WE01 Highways and Byways to a Career in Academic General Internal Medicine

Online Registration Title: Pathways to Careers in Academic Internal Medicine

Coordinator: Shelly-Ann Fluker, MD, Emory University School of Medicine

Additional Faculty: Rosette Chakkalakal, MD, MHS, Vanderbilt University; Jason Higdon, MD, Emory University School of Medicine; Stacy Higgins, MD, Emory University School of Medicine; Nancy T. Kubiak, MD, University of Louisville; Charlene K. Mitchell, MD, MSPH, University of Louisville

Session Summary
This workshop is primarily targeted to students and residents. We will focus on
1) describing a variety of career paths in academic general internal medicine with an emphasis on leadership roles;
2) guiding participants in identifying and defining a path in academic general internal medicine; and
3) developing strategies to pursue a path in academic general internal medicine that is in sync with each participants’ individual interests, strengths, and needs.

We will discuss the practical definition of academic general internal medicine and the diversity of profiles within it including education, investigation, and administration. Utilizing “real-life” profiles of academic generalists we demonstrate the variety of roles and career paths of an academic generalist and the potential advantages and disadvantages of each path. Among the profiles presented will be those of the workshop faculty who are faculty at different rank and several of whom are in leadership roles in their institutions.

Each participant will then proceed through a guided self-deliberative process to identify and define a potential career path in academic general internal medicine that suits their interests, strengths, and needs. Finally,
participants will interact in small groups to discuss strategies for finding, negotiating, and advancing in a position that meets the requirements of each participant.

Measurable Learning Objectives:
At the end of the session, participants will be able to:
1. Define academic general internal medicine and describe a variety of career paths in academic general internal medicine,
2. Develop and describe their personal wish list for a career in academic internal medicine
3. List strategies for finding a position suited to each individual participant

Session Agenda:
1. Introduction (10 minutes)
   Brief introduction of faculty and participants followed by review of the learning objectives.
2. Group Discussion (15 minutes)
   Using slides we will discuss roles of an academic general internist.
3. Faculty Profiles (10 minutes)
   The faculty will introduce themselves in more detail. The workshop faculty includes:
   a. Hospitalist: With 23 years in academia this tenured faculty will provide an overview of the different roles she had had over her career. She will discuss her current role as a hospitalist but also provide perspectives on her former roles and transitions from a Medicine -Pediatrics program director, medical student course director, Internal Medicine Clinic director, and clinician researcher.
   b. Clinician Administrator: This faculty member has been in academia for 16 years. She will focus on her current role as a Medical Director of an Internal Medicine Residency Clinic.
   c. Residency Program Leader: This faculty member has been in academia for 13 years and is currently an Internal Medicine Primary Care Program Director with a clinical focus on Women’s Health and primary care for Spanish Speaking patients.
   d. Part-time Clinician Educator: This faculty member has worked part-time for 7 of the 8 years she has been in academia. She is an Assistant Director for Primary Care Track of an Internal Medicine Residency program and will provide insight on negotiating part-time careers in academia.
   e. Outpatient Clinician: This faculty member has been in academia for 3 years and had provided primary care in university based group practice. He has recently helped spearhead the transition of his practice to a patient centered medical home while also participating in medical student and resident teaching and administration.
   f. Clinician Investigator: This faculty member has been in academia for 4 years. She was a fellow in the Robert Wood Johnson Foundation Clinical Scholars Program and is now a clinician investigator with a research interest in addressing the growing burden of diabetes and cardiovascular disease among immigrant communities in the US.
   We will provide a table that “at a glance” describes each clinician’s current time allocation, their path, and their compensation structure.
4. Self-Reflection (10 minutes)
   Each participant will complete a questionnaire entitled “Identifying your path in academic general internal medicine.” Participants will be asked to answer questions that 1) prompt them to reflect on their interests and strengths (inpatient, outpatient, teaching, research, leadership) using examples to clarify their responses; 2) ask them to consider how they would prefer to divide their time amongst their various interests; and 3) ask them to consider if they need additional skills and further training (and if so, what skills/training).
5. Small groups (35 minutes)
   We will break into small groups with each group facilitated by a workshop faculty. If possible, we will try to match small group participants with a faculty facilitator that matches the interests expressed on their self-reflection sheet. In the small groups, each participant will be asked to share their answers to the questionnaire and we will discuss defining a path in academic general internal medicine for each
participant. Specifically, each participant will craft their “ideal” job with help of the group members. In addition to considering how to split time amongst various activities the groups will also discuss practical matters such as: 1) How much do you need to get paid? 2) Where do you want to live? 3) Do family obligations affect your decision? We also come up with strategies for job hunting for each participant, including strategies for identifying, inquiring, and pursuing suitable positions.

6. Reconvene and Workshop Evaluation (15 minutes)
We will summarize the broad themes of the workshop, answer any remaining questions, and distribute a handout with tips and resources. We will reserve time for written evaluation of the workshop.

WE02
How to Teach Guiding Principles for the Care of Older Adults with Multimorbidity
Submitted in Conjunction with: SGIM Geriatrics Interest Group
Online Registration Title: Learn techniques for helping medical trainees manage multimorbidity in real-time
Coordinator: Shahla Baharlou, MD, Department of Geriatrics and Palliative Medicine, Mount Sinai School of Medicine
Additional Faculty: Cynthia M. Boyd, MD, MPH, Johns Hopkins University School of Medicine; Danelle Cayea, MD, Johns Hopkins University School of Medicine; Alexia Torke, MD, MS, University of Indiana
Session Summary
More than 50% of older adults have three or more chronic conditions. Number of conditions and the proportion of people with multimorbidity increase substantially with age.

