

Mud Season Education Retreat

March 29, 2019 Doubletree by Hilton Hotel and Conference Center South Burlington, VT

Welcome to the Mud Season Education Retreat

Friday, March 29	Doubletree by Hilton, South Burlington, VT
8:00-8:30 AM	Registration and Continental Breakfast Emerald III Promenade; Emerald III
8:30-8:40 AM	Welcome Kathryn N. Huggett, PhD, Director, Teaching Academy <i>Emerald III</i>
8:40-9:15 AM	Oral Platform Presentations Moderator: Stephen Berns, MD Evaluation of an Active Learning Curriculum in Quality Improvement and Patient Safety for Medical Students Samantha Magier; Allen Repp, MD Faculty Development in Clinical Research Using EHR Data: A Recipe for Success Halle Sobel, MD; Abigail Crocker, PhD; Charles MacLean, MD <i>Emerald III</i>
9:15-10:15 AM	Keynote Session How Should We Prepare Students to Fight Clinically Impactful Injustice? Tim Lahey, MD Emerald III
10:15-10:45 AM	Break / Poster session with poster authors present Emerald III Promenade
10:45-12:15 PM	Breakout Session One Social Medicine Teaching Techniques Tim Lahey, MD <i>Emerald I</i> Preparation of Active Learning Materials: Less is More David Kaminsky, MD <i>Emerald II</i> Teaching at the Bedside: The Original Active Learning Molly Rideout, MD; Stephen Berns, MD <i>Diamond I</i> Pearls and Pitfalls of Curricular Design: A Workshop for Beginners Halle Sobel, MD; Amanda Kennedy, PharmD <i>Diamond II</i>
12:15-1:00 PM	Buffet Lunch Presentation of UVMHN Education Awards; Interest group tables and open seating <i>Emerald III</i>

Welcome to the Mud Season Education Retreat

1:00-2:30 PM	Breakout Session Two			
	How to Run a Successful Workshop			
	Melissa Davidson, MD; Bridget Marroquin, MD			
	Emerald I			
	Understanding Implicit Bias			
	Pamela Puthoor, MD			
	Emerald II			
	Diagnosing and Remediating the Clinical Learner			
	Dennis Beatty, MD			
	Diamond I			
	Neural Sciences Mini Retreat			
	Karen Lounsbury, PhD			
	Diamond II			
2:30-2:45 PM	Break / Active Learning Showcase			
	Emerald III Promenade			
2:45-4:15 PM	Breakout Session Three			
	Improve Your Odds: Education Grant Writing 101			
	Kathryn Huggett, PhD; Cate Nicholas, EdD, MS, PA;			
	Nancy Lemieux, MS, RN, CHSE			
	Emerald I			
	Planning for a Successful Active Learning Session: Learning			
	Objectives, Independent Learning, and Educational Technology			
	Active Learning Team / EdTech Team			
	Emerald II			
	Teaching at the Bedside: The Original Active Learning			
	Molly Rideout, MD; Stephen Berns, MD			
	FoCS Mini Retreat			
	Karen Lounsbury PhD			
	Diamond II			

4:15-4:30 PM

Closing Remarks and Evaluations

Emerald III

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

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

CME Information



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 JOINTLY ACCREDITED PROVIDER" (ANCC), to provide continuing education for the healthcare team.

INTERPROFESSIONAL CONTINUING EDUCATION

The University of Vermont designates this live activity for a maximum of 6 AMA PRA Category 1 *Credits*TM. 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:

- Dennis Beatty, MD
- Stephen Berns, MD
- Amanda Broder .
- Melissa Davidson, MD
- Lewis First, MD
- Kathryn Huggett, PhD •
- Amanda Kennedy, PharmD
- Tim Lahey, MD, MMSc •
- Nancy Lemieux, MSN •
- Karen Lounsbury, PhD •
- Bridget Marroquin, MD
- Jesse Moore, MD, FACS, FASCRS •
- Cate Nicholas, PA, EdD, MS
- Pamela Puthoor, MD .
- Molly Rideout, MD •
- Alan Rubin, MD
- Cara Simone, MA .
- Halle Sobel, MD
- Christa Zehle, MD

*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

The Robert Larner College of Medicine at The University of Vermont requires that each speaker/planner/ moderator participating in an accredited program to disclose any financial interest/arrangement or affiliation with a corporate organization that may impact on his/her presentation (i.e. grants, research support, honoraria, member of speakers' bureau, consultant, major stock shareholder, etc.). In addition, the faculty member must disclose when an unlabeled use of a commercial product or an investigational use not yet approved for any purpose is discussed during the educational activity.

*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.

Interests to Disclose/COI/Bias Resolved*:

David Kaminsky, MD - Faculty Speaker for MGC Diagnostics; DSMB Members, Acorda, Inc; Pulmonary Function Testing Oversight, Spiration, Inc.

Keynote Session

How Should We Prepare Students to Fight Clinically Impactful Injustice? Tim Lahey, MD

Faculty and students want our graduates to be ready to address the social determinants of health. Yet, this topic has not traditionally been a mainstay of undergraduate medical education. Why should it be? How deep should coverage go? Are there promising early models at Larner and other institutions?

Learning Objectives:

- Recognize the role physicians play in redressing the social determinants of health.
- Share promising ways to teach and learn about physician interventions on the social determinants of health.
- Discuss challenges and limits to training physicians to redress the social determinants of health effectively.

Breakout Sessions

Social Medicine Teaching Techniques Tim Lahey, MD

Medical students can learn to redress the social determinants of health in many contexts. From the preclinical curriculum to quality improvement teaching to public health projects, there are many promising methods of converting concern for the welfare of all of our patients into concrete action. We will share promising approaches with each other, and brainstorm how we might use those approaches to improve our students' learning at the University of Vermont.

Learning Objectives:

- Catalog ways the social determinants of health are being taught at Larner College of Medicine currently.
- Brainstorm about how we can improve teaching about the social determinants of health at LCOM over time.
- Plan next steps in a rolling conversation about teaching the social determinants of health at LCOM.

Preparation of Active Learning Materials: Less Is More

David Kaminsky, M.D.

This session will focus on discussion and demonstration of how to improve pre-learning materials and facilitate in-class teaching for the Workshop style of active teaching.

Learning Objectives:

- Illustrate how to improve pre-learning materials by providing concise overviews of key concepts.
- Recommend methods of facilitating in-class activities that review the pre-learning materials and directly relate to the educational objectives.

Teaching at the Bedside: The Original Active Learning

Molly Rideout, MD; Stephen Berns, MD

With easy access to patient data via electronic medical records and ever-increasing technological advances in diagnostics, many clinician educators do not utilize the bedside history and physical exam to its full potential as a teaching tool. In this workshop, we will provide strategies for attendees to incorporate bedside teaching in to their clinical settings in an efficient and effective way.

Learning Objectives:

- Define bedside teaching.
- Discuss ways to facilitate bedside teaching.
- Practice bedside teaching techniques.
- Discuss barriers to bedside teaching and how to overcome them.

Pearls and Pitfalls of Curricular Design: A Workshop for Beginners

Halle Sobel, MD; Amanda Kennedy, PharmD

This session for early educators, or those looking to create a more structured approach to your teaching sessions, will work through 1-2 design models discussing such things as illustrative learning objectives and assessments.

Learning Objectives:

- Describe and practice writing key steps in curriculum design.
- Differentiate between goals and objectives when developing a curriculum.
- Write effective types of learning objectives based on Bloom's Taxonomy.
- List methods for evaluating your curriculum.

How to Run a Successful Workshop

Melissa Davidson, MD; Bridget Marroquin, MD

In this interactive workshop, participants will learn effective tools for successful workshop development, from creation and planning to managing and facilitation. Participants will have the opportunity to collectively put these tools into practice using a step-by-step workshop template, which can be used to plan a variety of future activities such as local faculty development and national meetings.

Learning Objectives:

- Describe a framework for creating, managing and facilitating a workshop.
- In small groups, develop a sample workshop curriculum using knowledge gained from the above, utilizing a structured template intended to guide performance.
- Use report-outs from small groups, discuss strategies and pearls for running a highly successful workshop, which can be applied from the local level to national meetings.

*Please note that this session will address multiple workshop types, venues, and audiences. It is not limited to the Active Learning workshop approach used in LCOM medical student Foundations courses.

Understanding Implicit Bias

Pamela Puthoor, MD

We will discuss the mental constructs of bias, and the implications on social behaviors, and our roles as medical educators. We will apply this knowledge to examples in medical education, and analyze our responses.

Learning Objectives:

- Discuss the nature of bias.
- Describe the cognitive patterns associated with bias.
- Review bias in our everyday life.
- Analyze examples of bias in life and in medical education.
- Role play medical education examples.
- Create strategies around disengaging from bias.

Diagnosing and Remediating the Clinical Learner

Dennis Beatty, MD

This session will review the steps clinicians take when making a diagnosis, then practice how to identify specific learner deficiencies, and discuss how to remediate them.

Learning Objectives:

- Appreciate the complexity of the diagnostic reasoning process.
- Recognize specific areas of deficiency in clinical case presentations.
- Discuss strategies for improvement and remediation.

Neural Sciences Mini Retreat

Karen Lounsbury, PhD

This session invites faculty of the Neural Sciences course to meet to review weekly themes and schedules and discuss active learning.

Improve Your Odds: Education Grant Writing 101

Kathryn Huggett, PhD; Cate Nicholas, EdD, MS, PA; Nancy Lemieux, MS, RN, CHSE

Learning Objectives:

- Describe the typical components of education grants.
- Identify the characteristics of a competitive grant proposal.
- Discuss the common pitfalls in grant writing.
- Apply the processes described to begin the development of a grant submission.

Planning for a Successful Active Learning Session: Learning Objectives, Independent Learning, and Educational Technology

Active Learning Team / EdTech Team

What makes a session successful? The Active Learning and Educational Technology Teams will lead an interactive session on the process of designing, aligning, and implementing a class plan. Topics will include writing learning objectives, aligning materials, and choosing appropriate technology.

