedia format is ideal for teaching the MSE^{2,3}.

Description of Innovation

Currently, there are no comparable MSE learning modules presently available for wide spread use.

Methods

We created a self-study multimedia MSE e-module. The module, built with Articulate Storyline software, includes photographs, film and audio recordings, and artwork to illustrate exam findings. It is based on an existing internal use module whose content was not copyright permissible or not consented for national use. Whenever possible, for the new module, we obtained patient-generated materials to provide a more compelling and authentic learning experience.

Results

We anticipate the e-module will be a valuable and accessible resource for psychiatric education across the country. Preliminary data regarding the effectiveness of teaching the MSE with the e-module is positive, and we are undergoing peer review to further refine the module's content and organization. Data will be available for this poster session.

Discussion

This will be the first nationally available learning module devoted to MSE teaching. The strengths of our module lie within the use and organization of multimedia and real patient material to teach abstract concepts and illustrate MSE findings. Limitations include ensuring that the quantity of content is appropriate for the stage of learner. Also, incorporating more learner assessments within the module may help to foster retention of new content.

Previous dissemination

We presented the patient consent process for this module at Snow Season Retreat 2018. This is the first report on our finished module.

Disclosures: none

Abstract: Inhaling focus and exhaling stress: Effect of mindfulness meditation on medical students' perceived stress levels

Author: Esemeli, Alim; Seagrave, Martha; Holterman, Leigh Ann

Mindfulness-based stress reduction training is gaining popularity in medical schools due to high rates of burnout, depression, and chronic anxiety among medical students.^{1,2,3} Programs demonstrate positive outcomes, such as reductions in self-doubt, stress, and concentration loss, as well as increases in level of empathy and compassion.¹ However, students express frustration regarding the time requirement, mandatory nature of the programs, and lack of acknowledgement of individual preferences in stress-coping styles.

The purpose of this study was to determine if a 10-minute meditation session before class can help with stress reduction and to compare it with other mindfulness activities like coloring and origami. 1st and 2nd year medical students at the University of Vermont Larner College of Medicine who chose to participate were randomly distributed across three groups: control, guided meditation session, and independent creativity station. Students took a 10-minute electronic survey reporting on pre-session perceived stress levels and then participated in a 10-minute activity (no specified activity for the control group, listening to a pre-recorded meditation audio for the guided meditation session, and coloring and doing origami for the independent creativity station). After attending class, students took a 5-minute electronic survey reporting on post-session perceived stress levels and giving session feedback.

We saw significant reduction in post-session stress levels across all groups. Students indicated wanting to participate in mindfulness activities regularly and being able to choose from a greater variety of activities.

Limitations included possible confounding variables (timing, perceived difficulty of upcoming class), limited number of participants, and transparency of the study's purpose. Future studies should look into whether or not coming to school early in and of itself helps with stress reduction. This study has been approved under IRB Exemption 3 criteria. A poster was presented at the 2019 Family Medicine Education Consortium conference.

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Abstract: Student Driven Integration of Social Medicine Themes into the Preclinical Curriculum at the Larner College of Medicine

Authors: Finnie, Sheridan; Brach, Richard; Lahey, Tim; Lounsbury, Karen; Hale, Andrew

Background

Health disparities are increasingly recognized as a major driver of the mediocre outcomes of expensive medical care in the United States. Many medical schools are developing curricula to train students to recognize and redress the health disparities and the social determinants that contribute to them but no standard model for curriculum content and implementation exists.

Description

In collaboration with faculty, the Social Justice Coalition (SJC) developed an innovative integrated first year curriculum in social medicine (SM) at the Larner College of Medicine (LCOM). To build on the successful insertion of SM themes into multiple courses in the first year curriculum at LCOM, we mapped SM themes and objectives to the Cardiovascular, Respiratory & Renal Systems (CRR) course in the second year curriculum. Weekly SM themes focused primarily on equity, justice, and the social determinants of health.

Methods

We conducted a non-systematic literature review to identify relevant SM themes for undergraduate medical training and design related objectives that aligned with the core course content. Collaboration with the CRR course director assured the fit and alignment of weekly themes and objectives. Themes and objectives were uploaded to the curriculum calendar for students to view. Additionally, weekly, student-developed, in-class announcements were implemented to increase awareness of SM themes and encourage dialogue and reflection.