Most available clinical practice guidelines (CPGs) are focused on the management of a single disease, but CPG based care may be cumulatively irrelevant, impractical and harmful for older adults with multimorbidity. Older adults are underrepresented in clinical trials - therefore application of evidence based data to this group of patients is challenging and at times irrelevant. Optimal care for one condition can provide challenges with respect to other conditions. Clinicians need a management strategy that considers patient’s multimorbidity, in terms of interactions between interventions and other conditions, the limitations of available evidence, feasibility of treatment regimens as well as patient preferences, goals and prognosis. The American Geriatrics Society has established a stepwise practicing approach for clinicians to help them care optimally for older adults with multimorbidity, titled Guiding Principles for the Care of Older Adults with Multimorbidity. It includes five domains: Patient Preferences, Interpreting the Evidence, Prognosis, Clinical Feasibility, Optimizing Therapies and Care Plans. These guiding principles are applicable to the care of older adults with multimorbidity within various venues of care.

The majority of the care for older adults with multimorbidity is provided by primary care practitioners. This can be a difficult task even for seasoned clinicians and, at times, an overwhelming task for novice trainees. The ACGME requires that residents demonstrate competency in principals of geriatric care. Incorporation of these principals into residency curriculum would help achieve this. This workshop will provide participants with information and resources for teaching these guiding principles. Introductory content will include brief review of the framework as well as discussion of tools and methodologies for teaching around focused on some of the domains. Subsequently participants will break into small groups to review cases representative of typical teaching interactions and discuss teaching application of guiding principles, focused primarily on the prognosis, patient preferences, and optimizing care plans domains. Small group participants and facilitators will discuss methods and approaches in identifying opportunities and implementing teaching.

Measurable Learning Objectives:

a. Describe principles that can help guide care for older adults with multimorbidity
b. Describe tools that can help guide educators and trainees in the care of older adults with multimorbidity
c. Apply some of these tools in real-time learning/precepting situations

Session Agenda:
15 minutes Intro/Overview of guiding principles
10 minutes Description of potential resources/techniques to help guide trainees
35 minutes Facilitated small group discussion of 2 cases that are representative of common teaching encounters, which include application of potential tools to help guide learners
10 minutes Small groups report back questions and themes that arises from discussion/wrap up
WE03
Co-Management and Consultation: Overcoming Challenges in Managing Medical Problems in the Surgical Patient
Category: Clinical Decision-Making and Economic Analyses
Online Registration Title: Co-Management and Consultation In Perioperative Care
Coordinator: Kurt J. Pfeifer, MD, Department of Medicine, Medical College of Wisconsin
Additional Faculty: Leonard S. Feldman, MD, Johns Hopkins University School of Medicine; Efren Manjarrez, MD, University of Miami Miller School of Medicine; Barbara A. Slawski, MD, MS, Medical College of Wisconsin; Christopher M. Whinney, Cleveland Clinic Lerner College of Medicine

Session Summary
As surgical techniques continue to improve and expand in scope, an increasing number of patients with significant comorbidities are undergoing invasive procedures. Many of these surgical patients require complex perioperative medical care by general internists. However, the interface and collaboration with surgical and anesthesiology services can be challenging given the differences in workflow, patient care focus and physician culture. For many internists lack of knowledge and confidence in consultative medicine principles and co-management paradigms further hinders the use of an essential, collaborative approach to perioperative care. In this workshop, the authors will review current concepts in medical consultation and medical co-management of surgical patients. The authors will lead the audience through a discussion of key intersections between medical, surgical and anesthesia care during the perioperative period. For each of these points, the authors will utilize cases to illustrate potential pitfalls in care and lead participants through an interactive discussion of different approaches to avoiding such problems and ensuring optimal perioperative outcomes. Specific areas of discussion will include preoperative collaboration with anesthesiology, delegation of postoperative care responsibility and implementation of cost-effective perioperative care strategies. The authors come from a variety of institutions and have experience in the full spectrum of medical consultation, from traditional consultation to comprehensive perioperative co-management programs. The authors will draw upon their experience and that of the audience to highlight different strategies for achieving strong collaborative care within these different models of care. Practical advice on implementing effective perioperative care strategies (including shifting to different models of care) will also be provided by the authors.

