Quality Improvement for Clinician Educators:
Dissemination

Objectives

- Conceptualize QI projects into a format conducive to dissemination

- Understand avenues for dissemination for CE faculty specific to QI

- Brainstorm practical ways to move projects forward

Format

- Introduction to speakers [5-10 minutes]

- Dissemination in QI [20 minutes]

  - Overview

  - Examples

  - Barriers and Tips

- Project Discussion – large group[20 minutes]

Format

- **Introduction to speakers [5-10 minutes]**

- **Dissemination in QI [20 minutes]**

  - **Overview**

  - **Examples**

  - **Barriers and Tips**

- Project Discussion – large group[20 minutes]

Introductions

- Jim Coons, PharmD

- Priya Gopalan, MD FACLP

Clinician-Educator Pathway

Faculty who seek appointment or promotion as a Clinician-Educator generally devote significant amounts of their effort to both the clinical programs of the Health System and the educational programs of the School or Medicine. Clinician-Educators demonstrate Scholarship in Education. Scholarship in Education is a unique form of teaching or education that must demonstrate sustained depth and commitment and results in peer-reviewed original publications or publication equivalent scholarly products that fulfill the following criteria of being: 1) disseminated, 2) peer reviewed, 3) able to be applied by and built upon by others. Examples include, but are not limited to: AAMC MedEd Portal products, clinical practice guidelines, web-based curricula, peer reviewed published abstracts, etc. Examples of objective evidence of excellence in this pathway include the following; and, every individual need not meet every criterion.

- Record of scholarly contributions to knowledge, typically 10 peer reviewed original publications or publication equivalent scholarly products; however, the actual number may range widely based upon significance and quality
- Evidence of innovation by creation and dissemination (by publication, AAMC MedEd Portal, etc.) of new educational activities, programs, curricula or products
- Local, regional, and developing national reputation, evidenced by invited lectures and professorships, membership in professional societies, service on editorial boards or as a reviewer, invited papers, organizing conferences and symposia
- Programmatic level contributions to the School of Medicine or Departmental educational mission
- Leadership roles in medical education (e.g. Program Director, Course Director, Associate Program Director, etc.)
- Authorship of reviews and book chapters
- Authorship of teaching materials for patients and lay publications
- Membership in scientific educational organizations
- Teaching of symposia, panels, workshops, or courses
- Development and presentation of CME
- Development of teaching materials such as videos, computer programs, websites, podcasts, etc.
- Development of clinical guidelines used by hospitals, or clinics
- Development of clinical programs
- Record of high-quality patient care
- Record of high-quality teaching as documented by learner and peer evaluations
- Record of robust service to the Department, School of Medicine, and/or University
- Awards, Honors, and Prizes for research, teaching, and/or service
- Mentoring of students and trainees at all levels and especially those from underrepresented and disadvantaged backgrounds
- Demonstrated commitment to supporting and increasing diversity and inclusion within our University

Quality Improvement

- Which areas are interesting to you?

- Programmatic development

- Educational interventions

Dissemination

What are you working on that you think is "worthy" of dissemination?

Examples - Priya

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.ajgponline.org

**Treatment in Geriatric Mental Health:
Research in Action**

Care Transitions in the Psychiatric Hospital: Focus on Older Adults

Matthew Conlon, M.D., James Tew, M.D., LalithKumer K. Solai, M.D., Priya Gopalan, M.D., Pierre Azzam, M.D., Jordan F. Karp, M.D.

Original Research Article

Consultation-Liaison Telepsychiatry on an Inpatient Obstetrical Labor and Delivery Unit

Priya Gopalan, M.D., Lauren Auster, B.A., Ida Brockman, M.D., Neeta Shenai, M.D.