Learning Objectives:

- Create Independent Learning Objectives (knowing and understanding) that prepare students for in-class application exercises.
- Target material directly to Learning Objectives.
- Format materials in a way that lowers cognitive load and enhances understanding and memory with students.
- Identify the appropriate technology tool for different active learning modalities.
- Identify scenarios when technology is not an appropriate addition to the learning environment.
- Modify an existing lesson/session plan to incorporate the appropriate type of educational technology tool.

FoCS Mini Retreat Karen Lounsbury, Ph.D.

This session invites faculty of the Foundations courses to meet to review weekly themes and schedules and discuss active learning.

Mud Season Education Retreat

Workshop Presenters and Facilitators

Dennis Beatty, MD, Medicine* Stephen Berns, MD, Family Medicine* Melissa Davidson, MD, Anesthesiology* Kathryn Huggett, PhD, Medicine, The Teaching Academy* Amanda Kennedy, PharmD, Medicine* Tim Lahey, MD, MMSc, Medicine Nancy Lemieux, MS, RN, CHSE, Nursing Karen Lounsbury, PhD, Pharmacology* David Kaminsky, MD, Medicine Bridget Marroquin, MD, Anesthesiology* Jesse Moore, MD, FACS, FASCRS, Surgery* Cate Nicholas, PA, EdD, MS, Obstetrics, Gynecology, and Reproductive Sciences* Pamela Puthoor, MD, Pediatrics* Molly Rideout, MD, Pediatrics* Cara Simone, MA, Active Learning Halle Sobel, MD, Medicine*

Planning Committee

Melissa Davidson, MD, Anesthesiology* Lewis First, MD, Pediatrics* Kathryn Huggett, PhD, Medicine, The Teaching Academy* Karen Lounsbury, PhD, Pharmacology* Bridget Marroquin, MD, Anesthesiology* Jesse Moore, MD, FACS, FASCRS, Surgery* Alan Rubin, MD, Medicine* Cara Simone, MA, Active Learning Halle Sobel, MD, Medicine* Christa Zehle, MD, Pediatrics, Office of Medical Student Education*

*Indicates Teaching Academy Member

Teaching Academy New Members Inducted in January 2019

Distinguished Educator Mark Plante, MD	Associate Professor	Surgery
<u>Master Teacher</u> Robert D'Agostino, MD Andrea Green, MD Friederike Keating, MD Michael LaMantia, MD Janet Murray, PhD Deirdre O'Reilly, MD	Associate Professor Associate Professor Professor Associate Professor Assistant Professor Assistant Professor	Radiology Pediatrics Medicine Microbiology and Molecular Genetics Pediatrics
Member Anne Dougherty, MD Danielle Ehret, MD Jonathan Flyer, MD Deepak Gupta, MD Abhishek Kumar, MD Lauren MacAfee, MD Roberta O'Brien, MD Marios Prikis, MD David Rand, DO, MPH Andrew Rosenfeld, MD Matthew Saia, MD Eline van den Broek-Altenburg, PhD Stanley Weinberger, III, MD	Assistant Professor Assistant Professor	Obstetrics, Gynecology, & Reproductive Sciences Pediatrics Pediatrics Neurological Sciences Medicine Obstetrics, Gynecology, & Reproductive Sciences Medicine Medicine Medicine Psychiatry Pediatrics Psychiatry Pediatrics

<u>Protégé</u>

Hillary Anderson, MD	Resident	Pediatrics
Nicholas Bedrin, MD	Resident	Surgery
James East, MD, PhD	Resident	Radiology
Johanna Kelley, MD	Resident	Obstetrics, Gynecology, &
		Reproductive Sciences
Stephen Ranney, MD	Resident/Fellow	Surgery
Rebecca Rieck, MD	Fellow	Obstetrics, Gynecology, & Reproductive Sciences
Avneet Singh, MD	Resident	Medicine

Teaching Academy Members January 2019

Distinguished Educator

Jan Carney, MD Melissa Davidson, MD Lewis First, MD Pamela Gibson, MD Ann Guillot, MD Mark Hamlin, MD Kathryn Huggett, PhD Charles Irvin, PhD William Jeffries, PhD John King, MD Mark Levine, MD Judith Lewis, MD Cate Nicholas, EdD, PA Mark Plante, MD Martha Seagrave, PA-C Douglas Taatjes, MD

Master Teacher

Varun Agrawal, MD Elizabeth Ames, MD Scott Anderson, MD Dennis Beatty, MD Patrick Bender, MD Marie Berg, MD Stephen Berns, MD Anant Bhave, MD Stephen Contompasis, MD Robert D'Agostino, MD Kristen DeStigter, MD, FACR Stephen Everse, PhD Candace Fraser, MD Tim Fries, MD Mark Fung, MD, PhD Erica Gibson, MD Karin Gray, MD Andrea Green, MD Laura Greene, MD Andrew Hale, MD Felix Hernandez, MD Friederike Keating, MD Amanda Kennedy, PharmD Jay Kikut, MD Patricia King, MD, PhD Michael LaMantia, MD Jerry Larrabee, MD Karen Lounsbury, PhD Stephanie Mann, MD Bridget Marroquin, MD Christopher Morris, MD Janet Murray, PhD Deirdre O'Reilly, MD, MPH Mark Pasanen, MD Richard Pinckney, MD Carlos Pino, MD

Master Teacher

Molly Rideout, MD Lee Rosen, PhD Jay Silveira, PhD Rebecca Wilcox, MD Christa Zehle, MD

<u>Member</u>

Abigail Adler, MD Erik Anderson, MD Maura Barry, MD Jason Bartsch, MD Michael Bazylewicz, MD Lynn Blevins, PhD Bronwyn Bryant, MD Kelly Butnor, MD Whitney Calkins, MD Eileen CichoskiKelly, PhD Deborah Cook, MD Kelly Cowan, MD Thomas Delaney, PhD Jeremiah Dickerson, MD Anne Dougherty, MD Danielle Ehret, MD, MPH Shaden Eldakar-Hein, MD Elise Everett, MD, MS Borzoo Farhang, DO Havaleh Gagne, MD Garth Garrison, MD Lydia Grondin, MD Deepak Gupta, MD Sally Herschorn, MD Robert Hieronimus, MD Rosy Hill, MD Elise Hotaling, MD Clara Keegan, MD Alison Krywanczyk, MD Julie Lahiri, MD Karen Leonard, MD Michael Lewis, MD Robert Low, PhD John Lunde, MD Lauren MacAfee, MD Isaura Menzies, MD Stephen Merena, DPM Jesse Moore, MD Molly Moore, MD Sharon Mount, MD Roberta O'Brien, MD Julie Phillips, MD Marios Prikis, MD Pamela Puthoor, MD David Rand, DO, MPH Valerie Riss, MD Andrew Rosenfeld, MD

<u>Member</u>

Alan Rubin, MD Matthew Saia, MD Joel Schnure, MD Geoffrey Scriver, MD Paul Slavik, MD Arti Shukla, PhD Halle Sobel, MD Emily Stebbins, MD Kevan Sternberg, MD Jillian Sullivan, MD Mitchel Tsai, MD Sarah Twichell, MD Michael Upton, MD Eline van den Broek-Altenburg, PhD Constance van Eeghen, DrPH Stanley Weinberger III, MD Leslie Young, MD

Protégé

Hillary Anderson, MD, MPH Tess Aulet, MD Nicholas Bedrin, MD James East, MD, PhD Emily Hadley Strout, MD Johanna Kelley, MD Sherrie Khadanga, MD Rachel McEntee, MD Philip Munson D. George Ormond, MD Charmaine Patel, MD Stephen Ranney, MD Rebecca Rieck, MD Thomas Rogers, DO Lea Sheward, MD Mrinal Shukla, MD Avneet Singh, MD Kramer Wahlberg, MD Patrick Zimmerman, DO

Teaching and Educational Excellence Awards

Conferred at the Teaching Academy Induction and Award Ceremony on January 31, 2019

Innovation in Curriculum Development or Pedagogy Award

Keith Curtis, MD Assistant Professor, Surgery

Learner Assessment Award

Cate Nicholas, EdD, PA Assistant Professor, Obstetrics, Gynecology, and Reproductive Sciences

Frederick C. Morin, MD Educational Leadership Award

Tania Bertsch, MD Associate Professor, Medicine

Outstanding Contribution Award

Maria Mercedes Avila, PhD Associate Professor, Pediatrics **Abstract:** Power Tools of Learning: Comparing Communication Skills Teaching Methods for Serious Illness Conversations

Author: Adkins, Ashley; Fay, Bailey; Berns, Stephen; Boyle, Kacey

Background

Patient-centered communication skills (PCCS) are a fundamental component of caring for patients with serious illness. The most effective PCCS training programs incorporate deliberate practice in small-group learning and patient simulation. These methods can be resource and time intensive for educators. Drill-based teaching can be an efficient and effective alternative teaching method.

Description

This study aimed to investigate the difference between students who learned PCCS through skill isolation drills with patient simulation versus patient simulation only.

Methods

During Palliative Care Bridge Week, 3rd year medical students were randomly and blindly divided into groups: drill-based and standard. Shortly before the course, faculty were trained in both teaching methods and were randomized to a group. All students received didactics and demonstration of PCCS. The standard group completed 4 cases of patient simulation with feedback. The intervention group received drills training followed by 2 cases with feedback. Both groups were given surveys afterwards and a follow-up survey during their next bridge week.