Measurable Learning Objectives:
1. Recognize common opportunities and obstacles facing physicians who provide perioperative care
2. Define basic models of care for perioperative programs
3. Implement strategies to improve collaborative, perioperative medical care
4. Identify avenues for development, growth and optimization of perioperative programs within the context of a physician’s home institution

Session Agenda:
1. Introductions and review of agenda (2 minutes)
2. Overview of current systems of perioperative care and frequent challenges faced by general internists in this setting (5 minutes).
3. Present scenario of inappropriate diagnostic test ordering by surgeon (1 minute).
4. Discuss different strategies for bringing surgeon and institution practices for preoperative diagnostic testing in line with evidence-based guidelines (5 minutes).
5. Present scenario of high cardiopulmonary risk and need for consultation with anesthesiology preoperatively (1 minute).
6. Review variations in anesthesiology systems at different institutions, when preoperative consultation with anesthesiology is warranted and how this consultation can be performed within these different systems (9 minutes).
7. Present scenario of requirement for antithrombotic therapy continuation through surgery (1 minute).
8. Describe useful strategies for negotiating the best risk-benefit balance in patients requiring medical therapy that increases surgical risk (8 minutes).
10. Describe mechanisms for providing specific postoperative medical care in the absence of in-person medical consultation and discuss indications for postoperative medical consultation (12 minutes).
11. Present scenarios of placing orders from medical consultants (2 minutes).
12. Discuss benefits and risks of medical consultants leaving recommendations versus writing orders themselves (8 minutes).
13. Present scenarios of patient requiring after-hours medical care (1 minute).
14. Describe ways of triaging immediate postoperative care of medically complex patients and delegating patient care responsibilities between surgical and medical providers (12 minutes).
15. Delineate situations in which development of dedicated medical consultation teams and co-management systems are most beneficial (5 minutes).
16. Outline methods for implementation of medical consultation teams and co-management systems (15 minutes).
17. Evaluation completion (2 minutes).

WE04
A Picture is Worth 1,000 Words: Photovoice for Research and Advocacy
Submitted in Conjunction with: SGIM Disparities Taskforce and CBPR Interest Group
Online Registration Title: Photovoice for Research & Advocacy
Coordinator: Carol Horowitz, MD, MPH, Associate Professor, Health Evidence and Policy, Mount Sinai School of Medicine
Additional Faculty: Arshiya A. Baig, MD, MPH, Mount Sinai School of Medicine; Giselle Corbie-Smith MD, MSc, Mount Sinai School of Medicine

Session Summary
Innovative research tools, such as photovoice, are needed to assess the health needs of vulnerable populations and to inform health policy. Photovoice utilizes photography and storytelling to expose and describe important issues, often affecting under-represented, marginalized groups. Photovoice assumes the people behind the lens have the richest knowledge of their own experience and are best suited to convey these accounts. Through a well-established methodology, photovoice enables people to record and reflect their community’s assets and concerns and promotes critical dialogue and action. Photovoice participants use their pictures and stories to influence decision and policy-makers, becoming advocates for their own and their community’s well-being.

This workshop aims to teach participants how to use this qualitative, participatory action research method, primarily through conducting a mini-photovoice project. Of note, we will contact all individuals who sign up for the workshop and request they bring one photograph they take, in response to a specific question we will pose. These photos will be the foundation for our hands-on workshop.

Measurable Learning Objectives:
• Understand the purpose and uses of photovoice
• Acquire skills to conduct and analyze a photovoice project, including training others to lead projects
• Learn approaches to use photovoice to influence decision and policy makers.
• Obtain hands-on practice participating in a photovoice session.

Session Agenda
1. Introduction—(20 min) Carol Horowitz, Giselle Corbie-Smith
   • Welcome remarks
   • Identify the learning objectives for the workshop
   • The use of photovoice in research, advocacy and interventions
2. Hands-on (50 minutes) Learning photo voice through conduct of a project with photographs from workshop participants in small groups.
   Part 1 (Arshiya Baig)
   • Participants will bring their own photos for the hand-on portion of the workshop. The theme for the photos will be the provided in advance
   • Pre-printed photographs will be provided, if needed.
   • Use SHOWED method to elicit stories
   Part 2 (Carol Horowitz)
   • Group presentations
   Part 3 (Corbie-Smith)
   • Share ways to train participants to take action based on findings
   • Discuss ways to disseminate and publish findings, and influence policy
WE05
No More Noon Conferences: Implementing Team Based Learning into the Internal Medicine Residency Core Curriculum

Online Registration Title: Implementing TBL into Internal Medicine Residency

Coordinator: Erik A. Wallace, MD, Internal Medicine, University of Oklahoma School of Community Medicine

Additional Faculty: John H. Schumann, MD, University of Oklahoma School of Community Medicine

Session Summary
Traditionally, residents have learned medical information in residency through a variety of lectures (i.e. noon conferences and Grand Rounds) and small group interactions (i.e. morning reports). In these sessions, the focus is on the teacher “teaching” the learners. Residents then individually take the content they have learned and apply it to the clinical care of their patients. However, with the evolution of medicine and with implementation of the Patient-Centered Medical Home (PCMH), it is increasingly important that residents learn how to work effectively in teams. In Team-Based Learning (TBL), learners work together longitudinally in small groups on content application through shared accountability for learning and application of medical information to clinical scenarios. Using TBL in pre-clinical medical education and nursing education has been shown to improve knowledge retention, application, and interpersonal communication. At the University of Oklahoma School of Community Medicine in 2010, we successfully implemented TBL into the ambulatory block rotation to improve knowledge of ambulatory medicine topics, promote application of that knowledge to the care of clinic patients, and to encourage teamwork and collaboration in our PCMH. Based on our success with TBL on the ambulatory and requests by our residents to expand TBL opportunities during residency, in 2012, we replaced our core noon conference curriculum with TBL during once-weekly academic afternoon sessions. Participants in this workshop will learn the principles, benefits, and challenges of implementing TBL, the results of TBL at our institution, and recommendations for implementing TBL at other institutions. Participants will also learn how to create new faculty development and scholarly activities for clinician educators through TBL implementation.

