



Workforce Development and Improving Health Outcomes Through Practice-Based Research & QI

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Objectives

- **Review role** of practice-based research and QI in mitigating health inequities and in workforce development
- **Outline examples** of clinical site research and QI projects that aim to improve local health care delivery and outcomes
- **Provide strategies** for actively engaging stakeholders in the process
- Identify elements of project design to ensure **utility**, **feasibility**, and **sustainability**
- Conduct interactive session:
 - *Asking a clinically relevant question and strategies for systematically answer it, maximizing limited resources and interprofessional collaboration*

Overview

Practice-Based Research and QI

Opportunity for clinicians and health professions students to participate in or conduct clinical site-specific projects, impacting:

Workforce development

- Statewide and national workforce shortages across multiple disciplines¹
- Training health professions students is a critical part of workforce development
- Participation shown to impact recruitment and retention²

Interprofessional collaboration

- Engagement of preceptors and stakeholders in professional development

Improving outcomes

- Projects aim to improve quality or access to care, maximizing limited site resources and mitigating health disparities. Opportunity to incorporate EBP.

Opportunities

Academic Resources

- Health professions students frequently have opportunity to participate in or conduct projects at clinical sites.
- Doctor of Nursing Practice (DNP) NP student requirement

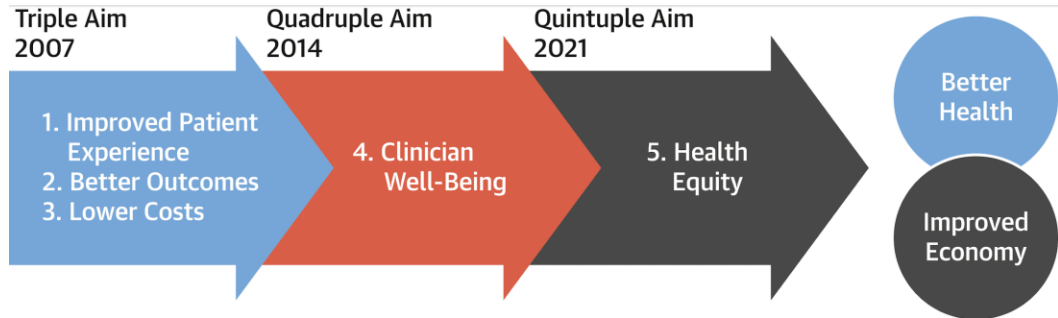
Patient Benefits

- Opportunity to evaluate practice patterns, incorporate evidence into practice, improve patient care

Maximize Limited Resources

- Leverage academic resources of doctoral programs for design, implementation, evaluation.

Consider the Quintuple Aim



Nundy S, Cooper LA, Mate KS. The quintuple aim for health care improvement: A new imperative to advance health equity. *JAMA*. 2022;327(6):521-522.

Site Project Examples

Provider education - Evidence-based practice

- Chronic disease management, Mental health
- Advance directives
- Implement screening tools - depression, sleep apnea

Patient education - tools (health literacy)

- Chronic disease management – DM, HTN
- Prevention

Program evaluation

- Transitional care, telehealth programs

QI vs Research?

- QI tailored to needs of site, resources vs Generalizability
- Ask and answer locally clinically relevant question
- Systems approach
- Design for site feasibility, sustainability?

Considerations

- Needs?
- Resources?
 - Site resources:
 - Time
 - Personnel
 - Capacity
 - Technical capacity (eg rigorous study design, implementation, analysis so quality results)

Research

- **Aim – increased generalizable knowledge**
(eg better care of patients)
- Formal network – eg PBRNs – check professional organizations, AHRQ
- ***Pros:***
 - Opportunity to increase sample size – eg patients, providers, pts with certain dx, other characteristics, etc
- ***Cons/Limitations:***
 - Limited ability to tailor to site needs and resources – impact feasibility & sustainability

Quality Improvement

- **Aim: test a change**

PDSA cycle

- **Plan:** Develop implementation and evaluation plan
 - **Do:** Implement and observe
 - **Study:** Analyze: What did you learn?
 - **Act:** What can you conclude?
-
- **Pros:** Tailored to site needs & resources. Single or multiple cycles; able to tailor implementation in response to previous cycle results
 - **Cons/limitations-** limited sample size, may be difficult to draw larger conclusions, identify statistically significant (not just clinically significant) findings



AHRQ: <https://www.ahrq.gov/health-literacy/improve/precasions/tool2b.html>

IHI: <https://www.ihi.org/resources/tools/plan-do-study-act-pdsa-worksheet>

Deming: <https://deming.org/explore/pdsa/>

Program Evaluation

- **Framework for evaluating public health programs** – e.g. CDC
- Includes elements and standards for process
- Starts and ends with engaging stakeholders
- **Pros:** Can tailor to site needs and resources- can incorporate considerations for feasibility and sustainability
- **Cons/limitations-** limited sample size, may be difficult to draw larger conclusions, identify statistically significant (not just clinically significant) findings



CDC (2017)

<https://www.cdc.gov/evaluation/framework/index.htm>

Process

Collaboration

- Engagement of site stakeholders
- ID problem and project purpose
- Project Design