IN BRIEF REPORT

Self-Assessment of Teaching Skills Among Psychiatric Residents

Meredith Spada[1] · Wynne Lundblad[1] · Jody Glance[1] · Jason Rosenstock[1] · Priya Gopalan[1] · Pierre N. Azzam[1] · Sansea L. Jacobson[1] · Michael J. Travis[1]

FROM THE FIELD

Integrated Brief Intervention for PTSD and Substance Use in an Antepartum Unit

Neeta Shenai[1,2] · Priya Gopalan[1,2] · Jody Glance[1,3]

Less is more: Deprescribing anticholinergic medications in persons with severe mental illness

Ana M Lupu, Kathryn L MacCamy, Jessica M Gannon, Jaspreet S Brar, Kn Roy Chengappa [1]

Examples - Jim

RESEARCH

A Pharmacotherapy Scholars Program to Provide Intensive Training to Enhance Pharmacy Students' Postgraduate Readiness

James C. Coons, PharmD,[a,b] Neal Benedict, PharmD,[a,b] Amy Seybert, PharmD,[a,b] Carlo J. Iasella, PharmD, MPH,[a,b] Susan J. Skledar, MPH,[b] Randall M. Smith, PhD,[b] Melissa Saul, MS,[c] Christopher R. Ensor, PharmD[d]

[a] UPMC Presbyterian-Shadyside Hospital, Pittsburgh, Pennsylvania

---

Apixaban as an alternative to warfarin for patients with a left ventricular assist device

Edward T Horn [1], Emilee Baker [2], Jennifer Dolphin [2], Madeline Mitchell [2], Ashley Modany [1], Michael A Shullo [3], James C Coons [1]

Affiliations + expand
PMID: 35088839   DOI: 10.1093/ajhp/zxac028

Development of best practice recommendations for the safe use of pulmonary hypertension pharmacotherapies using a modified Delphi method

Zachary R Smith [1], Krishna Rangarajan [1], Jennifer Barrow [2], Danielle Carter [3], James C Coons [4], Amy L Dzierba [5], Jennifer Falvey [6], Keith A Fester [7], Maria R Guido [8], Diana Hao [9], Narith N Ou [10], Kristen T Pogue [11], Nancy C MacDonald [1]

Design and testing of MEDIvate, a mobile app to achieve medication list portability using HL-7 FHIR

James C. Coons, PharmD, FCCP, BCCP [Associate Professor],
Department of Pharmacy and Therapeutics, University of Pittsburgh School of Pharmacy and Clinical Pharmacist, Cardiology at UPMC Presbyterian Hospital, Pittsburgh, PA

Ravi Patel, PharmD [Lead Innovation Advisor and Instructor],
Department of Pharmacy and Therapeutics, University of Pittsburgh School of Pharmacy, Pittsburgh, PA.

Kim C. Coley, PharmD, FCCP [Professor], and
Department of Pharmacy and Therapeutics, University of Pittsburgh School of Pharmacy, Pittsburgh, PA