Measurable Learning Objectives:
- Know the core design elements of Team Based Learning
- Identify 3 benefits and 3 challenges of using Team Based Learning in graduate medical education
- Formulate a plan to implement Team Based Learning into graduate medical education

Session Agenda:
5 minutes  Introduction to TBL and recommendations for research and publication
55 minutes  Participants will read a short article on a medical topic, take an individual and group readiness assurance test, and engage in a group discussion of the test questions. Presenters will lead the audience through the TBL session and 1 or 2 application exercises.
20 minutes  Participants will work in teams to share insights, challenges, questions and successes of implementing TBL into a graduate medical program. Each participant will sketch out a plan for implementing TBL in their educational program.
10 minutes  Debriefing and questions

WE06
Interprofessional Education: A Virtual Model for a High-tech Generation

Category: Medical Education Scholarship and Professional Development

Online Registration Title: Interprofessional Education: A Virtual Model for a High-tech Generation.

Coordinator: Jennifer Adams, MD, Department of General Internal Medicine, New York University School of Medicine

Additional Faculty: Kathleen Hanley, MD, New York University School of Medicine; Deepa Rani Nandiwada, MD, New York University School of Medicine; Jessica Taff, MD, New York University School of Medicine; Sondra Zabar, MD, New York University School of Medicine

Session Summary:
This workshop will focus on the principles behind developing an interprofessional curriculum for medical and nursing students. The core principles behind interprofessional education including role defining, conflict resolution, communication skills, leadership, and team building will be reviewed. Participants will explore these through a mixture
of group discussion and small case based groups. A virtual interactive module based program, developed through a Josiah Macys foundation grant, by the NYU schools of Nursing and Medicine, the NYU3T curriculum, will be presented as a model curriculum. Participants will have the chance to explore this curriculum and develop strategies to bring IPE to their home institutions.

Background: The need for increased efficiency, improved quality of care, the patient centered medical home, and cost cutting in the current healthcare landscape has increased the importance of team based care delivery models. The majority of medical schools do not have a core curriculum teaching trainees the key proponents of interprofessional education (IPE). Some barriers identified to implementation of these programs are scheduling between the disciplines, commitment of the schools and time pressures. The NYU schools of medicine and nursing have developed a comprehensive interdisciplinary program that addresses these challenges and has successfully taught IPE to its students.

This workshop will provide the tools necessary for participant to bring this highly interactive and web based curriculum home to their institutions.

**Measurable Learning Objectives:**
- Identify core principles in an Interprofessional Education (IPE) curriculum
- Explore the need for IPE in healthcare
- Discuss how IPE can be brought in different formats to home institutions
- Appraisal of a virtual model for IPE

**Session Agenda:**
- **10 minutes** Introduction
  - Brainstorm the challenges and facilitators of implementing an IPE curriculum
- **10 minutes** Mini Lecture
  - Explore the research regarding the need for IPE
  - Highlight the core principles of interprofessional education
- **20 minutes** NYU 3T Case Example
  - Overview of the NYU3T curriculum:
    - Review curriculum, implementation and technology
    - Demonstrate communication and conflict resolution modules
    - Present the data to date of the NYU3T Curriculum
- **25 minutes** Small Group Cases
  - Small discussions groups with facilitators and worksheet:
    - Will identify current IPE curriculum and potential collaborators
    - Review different educational formats including technology to assist curriculum
    - Create Time line for implementing at home institution
- **10 minutes** Group Report Back
- **5 minutes** Evaluations

**WE07**

**Tools to Break the Cycle: Chronic Opioid Users with Disabling Pain**

Submitted in Conjunction with: SGiM Substance Abuse Interest Group

**Online Registration Title:** Tools to Break the Cycle: Chronic Opioid Users with Disabling Pain.

**Coordinator:** Barbara J. Turner, MD, MSED, University of Texas Health Science Center

**Additional Faculty:** Maureen J. Simmonds, PhD, PT, University of Texas Health Science Center

**Session Summary**

Patients with chronic non-cancer pain (CNCP) on long-term opioid analgesics (OA) and their primary care physicians can be “stuck in a rut” due to unmanageable pain and distress and disability despite increasing doses of OAs. The workshop will encourage participants to unpack the diverse -patient-practice -societal factors that contribute to this situation and learn about approaches to help get out of the rut and break this cycle of failed treatment. We will review themes from focus groups of veterans with CNCP on long-term OAs that elucidate the factors from the patient’s viewpoint that promote/ facilitate an obsession with pain and OAs. An expert in PT and pain management will review best evidence and evidence-based tools for non-pharmacological pain care from programs such as the Expert Patient program, Pain Toolkit from the UK, Canadian Chronic Disease Model and Progressive Goal Attainment Programs as well as the use of brief
intense exercise and virtual reality to address generalized psychomotor slowing. We will then present an example of how we structured a pilot study putting the principles knowledge translation into practice and measuring outcomes on cognitive, emotional, and physical outcomes.

Measurable Learning Objectives:

- To be able to describe the need for and components of a multifactorial goal-oriented pain management program for CNCP and chronic OA use
- To identify evidence-based measures to evaluate a comprehensive non-pharmacological support program for CNCP
- To be able describe appropriate cognitive and physical function measures to apply in evaluating outcomes of a multifactorial interventions for chronic OA users.