Results

Forty-eight students were in the drills group, 44 in the standard, 58% reported to be female, 92% had previous communication skills training through patient simulation. The groups were not statistically different in demographics or previous PCCS training. Both groups reported increased preparedness for all PCCS immediately after completing the course. The largest increases were in "delivering serious news" and "eliciting patient goals" (+2.5 and 2.1 respectively, on 1-7 Likert scale). 88.1% of the students felt the lab was overall valuable for their learning. In the follow-up survey, all students reported increased use of communication skills following the PCCS training. Between the control and intervention groups, there were no differences in the outcomes. Discussion: Overall, students reported increased confidence and skill utilization months later. Drills curriculum was as effective as the standard method. Thus, drill-based teaching can be used as a feasible alternative to practice PCCS.

IRB determination: Not research determination

No previous disseminations

No disclosures

Abstract: UVMMC Central Venous Catheter Insertion Course: Best Practices through Deliberate Practice

Authors: Bedrin, Nicholas; Fortune, John; Ranney, Stephen; Nicholas, Cate

Background

Central Line Associated Blood Stream Infections (CLABSI) are a major complication of Central Venous Cather (CVC) insertion and a major source of morbidity and in-hospital costs. Multiple institutions, including UVMMC, have shown that simulation-based CVC insertion courses decrease CLABSI rates and improve learner performance. The CLABSI committee tasked the Clinical Simulation Laboratory (CSL) to update and to improve the CVC insertion course. In the past, participation was limited to interns but excluded more senior learners. Our project aimed to reach a larger target population of learners, with the goal of educating all practitioners who place central lines regardless of prior experience with an emphasis on standard of care, best practices, and sterile technique. We created a deliberate practice-based simulation course for the best practices for CVC insertion.

Description

The curriculum has two tracts: full or refresher course. The full course is longer, designed for new learners, and includes an initial session focused on indications, contraindications, complications, deliberate practice with task trainers, sterile technique, kit components, and formal debriefing. The second session is a checklist-based assessment, allowing for successful completion or further deliberate practice. The checklists underwent a modified-Delphi for consensus on technique after searching the literature for best practices. Learners with prior experience were put through the refresher course, which consisted of a shorter format focusing on assessment, with necessary corrections as needed.

Results

Learners participated in the training based on specialty (Fig. 1). No learner has failed thus far. Evaluation data is based on a five-point Likert scale; results of the program are pending but are anecdotally very positive.

Discussion

Future efforts will focus on senior residents, intern completion during orientation, training new course instructors, and ultimately offering the course as a refresher for fellows, physicians, and advanced practice providers.

The authors have no disclosures.

Abstract: Medical Student Satisfaction in the Operating Room: Comparing Laparoscopic and Open Procedures

Authors: Benner, Nate; Rosen, Lee; Holterman, Leigh Ann

Naturally, medical schools place paramount importance on the quality of the educational experiences of medical students. To this end, a current trend in medical education is to incorporate active learning. The AAMC 2017-2018 LCME annual medical school questionnaire Part II reports that 124/147 medical schools indicated curriculum change is in the planning or implementation phase. 76 reported they plan to use selfdirected learning format. 113/147 were planning this reform in the pre-clinical years with only 92/147 planning change in the clerkship year. While the clinical years of medical school seem to be active learning environments in and of themselves, anecdotal student reports suggest that in the in the operating room in particular, active learning may be lacking. Students often speak of difficulty seeing, limited interaction with the sterile field due to crowding, and trouble following the surgeries from awkward viewpoints.

We hypothesize that this visual difficulty may be improved by laparoscopic surgery, where there are multiple screens projecting the surgery in real time. We also hypothesize that medical student satisfaction and perceived efficacy at answering questions may be improved by video assisted surgery.

Pending IRB approval, in February 2019, students in the Larner College of Medicine classes of 2019 and 2020 will be asked to fill out a survey with 10 questions regarding their experience in the operating room.

We anticipate that students will report higher levels of satisfaction with their learning experiences that include video-assisted devices. If so, findings may provide medical schools with a means to improve medical education and active learning, in the notoriously daunting operating room environment.

The discussion will highlight implications around implementation of point-of-view video assisting devices on the lead surgeon when a laparoscopic case is not taking place.

Abstract: The Flipped Journal Club

Authors: Bounds, Richard

Introduction

Educators struggle to develop a journal club format that promotes active participation from all levels of trainees. The explosion of social media compels residencies to incorporate the evaluation and application of these resources into evidence-based practice. We sought to design an innovative "flipped journal club" to achieve greater effectiveness in meeting goals and objectives among residents and faculty.

Methods

Each journal club is focused on a specific clinical question based on a landmark article, a background article, and a podcast or blog post. With the "flipped" model, residents are assigned to prepare an in-depth discussion of one of these works based on their level of training. At journal club, trainees break into small groups and discuss their assigned readings with faculty facilitation. Following the small group discussions, all participants convene to summarize key points. In redesigning our journal club, we sought to achieve specific educational outcomes, and improve participant engagement and overall impressions.

Results

Sixty-one residents at our emergency medicine program participated in the flipped journal club during the 2015-2016 academic year, with supervision by core faculty. Program evaluation for the flipped journal club was performed using an anonymous survey, with response rates of 70% and 56% for residents and faculty, respectively. Overall, 95% of resident respondents and 100% of faculty respondents preferred the flipped format.

Conclusions

The "flipped journal club" hinges upon well-selected articles, incorporation of social media, and small group discussions. This format engages all residents, holds learners accountable, and encourages greater participation. Following one academic year, evaluation of the flipped journal club demonstrated successful achievement of both personal goals and designated educational objectives amongst residents and faculty.

IRB Determination: N/A

Previous dissemination: Poster presentation at CORD-EM conference in 2016,

Publication in Western Journal of Emergency Medicine in 2017

Abstract: Emergency Medicine Residents' Self-Assessments Play a Critical Role when Receiving Feedback

Author: Bounds, Richard; Aghera, Amish; Santen, Sally

Objectives

Faculty aim to improve resident performance by enhancing the quality and delivery of feedback. However, all feedback is interpreted through the "lens" of the learner's own self-assessment. Ideally, a learner should be able to generate and act upon specific learning goals (LG) to improve performance. Looking at the source of generated LG, whether from one's self-assessment versus external feedback, might identify factors that lead to performance improvement. Using an oral board scenario, we sought to determine the effects that residents' self-assessment and supervisors' feedback have on both the generation of LG and the execution of these goals.

Methods

In this prospective educational study at 4 academic programs, 72 senior EM residents participated in a standardized oral board scenario. Following the scenario, residents completed a self-assessment. Next, examiners used a standardized checklist to provide both positive and negative feedback. Subsequently, residents were asked to generate "SMART" LG (Specific, Measurable, Attainable, Realistic, and Time-bound). The investigators categorized the LG as stemming from the residents' self-assessments, feedback, or both. Within 4 weeks, the residents were asked to recall their LG and describe any actions taken to achieve those goals.

Results

A total of 226 LG were initially generated (mean per resident 3.1 +/- 1.3). 47% of the LG were generated from residents' self-assessments only, while 27% were generated from feedback alone. Follow-up showed that 89 LG were recalled, of which 52 were acted upon. On follow-up, the number of LG from self-assessment and feedback were equal (25% each), while the most executed LG came from self-assessments and feedback in agreement (40%).

Conclusions

Following feedback on an oral case, residents generated the majority of their LG from their own self-assessments. Conversely, at the follow-up period, they recalled an increased number of LG stemming from feedback, while the largest proportion of LG acted upon stemmed from feedback that *confirmed* their own self-assessments. This suggests that both self-assessment and feedback are critical factors in residents' ultimate execution of plans to improve performance.

IRB Determination: This study was reviewed and approved by the local institutional

review board at each site.

Previous dissemination: Publication in Academic Emergency Medicine in 2013

Abstract: Residents Filter Feedback from Supervisors Based on Perceived Personality and Practice Style: A Qualitative Assessment of Emergency Medicine Residents in the Post-Milestone Era

Authors: Bounds, Richard; Fredette, Jenna; Michalec, Barrett

Background

Effective feedback is the cornerstone of competency based medical education. Research has demonstrated the need for supervisors to provide timely, specific, and actionable feedback. It has also been shown that residents filter feedback based on their own self-assessments. This interplay between supervisors and residents creates complicated feedback mechanisms. This interaction should be continually explored with the introduction of new processes to better understand the factors that influence feedback delivery and acceptance.

Objective

This qualitative study based in grounded theory seeks to explore residents' perceptions of feedback in the current graduate medical education (GME) climate after the introduction of the ACGME milestones.

Methods

Semi-structured interviews with residents were performed and transcripts underwent a multi-step coding process. Transcripts were analyzed and re-analyzed to identify common themes and explore their interconnectedness. Comparisons were then made between each cohort to further categorize consistent themes.

Results

Several themes of feedback recognition and acceptance emerged during the course of analysis. A few have been previously considered in the literature, including the desire for real-time and specific feedback. Newer themes emerged that are broadly classified as feedback "filtering" – residents filter feedback based on their supervisors' personality and practice styles, in the context of their own developing practice styles, and sometimes engage in feedback avoidance.

Conclusions

Residents filter the feedback they receive based on the personalities and practice styles of their supervisors, and residents' perceptions of their own practice styles influences feedback acceptance. In addition, residents may avoid soliciting feedback if they don't feel their performance was adequate. Residents' avoidance of constructive feedback may influence the accuracy of resident portfolios reviewed by clinical competency committees. With these insights, residency leaders are better equipped to effectively mentor residents when reviewing evaluations. At the program level, these issues must be considered when creating, evaluating, and modifying feedback mechanisms.

IRB Determination: Exempt

Previous dissemination: None

Abstract: A Case-Based High Value Care Curriculum for Internal Medicine Residents

Author: Burgess. Lee-Anna; Hood, Virginia; Stinnett-Donnelly, Justin; Kennedy, Amanda; Repp, Allen

Background

Physician-driven waste accounts for a significant portion of escalating health care costs and harm. Resident physicians will play critical roles in promoting High Value Care (HVC); however, many residency training programs do not provide formal education in the core skills required to fulfill this role.