Philip E. Empey, PharmD, PhD [Assistant Professor]
Department of Pharmacy and Therapeutics, Center for Clinical Pharmaceutics Sciences, University of Pittsburgh School of Pharmacy, Pittsburgh, PA
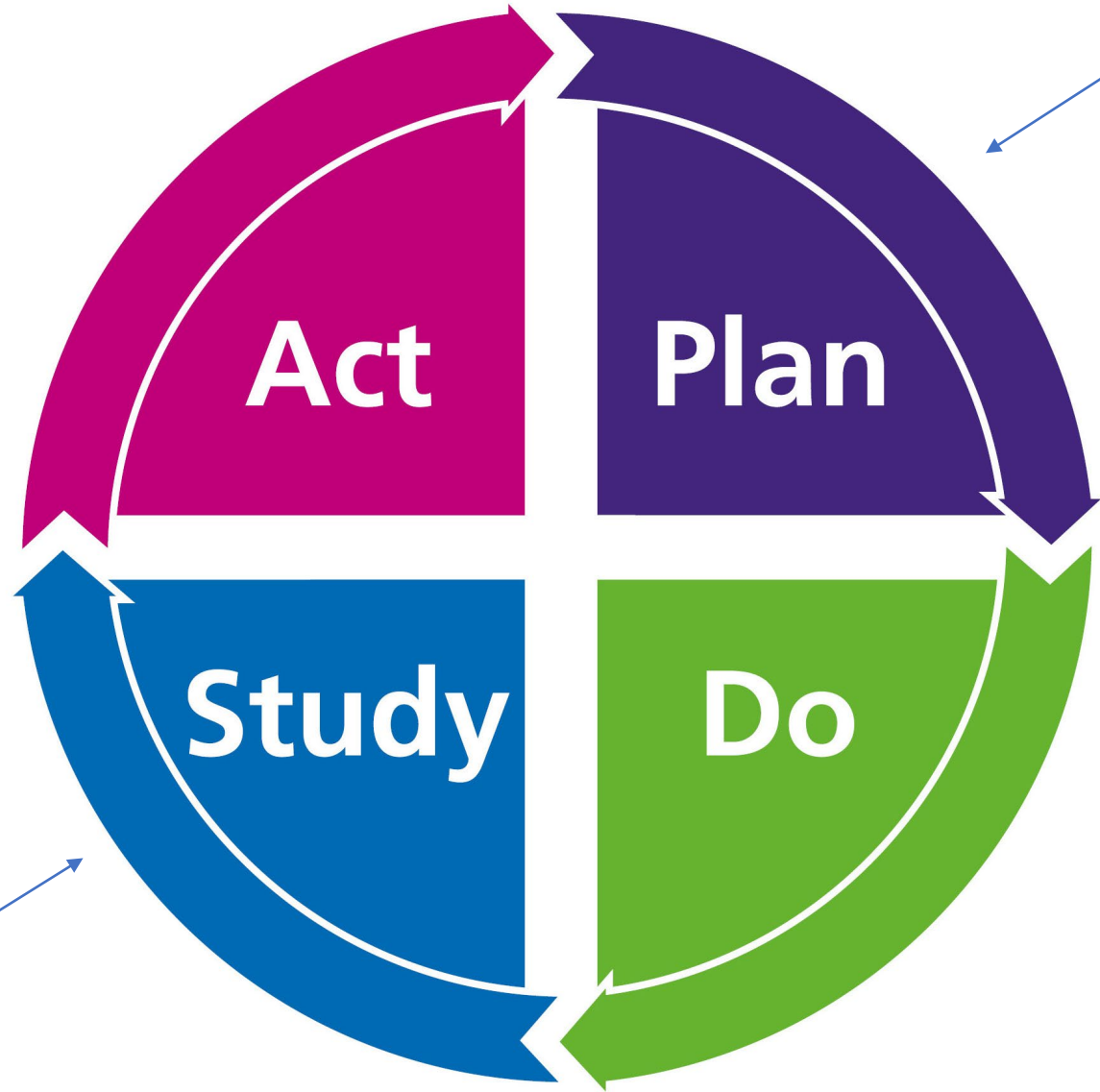

Use of Disproportionality Analysis to Identify Previously Unknown Drug-Associated Causes of Cardiac Arrhythmias Using the Food and Drug Administration Adverse Event Reporting System (FAERS) Database

Lindsay N. Moreland-Head, PharmD[1], James C. Coons, PharmD, BCCP[1,2], Amy L. Seybert, PharmD, CHSE[1,2], Matthew P. Gray, PharmD[2], and Sandra L. Kane-Gill, PharmD, MS[1,2]

PDSA

SMART

S — Specific
M — Measurable
A — Achievable
R — Result Oriented
T — Time Scheduled

Conducive to dissemination!

Consider Conferences

Different conferences and time of year

Targeting conferences based on interest

Abstract deadlines

Symposia/Workshops (3 of 51 = 5.9%)

1. *Taxidromes and Physical Exam: Inpatient Integrated Care and Psychiatrists as Physicians First*
2. *Integrated Care Delivered: Psychiatry's Role in Helping Women Rebuild After Cancer Treatment – A Women's Health SIG-Sponsored Workshop*
3. *Postpartum Depression: Building the Capacity of Pediatric Practices to Address Mental Health and Promote Parental and Child Well-Being*

Oral Papers (3 of 59 = 5%)

4. *"But This Is How I've Always Done Things": Incorporating Evidence-Based Practices in Consultation-Liaison Psychiatry – 11/12, 3:15-4:30 pm (*Best Brief Oral Presentation)*
5. *Endocarditis in Pregnancy: A Comparison of Medical and Psychiatric Outcomes in Opioid Use Disorder*
6. *Targeting High Risk Moms in the Medical Setting: Screening for Postpartum Depression in the Neonatal Intensive Care Unit*

Posters (12 of 190 = 6.3%)

Palliative Care Psychiatry: Integrative Models for Integrated Care

Beyond Postpartum Depression: Managing Psychiatrically Complex Patients with Obstetric Needs Using an Integrated, Interdisciplinary Approach

Communicating Bias: The Use of Stigmatizing Language in The Electronic Medical Record

Hyperemesis Cannabinoid Syndrome in Pregnancy: A Case Series

Are We There Yet? Do Psychiatric Boarding Times at A Pediatric Hospital Justify Development of Targeted Clinical Programming?