Session Agenda:

10 minutes  Session will start with introductions and attendees interests and expectations for session (10 mins)
20 minutes  Participant breakout discussion–how sample case would typically be managed in primary care practice and brainstorm how to break the cycle of opioid use and multiple dimensions of dysfunction
10 minutes  Review of breakout discussions
10 minutes  Overview of evidence from our focus groups of long-term OA user regarding challenges and barriers to addressing pain and associated problems
20 minutes  Critical review of non-pharmacologic tools and multi-component interventions to help break cycle of pain-psychomotor dysfunction-more pain
15 minutes  Back to breakout groups to discuss how these tools might be practically applied to patients, providers, and families
5 minutes  Summary of group discussion (5 mins)
Handouts of tools will be provided to participants at the end

WE08
How Doctors Think: Clinical Problem Solving in Action

Online Registration Title: How Doctors Think: Clinical Problem Solving in Action
Coordinator: Carlos Estrada, MD, MS, Professor of Medicine, University of Alabama, Birmingham

Additional Faculty: Robert M. Centor, University of Alabama, Birmingham; Jeff Kohlwes, MD, MPH, University of California, San Francisco; Ryan Kraemer, MD, University of Alabama, Birmingham; Jason L. Morris, MD, University of Alabama, Birmingham; Lisa L. Willett, MD, University of Alabama, Birmingham

Small Group Discussion Leaders: Chad S. Miller, MD, Tulane University; Amanda Vick, MD, University of Alabama, Birmingham

Session Summary

The clinical problem solving skills of both trainees and seasoned clinicians evolves over time. Expert clinical reasoning is a skill that can be learned. Contributors to the JGIM Exercises in Clinical Reasoning (JGIM ECR) will guide the discussion. Presenters have over 15 years of experience conducting clinical problem solving discussions.

The interactive workshop will provide hands-on experience on dissecting the thinking process of a seasoned clinician as he/she discusses a case. Participants will also review recently published JGIM ECR cases. Registered participants will read two hallmark articles prior to the session (Bowen JL. Educational strategies to promote clinical diagnostic reasoning. N Engl J Med. 2006;355:2217-25; Croskerry P. A universal model for diagnostic reasoning. Acad Med. 2009; 84:1022-28. PMID:19638766.).

We will provide resource materials and a list of journals accepting exercises in clinical reasoning. The workshop builds on adult-learning principles and social cognitive theory; including advanced reading, case-based discussion, learning by doing, reinforcing concepts, and finally by activating the applicability at their home institutions.

This workshop can help clinician educators incorporate medical decision making and clinical problem solving into their noon conferences and morning reports. Evidence from our group and others suggest that sharing of attending's thought processes is an important approach for successful ward attending rounds (Roy et al, JGIM. 2012 Jun 22. [Epub ahead of print]). Starr Steinhilber, MD, and Deepa Bhatnagar, MD will also assist with small group activity.
Measurable Learning Objectives:
- Recognize dual-process decision making (System 1, 2) and heuristics
- Identify educational strategies to promote clinical reasoning

Session Agenda:

5 minutes Introduction, goals, and objectives
10 minutes Presentation: A concise overview of clinical reasoning and dual-process decision making
30 minutes Large group exercise: A live demonstration of two “think-out-loud” clinical problem solving cases (based on a monthly presentation at main coordinator’s institution), followed by comments of the clinical reasoning demonstrated by the discussant (from co-presenters and participants; de-brief).

10 minutes Presentation: Building from the large group exercise, will reinforce concepts and expand to include heuristics (anchoring, diagnosis momentum, framing, and premature closure).
20 minutes Small group exercise: The small group will apply concepts outlined in #4. Each small group will work on one of three cases, two published JGIM ECR and one in development. Participants will only receive two chunks of clinical information and their respective “think-out-loud” discussions. The task of the group is to dissect the elements of the clinical reasoning. Finally, the clinical reasoning included in the manuscript will be revealed to the large group. The facilitators include the JGIM ECR authors and an expert clinician.
   b. A Middle-Age Woman with Sudden Onset Dyspnea (Bhatnagar et al. JGIM 2011;26:551-4).
   c. A 76-year-old woman with diaphoresis and anxiety (in development).

10 minutes Conclusions and homework: Presenters will provide concluding remarks and invite participants to try out at their home institution a “think-out-loud” clinical problem solving conference.
5 minutes Evaluation

References

WE09
HIV Prevention in Primary Care: What Primary Care Providers Need to Know to Be Leaders In Clinical Practice
Online Registration Title: HIV Prevention in Primary Care: Taking the Lead
Coordinator: Douglas Krakower, MD, Division of Infectious Diseases, Beth Israel Deaconess Medical Center
Additional Faculty: Kevin Ard, MD, MPH, Brigham and Women’s Hospital; Harvey J. Makadon, MD, National LGBT Health Education Center, The Fenway Institute

Session Summary:
As there are 50,000 new HIV infections in the US each year – a number that has not decreased in the past 10 years -- effective HIV prevention strategies are needed urgently. We know that many of these people were not HIV tested routinely or referred for treatment or counseling to prevent infection. Over the past 2 years, studies have demonstrated that use of antiretroviral medications by high-risk, HIV-uninfected persons, known as pre-exposure prophylaxis (PrEP), can protect against HIV acquisition. These studies showed that PrEP was efficacious among men who have sex with men
(44%) and heterosexual men and women who were in stable serodiscordant relationships (62-73%) or who had concurrent or sequential sexual partners (62%). PrEP represents a novel method of antiretroviral prophylaxis that complements the existing approach of post-exposure prophylaxis (PEP). In 2011, an additional study showed that administration of antiretroviral therapy to HIV-infected members of serodiscordant couples before immunologic decline, known as “Treatment as Prevention”, decreased HIV transmission to their uninfected partners by 96%.