Results

In the 8 weeks of CRR, 21 objectives and 8 social medicine Themes of the Week were developed and delivered.

Conclusions

We describe a novel faculty-student collaboration to develop and deliver SM curricula in undergraduate medical education. Next steps include formal assessment of student and faculty reactions to this curriculum, and generation of metrics of successful student acquisition of skills to recognize and redress health disparities.

Previous presentations

2018 NEGEA Conference poster, 2018 Social Medicine Consortium Conference workshop, and 2019 AAMC Conference poster

Abstract: TalkVermont: A Culture Change Project for The UVM Health Network

Authors: Hodde, Naomi; Boyle, Kilbourne; Toedt-Pingel, Iris; Berns, Stephen

Background

Goals of care (GOC) discussions in seriously ill patients are critical to high quality care. Although most clinicians believe they are important, less than 20% discuss GOC regularly. Inadequate training contributes to this gap. Avoiding GOC conversations negatively impacts patients and may increase clinician burnout. Deliberate practice can improve frequency and quality of this communication and may alleviate burnout by increasing meaning and connection in patient interactions.

Project Description

TalkVermont is a culture change project designed to increase clinician communication skills through evidence based, inter-professional workshops. We use simulated patient encounters incorporating cognitive mapping and deliberate practice. Coaches certify with VitalTalk national leaders and re-train regularly.

Methods

Between March, 2018 and November, 2019, we offered 29 workshops. We surveyed clinicians post-course and 6 months later on experience with GOC communication and change in confidence for target skills. We also investigated inter-professional interactions and job satisfaction.

Results

471 participants (medical students, residents, physicians, advanced practice providers (APP), nurses, chaplains, social workers and patient navigators) have completed TalkVermont. Post-training, 95% of participants felt they could apply what they learned to their practice and 99% would recommend the course to others. Participants reported increased confidence in all major domains including responding to emotions and exploring patients' goals. Follow up survey (52% response rate) revealed increased frequency of GOC conversations and sustained confidence in communication skills. Additionally, 92% of participants reported improved satisfaction with patient care because of their serious illness discussions.

Conclusions/Limitations/Future work

TalkVermont participants developed increased confidence in communication skills and improved satisfaction with clinical work following training. Project limitations include self-reported data and 50% response rate for follow-up survey. Our future work will incorporate objective structured clinical examinations (OSCEs) and increase inter-professional focus by diversifying content, adding advanced level workshops, and integrating APP students into our medical student training.

IRB: This study is IRB exempt.

Abstract: Learning about Diversity Through Global Health Electives

Authors: Holt, Megan; McNamara, Mariah; Maus, Lauren; Urbina, Luke; Kumar, Prasanna; Callahan, Katherine; Moore, Molly

Background

Medical educators must prepare future physicians to work with patients from different cultures. Geographical location can limit student exposure to diverse populations. Global health electives (GHEs) provide an opportunity for students to work with different communities and have shown to increase compassion and cultural humility. This study examines the impact of GHEs on the University of Vermont Lerner College of Medicine (LCOM) students' experience with diversity.

Project Description

The Global Health Program at LCOM provides medical students with clinical rotations and cultural and language enhancement through clinical placements, seminars and a host family experience to further develop comfort with diversity. Participants were surveyed on their experiences with diversity and global health.

Methods

A voluntary online survey about the Global Health Program was sent to current LCOM students who had previously participated in a GHE. Two respondents also participated in a ten minute in-person interview to gather further qualitative data.

Results

Four students completed the survey. Survey respondents reported that, after participation in the GHE, they had a greater sense of empathy towards their patients. They also had greater appreciation for cultural differences and felt better prepared for diverse interactions. Some students reported acquisition of key language skills. Respondents also noted feeling better equipped to deal with adversity and unexpected challenging situations. They enjoyed learning from medical students in other countries and saw GHEs as a way to connect with people around the globe.

Discussion

Medical students who participate in GHEs identify the experience as valuable for future practice with diverse populations. For medical training programs in regions with homogenous populations, GHEs can increase medical student exposure to diverse populations and promote cultural humility. GHE opportunities should be expanded to provide medical students with a diverse and inclusive medical school experience.

This abstract was submitted to the IAMSE 2020 conference.