Description: We developed a case-based HVC curriculum for Internal Medicine resident physicians at the University of Vermont Medical Center (UVMMC). The curriculum was introduced to all PGY-3 Internal Medicine residents beginning in 2017, with the goal of improving knowledge and skills essential to understanding and improving health care value.

Methods

Residents work in small groups with faculty mentors over 5 one-hour sessions. During the sessions, residents identify a case from their own clinical care with an opportunity to improve value, evaluate clinical evidence, discuss healthcare costs and payment, and estimate the financial impact of HVC for the case and the system. The culmination is a poster presented at the UVM Health Network Quality Forum. Participating residents also present their findings to PGY-1 Internal Medicine residents as part of the Improvement Science curriculum. Pre-course and post-course surveys were administered to assess residents' confidence with HVC knowledge and skills.

Results

Three cohorts, with a total of 29 participants, have completed the curriculum since inception. The survey response rate was 65.5% (19/29). Comparison of pre-course and post-course survey data reveals improvement in residents' confidence in many HVC domains (Table 1). Additionally, residents strongly agreed that they would recommend continuing the HVC curriculum for future residents (mean 4.55, SD 0.66).

Discussion

An active learning, case-based curriculum improves residents' confidence in HVC principles. This format has added benefits for residents by providing an opportunity to produce and present scholarly work, teach their colleagues and actively engage in a systems-based approach to patient care.

The authors have no disclosures.

Abstract: Barriers and Facilitators of a Clinical Evidence Technology for Clinical Impact: Insights from Mixed Methods

Authors: Burke, Marianne; Rubin, Alan; Savard, Liliane; Littenberg, Benjamin

Background

A previous cluster-randomized controlled trial tested the effectiveness of a clinical evidence technology (CET), VisualDx, for skin problems seen by Primary Care Providers (PCPs). Based on patient report, there was no effect on time to problem resolution or return appointments.

Objective

To explain, from the provider perspective, why the CET did not make a difference in the clinical trial and to identify barriers and facilitators to use.

Methods

Mixed methods study design. Providers from both arms completed a survey about their use of VisualDx and information-seeking during and after the trial. Active arm providers participated in interviews to explore their opinions and experiences using VisualDx. Behavioral steps of the evidence-based medicine (EBM) paradigm informed the 6 step model.

Results

PCPs found VisualDx easy to use (median 3 on a 1-4 scale), but found it only somewhat useful (median 2 on a 1-4 scale). PCPs with fewer years in practice used it more often and found it easier to use. Interviews identified facilitators and barriers to using VisualDx. Facilitators included diagnostic uncertainty, positive attitude, ease of access, utility for diagnosis and therapy decisions, and utility for patient communication. Barriers included PCP confidence in dermatology, preference for other sources, interface difficulty, and retrieval of irrelevant diagnoses and images. Some PCPs reported positive impacts on patient treatment and fewer referrals; others saw no difference. PCPs found VisualDx easy to access, but some found the interface difficult to use. They found it useful and relevant at times, but also frustrating and time-consuming. They used other sources in addition to, or instead of, VisualDx.

Conclusion

PCPs did not perceive VisualDx as "useful" often enough for them to use it frequently or exclusively, thereby reducing the likelihood of it making a difference in patient-level outcomes such as problem resolution and return appointments.

Abstract: Design and Implementation of a Theoretical and Practical Flow Cytometry Course to Graduate Students at the University of Vermont Larner College of Medicine

Authors: Del Rio-Guerra, Roxana; Boyson, Jonathan

Introduction

The Harry Hood Bassett Flow Cytometry (FC) and Cell Sorting Facility at the UVM LCOM was founded in 2001. This facility is designed as a multi-user resource for the high-throughput multiparametric analysis and sorting of single cells. We provide scientific and technical consultation as well as collaborative support to faculty, staff, and students in the design of flow cytometry experiments, and provide assistance in data analysis and interpretation.

Problem Statement

A central part of the mission of any shared resource facility is educational outreach that allows UVM investigators, students and staff to fully realize the benefits and applications of new technologies. Here at UVM, such a course did not exist for flow cytometry.

Goal

The goal of our facility was: 1) to survey the educational needs for a FC among faculty, staff, and students that were using this technology; 2) design a curriculum for a graduate level FC course that met the needs of users and addressed the common problems/ obstacles in learning identified by the survey; 3) design and implement a teaching style that delivers both theoretical and practical hands-on aspects in FC to faculty, staff, and students.

Results and Conclusions

The curriculum of "Introduction to Flow Cytometry" course (1 credit) was approved by the UVM Graduate College in the summer of 2014. Enrollment in Fall of 2014 commenced with a maximum enrollment of students of 8-10. In 2018, the course content was re-evaluated and was upgraded to a 2-credit course. During the last five years, we have taught this course to 35 graduate students, 2 postdoctoral associates, 10 lab technicians, and 4 faculty members.

Abstract: Team-based Research Projects in an Online Learning Environment: Insights from PH392, Culminating Project Experience

Authors: Delaney, Tom; O'Malley, Donna; Donovan, Kelsey; Carney, Jan

Background

Students working towards an MPH degree need to demonstrate competencies in public health research, including formulating questions, analyzing data and communicating findings. In UVM's online–only MPH program these competencies are addressed in PH392: Culminating Project Experience. Online-only programs face unique challenges (and opportunities) for supporting students working collaboratively and remotely on research projects. Over five years, we developed PH392 as a team-based research experience, in which each team works with a mentor and course faculty to develop research and teamwork skills.

Description of project/program/innovation

PH392 students work in groups of five or six, with specific roles and responsibilities outlined for each group member. Each team is provided access to a public health dataset and, with their mentor, develops a research question that is answered through data analysis. Students present their findings during an online, asynchronous poster session that includes a 3-minute voice-explanation of their poster and opportunities for online comments and discussion. Results are written up in a journal-article format following *American Journal of Public Health* guidelines.

Methods

Quantitative data on students' and mentors' experiences are being collected through a combination of course evaluations, team-functioning assessments and surveys with course mentors. Qualitative analysis is used to identify themes associated with the teams' collective challenges and successes.

Results

Data collection is ongoing; results will be available in March.

Discussion

We anticipate identifying specific benefits and drawbacks of conducting a group research project in an online course environment. Discussion will focus on specific changes that have been made to date, and on additional steps that can be taken to further improve students' learning outcomes.

Based on criteria of the UVM IRB, this project meets criteria for exemption from review.

No previous dissemination of this work has occurred; the authors have no conflicts to disclose.

Abstract: Systematic Review of Education on Firearms Safety Screening and Counseling for Pediatric Primary Care

Authors: Delaney, Tom; Atwood, Gary; Bell, Rebecca

Background

Primary Care Providers (PCPs) play an important role in assessing children's risk for accessing firearms stored unsafely. However, PCPs frequently have little knowledge of and express a lack of confidence on this topic¹. A 2016 review found few published articles about educating health professionals for engaging their patients on firearms safe storage². The current study provides an updated review and includes a specific focus on educating PCPs who care for children.

Description

We conducted a systematic review of published literature and other educational resources (e.g., online tutorials) addressing provider education for firearm safe storage screening and counseling.

Methods

Working with a medical librarian, we implemented a keyword search strategy with the PubMed, CINAHL, MedEdPORTAL and other databases. Screening of titles and abstracts identified 140 articles/resources possibly related to PCPs and teaching of firearm safe storage. Complete articles were reviewed by the authors for inclusion in the review. Inclusion criteria were: 1) having an educational intent, 2) relating to physicians who provide care to children, and 3) addressing screening or counseling on safe storage of firearms.

Results

The literature on educating PCPs about firearm safe storage is lacking. Educational resources on firearm safe storage

Typically were not appropriate for PCPs, provided insufficient information or lacked a focus on skills development. Several

themes related to improving existing approaches to training were identified.

Discussion

Educational approaches focusing on basic knowledge of firearms safe storage, how to effectively engage caregivers on this topic, and employ active learning principles should be developed to increase PCPs' confidence and skills relating to screening and counseling on firearm safe storage. This study meets criteria as an exempt project by the UVM IRB. No previous dissemination has occurred. No conflicts to disclose.

1. Olson et al (1997) Arch Pediatr Acad Med

2. Puttagunta et al. (2016) Acad Psychiatry

Abstract: University of Vermont Health Network – Project ECHO CVPH

Authors: Doelger, Ashley; Beveridge, Jennifer; Collins, Keith; Tarabula, Jill

CVPH's Project ECHO has broken down the walls between specialty and Primary Care. Our target audience is primary care providers in the Northeastern section of the North Country (Clinton, Essex, Franklin, and St. Lawrence counties). This is a medically underserved area with well-documented shortages of primary care providers and specialists. CVPH's Project ECHO supports primary care providers by helping them develop the skills they need to treat Hepatitis C and HIV.

This program is provided to participants at no cost, and each session attended is eligible for free CME. In our first six months of operation, we were able to recruit 24 sites to the program. Twice a month, participants log in via Zoom and receive diagnostic or treatment information pertaining to Hepatitis C from Dr. Keith Collins during a fifteen minute didactic. Following the short lecture, one of our spoke sites presents a patient case to the group for determination of treatment options. This methodology allows the providers at the spoke sites to retain their patients, and allows the patients to stay closer to home for treatment.

As a result of the sessions held, so far a total of at least eight Hepatitis C patients are being treated by their own primary care providers. These patients did not have to travel or be put on a wait list to see an infectious disease specialist. Our participating providers report increased comfort in testing for and treating Hepatitis C. We plan to repeat our Hepatitis C curriculum for new providers joining this year. Dr. Collins will also prepare a new curriculum pertaining to HIV Pre-exposure prophylaxis. We anticipate recruiting another ten sites in 2019, allowing us to reach more than fifty rural primary care providers.

"The project described was supported by Funding Opportunity Number CMS 1G1CMS331402 from the U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services."

