Resident and Fellow

Quality Improvement & Patient Safety

Project Handbook

Table of Contents

Contact Information:

Crystal David, Pharm-D, BCPS
OSU-CHS ACGME Quality Chair
918-899-2830 (cell)
crystal.david@okstate.edu

Lisa Cummins, RN   MeLyssa D. Bailey, BA
Quality Manager CLER   Executive Assistant-ACGME
918-561-1526(office)   918-561-1241 (office)
918-944-8138(cell)   918-495-5674 (cell)
 lisa.cummins@okstate.edu   melyssa.d.bailey@okstate.edu

Special thank-you to Dr. Binh Phung, Pediatrics, for allowing use of components of the Pediatrics Quality Handbook.

QUALITY IMPROVEMENT PROGRAM BACKGROUND

Quality improvement (QI) can be defined as the systematic approach of measuring and identifying gaps between actual and desired quality of care and applying tools and improvement methods to make changes to the system that result in measurable improvements (i.e. closing the gap). Quality improvement can occur at any level of the health care system and it is important to have physician involvement at each level. Furthermore, learning these methods and how to use the Model for Improvement early in your training will provide you with the necessary tools to be able to continuously improve care for your patients throughout the rest of your career.

The Clinical Learning Environment Review (CLER) Pathways to Excellence (Appendix A) outline the Institutional expectations for an optimal clinical learning environment to achieve safe and high quality patient care. These pathways outline an expectation for resident/fellow education on quality improvement and healthcare disparities, as well as resident/fellow engagement in quality improvement projects and clinical site initiatives to reduce healthcare disparities.

OSU MC Quality Priorities 2019-2020
- Reduce catheter-associated urinary tract infections (CAUTI)
- Reduce central-line associated blood-stream infections (CLABSI)
- Reduce MDROs, specifically focused on MRSA and Cdiff
- Reducing falls with injury
- Proper utilization and documentation of restraints
- Med Safety:
    - Hypoglycemia management
    - Reduce Narcan use with opioid administration
    - Anticoagulant therapy (therapeutic)
- Pressure Injury Prevention
- Antibiotic Stewardship
- Patient Experience
    - Nurse Communication
    - Physician Communication
    - Communication about Medications
    - Environment Clean and Quiet
- Throughput

OSU-CHS QUALITY IMPROVEMENT (QI) PROJECTS: STEP-BY-STEP GUIDE

1. SELECT A PROJECT AND CONTACT A QI FACULTY ADVISOR

Most residency programs have selected to use the site-wide format at OSU Medical Center. This format allows for the committee and service line chairs to serve as the faculty advisor for quality improvement projects that are carried out as a group effort with monthly update reports to be given by residents/fellows assigned to that committee or service line. If you are unsure of your committee assignment, contact your program coordinator. If you would like to select a project on your own, please connect with a faculty advisor in that department and notify the ACGME Quality Representative lisa.cummins@okstate.edu of your project plans.

If you are completing an outpatient project or a project at a different site, the steps are still very similar, with goal for presentation at the Annual Resident Quality Improvement and Patient Safety Symposium held each spring.

2. REVIEW INSTITUTE FOR HEALTHCARE IMPROVEMENT (IHI) MODULES

IHI Modules

IHI offers "*Open School for Health Professions*," which includes free online courses, modules, and other excellent resources about quality improvement and patient safety. To get started, create a free account and log-in at:
https://www.ihi.org/_layouts/15/ihi/login/login.aspx

3. COMPLETE IRB DETERMINATION FORM

IRB Application

Most QI projects are exempt from IRB approval, but it may be necessary to complete the IRB process. Once the application is submitted, it takes less than 10 business days for approval. Your QI faculty advisor can provide you with examples of IRB applications, if needed. The contact person to submit IRB is amber.hood@okstate.edu (918) 561-1413.

Human Ethics Training

If your project is determined to be exempt, you do NOT need to complete human ethics training. However, if your QI project is not exempt and you have to complete a full IRB application you **MUST** complete the Human Ethics training. The training is conducted online and contains modules on topics including ethical principles, IRB regulations, informed consent, and vulnerable populations. Each module has a short quiz at the end to assess understanding.

4. CREATE AN AIM STATEMENT

See Appendix B (pages 7 and 8) for advice on creating an effective AIM statement from the Institute for Healthcare Improvement.

5. COMPLETE A PROJECT TIMELINE

Sample project timelines are included in Appendix C (page 9). The timeline should include pertinent steps and assigned duties, and should be coordinated with and approved by the faculty advisor for the project. This will include items such as deadlines for data review and collection (literature review, analysis of the data with the who/what/when/where/how), project implementation, PDSA cycles, and poster preparation.