Use of Smartphone App for Anxiety and Depression Treatment in Trauma and Burn Patients

Examining the Triggers for Overdose Before and After A County-Wide Stay at Home Order Due to Covid-19: A Case Series and Comparison

Factors Associated with Psychiatric Hospital Length of Stay After Transfer from Medical Hospital

Integrating Payer and Provider Data to Identify Factors Associated with Outpatient Psychiatric Follow-Up After Inpatient Psychiatric Consults

Varying Presentations of Psychosis in Late-Stage Multiple Sclerosis: A Case Series

Catatonia: An Increasingly Recognized Manifestation of Lupus Cerebritis

First Episode Psychosis and the Role of the CL Psychiatrist

Dissemination: Trainee Engagement Can Help

- **Understand trainee skill levels**

- **Be approachable**

- **But don't expect them to approach as a default**
  - **Note: Not traditionally taught in mentorship articles**

Barriers and Challenges

Most projects are single site

Study design is often less rigorous than research studies

Time!

Tips

Always put structure to what you do

Use conference deadlines as your "deadline"

Write up what you present (i.e., poster to paper)
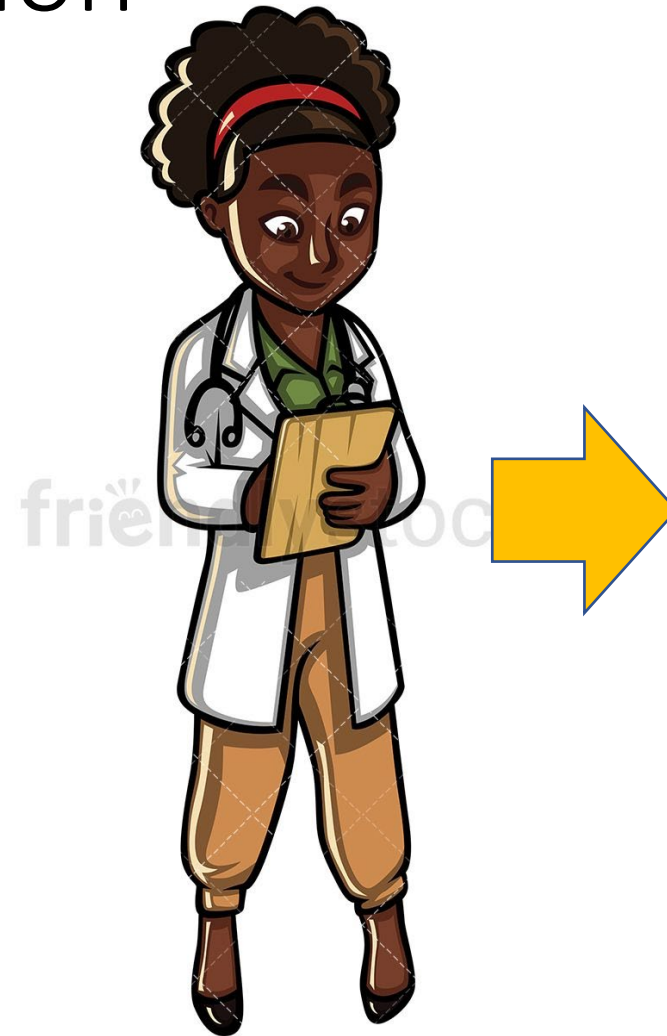
Get familiar with Excel

Understand the journals in your area of subspecialty interest

How to Write-Up a QI Project for Publication

- SQUIRE 2.0 (*Standards for Quality Improvement Reporting Excellence*)

- Provide framework for reporting new knowledge on how to improve healthcare

- Intended for reports that

    - Describe system level work to improve quality, safety, and value of healthcare

    - Uses methods to establish that observed outcomes were due to the intervention(s)

Ogrinc G, et al. BMJ Qual Saf 2016;25:986-92.