"The contents provided are solely the responsibility of the authors and do not necessarily represent the official views of HHS or any of its agencies." **Abstract:** Aligning the Basic Sciences Medical Curriculum with Social Medicine Themes: From Concept to Implementation

Authors: Goyal, Raghav Kumar; Lounsbury, Karen; Epstein, Samuel; Dawson, Christina; Lynch, Elizabeth; Thornburgh, Trina; Hausser, Reed; Finnie, Sheridan; Weiss, Jacob; Higgins, Luke; Ross, Adam; Abselab, Millen; Brach, Richard; Turgeon, Nikkole; Eldakar-Hein, Shaden

There is a growing need for a "Prevention and Equity" model of healthcare in America today. To encourage a generation of physicians equipped to make that shift, students from the class of 2021 formed The Social Justice Coalition and formally approached curriculum leaders and course directors with the goals of improving the student education and awareness of health disparities and to promote social justice in medicine. Prior to proposing curriculum changes, extensive research was performed to compile a set of over 300 learning objectives to serve as a framework for social medicine integration.

Students met with faculty to obtain support for their curriculum objectives and worked together with course directors to implement changes. Keys to the success of this collaboration were clear objectives, respectful communication with the faculty, flexibility and iterative improvement, and realistic expectations of the outcomes.

The results included an alignment of the curriculum to synthesize topics from the Professionalism course with the basic science content. This alignment was reported to students each week as a "Social Medicine Theme of the Week" and was distributed to students both in their calendar announcements and through crowd sourcing by the students. The quantified impact of these changes on student awareness and faculty experiences are being recorded through evaluations for future analysis. Students from the class of 2022 have been recruited to set new goals, and essential faculty and course director stakeholders have been identified to encourage sustainability.

The future goals include formal faculty development through the Teaching Academy, the development of new Public Health Projects topics, a continued increase in basic science integration, and a proposal for resources to sustain this effort at an institutional level.

Abstract: An Active Approach: Preliminary Experiences of the Transition to a Medical Education Curriculum Delivered Entirely with Active Learning

Authors: Gross, Brian; Holterman, Leigh Ann; Rosen, Brian J; Nicoli, Charles; Anderson, Kathryn; Lounsbury, Karen; Zehle, Christa; Moore, Jesse

Introduction

The emergence of active learning (AL) as an efficacious teaching platform has marked a dramatic transition away from passive, conventional medical education curricula. Shown to enhance critical thinking skills, improve student engagement, and increase knowledge retention, AL has been adopted in varying degrees by several medical institutions nationwide to improve their educational quality. The purpose of this report is to provide preliminary insight into our institutional transition to a curriculum taught entirely with AL. We address shifts in administrative support, classroom framework, and student opinions regarding the process.

Methods

To assess shifts in administrative support and adaptations to the classroom structure throughout the transition to AL, a semi-structured interview was conducted with the Director of Active Learning. Survey methods in the form of a 8-part questionnaire assessed first and second-year student opinions regarding the AL curriculum and measured self-reported preparatory time requirements for AL sessions.

Results

From 2012 to 2018, our institution progressively transitioned from a conventional, lecture-based curriculum to an 86% AL framework—scheduled to encompass 100% AL by 2019. The AL delivery of the curriculum consists of Team Based Learning (TBL), Problem Based Learning (PBL), flipped classrooms, and workshops. To accomplish these adaptations, an Active Learning Team consisting of 5 full-time staff and a 0.4 FTE faculty director was created. Of the 122 first and second-year students who responded to our survey (52.4% response rate), the majority agreed to strongly agreed that AL improves their understanding (n=64; 52.5%) and retention (n=70; 57.4%) of inclass material. Mean self-reported preparatory time associated with AL sessions was 99.0 ± 46.9 minutes.

Conclusion

The successful transition to an active learning medical education curriculum is a multifaceted process that requires extensive administrative support as well as cooperation on the part of medical students. Preliminary results of our transition to an AL framework suggest improved educational quality with this teaching platform.

IRB Determination (if obtained): This is QA, rather than research. This poster was presented at the AAMC 2018 Conference in Austin, TX, "Learn, Serve, Lead." Disclosures: None **Abstract:** Assessing the Impact of Gender and Years of Experience on Multiple Mini Interview Scores at the University of Vermont Larner College of Medicine

Authors: Howe, Alison; Huggett, Kathryn; Greene, Laura; Holterman, Leigh Ann; Prabhakar, Gayathri; Jewkes, Cary; McElhinney, Elizabeth; Barlow, Raiel; Rosen, Lee; Gallant, Jan

Background: Purpose and Significance of the Study

UVM Larner College of Medicine (LCOM) implemented the Multiple Mini-Interview (MMI) structuring the circuit to assess AAMC Core Personal Competencies¹. Previous studies demonstrated that age influences MMI scores², and that females receive higher MMI scores.^{2,3} We hypothesized that additional years since undergraduate degree attainment (YSUD; proxy for life experience) was associated with higher MMI scores, and investigated gender differences in this association.

Methods

1795 LCOM applicants (52% female) received MMI scores. A multivariate linear regression examined whether gender and YSUD predicted MMI scores. An ANOVA investigated the associations between YSUD (quartiles) and MMI score. An independent -samples *t*-test examined gender differences in scores.

Results

A regression model ($R^2 = .031$) demonstrated female gender (β =.298, p<.001) and YSUD (β =.032, p < .001) were associated with higher scores, though the interaction was not significant (p = 0.44). ANOVA results indicated an effect of YSUD on score (F [3, 1791] = 6.220, p < .001). Post-hoc comparisons indicated differences between ≤1 year and ≥ 3 years YSUD (p < .001). This overall pattern was not found for males (F[3, 846] = 2.256, p =.08), but was for females (F[3,934] = 3.731, p = .01), with the same post-hoc findings (p < .01). The *t*-test indicated females had higher average MMI scores (M = 6.449) than males (M = 6.155; t = -6.567, p < .001)

Conclusions (including Limitations)

Our findings replicated previous research with females outperforming males on the MMI. Additionally, YSUD impacted MMI scores, particularly in females. This research extends previous work to the US. One limitation is YSUD as a proxy for experience; it does not measure actual experiences or how these impact the applicant. Current findings inform quality assurance and validity of the admissions process. Future research should explore potential explanations for gender differences and life experience and how these associations might shape admissions practices.

This project falls under a UVM IRB Not Research Determination (CHRBSS: 17-0291) This poster was previously presented at NEGEA 2018 and won an Excellence in Medical Education poster award **Abstract:** A Scoping Review of the Influence of Personality Matching on Adult Mentoring Relationships

Authors: Huggett, Kathryn; Borges, Nicole; Blanco, Maria; Wulf, Karyn; Hurtubise, Larry

Purpose

Mentoring is a widely-regarded faculty development strategy in academic medicine. Despite decades of publications describing mentoring initiatives, few studies examine personality influence in mentoring relationships. Notable examples are Menges' exploration of the similarity-attraction paradigm[1] and Turban's review of personality across stages of mentoring relationship development.[2] We conducted a scoping review of the literature to: 1) examine the breadth and nature of studies on personality matching and its impact on mentoring relationships and 2) identify research gaps in the literature. We sought to determine: What disciplines are conducting the research and where is it published? What research methodologies are employed? What publication types address this topic? What outcomes are reported? What are the gaps in the literature?

Methods

We conducted a scoping review, employing the Arksey and O'Malley framework[3] as proposed by Levac et al. [4] We searched English language databases OVID, PsychInfo, Engineering Village, and ABI Inform with search terms: mentoring, personality, mentoring programs, personality traits, sponsorship, coaching, advising. Inclusion criteria were: Adult population; English language; 2006-Present; all research design types (qualitative, quantitative, mixed methods) and article types; all journal types, even not peer-reviewed; all mentoring program types; professional, workplace, and academic contexts; health sciences, social sciences, business/management, law, engineering; all frameworks/theories of personality. We excluded: non-English, non-adult, and community/recreation context. Titles and abstracts identified through database searching revealed 61 articles from Engineering Village; 213 from ABI; 237 Psych Info; and 132 from Ovid for a total of 643. We screened by title and abstract resulting in 127 articles with 99 after duplicates removed. Of these 99 articles, 57 attained low raters' agreement. Six articles with no raters' agreement were eliminated; two reviewers re-reviewed the remaining 51 abstracts, yielding 42 articles for full-text review. In pairs, reviewers worked independently to review 16-17 articles each, completing a data extraction form [5] for each article. Finally, findings were mapped to the objectives of this review and results summarized.

Results

Articles addressing our aims were published in the career/vocational development, business/ management, human resource, organizational behavior, psychology, and sports/athletic coaching disciplines. Only five articles were published in educational journals. Research reports were the prevailing publication type; survey studies, many using measurement instruments, were the predominant methodological approach. Frequently cited personality frameworks were the Big Five model[6], MBTI[7] and Proactive Personality.[8]Additional theoretical frameworks were noted, representing human resources, vocational, and career theories.

Discussion

This literature predominantly examined the personality traits of individuals, typically mentee/ protégé, rather than dyads. Other lines of inquiry investigated the influence of mentee personality traits on perceptions of mentoring; cultural differences in perceptions of mentoring; and the role of personality in career adaptability and participation in mentoring. Some studies suggested relationships between personality traits and successful mentoring relationships while identifying a need for further research. Therefore, understanding the influence of personality on the mentoring relationship remains a gap in the literature, especially in the contexts of medical education and higher education. **Abstract:** The Little Engine that Could: 20 Years of Educating Community Providers with the Vermont Academic Detailing Program

Authors: Kennedy, Amanda; Cote, Elizabeth; MacLean, Charles; McLean, Laurie; Pinckney, Richard; Starecheski, Gary; VanOpDorp, Jocelyn

Academic detailing is an educational approach with a forty-year evidence-base supporting continuing medical and interprofessional education for practicing community prescribers. The Vermont Academic Detailing Program, in operation since 1999, is the oldest, university-based academic detailing program in the country. The statewide program involves one-to-one or small group education, using motivational interviewing and social marketing techniques to influence prescribing behavior towards evidencebased principles. In FY18, 531 individual licensed prescribers attended at least one Vermont Academic Detailing Program session, with a median of 4 prescribers per session.