6. PROJECT OVERVIEW

Discuss ways to determine the extent of the problem you are trying to address with your QI faculty advisor. Develop a better understanding of the problem and summarize the information you learn by completing the following:

- Perform a literature review related to your project. Note: Lou Ann Thompson, MLIS, AHIP (louann.thompson@okstate.edu), is at the OSU-CHS Medical Library. She is available to help assist with performing literature search.
- Create a general overview of the project by outlining the following:

> TITLE: Describe the initiative to improve health care by improving patient safety, effectiveness, patient centeredness, timeliness, or cost.
>
> AUTHORS: Provide name of team members and faculty advisor.
>
> AIM STATEMENT
> State the specific goal of the project (What are you trying to accomplish?) – See Appendix B
> http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx
>
> INTRODUCTION/BACKGROUND
> State the problem the QI project is addressing
> Summarize available current knowledge – describe the extent of the problem and why it is important
> State the rationale for the goal/aim
>
> METHODS
> Design and execute plan-do-study-act (PDSA) cycle(s):
> http://www.ihi.org/resources/Pages/Changes/default.aspx
> PDSA worksheet and examples:
> https://moc.connecticutchildrens.org/media/1005/pdsa_worksheet-guide.pdf
> Identify the quality improvement tools you will utilize
> http://www.ihi.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx
> Develop measurement plan (summarize details of the data collection and analysis plan, using the IHI tools for improvement).
> Describe the outcome measures you will be tracking for your project .
>
> CONCLUSION
> Describe your plan for sustainability of project or end point of project.
> State your plan for publication and/or presentation.

7. SCHEDULE REGULAR MEETINGS WITH YOUR QI FACULTY ADVISOR TO CHECK IN

It will be necessary to periodically (e.g. every 2-4 weeks) check-in with your advisor. Use these times to review your progress, ask for guidance, confirm PDSAs and data collection methods, review data, and make plans for scholarly activities related to your project (ex: institutional, local, state, and/or national conferences).

8. CONDUCT YOUR QI PROJECT

- Use the tools you have learned and apply the PDSA approach to test change.
- Pick a small enough change that you can complete at least two PDSA cycles in a short period of time (preferable within a few weeks).
- Use at least two of the seven key tools of quality improvement and write up at least two PDSAs.
- Work closely with your QI Faculty Advisor and team when using the tools and planning your PDSAs
- Consult with your QI Faculty Advisor if you have questions or concerns.

9. COMPLETE FINAL REPORT AND CLOSEOUT MEETING WITH QI FACULTY ADVISOR

Once you have finished your QI project, you will complete your final report in preparation for the Annual Quality and Patient Safety Symposium. The report should be completed and emailed to your QI faculty advisor, the ACGME Quality Representative, and your program coordinator.

After completing all of the above, you should contact your QI faculty advisor to arrange a closeout meeting. In this meeting, you will review your work throughout this experiential learning process and the results of your pre-and post-assessment surveys. You should reflect on your experience beforehand so that you are prepared to ask questions and give feedback on the process (see Appendix E for the template agenda).

10. PRESENT YOUR QI PROJECT

All residents and fellows are expected to present their projects at the Annual Quality Improvement and Patient Safety Symposium held each spring. It is also encouraged to present additionally at local, state, and national conferences.

Appendix A: CLER Pathways to Excellence

Expectations for an optimal clinical learning environment to achieve safe and high quality patient care.

Health-Care Quality (HQ):

HQ Pathway 1: Education on quality improvement

Formal educational activities that create a shared mental model with regard to health care quality-related goals, tools, and techniques are necessary in order for health care professionals to consistently work in a well-coordinated manner to achieve health care quality improvement goals.

Properties include:

- Residents/fellows receive progressive education and training on quality improvement that involves experiential learning.
- Residents/fellows and faculty members are engaged in quality improvement educational activities where the clinical site's systems-based challenges are presented, and techniques for designing and implementing systems changes are discussed.
- Residents/fellows and faculty members are familiar with the clinical site's priorities for quality improvement.
- The clinical site's quality improvement education program is developed collaboratively by quality officers, residents/fellows, faculty members, nurses, and other staff members to reflect the clinical site's quality program's experience and goals.
- Faculty members report that they are proficient in clinical quality improvement
- Residents/fellows are engaged in periodic quality improvement educational activities in which systems-based challenges are highlighted and approaches to designing and implementing system changes are discussed.

HQ Pathway 2: Resident/fellow engagement in quality improvement activities

Experiential learning is essential to developing the ability to identify and institute sustainable systems-based changes to improve patient care.

Properties include:

- Residents/fellows are actively involved in the quality improvement activities at the clinical site.

HQ Pathway 3: Residents/fellows receive data on quality metrics

Access to data is essential to prioritizing activities for care improvement and evaluating success of improvement efforts.

Properties include:

- Residents/fellows receive, from the clinical site, specialty-specific data on quality metrics and benchmarks related to their patient populations.