These promising strategies represent potential “game-changing” innovations in HIV prevention. CDC has issued guidance for prescribing PrEP in clinical practice, and in May 2012, the FDA approved the antiretroviral tablet tenofovir-emtricitabine for use as PrEP. In March 2012, HIV treatment guidelines were changed to recommend treatment for all HIV-infected persons regardless of CD4 count, in part to decrease HIV transmission.

As many persons at high-risk for HIV acquisition in the US are cared for by primary care providers (PCPs), these providers are uniquely positioned to optimize access to the full range of prevention interventions, from testing, linkage to care for those who test positive, counseling, and interventions such as PEP or PrEP. Therefore, PCPs need to be ready to: (1) ensure routine HIV testing and appropriate follow up; (2) facilitate linkage to HIV care when needed; (3) engage in comprehensive HIV risk assessments to identify persons who may benefit from PEP or PrEP; and (4) prescribe PEP or PrEP when appropriate. PCPs also need to be prepared to counsel individuals who are sexual partners with HIV-infected persons regarding HIV prevention approaches that may benefit them.

This session will use 4 interactive case discussions (small group) and didactics to provide PCPs with the knowledge and skills they will need to utilize novel HIV prevention strategies in practice. Cases will involve: (1) taking a sexual history; and managing persons with (2) recent high-risk sexual exposure; (3) ongoing risky behaviors; and (4) a long-term HIV-infected partner. At the beginning of the session, participants will submit 1 question about HIV prevention (on a notecard). Panelists will organize these questions into themes that will form the basis of a large-group discussion moderated by the panelists near the end of the session.

Measurable Learning Objectives:
(1) List 1 opening question and 2 guiding principles that are helpful when taking a sexual history to assess HIV risk
(2) Summarize indications and contraindications for prescribing antiretroviral pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP), and the steps needed to safely prescribe PrEP and PEP
(3) Identify 4 approaches to HIV prevention for individuals who are in long-term sexual partnerships with HIV-infected persons

Session Agenda:
5 minutes Introductions
5 minutes Each participant writes 1 question about HIV innovation on a blank notecard; panelists collect notecards
45 minutes Four Content Subsections (15 minutes each):
5 minutes case-based discussion (small groups) followed by 10 minutes content (large group).
10 minutes Large-group discussion based on themes generated by participant questions
10 minutes Evaluation of session

WE10
The Journey to a High Reliability Culture in Health Care: The Road to Achieving Spread and Sustainability of Quality Improvement Initiatives

Online Registration Title: Achieving High Reliability through Spread & Sustainability
Coordinator: LeeAnn M. Cox, MD, Internal Medicine, Indiana University School of Medicine
Additional Faculty: Anne Kitchens, MD, Indiana University School of Medicine; Katherine M. McKinney, MD, University of Kentucky College of Medicine; Heather Woodward-Hagg, MS, Richard L. Roudebush VA Medical Center

Session Summary
This workshop will provide the learner with a road map to transitioning project-based quality improvement (QI) efforts into an organizational culture where continuous quality improvement is the way that work is done, i.e. a high reliability culture. This information is presented within the context of identifying and addressing the challenges of sustainability and spread in the adoption of QI programs.
Millions of people, daily, receive high-quality healthcare in the United States; however, significant variation in the utilization and delivery of these services continues to exist and many times leads to error. In the decade since the Institute of Medicine’s (IOM) report “To Err is Human” that highlighted the breadth of this quality gap and the more recent institution of value-based-purchasing, there is significant pressure to implement robust QI strategies. In fact, the IOM described six aims to guide improvement in healthcare including; safe, effective, patient-centered, timely, efficient, and equitable. Methodologies borrowed from industry such as LEAN, Six Sigma, and the PDSA cycle have been utilized with variable degrees of individual success. Yet, widespread implementation at the organizational level with the development of a culture expecting high reliability has failed.

Even when small successes have been achieved, struggles with sustainability and spread of innovation within QI efforts threaten the credibility of these programs. Front line staff and leadership become frustrated and disenchanted with the “flavor of the month” improvement projects, preventing the critical transition to a culture of high reliability.

This presentation will focus on addressing challenges with system level sustainability and spread of QI initiatives. Faculty will present a model for project implementation addressing these pitfalls. Small group discussions will be utilized to identify and describe participants’ local successes and barriers with sustainability and spread. Faculty will lead a large group discussion based on the challenges actually identified among participants during the small group exercise with the goal of sharing take home strategies to tackle barriers.

Additionally, while highlighting the important role of robust project implementation through the achievement of sustainability and spread, faculty will describe the characteristics and creation of a high reliability culture. Participants will be provided with a timeline guide, including expected milestones, for the creation of such a culture. Faculty will utilize a hands-on small group activity to demonstrate high reliability.