The survey responses of the licensed prescribers strongly support the Vermont Academic Detailing Program. Six hundred and forty-nine post-session surveys were completed by the prescribers. Some prescribers attended more than one session. Ninetynine percent of prescribers (631/636) indicated a willingness to attend future sessions. Ninety-nine percent of prescribers (594/595) felt the program was free of commercial bias. Ninety-two percent of prescribers (563/611) indicated that the presentation will impact their prescribing behavior.

The Vermont Academic Detailing Program continues to offer a high-quality statewide service that is perceived as valuable by prescribers and is promoting evidence-based prescribing for Vermonters.

IRB: According to the policy defining activities which constitute research at the University of Vermont, this work met criteria for operational improvement activities exempt from ethics review.

Previous Dissemination: Dr. Kennedy presented similar information as part of the keynote address at the National Resource Center for Academic Detailing (NaRCAD) 6th International Conference on Academic Detailing, November 2018.

Disclosures: The Vermont Academic Detailing Program has funding support from the University of Vermont Larner College of Medicine Office of Primary Care, the UVM Area Health Education Centers (AHEC) Program, the UVM Medical Center Community Health Foundation, and the Vermont Department of Health. None of the academic detailers or coauthors have conflicts to disclose

Abstract: A Community Based UVMHN Family Medicine Residency: Success in training for a medically underserved area

Authors: King, John; Worzack, Marianna; Wilhelm, Lindsey; Cabrera, Meagan; Ciolac, Candice; Heintz, Steve

Background

The UVM Health Network added CVPH in 2012. The North Country of New York State has a significant shortage of primary care physicians with corresponding areas of increased chronic disease and medical costs related to emergency room visits and hospital admissions. Previous research has shown that most family medicine trained physicians practice primary care near where they train.

Description of the Project

The UVMHN-CVPH Family Medicine Residency began in June 2016 with 4 residents. In 2018 the program expand to 6 residents per year. By June 2020 the program will have 18 residents (6-6-6).

Methods

CVPH obtained institutional accreditation in 2014 and ACGME program accreditation for a 4-4-4 family medicine program in 2015. First residents were recruited in the fall of 2015 for a June 2016 start. Recruitment was preferential to residents with ties to the region including our neighbors in Canada. A partnership with the local Community Health Center (Hudson Headwaters Health Network) allowed for expansion to 6 residents per year starting in 2018.

Results

The number of residents in the program has increased steadily. Graphic will show this. 3 of 4 (75%) of current third year residents have signed contracts for jobs in Clinton County, NY. This is the home of the residency. Poster will show map of graduates planned locations relative to the Plattsburgh residency.

Discussion/Conclusions/Lessons learned

The program has meet its objective to recruit and retain family physicians to provider primary care to an underserved region. Faculty from multiple specialties are engaged in teaching. A Project Echo grant in infectious disease was a spin off that will expand abilities of primary physicians to manage hepatitis C and HIV in the region supporting continuing education.

IRB and prior dissemination: Not applicable Disclosures: Presenters are employed by the CVPH Family Medicine Residency.

Abstract: Re-envisioning the Frymoyer Scholars Grant Writing Process as a Learning Endeavor

Authors: Lemieux, Nancy; Huggett, Kathryn; Broder, Amanda

Grant writing, whether for the purposes of obtaining funds for projects, innovative curricula, or research, can be daunting (Chung and Shauver, 2008). For applicants, lack of formal instruction, inexperience, or uncertainty related to submission requirements may result in incomplete proposals. Likewise, peer reviewers might struggle to weigh merits of grant applications when proposals are not fully developed, and review criteria are imprecise (Langfeldt, 2001). This was the case with the Frymoyer Scholars Program (FSP) that supports innovative educational programs and faculty development through the Larner College of Medicine. The purpose of the project is to improve the quality of proposals and enrich peer reviewers' decision making processes by: Aligning proposal criteria with the philosophy underlying the FSP; designing a structured format that guides faculty applicants to meet requirements for submission of scholarly proposals (Bordage and Dawson, 2003); and providing a learning opportunity in the scholarship of grant writing for applicants and in a standardized process for reviewers.

Description

Project involved a re-design of the FSP 'Call for Proposals' webpage, criteria and instructions, and inclusion of additional materials to guide applicants and reviewers. Project is grounded in constructivist learning theory wherein applicants assimilate new understandings as proposal elements are explored, articulated, and addressed (Dennick, 2012).

Methods

Six step instructional design created a submission packet that includes an introduction, checklists, examples of theoretical frameworks and evaluation plans, a rubric assessable to both applicants and reviewers that communicates values specific to the Frymoyer Scholars Program, and, in addition, a toolkit with resources and the provision of guidance by LCOM Teaching Academy faculty,

Results

Pending March 15, 2019 Frymoyer proposal submissions deadline

Evaluation plan

Use of the newly developed rubric to rate past proposal submissions and compare with ratings of 2019 submissions. Survey reviewers as to the usefulness of the rubric to standardize proposal evaluation.

Discussion/Conclusions Pending data analysis

Abstract: Evaluation of an Active Learning Curriculum in Quality Improvement and Patient Safety for Medical Students

Authors: Magier, Samantha; Repp, Allen

Background

Medical educators must prepare future physicians to understand and address deficiencies in the quality and value of health care. Quality Improvement (QI) and Patient Safety (PS) curricula have been introduced at many US medical schools, but the most effective educational approaches are uncertain.

Description of program

We developed and implemented an active-learning QI/PS curriculum for medical students at the Larner College of Medicine during their third-year clerkships.

Methods

Course objectives were developed using existing literature and the World Health Organization Patient Safety Curriculum, and were mapped to the Association of American Medical College's Entrustable Professional Activities. Pre-reading modules through Institute of Healthcare Improvement and Agency for Healthcare Research and Quality were assigned. Over two 3-hour learning blocks, faculty facilitated studentdriven small group activities using inter-professional case studies. Small team breakout groups were followed by large group report-outs and debriefs. A longitudinal case provided the foundation for the activities across the QI and PS learning blocks. Two iterations of the curriculum were deployed in a two-month period. Students completed an anonymous post-participation evaluation, as well as a pre- and post-assessment on confidence regarding QI/PS principles.

Results

Course evaluations were completed by 106 students. Analysis revealed that 59.8% of students rated the overall session as "good, very good, or excellent" (versus "fair or poor"), and 70.6% rated the overall effectiveness of facilitators as "good, very good, or excellent". After course completion, students reported higher levels of confidence in multiple QI/PS skills and higher levels of agreement that participating in a QI/PS curriculum is useful.

Discussion

An active learning QI/PS curriculum increased student confidence in QI/PS skills. Data from post-participation surveys will be utilized to revise the curriculum. Specifically, the overall session time will be reduced and more variety in pedagogical approaches will be introduced.

IRB Determination: Not Research

Previous dissemination: None

Abstract: Ambulatory Clinic Sprint: Continuing Medical Education to Improve Electronic Medical Record User Satisfaction

Authors: McEntee, Rachel; Suratt, Benjamin

Background

The contribution of dissatisfaction with the Electronic Medical Record (EMR) to physician burnout has been well documented. EMR's are frequently felt to impair efficiency of practice, which along with culture of wellness and personal resilience comprise the three reciprocal domains of physician well-being.

Description of project and Methods

The Ambulatory Clinic Sprint at the University of Vermont was adapted from a similar program at the University of Colorado to target efficiency of practice. The goal of the Sprint was to use targeted continuing medical education to improve satisfaction and efficiency with the Epic EMR by bringing a multidisciplinary team of clinical informaticists, Epic trainers, and Epic analysts into a clinic over a 2 week period for workflow improvement and intensive training. Sprints occurred in two clinics within the Department of Medicine which included a total of 19 attending physicians, 7 advanced practice providers, and 2 fellows.

Results

Participant pre/post surveys were administered by KLAS Research, an organization that specializes in health IT data analysis and has the ability to compare survey results to a large national sample. After the Sprint, user satisfaction improved (Fig 1) and afterhours use as tracked by user log-in records decreased significantly (Fig 2), among other positive findings.

Conclusion

The Ambulatory Clinic Sprint is an effective way to provide targeted CME to improve EMR user satisfaction, proficiency, and efficiency in an outpatient clinic. All these parameters contribute to efficiency of practice which is a key domain to address in programs promoting physician well-being.

IRB Determination: The project was reviewed by the University of Vermont IRB and determined to be a quality improvement project and not research.

Previous dissemination: Submitted to Academic Internal Medicine Week 2019, Philadelphia, PA, April, 2019

Abstract: Novel Active Learning Curriculum Extends Beyond The Classroom and Into The Wilderness

Authors: Moore, Nathaniel; Schlein, Sarah

Background:

Unlike traditional classroom, hospital, and clinic-based learning environments, wilderness medicine scenarios can develop competency in patient care, medical knowledge, interpersonal, communication skills, and professionalism. Wilderness scenarios improve interprofessional collaboration and are an effective method for teaching wilderness medicine procedural skills, medical knowledge, and student confidence.

Description:

This study observed the application of a novel scenario-based learning two week curriculum for fourth year medical students in the wilderness setting. Through faculty facilitated scenarios, students collaborated to address common wilderness medicine injuries and manage critically ill patients. Each scenario was followed with a standardized debrief. Upon course completion, an exit survey gathered qualitative data to evaluate the success of the course to achieve the objectives.

Methods:

Anonymous surveys were distributed among the students to assess the execution of this novel curriculum and faculty involvement.