Appendix A: CLER Pathways to Excellence

HQ Pathway 4: Resident/fellow engagement in planning for quality improvement
In order to understand quality from a systems-based perspective, it is necessary to be familiar with the entire cycle of quality improvement (QI) from planning through execution and re-assessment.
> ***Properties include:***
> - Residents/fellows participate in departmental and clinical site-wide QI committees. The focus will be on resident/fellow participation on the clinical site's QI committees, from department-level committees to committees of the governing body.
> - The clinical site monitors resident/fellow efforts in QI. *The focus will be on basic tracking of resident/fellow involvement in QI, keeping the   clinical site's governing body and GMEC apprised of resident/fellow involvement, and   developing site-specific strategies to maximize resident participation.*

HQ Pathway 5: Resident/fellow and faculty member education on reducing health care disparities
Formal educational activities that create a shared mental model with regard to health care quality-related goals, tools, and   techniques are necessary for health care professionals to consistently work in a well-coordinated manner to achieve a true   patient-centered approach that considers the variety of circumstances and needs of individual patients
> ***Properties include:***
> - Residents/fellows and faculty members receive education on identifying and reducing   health care disparities relevant to the patient population served by the clinical site.
> - Residents/fellows and faculty members receive training in cultural competency relevant to the patient population served by the clinical site.
> - Residents/fellows and faculty members know the clinical site's priorities for addressing healthcare disparities.

HQ Pathway 6: Resident/fellow engagement in clinical site initiatives to address health care disparities
Experiential learning is essential to developing the ability to identify and institute sustainable systems-based changes to address healthcare disparities.
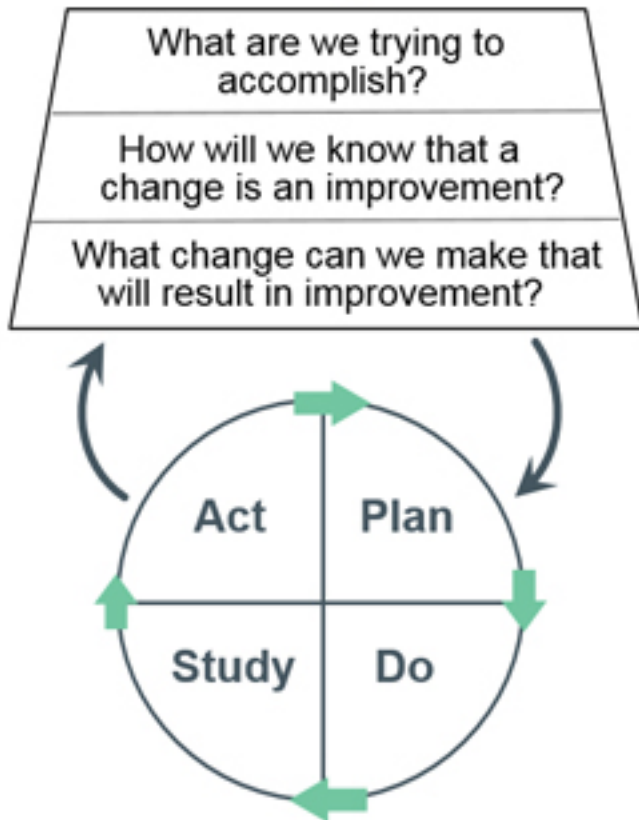> ***Properties include:***
> - Residents/fellows are engaged in QI activities addressing health care disparities for the vulnerable populations served by the clinical site.

Appendix B: Setting Aims

Science of Improvement: Setting Aims

Improvement requires setting aims. An organization will not improve without a clear and firm intention to do so. The aim should be time-specific and measurable; it should also define the specific population of patients that will be affected. Agreeing on the aim is crucial; so is allocating the people and resources necessary to accomplish the aim.

In 1999, the Institute of Medicine (IOM) in Washington, DC, USA, released _To Err Is Human: Building a Safer Health System_, a report that brought much public attention to the crisis of patient safety in the United States. In 2001, the IOM issued a second report, _Crossing the Quality Chasm: A New Health System for the 21st Century_, which outlines six overarching "Aims for Improvement" for health care:

- **Safe:** Avoid injuries to patients from the care that is intended to help them.
- **Effective:** Match care to science; avoid overuse of ineffective care and underuse of effective care.
- **Patient-Centered:** Honor the individual and respect choice.
- **Timely:** Reduce waiting for both patients and those who give care.
- **Efficient:** Reduce waste.
- **Equitable:** Close racial and ethnic gaps in health status.

Many organizations use the six IOM aims to help them develop their aims.

Appendix B: Setting Aims

Science of Improvement: Tips for Setting Aims (Institute for Healthcare Improvement/IHI)

1. **State the aim clearly.** Achieving agreement on the aim of a project is critical for maintaining progress. Teams make better progress when they are very specific about their aims. Make sure that the aim statement describes the system to be improved, and the patient population. In addition, ensure that the aim gives guidance on the approaches to improvement.