Abstract: Evaluation of Higher Fidelity Simulator Use in General Surgery Resident Skills Curricula

Authors: Kelso, Sarah; Brandeis Johnson, Alison; Nicholas, Cate; Forgione, Patrick

Background

Cognitive Load Theory suggests that learners organize pertinent visual, auditory, and tactile information to form schema-based memory. The fidelity of a simulation may alter the cognitive input, thus affecting learning. High-fidelity simulation often focuses on the likeness of a simulator to reality and less on functionality or the educational benefit¹.

The ACS/APDS Surgical Resident Skills Curriculum provides low- and high-fidelity options for surgical simulation of the core skills. In this study we aimed to increase the fidelity of local surgical residency simulations and assess resident evaluations.

Methods

Simulations based on the ACS/APDS Surgical Resident Skills Curriculum are performed monthly with PGY1-5 General Surgery residents. For the Hand-Sewn Bowel Anastomosis (HSBA) curriculum, porcine bowel was used instead of simulated bowel. For the Laparotomy Opening and Closing (LOC) curriculum, water-filled long balloons were used as simulated bowel to assess for enterotomy. Feedback was gathered using a Likert-scale Kirkpatrick model at the end of both simulations. Comments were reviewed for relation to fidelity of the simulation.

Results

Fifteen and 17 learners completed evaluations for HSBA and LOC respectively. Kirkpatrick level evaluation is shown in Table 1. Four comments positively discussed use of porcine bowel. However, one participant wrote "...it would be easier for me (as an intern) to learn the basics on the fake stuff [because] the pig bowel was so thin and slippery." Five comments approved the laparotomy model.

Discussion

Overall feedback was that realistic models led to increased educational benefit. The exception was that junior learners may benefit from utilizing less complex simulated materials as a first step.

The ideal simulation would provide the right amount of cognitive load such that learners could focus on learning the most important steps without distraction. Awareness about how cognitive input changes as learners advance may be beneficial when modifying simulations in the future.

Hamstra, et. al. Reconsidering fidelity in simulation-based training. *Academic Medicine*. 2014; 89(3): 387-392. doi: 10.1097/ACM.000000000000130.

Abstract: Concept Mapping: A Novel Approach to Developing a Collaborative Team Environment

Authors: Marroquin, Bridget; King, Mary; Thurston, Amelie; Howe, Alison; Menezes, Katherine

Background

Labor and delivery is a high-stress environment where providers from multiple professions and disciplines converge, creating potential communication failures and teamwork breakdowns. Simulation-based team training is one validated tool for improving communication and developing highly-functioning health care teams; however simulation is expensive and time consuming. Concept mapping, a validated education tool, is a novel approach to team-based learning and team building. We hypothesize this low-resource, just-in-time activity will improve communication, team dynamics, and collaboration on Labor and Delivery.

Description of project

This is a prospective observational study involving obstetric care providers from UVMMC. Investigators evaluated participants' attitudes and experience following each concept mapping activity. Additionally the investigators evaluated the impact, if any, team concept mapping had on communication, team dynamics and provider attitudes toward interprofessional (IP) care teams.

Methods

From July 2018 to June 2019, investigators engaged front-line obstetric care providers (primarily nurses, obstetricians, and anesthesiologists) in team concept mapping sessions during low-census shifts. Participants completed a pre- and post-intervention survey regarding IP health care teams. Additionally, participants completed a short survey immediately following each concept mapping activity assessing the team learning activity experience and subsequent impact on communication and learning.

Results

During the intervention 11 concept mapping sessions occurred with 111 participant-activity experiences reported. All participants (100%) rated the team activity as "positive;" 98% of participants reported the session as having a "positive impact" on their own learning. Over 90% of participants reported being "able to contribute to the team learning environment" during the concept mapping activity. Post-intervention analysis revealed decreased reporting of IP care teams as inefficient or unnecessarily time consuming.

Discussion and conclusion

Our results support the hypothesis that concept mapping, a low-resource team activity, fosters a positive learning environment through improved communication, team learning, collective problem solving, and collaborative patient care.

IRB Determination: approved

Abstract: Assessing Self-Perceived Provider Efficiency in Epic

Authors: McGinn, Colby; Ziegelman, David; McEntee, Rachel

Background

Clinician inefficiency in using the Electronic Medical Record (EMR) is linked to an increase in costs and decreased provider wellbeing.¹ Specific components that have been studied include number of patient phone calls, task delegation and staffing, and communication using the EMR.² While multiple methods have been used to study clinician efficiency, there is no consensus about how best to apply this information to help clinicians improve.