Results:

Eleven students participated in the exit survey, resulting in an universally very positive experience. Students concluded that scenario-based simulations increased leadership skills, communication, and medical knowledge retention.

Discussion/Conclusion:

Through active scenario-based learning, students acquired competency in patient care, medical knowledge, interpersonal, communication skills and professionalism. We suspect the skills will extrapolate to the student's application of these competencies in the hospital setting.

IRB: N/A

Disclosures: No disclosures.

Abstract: Active-Learning Quality Improvement Training Curriculum for Faculty in Hospital Medicine

Authors: Muthukrishnan, Preetika; Repp, Allen; Burnett, Maria; Kennedy, Amanda

Background

There is a growing emphasis on teaching Quality Improvement (QI) to resident physicians and medical students. However, faculty with QI skills and knowledge is lacking at many academic medical centers. Active learning programs to improve faculty capacity for QI have shown positive outcomes. We sought to develop a QI curriculum for faculty within the Division of Hospital Medicine.

Description of project/program/innovation

We conducted a needs assessment focus group for Hospital Medicine faculty at our academic medical center. Six faculty members participated and identified priorities and potential challenges. Based on the focus group feedback, we designed a 12-session curriculum that uses an active-learning approach to teach core concepts in QI and includes sessions on effectively mentoring and publishing QI (Table 1). Junior and senior faculty collaborated on curricular design and delivery, with the goal of developing junior faculty into effective QI teachers. Pre-assessment of QI knowledge, skills, and attitudes was conducted using a survey instrument and the revised Quality Improvement Knowledge Application Tool (QIKAT-R).

Results

Eighteen faculty completed the pre-assessments (82% completion). At baseline, selfreported comfort was highest for "setting aims for a QI project" and lowest for "presenting results of a QI project". The mean QIKAT-R score was 16.8 out of 27 (SD 4.5), with the lowest performance in the "setting aims" domain. To date, six sessions have been completed. The selected project focuses on improving hospitalized patients' experiences around daily bedside rounding.

Discussion

We have created a QI curriculum that seeks to address the gap in QI skills among hospitalists. Pre-assessments revealed poor correlation between self-reported comfort level and QIKAT-R scores within each domain, further highlighting educational opportunities. We plan to use feedback from this pilot to refine the curriculum and offer it to faculty in other specialties.

IRB Determination: Not research determination

Previous dissemination: To be presented at Annual Society of Hospital Medicine Meeting on March 25th-27th 2019 at National Harbor MD.

Abstract: Standardized Patient Handoff in the Neonatal Intensive Care Unit (NICU): Implementation and Evaluation of an Electronic Medical Record (EMR) Based Tool

Authors: Pahl, Adrienne; O'Reilly, Deirdre; Diego, Ellen; Mercier, Charles

Background

The Accreditation Council for Graduate Medical Education (ACGME) mandates that residents and fellows receive education about patient safety and handoff methods. Studies have demonstrated that a standardized patient handoff tool, once integrated to resident physician workflow, enhances communication, reduces errors, increases efficiency and potentially improves patient outcomes. Among such handoff tools, the I-PASS Handoff Bundle has been used in various pediatric inpatient settings, but it has not been used widely in the newborn intensive care unit (NICU).

Objective

We identified shared data elements of resident and fellow patient handoffs in the NICU, created a single template document based in I-PASS formatting, and assessed provider satisfaction with the data elements and use of the template for sign out sessions. We hypothesized that an I-PASS based template could be adapted to the NICU, would improve the quality of information transfer, and increase the efficacy of resident and fellow workflow during the handoff process.

Design/methods

We conducted a prospective pilot project of education and implementation of the I-PASS handoff bundle, adapted to the NICU at the University of Vermont Children's Hospital. We conducted resident and fellow collaborative education sessions to create an EMR (EPIC) based document (Fig. 1), with pertinent details for sign out and daily documentation (progress notes). We surveyed providers caring for infants on the NICU resident service including neonatal-perinatal medicine fellows, neonatal nurse practitioners, and physician assistants to receive feedback about a new handoff document based on I-PASS. Surveys were collected via a webbased tool (Survey Monkey) using no identifying data other than provider role and years of practice in the NICU.

Results

Nineteen surveys (out of total eligible: 15 residents, 3 fellows, 10 NNP/PA) were completed over a 5 month period (July 2018-November 2018). Respondents included all levels of pediatric residents, first and second year fellows, and NNP/PAs working both day and night shifts in the NICU. Of these, 89% (17/19) rated the I-PASS handoff tool as "complete" or "very complete." Many felt "prepared" or "well prepared" for patient care in the NICU after receiving sign out via I-PASS (14/19, 74%). Respondents ranked satisfaction with the Patient Summary and Action Steps as highest. When asked about how the I-PASS system of handoff compared to the prior method (binder of written materials), more than 60% (12/19) of respondents reported that it was "better" or "about the same." Just over half of respondents (10/18, 56%) felt that the new system increased efficiency of sign out in the NICU.

Conclusion

The I-PASS handoff tool can be adapted for use in the NICU with a high degree of satisfaction among varied providers. The incorporation of an EMR-based tool has the potential to reduce errors and improve efficiency of work flow for NICU providers. This project has the potential to serve as the basis for quality improvement and patient safety projects around resident and fellow handoff in the NICU at the University of Vermont Children's Hospital. Background (e.g., rationale or theoretical framework, opportunity or problem addressed, including brief review of relevant literature)

Abstract: Share & Promote Your Work on ScholarWorks @ UVM

Authors: Pond, Fred; Atwood, Gary

ScholarWorks @ UVM provides an open access venue for your scholarly efforts that allow them to be easily discoverable through Google and Google Scholar.

ScholarWorks @ UVM provides for the organization, dissemination and management of digital materials created by UVM faculty, staff, and students and their collaborators. The goal is to both increase access to the scholarly and creative output of the University, and to manage the preservation of these works in digital form.

Many journal publishers (e.g. IEEE, Elsevier, Wiley) allow authors to post open access versions of their journal articles on institutional web sites. For those who choose to deposit their publications, ScholarWorks @ UVM serves as an open access repository for articles that would otherwise only be available behind a paywall, broadening access to researchers and practitioners in lower-income institutions and countries.

If federal funding sources require that research results be made freely and publicly available in repositories and PubMed Central is not the right repository for your articles, ScholarWorks @ UVM is available to host them.

Authors who deposit in ScholarWorks @ UVM and provide an email address will receive quarterly reports summarizing the hits and downloads of their digital documents.

ScholarWorks @ UVM is a great place to share your:

- Pre-prints and publications
- Grant reports
- White papers
- Technical reports
- Conference proceedings
- Posters
- Unpublished works
- Open access journal projects

As part of its mission to further the creation, application, and dissemination of knowledge, UVM Libraries offers ScholarWorks to the UVM community. Librarians at UVM can advise you on metadata and file formats that will increase the discoverability of your work.

Find ScholarWorks @ UVM at www.dana.uvm.edu under Collections.

Abstract: Medical & Surgical Errors Translated into Simulated Learning Opportunities

Authors: Ranney, Stephen; Forgione, Patrick; Bedrin, Nick; Nicholas, Cate; Trevisani, Gino

Background

Morbidity & Mortality Conferences (M&M) are mandated by multiple oversight committees and are a crucial learning tool for general surgery residents. In this forum, errors in surgical decision making and technical performance are discussed openly. However, there is no guarantee that the resident will have the opportunity to practice the procedure and correct their mistakes before having to perform it again, possibly independently. As such, the authors sought to use simulation as a learning opportunity for mistakes commonly discussed at departmental M&M.

Description/methods

Previously, two procedures were repeatedly discussed at M&M: McVay Hernia Repair & Resuscitative Thoracotomy. When polled, few UVM MC surgical residents had ever performed a McVay repair and nearly none could describe it correctly. Additionally, many had never seen or performed a Resuscitative Thoracotomy. Thus, the authors created two cadaveric simulations for each procedure, complete with pre-briefing, didactic session, and procedural checklist to ensure residents had adequate exposure and practice prior to having to perform these procedures. Expert attendings for each case were consulted to help with the cadaveric lab as well as the procedural checklist. The simulations were run by a simulation fellow.

Results

The group that performed the ED thoracotomy showed improved knowledge based on written tests. Both groups showed improved confidence and understanding based on post-simulation surveys—there was no written test for the McVay repair. Although not all residents were able to participate in these simulations, the discussion was positive, and several learners and attendings felt these should be required simulations prior becoming an upper or chief level resident.

Discussion

Although early, this process of translating mistakes discussed at M&M into simulations may prevent repeat errors and improve resident performance.

This has not been submitted for IRB approval as it is an educational curriculum. The authors have no disclosures.

Abstract: Surgical Skills Remediation Using Simulation Based Mastery Learning

Authors: Ranney, Stephen; Forgione, Patrick; Bedrin, Nick; Nicholas, Cate

Background

Many residents progress through training at similar rates, however, some advance at a slower pace. Given concerns that these learners may fall behind their peers, some institutions have implemented remediation programs or committees. For many residents, deficiencies are related to medical knowledge, clinical decision making, or professionalism. However, surgical residents must also show technical improvement and surgical understanding throughout training. Using clinical evaluations from attendings, the Curriculum Advancement Committee for General Surgery (CAC) identified surgical residents with technical deficiencies compared to their expected training level. As UVMMC does not have a formal surgical remediation curriculum, there was no method for correction or improvement. Thus, the CAC tasked the simulation fellows (SF) and Clinical Simulation Laboratory (CSL) to create a remediation curriculum to help improve the learners' performance.

Description

The SF created, under CSL guidance, a simulation based mastery learning curriculum focusing on the expectations of the CAC in addition to creating a targeted needs assessment for each individual learner. Using portions of the ACS-APDS curriculum, the UVM MC CVC Best Practices Course, the virtual reality laparoscopy trainer, and cadavers, the CSL and SF created a multimodal simulation curriculum with pre-testing, deliberate practice sessions with near-peer coaching, independent practice sessions, and a final assessment.