2. **Include numerical goals that require fundamental change to the system.** Teams are more successful when they have unambiguous, focused aims. Setting numerical goals clarifies the aim, helps to create tension for change, directs measurement, and focuses initial changes. For example, the aim "Reduce operating room time" is not as effective as "Reduce operating room time by 50% within 12 months." Including numerical goals not only clarifies the aim but also helps team members begin to think about what their measures of improvement will be, what initial changes they might make, and what level of support they will need.

3. **Set stretch goals.** A "stretch" goal is one to reach for within a certain time. Setting stretch goals such as "Reduce operating room time by 50% within 12 months" communicates immediately and clearly that maintaining the status quo is not an option. Effective leaders make it clear that the goal cannot be met by tweaking the existing system. Once this is clear, people begin to look for ways to overcome barriers and achieve the stretch goals.

4. **Avoid aim drift.** Once the aim has been set, the team needs to be careful not to back away from it deliberately or "drift" away from it unconsciously. The initial stretch goal "Reduce operating room time by 50% within 12 months" can slip almost imperceptibly to "Reduce operating room time by 40%" or "by 20%." To avoid drifting away from the aim, repeat the aim continually. Start each team meeting with an explicit statement of aim, for example, "Remember, we're here to reduce operating room time by 50% within 12 months," and then review progress quantitatively over time.

5. **Be prepared to refocus the aim.** Every team needs to recognize when to refocus its aim. If the team's overall aim is at a system level (for example, "Reduce adverse drug events in critical care by 30% within 12 months"), team members may find that focusing for a time on a smaller part of the system (for example, "Reduce adverse drug events for critical care patients on the cardiac service by 30% within 12 months") will help them achieve the desired system-level goal. Note: Don't confuse aim drift, or backing away from a stretch goal (which usually isn't a good tactic), with consciously deciding to work on a smaller part of the system (which often is a good tactic).

Examples of Effective Aim Statements
- Reduce adverse drug events (ADEs) in critical care by 75 percent within 1 year.
- Improve medication reconciliation at transition points by 75 percent within 1 year.
- Reduce high-hazard ADEs by 75 percent within 1 year. For example, reduction of 75 percent in one of the following:
    - Overdoses from benzodiazepines and narcotics
    - Percentage of patients with incidence of bleeding in patients being treated with anticoagulant medications
    - Percentage of patients on insulin with any blood sugar <50
- Increase the number of surgical cases between cases with a surgical site infection by 50 percent within 1 year.
- Achieve > 95 percent compliance with on-time prophylactic antibiotic administration within 1 year.
    http://www.amchp.org/TransformationStation/Documents/QI%20Step%20by%20Step%20Guide.pdf
    http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx

Appendix C: Sample Project Timelines

Tasks (to be completed in the following order)	June	July	August	September	October	November	December
1. Select a Project and Contact QI Faculty Advisor	■						
2. Complete IRB Determination Form	■						
3. Take Pre-assessment Survey	■						
4. Required Readings and IHI Modules		■	■				
5. Read QI Project Background Materials		■	■				
6. Attend QI Project Team Meetings			■	■			
7. Conduct QI Project				■	■	■	
8. Complete Final Report						■	■
9. Take Post-assessment Survey							■
10. Attend Closeout Meeting with QI Faculty Advisor							■

SAMPLE TIMELINE: (should also designate who is responsible for each task)

12/15-31: Decide on project, literature review and other duties assigned, IRB request

01/01: Literature review complete, project outline complete.
Report progress on plan for data collection and develop plan for any identified barriers (include who/what/where/when/how).

01/15: Initial survey completed/data collection.

01/15-31: PDSA 1 complete- plan education methods and times, assign educator roles (prepare ppt, present data, possible quiz vs review at end of brief presentation).

02/01-4/15: Carry out additional PDSAs and complete project (for this project-educate selected resident programs and complete post-survey). If we have data from quality, will add an assessment of the current problems identified with telemetry utilization with plan for next cycle to address with telemetry protocol.

04/15-04/30: Prepare poster presentation –tasks previously assigned in project outline.

05/01: Email your Faculty Advisor, Crystal David, Lisa Cummins and MeLyssa Bailey finalized presentation for poster printing (See Appendix G).

05/18: Poster presentation set-up will be available from 7:00am to noon. Poster numbers will be assigned in order received. If in same specialty they will be grouped together in consecutive order.

05/19: Present at Resident Quality Improvement and Patient Safety Symposium.

Appendix D: Sample Closeout Meeting Agenda

Agenda Items:

1. Review final report, including tools used and PDSA cycles

2. Discuss what went well with your project and what could have been done differently

3. Discuss suggestions to improve the learning experience during your QI project (i.e., resources, readings, etc.)

4. Discuss key learning you will apply in your future work

5. Discuss the sustainability of your project even after you are gone. Who will sustain the project? What will it look like?

6. Discuss importance of lifelong learning and application of QI knowledge and skills throughout your career (i.e., if you are in practice, and someone asked you to do a project, how would you do it?)

