SQUIRE
Promoting Excellence in Healthcare Improvement Reporting

Harnessing SQUIRE-EDU to Create and Disseminate Innovation in Medical Education

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Disclosures

- Dr. Ogrinc is a paid employee of the American Board of Medical Specialties
- Dr. Ogrinc receives royalties from Joint Commission Resources
  - *Fundamentals of Health Care Improvement*
  - *Practical Measurement for Health Care Improvement*

Objectives

1. Apply a QI lens to curriculum development and improvement
2. Describe the key components of SQUIRE-EDU
   - Educational gap
   - Impact on stakeholders (learners, faculty, the educational program, patients, families, healthcare systems, or communities)
   - Fidelity of the intervention
3. Use the SQUIRE-EDU guidelines to assess an article from the peer-reviewed literature

SQUIRE Key Components
1. Rationale/Theory
2. Context
3. Study of the Intervention

Agenda

- The need for publishing educational QI work (10 min)
- SQUIRE-EDU (45 min)
  - How has it been used? Is it effective?
  - Theory bursts (5 min) followed by group exercise (5 min)
    - Educational gap
    - Impact on stakeholders (learners, faculty, the educational program, patients, families, healthcare systems, or communities)
    - Fidelity of the intervention

The Influence of Teaching Setting on Medical Students' Clinical Skills Development: Is the Academic Medical Center the "Gold Standard"?

Patricia A. Carney, PhD, Greg Ogrinc, MD, MS, Beth G. Harwood, MEd, Jennifer S. Schiffman, MPH, and Nancy Cochran, MD

Abstract

Purpose

Many medical schools have revised their curricula to include longitudinal clinical training in the first and second years, placing an extra burden on academic teaching faculty and expanding the use of community-based preceptors for clinical teaching. Little is known about the impact of different learning settings on clinical skills development.

Method

In 2002–03 and 2003–04, the authors evaluated the clinical skills of two sequential cohorts of second-year medical students at Dartmouth Medical School ($n = 155$) at the end of a two-year longitudinal clinical course designed to prepare them for their clerkship year. Students' objective structured clinical examination (OSCE) scores were compared on a cardiopulmonary and an endocrine case according to precepting sites (academic medical center [AMC] clinics, AMC-affiliated office-based clinics, or community-based primary care offices) and core communication, history taking, physical examination, and patient education skills were assessed. Study groups were compared using descriptive statistics and analysis of variance (mixed model).

Results

Ninety-five students (61%) had community-based preceptors, 31 (20%) AMC clinic-based preceptors, and 29 (19%) AMC-affiliated office-based preceptors. Students' performances did not differ among clinical learning sites with overall scores in the cardiopulmonary case of 61.2% in AMC clinics, 63.3% in office-based AMC-affiliated clinics, and 64.9% in community-based offices ($p = .20$). Scores in the endocrine case similarly did not differ with overall scores of 65.5% in AMC clinics, 68.5% in office-based AMC-affiliated clinics, and 66.4% in community-based offices ($p = .59$).

Conclusions

Students' early clinical skill development is not influenced by educational setting. Thus, using clinicians for early clinical training in any of these settings is appropriate.

Acad Med. 2005; 80:1153–1158.

Method

The educational setting

Dartmouth Medical School (DMS) in Hanover, New Hampshire, is affiliated with the Dartmouth-Hitchcock Medical Center in Lebanon, New Hampshire, which supports a range of residency and fellowship programs. Between 78 and 90 students enter DMS each fall, with approximately 18 transferring to Brown Medical School in Providence, Rhode Island, for their clinical training in the third year, and 60–70 graduating from DMS after four years. During the first and second year the students take the course "On Doctoring—a Longitudinal Clinical Experience." The mission of this required course is to provide the fundamentals of interviewing and

Table 1

Content of the Longitudinal Clinical Skills Course "On Doctoring I & II" for First- and Second-year Medical Students, Dartmouth Medical School, Hanover, New Hampshire