Results

Thus far, no resident has completed the entire curriculum. However, preliminary results show an improvement in scored performances and pass rates as well as an overall decrease in procedural time.

Discussion

Early results are promising that simulation based remediation could improve learner performance. To ensure this, curriculum adjustments will be made based on learner evaluations and instructor evaluations. Ultimately, clinical evaluations will need to be assessed to determine if simulation training negates previously identified deficiencies.

This was a pilot endeavor. An IRB will be submitted for future study. This has not been disseminated previously. The authors have no disclosures. **Abstract:** The Medical Student Mental Health Panel: A powerful approach to overcoming barriers to medical students seeking mental health care

Authors: Rosen, Lee; Holterman, Leigh Ann; Lynch, Elizabeth; Larkin, Olivia; Bitterman, Moshe

Research Question

Does a student-organized "Mental Health Panel" (MHP) for M1s, in which senior students share experiences with seeking mental health care, reduce stigma around and barriers to seeking care during medical school?

Background

Alarming rates of student depression and anxiety have spurred medical schools to work to improve wellbeing¹. Schools must address barriers to treatment and students' willingness to seek it. Recently, LCOM students developed the MHP, described above. Prior work suggests LCOM students seek professional help more frequently than others². Thus, we hypothesized the panel is an intervention that helps break down multiple barriers to students seeking care.

Methods

2017: 63 students completed a post-MHP questionnaire measuring attitude change surrounding mental health treatment. Frequencies examined reported attitude change. 2018: 24 students completed identical pre-panel and post-panel questionnaires. Wilcoxon Signed Rank tests examined attitude change.

Results

Students reported similar attitude change both years. Students reported increased likelihood to seek treatment in 2017 (73% - more likely) and 2018 (*T*= 49.5, *p* = .01). Students were less likely to believe they would be stigmatized by supervisors in 2017 (47% - less likely) and 2018 (*T*= 0, *p* = .01), or peers in 2017 (71% - less likely) and 2018 (*T*= 4.0, *p* < .05). Students were marginally less likely to feel inadequate seeking support in 2017 (65% - less likely) and 2018 (*T*= 4.0, *p* = .06).

Discussion

Results suggest the MHP increased openness and reduced barriers to treatment - a critical accomplishment. Limitations include sample size, lack of comparison group, so-cial desirability bias, and self-report. In 2017, we could not measure actual change pre-to post-panel. Future directions include a multi-institutional intervention with matched comparison groups. This suggests that peers may positively influence attitudes toward mental health treatment³, ultimately increasing wellbeing.

No conflicts to disclose. UVM IRB has granted our project a "Not Research" determination. **Abstract:** Saturday School: A student-designed, student-led Step 1 preparation program

Authors: Rosen, Lee; Holterman, Leigh Ann; Johnston, Margaret; Couperus, Cody

Purpose

USMLE Step 1 is a mandatory measure of medical students' knowledge, and used widely for residency applicants.¹ Development of effective Step 1 support programs is a high priority. While little is known about the effectiveness of commercial programs², there is some favorable evidence for student-initiated programs³.

Larner COM students developed a Step 1 preparation program focused on content and board-style questions. This study evaluated the impact of this program on Step 1 scores.

Method

Saturday School consisted of ten 1.5-hour sessions, which included Step 1 questionbank questions, didactics, and group discussion questions (individual answer selection, group review and answer selection, and topic discussion).

<u>Year 1 pilot</u>. 14 students attended 3-5 sessions. Predicted Step 1 scores came from an annually-calculated regression model. Matched non-attendee controls were randomly selected based on predicted scores.

<u>Year 2</u>. 21 students attended 3-7 sessions. Upon completion of Step 1, predicted versus actual scores will be compared between attendees and controls. A postquestionnaire will be discussed.

Results

<u>Year 1</u>. A repeated-measures ANOVA indicated a significant within-subjects effect of score (p < .05) such that with average Step 1 scores (M = 233.3) higher than average predicted scores (M = 227.8). There was a marginally significant interaction between score and attendance (p = .08). Follow-up ANOVAs indicated that attendees' actual scores (M = 237) were higher than predicted (M = 227.8; p < .01). Non-attendees actual (M = 229.6) and predicted scores (M = 227.8) did not differ (p > .05). IRB not-research determination.

Discussion/Significance

Attendees' scores significantly increased from predicted, while non-attendees' did not. This suggests Saturday School may be effective. Limitations include sample size and self-selection biases. Future directions include implementation with a larger group. Corroboration of findings in Year 2 would be evidence for an important new approach to Step 1 support.

No conflicts to disclose.

Abstract: Faculty Development in Clinical Research Using EHR Data: A Recipe for Success

Authors: Sobel, Halle; Littenberg, Benjamin; Crocker, Abigail; MacLean, Charles

Faculty at academic institutions are surrounded by secondary data through electronic medical records (EMRs) and can benefit by learning how to use this data for scholarly research. Deans and department chairs at academic medical centers want to increase academic productivity at their institutions.

Clinical faculty members at UVMMC were offered an opportunity to enroll in an internal 9-month faculty development course offered by a team of 2 physician researchers, and 3 epidemiologists/statisticians, entitled Introduction to Clinical Research Using Secondary Data.

The course was organized as 16 half-day sessions from October-July for each of three cohorts. We focused on analysis of secondary data rather than primary data collection to promote use of data from our EHR. The course had a set curriculum including topics such as: developing a research question, searching the medical literature, navigating the IRB processes, navigating the data extraction process and communicating with data analysts. Each participant was asked to develop a research question and was paired with both a faculty researcher as well as a statistician.

Each year, we completed pre-post student course evaluations. Students rated the experience very positively with 91% noting that the time commitment was "just right" and 100% agreeing or strongly agreeing that they would recommend the course to a colleague. Student confidence in defining a research question increased significantly in a pre-post evaluation with over 84% reporting being "confident or very confident" at the end of the course, an increase of 25% from baseline.

A clinical research methods course directed at clinical faculty is a successful strategy to increase output of research, QI and patient safety projects at an academic institution. By coordinating institutional resources to be part of a 9-month curriculum, faculty can: learn the process of clinical research, better understand local resources, develop collaborative relationships with peers from other departments, and increase their scholarly output.

IRB Determination: not obtained Please list any previous dissemination: none Disclosures: none **Abstract:** Enhancing Interprofessional Collaborative Practice Through Concept Mapping

Authors: Williams, Lindsey; Marroquin, Bridget; Menezes, Katherine

Background

Concept mapping is a low-resource, team-based learning activity that allows pooling of collective knowledge while linking different perspectives and priorities. Though a validated educational tool, it has not been applied to inter-professional education. This is a novel approach to communication that we hypothesize will improve the learning environment, team dynamics, and collaboration on Labor and Delivery, a service with frequent communication failures and teamwork breakdowns.

Description of project

This is a descriptive project involving obstetric care providers from CVPH and UVMMC. Investigators will determine if team concept mapping fosters a supportive learning environment where providers can learn from each other; thereby, ultimately influencing provider attitudes towards inter-professional education and collaborative clinical practice.

Methods

Investigators facilitate team concept mapping activities involving front-line obstetric care providers (primarily nurses, obstetricians, and anesthesiologists) on L&D. Participants complete a voluntary survey regarding the educational exercise immediately following the team activity. In the short term, investigators are assessing participants' attitudes regarding the team concept mapping activity and the impact on communication and learning.

Results

Since July 2018, ten team mapping sessions have occurred with 84 participant survey responses. To date, 90.5% of participants rated the team activity as having a "very positive" impact overall; 73.2% of participants felt the session had a "very positive" impact on their own learning. Over 90% of participants "agreed" or "strongly agreed" with the following statement: "I was able to contribute to the team learning environment."

Discussion and conclusion

Our results support the hypothesis that concept mapping, a low-resource team activity fosters collaborative team learning across specialties and professions. As we continue to gain more participation through team mapping sessions, we will further examine the overall impact on collaborative practice and team dynamics.

IRB Determination: approved

Abstract: Building an Academic Hospital Service at a Community Hospital

Authors: Worczak, Marianna; Ciolac, George; Cernii, Aura

Background

The UVMHN-CVPH Family Medicine residency program welcomed its first class in 2016. The program's main teaching hospital is a community hospital of about 300 beds. Prior to the residency, most medical coverage was provided by a hospitalist service. In the first two years of the residency program, residents worked with the hospitalists but it became clear that an independent service was needed. With the welcome of the third class of residents in 2018 it became feasible to design and implement a separate academic service.

Program Innovation & Methods

The UVMHN-CVPH Family Medicine residency program developed an academic service within its community teaching hospital in July of 2018. The teaching service now cares for a daily census of 10-20 patients. Planning for the service began nine months prior to the 2018-2019 academic year. The program worked closely with the Hospital-ist Medicine Service director and chief residents to develop an ideal program. To supervise and teach residents, the program hired two academic hospitalists. The team continued to also utilize a few community providers and one family medicine faculty member for additional coverage.

Results

In July of 2018 the Academic Inpatient Service was launched. The current team consists of two academic hospitalists and 3-4 residents. The team admits patients from the Family Medicine Center and unassigned patients as space permits. The team uses standardized H&P and discharge summary templates, and a standardized sign out process called IPASS. Improvements to the education program include regular weekly teaching sessions, radiology rounds, and monthly simulation center scenarios with debriefing.

Future Directions

Key areas for future improvement include: hiring additional faculty with inpatient experience and improving transitions of care and communication with non-academic hospitalist. We have also set a goal to develop a resident night service for the 2020-2021 academic year.

N/A: IRB, Disclosures, Previous dissemination

To connect to Wi-Fi:

Choose the strongest network for your location and enter passcode MUDseason2019

For more information about The Teaching Academy, please contact teaching.academy@med.uvm.edu

Or visit: www.med.uvm.edu/teachingacademy