Description

This project was designed to assess self-perceived EMR efficiency amongst primary care clinicians at UVM and to identify perceived strengths, areas for improvement and opportunities for charting delegation as one potential avenue for increased efficiency. The project was funded by an AHEC summer grant.

Methods

26 primary care providers were surveyed about their own charting efficiency, areas of strength and potential improvement. We also analyzed Epic's Signal data, which provides information on users' charting habits (e.g. time spent in chart review, notes, timer per encounter, etc.), to identify potential areas for department-wide intervention.

Results

19 of the 26 respondents identified themselves as somewhat or very efficient. Using smartphrases and experience with Epic were the most commonly self-identified strengths. Commonly self-identified areas for improvement were note writing and orders. InBasket management was found to be both one of the most common strengths and areas for improvement. Finally, working to the top-of-license was a theme amongst respondents regarding areas for delegation and efficiency improvement.

Discussion

Efficiency in the EMR is individual and multi-factorial. Using Epic's efficiency tools is limited by Epic literacy and receptiveness to change. Identified strengths for some providers were identified areas of improvement for others. Interestingly, there were no department-wide trends between charting methods and efficiency. As a result, it appears that intervention must include a combination of improved training/literacy, more proficient charting delegation and, importantly, individualized support for those who seek efficiency improvement.

Disclosures: Nothing to disclose.

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Katherine A. James, PhD, MSCE, Stephen E. Ross, MD, Betsy Vance, MPH, Radhika Nath, PhD, Michael I. Harrison, PhD, and David R. West, PhD. "Inefficiency in Primary Care: Common Causes and Potential Solutions." *Fam Pract Manag*. 2015 Mar-Apr;22(2):18-22

Abstract: What a High-Risk Obstetrician means to a Uganda Healthcare Model: A Provider Needs-based Assessment for the Development of a Maternal Fetal Medicine Fellowship

Authors: Menezes, Katherine; Kagawa, Michael; Nakabembe, Eve; Nakubulwa, Sarah; Nakimuli, Annetee; Meyer, Marjorie; Dougherty, Anne

Background

Despite the high rate of maternal morbidity and mortality in Uganda, there is no structured educational program for the development of obstetric providers to lead teams caring for high-risk and medically complicated women (Milln, 2018). The field of maternal fetal medicine was designed to fill such a gap. Currently, little is known about the needs of providers regarding maternal fetal medicine (MFM) training in Uganda.

Methods

An educational session was held for OB providers and trainees at a Ugandan national referral hospital describing the MFM subspecialty and how it could meet the unique needs of the population. A survey of 16 questions was administered (written and electronic), focusing on interest in training and the MFM's role as clinician, teacher, collaborator/leader. A Likert scale of 1-10 was used to describe least (1) or most (10) important attributes of MFM. Data are expressed in median (25%, 75%).

Findings

103 surveys were obtained (30 residents, 1 student, 64 specialty MD, 6 midwives, 2 RN). There was strong agreement of the importance of having MFM trained clinicians (10(9,10)), educators (10(9,10)) and collaborators/leaders (10(9,10)). There was strong interest in such training (9(8, 10) but more variability in the potential financial hardship (10(7,10) agreed no financial hardship). There was strong agreement regarding the addition of fetal monitoring (10(8, 10), ultrasound (10(9, 10), and antenatal care (9, 8, 10). The need for team-based care was expressed. Interestingly, many midwives requested specialized, high-risk pregnancy training.

Interpretation

Our findings support tailoring MFM training to population needs and resources available. This survey also unexpectedly identified enthusiasm for high-risk training for RNs and midwives. Comprehensive high-risk training would be scalable to an area with similar challenges across the continent. Teams of providers with high-risk pregnancy expertise could develop collaborative protocols and standards that can assist in reducing maternal morbidity and mortality.

Milln, J.; Nakimuli, A. (2018). Medical complications in pregnancy at Mulago Hospital, Uganda's national referral hospital. *Obstetric Medicine*. <https://doi.org/10.1177/1753495>

Abstract: Creation of a mock operating room environment for assessment of orthopedic resident surgical skills: A starting point toward development of deliberate practice curriculum

Authors: Merena, Stephen; Kaplan, Andrew; Stone, Lara; Charlson, Mark; Michelson, James; Ames, Elizabeth

Deliberate practice (DP) in post graduate medical education has demonstrated superior outcomes to traditional linear instruction as it pertains to acquisition of medical/surgical expertise. Specific opportunities for DP in orthopedic resident training are limited. Faculty are challenged to create DP surgical based environments that can be used to assess the progression of resident surgical expertise over the greater residency continuum.