Appendix E: Final Report Template

Instructions:
Complete your poster presentation report and submit to your **QI faculty advisor** and the **program coordinator** for revisions prior to the closeout meeting.

1. Project Background:
    a. Describe the specific area of care that you focused on.
    b. State the problem or the "gap" in care that you identified.
    c. Include any baseline data that was collected before you started the QI project.

2. Project Aim:
    a. Please paste your project aim statement here, or attach your completed aim statement.

3. Methods:
    a. Attach the plan-do-study-act (PDSA) cycle(s) that you designed and executed.
    b. Attach any tools that you used.

4. Results:
    a. Attach the data you collected and/or analyzed.

5. Conclusions:
    a. What did you learn?
    b. Describe how you think you can apply this experience to potential future clinical problems you are likely to encounter.

6. Sustaining Improvements / Next Steps
This is to allow you to think about how you can sustain the project after you leave. If your QI project resulted in change that was an improvement, think about:
    a. Who should be assigned to carry out the change or project going forward?
    b. What data should continue to be collected in order to monitor the change? How should the data be collected? Who should collect the data?
    c. What clinic or hospital leader should be informed of your sustainability plan so that they can track the project going forward?

Appendix F: 2018 Resident Quality Projects

Poster 1: *No Flu for You: Improving Influenza Vaccination Participation*
> **Faculty Advisor:** Dr. Erin Kratz, Attending Physician
> **Authors:** Drew Anthony, D.O., PGY1, Logan Hardin D.O., PGY1, Daniel Tran, D.O., PGY2 and Rebekah Kriegsman, D.O.,PGY1

Poster 2: Improving ENT Page Response Time
> **Faculty Advisor:** Dr. Tom Hamilton, D.O., Program Director
> **Authors:** Jaye Bea Downs, D.O., PGY4, Kahren Aydinyan, D.O., PGY5, Chase Nelson, D.O., PGY3 and Margo Tanghetti, D.O., PGY2

Poster 3: Hepatic Fanatic: Increasing Hepatitis Screening Rates in Outpatient Settings
> **Faculty Advisors:** Dr. Andrea McEachern, D.O. and Crystal David, PharmD
> **Authors:** Colin Morgan, D.O., PGY3, Whitney Engheta D.O., PGY2, Michael Hitsman, D.O., PGY1, Joshua Redmond, D.O., PGY1, Jason Postlethwaite, D.O., PGY1

Poster 4: Improving Tobacco Screening at OSU-HCC and Eastgate
> **Faculty Advisor:** Dr. Steffen Carey, D.O.
> **Authors:** Philip Zrenda, D.O., PGY3, Aaron Bennett, D.O., PGY2, Christin Baker-Hankton, D.O., PGY1 and Kathleen Postlethwaite, D.O., PGY1

Poster 5: Annual Diabetic Foot Exam Clinical Documentation Trial, Comparison of 2017 and 2018 Data
> **Faculty Advisor:** Dr. Amanda Gorden-Green, D.O.
> **Authors:** Ambreen Sarmast, D.O., PGY2, Andrew Crow, D.O., PGY1, Kim Barron, D.O., PGY1 and Glennda Tiller, D.O., PGY1

Poster 6: Analysis of Blood Transfusions Utilizing a Restricted Hemoglobin Threshold and a Transfusion Review Process
> **Faculty Advisor:** Kathy Cook, D.O.
> **Authors:** Nathan Weber, D.O., PGY 2, Hanna Crow, D.O., PGY1 and Fady Hanna, D.O., PGY1

Poster 7: Improving Documentation of Depression Screening in the Outpatient Setting
> **Faculty Advisors:** Dr. Amanda Carey, D.O. and Dr. Regina Lewis, D.O.
> **Authors**: Tim Bushyhead, D.O., PGY3, Shaylea Shebester, D.O., PGY2, Caleb Prentice, D.O., PGY1, and Kealan O'Neiill, D.O., PGY1

Poster 8: Social Media for Improving A1C
> **Faculty Advisor:** Dr. Moncy Varkey, D.O., Associate Program Director, Comanche County Memorial Hospital
> **Authors**: Mariam Bennett, D.O., PGY3, Mercedez Bernard, D.O., PGY3, Hunter Janz, D.O., PGY3 and Iryna Polyakova, D.O., PGY3

Poster 9: Evaluating Recovery Following Colorectal Surgery at OSU MC
> **Faculty Advisor:** Dr. Adam Bradley, D.O.
> **Authors:** Willy Bustinza, D.O., PGY5, Justin Haning, D.O., PGY1 and Austin Carlisle, D.O., PGY1

Poster 10: Getting a Little Loopy: Delirium Risk Assessment
> **Faculty Advisor:** Dr. Jana Baker, D.O., FACOI
> **Authors:** Robert Aran, DO, PGY2, Caleb Severns, D.O., PGY2, Sully Drotar, D.O., PGY3, Jennifer Thomas, D.O., PGY3, Brandy Kalami, D.O., PGY2 and Tiffany Scheuplein, D.O., PGY1