How to Write-Up a QI Project for Publication

- Text sections:

  - Introduction – Why did you start?

  - Methods – What did you do?

  - Results – What did you find?

  - Discussion – What does it mean?

Ogrinc G, et al. BMJ Qual Saf 2016;25:986-92.

Recommended Elements and Common Pitfalls

Manuscript Section	Elements	Common Pitfalls
Introduction	• Importance and relevance of QI problem beyond authors' site • Gap between what we currently know and what we need to know to achieve desired QI outcomes • Project aims	• Too long • Too much on review of importance and too little on evidence gap • Specific project aim not clearly articulated
Methods	• Context of the project • Theory connecting QI problem, context, and proposed intervention strategy • Multiple, iterative, intervention steps • Use of a family of measures, ideally including outcome, process (fidelity), and balancing (unintended consequences) measures	• Superficial description of, or general lack of attention to, context • No theory supporting intervention reported • Many intervention steps reduced to single intervention • Single measure used to track project impact
Results	• Data presented over time, with use of run or control charts • May include contemporaneous control group or unit to account for secular trends and co-interventions	• Data aggregated as simple before-after design
Discussion	• One short paragraph summarizing most important findings • Place study in context of others' work • Reflect on implications of results • Lessons learned, especially the influence of context on results • Discussion of how limitations may have affected findings • Future steps, in brief	• Discussion limited to implications for local institution or setting • Results repeated without analysis or deeper reflection • Reflections omitted • Lessons and context effects omitted • Listing of limitations, as if all of equal importance, without thoughtful consideration of potential effects
Conclusion	• Brief summary of key study findings	• Suggest "further research is needed" • Overgeneralize from study site to all settings

- Wong BM, et al. J Grad Med Educ 2016;8:128-33.

Where to Submit QI Projects for Publication

- http://www.ihi.org/education/IHIOpenSchool/resources/Pages/WhereToSubmitYourWritingQIFriendlyPeerReviewedJournals.aspx

Format

- Introduction to speakers [5-10 minutes]

- Dissemination in QI [20 minutes]

  - Overview

  - Examples

  - Barriers and Tips

- **Project Discussion – large group [20 minutes]**

Discussion Questions for the Group

- What project are you working on?

- Do you have data for this project?

  - If yes, how would you put this together as a publication?

  - If no, then how might you structure your project moving forward to help you disseminate?

Question Raised

- QI Project - Problem addressed: CHP ED not meeting goal of timely antibiotic administration to children with cancer and presumed neutropenia.

- Project start = 2018, already had a standard EMR designation for the patients on our tracking board ("CANCER FEVER"), standardized order-set for eval and mgmt

- Interventions tested in late 2018 with operationalized RN dyad approach:
  - Trained a select group of RNs with extra experience and practice accessing implantable ports and created an RN shift schedule such that at least one of the RNs on the Implantable Port Access Team is available 24/7
  - One RN weighs patient, checks for allergies and notifies MD to order 1st dose antibiotic, then prepares the antibiotic on site (or calls Pharmacy for preparation)
  - Implantable Port Access Team RN access the port and draws the labs

Question Raised

- Frequent audit-and-feedback to individual providers and RNs, primarily searching for barriers to timely antibiotic administration
- "Buzzer Beater" celebration of successful cases via email, naming RNs, PCTs and MDs who were part of a very successful case of timeliness, creating competition amongst the staff
- Interventions resulted in success through the remainder of 2018 and 2019
- Come early 2020, our performance began to drop, coincident with onset of the pandemic
  - Restarted email audit-and-feedback in September 2020, which helped for a few months
  - By mid-2021, with the onset of our ED patient surge and turn-over of many ED RNs, performance dropped further

Question Raised

- Can a project that has shown *not* to have sustained improvement over time be published?

- How would a group prepare a manuscript for this type of experience?

- Would it be worthwhile to explore level of reliability of various interventions and tell a story about the importance of high-reliability interventions for sustained change?

Discusion Questions for the Group

- Take-Aways

- Questions