A mock operating room (OR) environment was created in the University of Vermont anatomy laboratory. Orthopedic residents (PGY 2-5) (N-12) were tasked with completing a surgical procedure on a fresh frozen cadaver limb as part of a high stakes exam.

Methods

An orthopedic faculty survey regarding the anticipated expertise level of each resident was completed prior to the exam date. The mock OR environment was controlled so as to minimize variability between residents. Each resident was tasked with completing an ankle tendon transfer procedure within one hour. Specific tasks were stratified by PGY level. Proctors (N-3) assessed each resident on procedural knowledge, technical skills and visuospatial awareness. In addition, a separate observer (N-2), was charged with assessing the efficiency and communication skills of the resident. The OSCORE was utilized as the assessment scale. A GoPro video camera was worn by each resident during the exam which was reviewed by a blinded observer (JM) at a later date.

Results

Resident level of surgical expertise improved with each post graduate year. However, the results of the exam for multiple residents yielded a previously unknown discrepancy between presumed and actual level of resident surgical expertise.

Conclusions

The mock OR exam provided valuable insight to both faculty and residents with regards to each resident's current level of surgical expertise and can be used towards future DP based curriculum. We believe this environment can be used for the benefit of other medical/surgical post graduate resident assessments.

Abstract: More is not always better: Student use of self-assessments and performance on USMLE Step 1

Authors: Moore, Jesse; Menon, Prema; Moynihan, Tim; Howe, Alison; Zehle, Christa

Background

The National Board of Medical Examiners provides practice self-assessments for the Step 1 licensing exam. Students and institutions spend significant resources on these assessments. We sought to examine the relationship between the number of completed self-assessments, performance on self-assessments, curricular outcomes and step 1 score.

Methods

Our institution provided self-assessment vouchers to 118 second year students. Data on completion and performance on self-assessments, scores on the comprehensive basic science subject exam (CBSSE), in the first and second year, and step 1 were included. Regression modeling was used to create a predictive model for step 1 scores and to evaluate the impact of vouchers on step 1.

Results

116 students had complete data. 84% used one or more vouchers, mean = 3. There was no difference in step 1 scores for those who did not use vouchers compared to those who did (mean 229 for both groups, $p = 0.969$). Regression modeling determined that a model using the CBSSE and scores from our curriculum was the best prediction of step 1 scores. It accounted for 77% of the variance in step 1 scores. Addition of voucher use into the model did not change results. Voucher score was a predictor of step 1 score. Each unit of increase in a student's overall average voucher score is associated with a 0.037 increase in Step 1 score ($\beta 0.037$, $p = 0.009$). The number of vouchers used was negatively associated with passing or failing step 1 (OR 0.48, 95% CI 0.319-0.736)

Discussion/Conclusions/Lessons Learned

Completion of self-assessments did not affect our students step 1 scores. Higher scores on self-assessments were associated with a higher step 1 score. Completing more self-assessments had a negative association with passing step 1. These data provide administrators information that can be helpful in advising students and may lead to cost savings.

IRB Determination (if obtained): NA

Previous dissemination, if applicable: Submitted to IAMSE

Disclosures: None

Abstract: Near-Peer Teaching Assistant Rotation in Global Health: A Pilot Study

Authors: Rodgers, Monica; Hodde, Naomi; Clements, Benjamin; McNamara, Mariah; Moore, Molly; Zehle, Christa

Background

Near-peer teaching provides valuable educational opportunities for both the learner and teacher and is gaining in popularity in medical curricula nationwide.¹ Studies reveal that near-peer teaching and teaching assistants led to equal or better performance by learners on objective measures when compared to resident or faculty-led teaching.^{2,3,4,5} Benefits for peer teachers include better understanding of the content and improved confidence in teaching ability.⁶

Project Description

The objective of this project was to develop a student teaching assistantship (TA) within the LCOM global health first year elective. Fourth-year students who had participated in global health electives were asked to serve as TAs with students during summer global health experiences. Their role was to aid in pre-departure training, partner with host-site faculty to coordinate learning activities and cultural integration, provide pre-clinical and bedside teaching, and provide feedback and support to first year learners.