Course	History taking	Physical Exam Skills
On Doctoring I (first-year medical students)	The chief complaint	Vital signs, skin and nails
	History of present illness	Introduction to the pulmonary exam
	Past medical history	Introduction to the cardiac exam
	Social and family history	Introduction to the abdominal exam
	Prevention/health maintenance and occupational history	Introduction to the head, ears, eyes, nose, and throat exam
	Sexual history-I	Introduction to the joint exam
	Review of symptoms	
	Motivational interviewing and smoking cessation counseling	
	Screening and assessment of alcohol problems	
On Doctoring II (second-year medical students)	Taking a trauma history-introduction to domestic violence	Advanced pulmonary exam
	Chronic health conditions interview-I	Advanced cardiovascular exam
	Cross-cultural interviewing	Advanced abdominal exam
	Interview with patients with chronic illness and disabilities-II	Neurological exam
	Sexual history-II	Genitourinary exam
		Advanced head, ears, eyes, nose, and throat exam
		Advanced joint and back exam
		Examination of breasts, axillae, and pelvis

Compare educational outcomes from students' experiences at:

- Academic health center
- AHC affiliated (VA hospital)
- Community clinical site

Table 2

Case Characteristics
Assessment Variable
Hanover, New Hamp

Characteristic or Var
Case characteristic
Patient's gender
Patient's age
Presenting compliant(s)
Symptom development
Associated symptoms
Past medical history
Variable assessed
Communication skills
History Taking
Physical Examination
Patient Education

Table 4

Mean Scores (S
Structured Clin
Medical School

OSCE item				p Value
Case A: Cardiop				
Communication sk				.16
History Taking				
Symptom analys				.29
Associated symp				.94
Other relevant ri				.10
Total history tak				.14
Physical examinatic				.95
Exam total (all sect				.20
Case B: Endocri				
Communication sk				.35
History taking				
Symptom analys				.96
Associated symp				.89
Other relevant ri				.59
Total history tak				.93
Physical examinatic				.16
Patient education				.01
Exam total (all sections combined)	65.5 (11.9)	68.5 (12.6)	66.4 (12.7)	.59

* Each item in the OSCE was scored with a "0" if the skill was not done, a "1" if the student could use feedback on how to improve, and a "2" if the skill was done well. Individual items were summed to reflect a score for each skill area, then expressed as percentages by dividing the mean score by the total possible score.