**Measurable Learning Objectives:**
- Describe the role sustainability and spread in the transition to a high reliability organization
- Identify barriers to achieving sustainability and spread of quality improvement initiatives
- Describe strategies to addressing challenges with sustainability and spread.
- Describe the characteristics of a high reliability organization
- Identify key milestones along the path to the creation of a high reliability organization.

**Session Agenda:**
- **5 minutes** Audience and faculty introductions
  - Faculty presenters will introduce themselves and their roles within their organizations. Participants will be provided the opportunity to share their background and experiences with quality improvement implementation.
- **20 minutes** Addressing the challenges of sustainability and spread
  - Faculty will provide an overview of quality improvement implementation theory including top-down and bottom-up concepts. Learners will be introduced to the concepts of lateral diffusion and how this can be used to help drive sustainability and spread. Faculty will outline the variety of characteristics of members involved with quality improvement implementation and how they can best be utilized to promote sustainability and spread.
- **20 minutes** Small group exercise #2: Discussion of current barriers challenges (20 minutes)
  - Participants will break into small groups and share actual success and challenges related to spread and sustainability of quality improvement efforts. Participants will be specifically asked to identify where quality improvement projects have been successfully implemented and sustained and where the most significant gaps in sustainability have occurred. Faculty will solicit common themes identified in the small groups and stimulate small group discussions concerning potential ways to address challenges.
- **15 minutes** Large group discussion
  - Each small group will present a brief summary during large group discussion and faculty will record themes identified for the large group. The faculty panel will lead a discussion regarding ways to address these challenges.
- **10 minutes** Description of a high reliability organization and the process for achieving this
  - In conjunction with sustainability and spread, the concept of a high reliability culture will be introduced. This concept will be compared and contrasted with simply achieving project level interventions and
success. Learners will be provided with timeline for the milestones associated with developing a high reliability culture.

15 minutes  
Small group exercise #1: Modeling high reliability activity
To solidify presented concepts, learners will participate in a hands-on simulation demonstrating the characteristics of high reliability.

5 minutes  
Conclusion
Faculty will provide a brief summary of concepts addressed during the workshop and address any additional questions.

WE11

Online Registration Title: Managing Admissions and Readmissions
Coordinator: Gwen Crevensten, MD, Massachusetts General Hospital
Additional Faculty: Harry Burke, MD, PhD, Walter Reed National Military Medical Center; Leora I. Horwitz, MD, MHS, Yale; Diane L. Levine, MD, Wayne State University School of Medicine; Amy R. Schwartz, MD, VA Connecticut Healthcare System

Session Summary
Many patients experience hospital readmission and other adverse events shortly after hospital discharge. Reducing readmissions has gained national attention recently, with policy leaders and the general public increasingly viewing 30-day hospital readmission rate as both a clinical quality measure and an opportunity to reduce healthcare spending. The financial implications connected to reducing readmissions will become more immediate for hospitals in 2013 with enactment of a provision from CMS which reduces payments to hospitals with high readmission rates. These developments challenge us to foster innovation and collaboration across institutions as we gain experience with this metric and begin to encounter associated financial penalties. The aim of this workshop is to review current practices in defining a preventable or ameliorable readmission, teach participants methods and tools to assess and improve transitions of care, and share ongoing innovations at our institutions to reduce readmissions.

We will begin the session with a discussion of the policy changes and financial impact of excess readmissions, as well as proposed definitions of a preventable readmission. We will then move to a discussion of the inpatient to outpatient transition and methods and tools to assess care during this time. After this section, small groups will convene to outline a list of “transition essentials”, and brainstorm ways to apply the tools from this section to care transitions at their home institutions.

The next section of the workshop will focus on innovative strategies to reduce readmissions. The hospitals represented in this workshop have approached readmission reduction in many capacities, including identification of high-risk patients on admission, discharge planning practices that aim to reduce readmission, and interventions after discharge to allow patients better communication and access to care.

We will review experience with a pilot on a general medicine unit at MGH in which a multidisciplinary care team performed a readmission risk assessment within 48 hours of admission, and used this information to connect patients with interventions best suited to their particular area of risk. This section of the workshop will also preview a novel readiness for discharge planning tool in the VA healthcare system. Implementation of post-discharge phone calls will be reviewed, including experience in the VA Healthcare System using the Primary Care Medical Home model. We will also discuss experience with hospitalist discharge clinics, and with a longitudinal post-discharge intervention at Yale-New Haven Hospital funded by the Medicare Community Care Transitions Program. We will end with an interactive demonstration of MOBIUS (Mobile Information Utilization System), an innovative iPad-based tool enabling improved communication with patients after discharge.

Measurable Learning Objectives:

1. Understand current national policy and hospital financial implications in the area of readmissions
2. Acquire and apply tools to assess and improve transitions of care with the aim of reducing readmissions
3. Learn what innovative practices hospitals are employing to reduce readmission rates
4. Identify discharge transition interventions appropriate for a variety of hospital and community settings.