Poster 11: Randomized Chart Review for Documentation within 24 hours of Admission for Resuscitation Preference
> **Faculty Advisor:** Katherine Cook, D.O. FACOI
> **Authors:** Kenneth Argo, D.O., PGY4, Michael Arquisola, D.O., PGY3, Brie Roepke, D.O., PGY 3, Hope Burkett, D.O., PGY4, Brenton Priest, D.O., PGY2, Reagan Gill, D.O., PGY1, Dustin Cheney, D.O., PGY2, Kim Barron, D.O., PGY1 and Bo Mansell, D.O., PGY5

APPENDIX G: 2019 Resident Quality Projects

Poster 1: Repetition is Key: A Retrospective Analysis of Perioperative Antibiotic Reading – Anesthesiology
Faculty Advisor: Brian Harris, D.O.
Authors: Tate Triska, D.O. (PBY), Fady Hanna, D.O. (CA-1) and Michael Moore, D.O. (CA-3)

Poster 2: Improving the Safety and Efficiency of Labor Epidural Placement
Faculty Advisor: Kimberlie Dullye, D.O.
Authors: Kale Goerke, D.O. (CA-1), Ross Tanzer, D.O. (CBY) and Michael Moore, D.O. (CA-3)

Poster 3: Systematic Review of Pre-Admission Testing: An Update on Guidelines
Faculty Advisors: Sarah Carter, D.O. and Brad White, D.O.
Authors: Jaime W. Thompson, D.O. (CBY), John Grose, D.O. (CA-1) and Michael Moore, D.O. (CA-3)

Poster 4: Declare the Past, Diagnose the Present and Simulate the Future: Can Simulation Prepare Physicians for Catastrophic Events?
Faculty Advisor: Trevor Bright, D.O.
Authors: Michael Moore, D.O. (CA-3) and Maxwell Sencherey, D.O. (CA-2)

Poster 5: Overcoming Barriers to Promote Advance Care Planning Discussions in the Outpatient Setting: Is There a Better Way?
Faculty Advisors: Ashton Clayborn, D.O. and Robert R. King, M.D.
Authors: Nikki Eagle Road, D.O. (PGY-1), Mitchell Sanford, D.O. (PGY-1) and Quinton Tieu, D.O. (PGY-3)

Poster 6: Colorectal Screening: An Intervention to Improve Your Bottom Line
Faculty Advisor: T. Sanford, D.O.
Authors: L. Sanford, D.O., T. Tandberg, D.O., H. Yang, D.O. and J. Lowe, D.O.

Poster 7: Bringing Resident Awareness of Clinical Research Trails for Osteopathic Manipulative Treatment (OMT)
Faculty Advisor: Mark Thai, D.O.
Author: Angela Tyson, D.O., (PGY-4), NMM/OMM +1

Poster 8: Improving Documentation of Blood Product Consent in the Outpatient Setting
Faculty Advisors: Sarah Hall, D.O. and Regina Lewis, D.O.
Authors: Caleb Prentice, D.O. (PGY-3), Glennda Tiller, D.O. (PGY-2), Kathleen Postlehwaite, D.O. (PGY-2), Erica Beal, D.O. (PGY-1) and Frank Goodman, D.O. (PGY-1)

Poster 9: Barriers in the HCV treatment cascade after confirmed diagnosis
Faculty Advisors: Steffen Carey, D.O. and Crystal David, Pharm D, BCPS
Authors: Daniel de Gaston, D.O., Michael Hitsman, D.O., Christopher, Long, D.O., Jantzen Matli, D.O., Jason Postlethwaite, D.O., Tate Vance, D.O.

Poster 10: Clinical Strategies to Reduce Heart Failure Hospitalizations

Faculty Advisor: Amanda Gorden Green, D.O.
Authors: Dev Jaiswal, D.O., Rusty Vann, D.O., Gershon Koshy, D.O. and Kelly Natarajan, D.O.

Poster 11: Preventing Upper Aerodigestive Tract Bleeding in the Anticoagulated Patient
Faculty Advisor: Tom Hamilton, D.O.
Authors: Chase Nelson, D.O. (PGY-4), Jaye Bea Downs, D.O. (PGY-5); Margo Tanghetti, D.O. (PGY-3), Clay Farahani, D.O. (PGY-2) and Mason Skinner, D.O. (PGY-1)

Poster 12: Change in Provider Workflow to Promote 'Before Noon' Patient Discharges
        Faculty Advisor: Kathy Cook, D.O.
        Authors: George Demopoulos, D.O. and Robert P. Aran, D.O.