Methods

The pilot was evaluated through review of student reflections, in-person debriefs, and a post-elective survey.

Results

First-year students felt supported in unfamiliar settings and reported increased understanding of basic science topics and clinical interactions through facilitation by TAs. They also noted increased cultural competency. TAs gained clinical experience and bedside teaching skills as well as increased confidence in supporting learners and facilitating discussions around ethical dilemmas that arose during the rotation.

Discussion

This pilot showed significant bi-directional positive outcomes with first and fourth year students reporting significant benefits from participation. First year students gained clinical knowledge and cultural competency while fourth year students gained key leadership and teaching skills. Due to the positive feedback from learners, there is plan for expansion of the program to include more TAs at more international sites. Future directions include formal pre-training for TAs, seeking feedback from local faculty at international sites, and more formalized objective measures of learning outcomes.

Dissemination: This project description has been submitted for the NEGEA spring conference.

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Abstract: Where Do We Go from Here? The Importance of the URM Voice in Building Diversity

Authors: Ross, Adam; Gallant, Janice; McElhinney, Elizabeth; Jewkes, Cary; CichoskiKelly, Eileen; Barlow, Raieal

Larner College of Medicine (LCOM) has initiatives in place and has developed recruitment strategies to create a diverse incoming class. Although the number of students that are Underrepresented in Medicine (URM) has increased, LCOM remains a predominately white institution that is committed to the recruitment and retention of URM's. Studies conducted by other institutions indicate that successful matriculation of URM's is impacted by many factors at both undergraduate and graduate levels ^{1,2}. In order to design a successful matriculation program for URM's at LCOM, it is necessary to understand the factors which influence their decisions. The aim of this study is to investigate the themes behind URM applicants choosing not to enroll at LCOM.

This study utilizes quantitative data from surveys administered to all students who were accepted but did not attend LCOM. In this analysis, survey information was collected over 4 admissions cycles, 2015-2019. Data was analyzed for both URM and non-URM applicants to examine any differences in matriculation rates.

The withdrawal survey indicated similar reasons for both URM and non-URM applicants. Predominate themes for both groups were location, tuition cost and financial aid package received. However, preliminary analyses show that URM applicants (89%) were more likely than non-URM applicants (27%) to indicate that scholarship was a major factor in their decision. The withdrawal survey also found that URM's decisions were impacted by diversity of class, campus and city atmosphere. It is the goal of this study that information gained about URM's matriculation decisions will aid in the development of intentional URM recruitment and retention practices.

Abstract: “Genetics for Clinicians,” an Online-only Graduate Course: Design, Methods, and Experience

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Genetics education in graduate nursing programs is essential to prepare nurses and other health providers for advanced clinical practice. A 3-credit, 14-week course in healthcare genetics has been offered annually at the University of Vermont since 2014 as part of the Ph.D. Nursing and Masters-level Medical Laboratory Science programs. Most students work in healthcare settings across a rural state with limited availability to attend on-site classes. The course is designed with modular content including video lectures, reading assignments, quizzes, and facilitated discussions. Cross-functional Genetics professionals have expanded and updated the clinical and case-based content, and created or modified modules. An online teaching platform is used with robust capabilities for multimodal teaching and grading, and for facilitating interactions via asynchronous discussion boards.

Despite the limitations of online learning, ratings from the over 100 students completing the course are consistently high. Mentored clinical experiences are replaced by reflections placing their learning in their own clinical context by retelling real-life nursing or personal experiences on a guided discussion board.

Advantages of online teaching of genetics include reusability of modules, automated module release, integration with grade management platforms, accessibility for geographically distributed students and those with diverse work schedules, and instructor-facilitated discussions involving >30 students. Asynchronous teaching alleviates scheduling conflicts with patient care responsibilities for the instructors as well. Incorporating simulated clinical encounters and other web-based tools enriches the learning experience. Lack of face-to-face interaction with instructors, and the associated barriers to mutual insight and respect, is a potential disadvantage. Overall, the utilization of multiple interactive learning modalities, schedule and teaching flexibility, and integration into technology platforms has empowered a highly successful learning experience. Expansion to other clinician learners is contemplated.

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