Preceptor role

- Consultant
- Member, Doctoral Committee

Approvals

- Site approval for project
- University IRB – ensure human subjects protection

Implementation

- Tailored to site, considering feasibility, sustainability

Dissemination

- Executive summary of findings and future recommendations provided to site

Engaging Stakeholders

Strategies

- Relevance
 - Important? What's in it for them?
- Start:
 - *What's bothering them in practice?*
- Feasibility
 - Overwhelm/burnout risk?
- Demonstrate value –
 - Timing (paid) time during day (med staff meeting, etc) – no after hours
- Feedback & insight (to develop and refine project)
- Champion(s)?
- Professional development
 - Consultant, special committee member, DCC (adjunct) status

Ethical Considerations

Consider:

1) *Respect for persons, 2) beneficence, and 3) justice (Belmont Report)*

Examples:

- Equitable
 - All eligible participants invited to participate. Also consider systems level (stakeholders) – providers, MAs, front desk staff
- Voluntary
 - How protect against potential coercion? May withdraw at any time?
- Privacy
 - Collecting any identifiable information? Risks? Examples (Disclosures, Demographic info)
- Benefit?
 - Improved pt care, work flow, professional development

Approvals

Obtaining Approval

What is required by site and any partners?

IRB

- Site or academic partner?
- Federal guidelines for Human Subjects Research (also guidance for QI, Program Eval)
- Academic partner – sites/organizations may defer to academic partner IRB review (maximize limited resources)

Site approval

- Site policies and procedures
- Formal? Medical Director/CMO?
- Engage, explore early in process – design phase. Considerations? Limitations? Requirements? Duplication? Timeline? Concurrent?

Process Example

- Site authorization (signed letter of support) – by whatever process required by site/organization
- Included in Academic institution IRB packet – IRB Determination of vs. Application for Human Subjects Research

QI Exemplar #1

Routine Depressing Screening

- Routine Depression Screening: PHQ-2 vs PHQ-9
- Evidence-based recommendations for depression screening in adults
- FQHC (high volume, high acuity)
- Observed clinical issue while in clinical rotation
 - Frequent, time consuming, impacted patient care and flow
 - Systems issue
- Reviewed evidence to inform plan, options, rationale (PHQ-2 vs 9, what other sites/practices doings? Lessons learned? Lit Review!) Systematic review of the literature
- Developed plan
 - Site/practice considerations
 - Engaged stakeholders
 - Feasibility & Sustainability
 - Phases?

QI Exemplar #1

Routine Depressing Screening

- Phase I
- First step: Needs to assess ID provider needs, perceptions, buy in
- Next step: (Phase II) – implement any changes, eg use of PHQ-9, use of tablet for patients to complete screening tool themselves, professional development for MAs, (and front desk if tablet) – systems level considerations

QI Exemplar #1

Routine Depressing Screening

- Proposal development (roles of Doctoral committee, site preceptor consultant)
- Approvals: Formal Site approval and IRB Review
- Implementation
- Evaluation
- Dissemination - **aggregate** findings and recommendations provided to site (Executive Summary)

QI Exemplar #1

Routine Depressing Screening

Phase I Project –Provider input, assess needs, preferences/perceptions

- **Intervention:** Brief overview/presentation (15 mins) – eg synchronous at med staff meeting, morning huddle, vs asynchronous? Who needs to be there? Recommend: in person, during work time. Consider burnout risk.
- **Recruitment:** Email invite with any links, attachments, disclosures
- **Evaluation tools** – typically link to online, anonymous survey to protect privacy, encourages honest responses; What are most important elements you want to know?;3-5 mins (too long and won't complete), multiple choice, likert, free text box (in case info want to share and we didn't ask; caution with too many free text boxes); no identifiable information (careful with small practices/sites/organizations). In-person recommended. Can be URL link or QR code (or paper). Consider burnout risk – how long need to be?
- Email reminder 1 week later (thank you, if not still time)
- **Data analysis**
- **Dissemination** – findings with actionable items

QI Exemplar #2

Patient Education

Phase I Project –Patient education handout tailored to practice needs, resources, preferred referral sources

- **Aim:** develop tailored Tri-fold handout
 - Facilitate patient education (streamlined, quality and efficiency)
- **Evidence-based recommendations**
- **Content**
 - Evidence-based
 - What do providers in practice want in there?
 - Practice/local resource considerations
- **Design/readability** (reading level, layout, inclusivity) Any areas for providers to fill in/select tailored patient education?
- **Systems level** considerations (MAs to distribute? Available on patient portal?)
- **Billing/reimbursement** (eg patient education codes for education – increase billing -> increase revenue -> more time feasible and sustainable for patient care, services)
- **Patient feedback** to inform any needed changes before larger roll-out
 - Student incorporates and provides final version back to site

QI Exemplars

Additional Projects

- HIV Screening
- Advance Directives
- Medication Reconciliation
- Other Evidence-Based Screenings (Sleep Apnea, PPD)
- Patient Portal Usage

QI Exemplar Next Steps

- ID area for improvement
 - What's bothering you in your practice? What would help you take better care of your pts?
 - Ask others what are they seeing, what would be helpful, what's working, not working well?
- Explore current lit/evidence to inform potential intervention
- Design
- Implement
- Evaluate
- ID next steps

- ***Consider***
 - Feasibility (can we actually, reasonably do this)
 - Sustainability (how can we keep reasonably doing this)
 - Systems level