Poster 13: Initiative to reduce Central Line Associated Bloodstream Infection Rates: an Infectious Disease Prevention Committee QI Project
        Faculty Advisor: Amanda Gorden Green, D.O., Kaleb Veit, D.O.
        Contributing Advisor: Michelle Murtaza-Rossini MPH, BSN, RN
        Authors: Michael Engheta, D.O. (PGY-3), David Alcorn, D.O. (PGY-2) and James Pelton, D.O. (PGY-1)

Poster 14: CT Guided Core Needle Bone Biopsy for Non-Vertebral Osteomyelitis: Is It Necessary?
        Faculty Advisor: Donald von Borstel, D.O.
        Authors: Cameron Smith, D.O, Gregory Bradley, D.O. and Yoon Cho, D.O.

Poster 15: Probiotic Protocol: Prevention of Hospital Acquired Clostridium difficile Associated Diarrhea
        Faculty Advisor: M. Bernard, D.O.
        Authors: D. Vardeman, Megan, Garibay, N. McFarland, D.O., P. Flournoy, DO and K. Greuel, D.O.

Poster 16: Antibiotic Stewardship Interventions and Their Effects on Prescribing Practices: A Prospective Cohort Study
        Faculty Advisor: Troy Harden, D.O.
        Authors: Larry Elliott, D.O., Jalal Moharreri, D.O., Colin Mychak, D.O. and Troy Harden, D.O.

Poster 17: Prevention of Syncope during IUD Placement, a quality improvement project
        Faculty Advisor: William Po, M.D.
        Authors: Thanh Luu, D.O. (PGY-2), Kent Abernathy, D.O. (PGY-4) and Darren Vargas, D.O. (PGY-2)

Poster 18: Analysis of O-Negative Blood Transfusions and Implementation of Utilization Policy
        Faculty Advisor: Justin Chronister, D.O.
        Authors: Nekita Patel, D.O., Hanna Crow, D.O. and Rebecca Gupton, D.O.

Poster 19: Documentation of Code Status in Initial Admitting and Consulting Documentation, A Randomized Chart Review
        Faculty Advisor: Katherine Cook, D.O.
        Authors: Hope Burkett, D.O., Jared Lepley, D.O., Alainna Simpson, D.O. and Michael Warren, D.O.

Poster 20: Perioperative Glycemic Control, Mortality and Sternal Wound Rate in CABG Patients
        Faculty Advisor: Amanda Gorden Green, D.O.
        Authors: Alexander Thoman, D.O., Andrew Hale, D.O., Gershon Koshy, D.O. and Zach Beam, D.O.

Poster 21: Advancing Advance Directives in the Outpatient Setting
        Faculty Advisor: Erin Kratz, D.O.
        Authors: Kealan O'Neill D.O., Stephen Granger, D.O., Scott Russ, D.O., Barry Dockery, DO, Amrit Dockery, D.O., Liz Severns, D.O., Zach Thomas, D.O.

APPENDIX H: Poster Information - Checklist

Content
- ❑ Add poster title to presentation. List posters, faculty advisor(s) with credentials, authors with credentials and PGY status, and institutional affiliations.
- ❑ Logical sequence of information flow (left to right, and top to bottom).
- ❑ Photographs graphs, tables, and charts are used whenever possible to display data or convey important information.
- ❑ Each section is concise and clear. Wording should allow for each graphic, section, table to 'stand alone.'
- ❑ Avoid abbreviations
- ❑ Cite references in standard style (there should be several references utilized)
- ❑ **Review with Faculty Advisor for the project prior to submitting.**

Appearance
- ❑ Poster meets the size restrictions of the scientific program (maximum size is 24" tall by 36" wide).
- ❑ Poster construction will accommodate method of display at the meeting.
- ❑ Abstract is posted in the proper position on the poster (optional).
- ❑ The poster does not appear cluttered.
- ❑ Major headings can be read from at least 4 to 5 feet away.
- ❑ Text and figures can be read from 2 to 3 feet away.
- ❑ Graphs and figures can be read from 2 to 3 feet away.
- ❑ Font is similar throughout (no more than three fonts sizes used for poster's title, section title, and text).
- ❑ Color, lines, boxes, and arrows are used to emphasize important points.
- ❑ Content can be absorbed in 10 minutes or less.

Sections
- ❑ **Background:** This is the introduction, it provides the reader a short background of the topic you are discussing/presenting. The reader needs to very quickly understand why you chose this general topic (why is it important?). This can be a bulleted list or paragraph, maximum length of approximately 200 words. Avoid providing an overview of the entire project.
- ❑ **AIM Statement**: One sentence that includes the goal of the project with specific percentage improvement (if applicable) and end date (can be Month/Year).
- ❑ **Methods**: Briefly describe qualitative (descriptive) and quantitative results using bullets or limited text.
- ❑ **Results**: Use figures with figure legends, graphs, and tables to enhance the presentation of your results, not just a text description.
- ❑ **Conclusions:** Remind the reader of your AIM, discuss relevance of your findings and limitations. This would include a brief discussion of things that went well and reasons goals may not have been met (limitations). (Example: Order set utilization did not seem to be related to lack of knowledge of its existence, but rather the difficulty in navigating the order set.)
- ❑ **Next Steps:** Describe how you will use this information to continue to improve quality of care and patient safety (further PDSA for your project or implementation).