Session Agenda:
5 minutes Introduction
5 minutes Policy and financial implications of readmissions in 2013
30 minutes Assessing care during the inpatient to outpatient transition
   A. Self-assessment tools
      1. Assessment of readmission cases
      2. Assessing quality of discharge instructions and discharge summaries
      3. Medication reconciliation assessment
      4. Rate of appointments provided post-discharge
   B. Small group session
      1. Groups generate a list of transition essentials
      2. Brainstorm/discuss application of self assessment tools to care transitions at home institutions
45 minutes Readmission reduction strategies
   A) Risk Stratification
      1) Readmission risk assessment
      2) Assessing readiness for discharge tool
      3) Discussion, lessons learned
   B) Review of multicomponent transition interventions
      1) General population
      2) High-risk (i.e. stroke, MI) sub-populations
   C) C. Post-discharge interventions: strategies and outcomes
      1) Discharge clinics
      2) Post-discharge phone calls
      3) MOBIUS tool, interactive demonstration
      4) Post-discharge coaching and case management
      5) Discussion, lessons learned
5 minutes Conclusion and final discussion

WE12
Taming Tricky Data and Methods: Missing Data, Heterogeneity, and Propensity Scores – from Statistical Editors at the Annals of Internal Medicine

Online Registration Title: Missing Data, Heterogeneity, and Propensity Scores
Coordinator: Catharine Stack, PhD, Annals of Internal Medicine, American College of Physicians
Additional Faculty: Michael Griswold, PhD, University of Mississippi Medical Center; Anne Meibohm, PhD, Annals of Internal Medicine, American College of Physicians

Session Summary
This 90-minute workshop, conducted by three deputy and associate editors of, and statistical reviewers for, Annals of Internal Medicine, offers an overview of some current challenges to authors and readers when reporting and analyzing data from studies submitted to the Annals.

The session will begin with three 20-minute sessions covering three commonly encountered challenges when analyzing data from clinical studies. (1) missing data, (2) heterogeneity (clustering and site effects), and (3) propensity scores (balancing scores).

These short talks will attempt to demonstrate for the audience the reporting and analysis issues related with these commonly, yet often poorly-understood encountered data structures and methods. Each talk will give principles and examples from the medical literature, both good and bad, and will offer guidance on dos and don’ts for readers as well as authors.

The session will conclude with a 25 minute Q&A session to allow attendees an opportunity to ask substantive questions about the materials covered and to voice their own experiences, viewpoints, and feedback about the statistical review process. Each attendee will be provided with a bibliography of tutorials, review articles, and internet addresses that cover the topics and materials covered in the workshop.

Measurable Learning Objectives
1. For all attendees: to learn about common challenges in analyzing and reporting data from clinical studies (e.g., missing data, heterogeneity of effect across sites, imbalanced data) and methods to address them (e.g., propensity scores)

2. For readers: to appreciate what data and statistical issues to look for when reading and evaluating the published literature

3. For authors: to gain insights about when and under what circumstances collaboration with statisticians might prove fruitful in the design, analysis, and writing of articles targeted for general internal medicine journals.

4. For authors: to understand better the statistical review process at Annals of Internal Medicine and hear tips about how best to respond to statistical reviewers and statistical comments from editors

5. For all observers: an opportunity to engage the speakers in a 25 minutes question and answer session on the role of statistical methods in clinical research, to voice concerns and offer feedback about prior and current experiences with statistical review in medical journals.

Session Agenda:

20 minutes Segment 1: Missing Data:

(1) Exclusions at the time of cohort assembly
   i. Sampling bias
   ii. Impact on generalizability and interpretation

(2) Missing covariates
   a. Practices to avoid (e.g., indicator for missing)
   b. Better approaches (e.g., multiple imputation)

(3) Missing outcomes (drop-out)
   a. Reasons for missing and possible impact
   b. Appropriate analyses and implicit assumptions
   c. Methods to avoid (e.g., LOCF, single imputation)
   d. Importance of sensitivity analyses

(4) What to look for as a reader and to report as an author
   a. Flow diagrams, CONSORT diagram
   b. Frequencies of missing within tables and figures
   c. Explanations for how missing data were handled in the analysis
   d. Sensitivity analyses

(5) Current guidance on missing data
   a. Report from the National Research Council (2010)
   b. PCORI Methodology Contractor Report (2012)

20 minutes Segment 2: Heterogeneity (Clustering and Site Effects)

(1) Clustering of data at many levels
   a. Individual (longitudinal data)
   b. Provider
   c. Sites (e.g., clinics, hospitals)

(2) Heterogeneity – differences in effect
   a. Individual (heterogeneity of treatment effect)
   b. Provider, site

(3) How to identify?
   a. Graphs
   b. Descriptive data

(4) How to handle?
   a. Subgroup analyses
   b. Analytic methods for multi-level data (e.g., GEE, GLMM, hierarchical models)
   c. Account for data structure (take cluster into account)

(5) What to look for as a reader and to report as an author?
   a. Adequate reporting of trial methods
   b. Description of clustering
   c. Exploration of heterogeneity
   d. Appropriate analyses
20 minutes   Segment 3: Propensity scores
(1) The problem – confounding and bias
(2) Propensity scores – history and current usage
   a. Motivations for propensity scores
   i. Rare outcomes and many covariates
   b. Frequency and use at Annals
(3) Propensity score essentials
   a. Clear description of methods
   b. Diagnostics – overlap and balance; tests and graphics
   c. Interpretation of results
(4) Special issues seen commonly at Annals
   a. Pooled versus unpooled propensity scores – when and why
   b. Incorrect measures of propensity score success

25 minutes + Segment 4: Question & Answer Session
With one of the presenters serving as moderator, this workshop will conclude with an open question and answer session among the three presenters and attendees.
Time will also be given to allow attendees to complete session evaluation forms.