APPENDIX I: Poster Information - Printing

❑ The OSU-CHS Medical Library will be providing large format-poster printing for the 2020 Quality Improvement & Patient Safety Symposium. ***All posters this 2019-2020 academic year must be submitted by the deadline of May 8. Any posters submitted after this due date cannot be accepted and it will be at the expense of the resident or department to pay. THERE WILL BE NO EXCEPTIONS.***

❑ Additionally, **all Departments** are required to send their final file in MS Powerpoint and PDF to MeLyssa Bailey at melyssa.d.bailey@okstate.edu and copy Dr. Crystal David at crystal.david@okstate.edu and Lisa Cummins at lisa.cummins@okstate.edu. Please proofread all material prior to submission (especially resident/fellow names). MeLyssa will upload all final files to The OSU-CHS Medical Library. Posters will be retained in a folder to create an online flipbook.

❑ Maximum size is 24" Tall by 36" Wide. To create a true size slide in PowerPoint, select **D**esign, **S**lide Size->**C**ustomer Slide Size-> **W**idth: 36; **H**eight 24"-> **E**nsure Fit. **Save** the poster first. Then do a "**S**ave as Adobe PDF", then selecting "PDF". Send **BOTH** formats to MeLyssa Bailey at melyssa.d.bailey@okstate.edu and copy Dr. Crystal David at crystal.david@okstate.edu and Lisa Cummins at lisa.cummins@okstate.edu.

❑ Do not name your file "Presentation". You will be given a Poster #. When naming your file use this format: Poster number-> dash symbol-> brief template name-> dash symbol->QI 2020.
Example: Poster 3-Blood Transfusions-QI 2020

❑ OSU-CHS POSTER GUIDELINES AND TEMPLATES:

http://libraryguides.health.okstate.edu/postertemplates
*This link provides you with OSU-CHS poster templates and instructions for creating your template as a file. **These websites contain information for Research Day, please use our guidelines for the QI Symposium.***

Or you may use Matt Vassar's link for templates/instructions:

http://vassar.pbworks.com/w/page/117691287/How%20to%20create%20a%20research%20poster

Additional General Resources for Academic Posters:

Designing Conference Posters (includes do's and don'ts)
http://colinpurrington.com/tips/poster-design

Scientific Poster Design: How to keep your poster from resembling an abstract painting
http://hsp.berkeley.edu/sites/default/files/ScientificPosters.pdf

How to make an Academic Poster
Annals of Surgery and Medicine
http://www.sciencedirect.com/science/article/pii/S2049080116301303

Appendix J: Poster Information – 2020 Deadlines

OSU-CHS Resident/Fellow Quality Improvement and Patient Safety Symposium
<mark>Tuesday - May 19, 2020</mark>
OSU MC Auditorium, 2nd Floor
7:00 am to 9:00 am
Poster Presentation and Judging

Deadlines:

January 15, 2020   Email crystal.david@okstate.edu of notification of intent to participate.

February 10, 2020   Email crystal.david@okstate.edu with abstract of poster. You will receive email confirmation with further details and instructions for the symposium.

April 24, 2020   Submit draft of your poster by 5pm to crystal.david@okstate.edu after review by your faculty advisor.

May 1, 2020   Using the dimensions on page 17, Appendix I, submit final large poster template via PowerPoint (ppt) **and** Adobe PDF to Lisa Cummins lisa.cummins@okstate.edu by 10am for submission for uploading to the approved printer. Copy crystal.david@okstate.edu and melyssa.d.bailey@okstate.edu on the email.

May 8, 2020   The OSU-CHS Medical Library will complete poster printings.

May 18, 2020   Poster presentation set-up will be available from **7:00 am to Noon** in the Doctor's room (right before you get to the OSU Auditorium, 2nd Floor OSU MC).   Poster numbers will be assigned and push pins will be provided for mounting. Please put push pins on each corner (4).

May 19, 2020   Resident/Fellow Quality and Patient Safety Symposium will be held, **starting at 7:00 am**.

Submission Process Details

- All medical students, residents, and fellows that are engaged in a quality or patient safety project are encouraged to participate. Projects can be in progress or completed.
- Submitted abstracts that are related to quality and/or patient safety will be accepted for participation in the symposium, included in the program overview, and have the opportunity to participate in poster presentations. Selected abstracts will participate in podium presentations.
- Email notification of intent to participate must include the completed draft QI poster template PowerPoint slide. Clearly indicate all participants, department, program director, faculty advisor for the project if applicable, and poster size (maximum 24 inches in height by 36 inches in width).