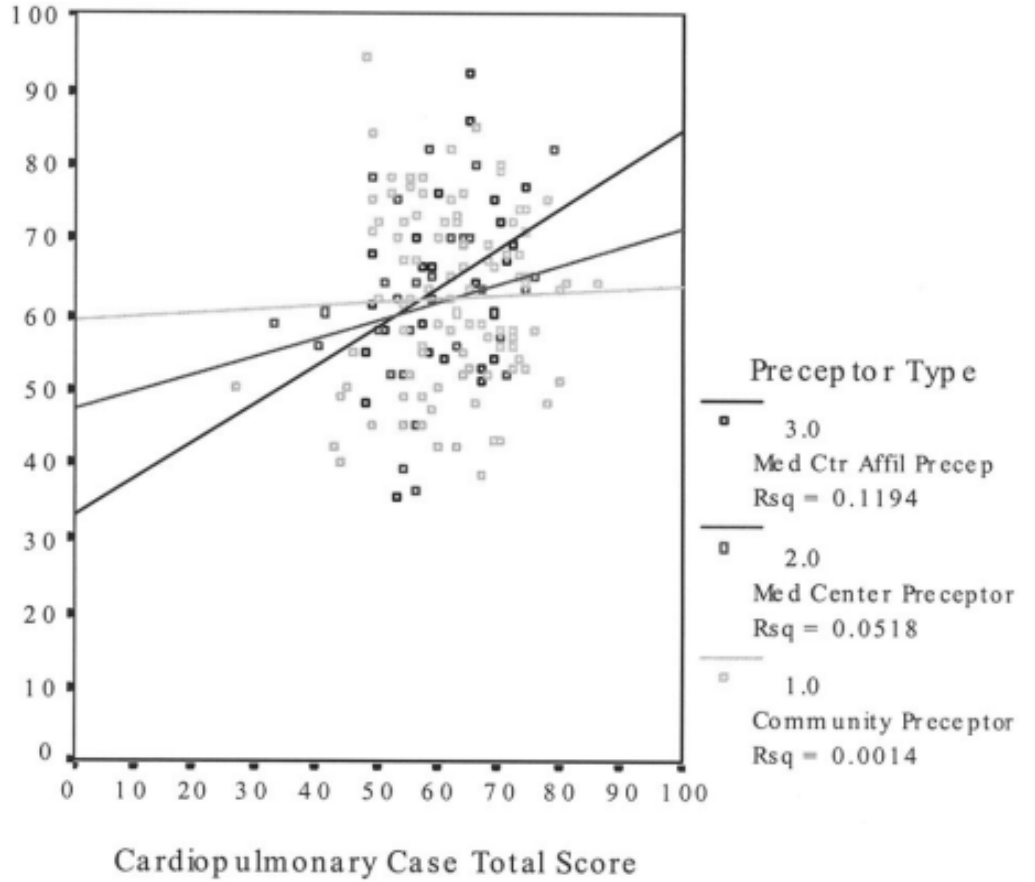

Figure 1 General linear regression of total case scores by preceptor type. F for corrected model of between-subjects effects by preceptor type = 0.53 for cardiopulmonary case ($p = .59$) and 1.63 for cardiopulmonary case ($p = .20$). From a study of 155 second-year medical students who took an objective clinical skills examination in the course "On Doctoring –a Longitudinal Clinical Experience" at three preceptor sites, Dartmouth Medical School, Hanover, New Hampshire, 2002–03 and 2003–04.

So…what actually happened at the clinical sites?

Can I get these “good” results in my medical school?

Was this the right design for the problem?

Standards for Quality Improvement Reporting Excellence – Education (SQUIRE-EDU)

- ✓Offers guidance on reporting original studies of improvement of health professions curriculum
  - Acknowledges context-dependence, complexity, iterative nature of the work
  - Many health professions educators use systematic methods to assess, change, and improve curricula and systems
  - Emphasizes an explanatory approach that encourages evaluation of the context and lessons learned
- ✓Supports planning as well as writing phases
- ✓www.squire-statement.org

SQUIRE-EDU (Standards for QUality Improvement Reporting Excellence in Education): Publication Guidelines for Educational Improvement

Greg Ogrinc, MD, MS, Gail E. Armstrong, PhD, DNP, RN, Mary A. Dolansky, PhD, RN, Mamta K. Singh, MD, MS, and Louise Davies, MD, MS

Abstract

The SQUIRE 2.0 (Standards for QUality Improvement Reporting Excellence) guidelines were published in 2015 to increase the completeness, precision, and transparency of published reports about efforts to improve the safety, value, and quality of health care. The principles and methods applied in work to improve health care are often applied in educational improvement as well. In 2016, a group was convened to develop an extension to SQUIRE that would meet the needs of the education community. This article describes the development of the SQUIRE-EDU extension over a three-year period and its key components. SQUIRE-EDU was developed using an international, interprofessional advisory group and face-to-face meeting to draft initial guidelines; pilot testing of a draft version with nine authors; and further revisions from the advisory panel with a public comment period. SQUIRE-EDU emphasizes three key components that define what is necessary in systematic efforts to improve the quality and value of health professions education. These are a description of the local educational gap; consideration of the impacts of educational improvement to patients, families, communities, and the health care system; and the fidelity of the iterations of the intervention. SQUIRE-EDU is intended for the many and complex range of methods used to improve education and education systems. These guidelines are projected to increase and standardize the sharing and spread of iterative innovations that have the potential to advance pedagogy and occur in specific contexts in health professions education.

In the past decade, publication guidelines have been developed for the many methods of scientific inquiry, the goal being to improve the transparency and completeness of published reports.[1] Such reporting structures enable authors, reviewers, editors, and readers to focus on the content of the information exchange, knowing that studies follow well-established guidelines considered critical for scholarly reporting. Reports of scholarly health care improvement work became standardized in 2008 with the initial publication of the Standards for QUality Improvement Reporting Excellence (SQUIRE)[2] guidelines, and these have been superseded by revised guidelines (SQUIRE 2.0) in 2015.[3] Here, we describe the developmental process for and introduce SQUIRE-EDU, an extension of the SQUIRE guidelines, applicable for reporting work done to improve health professions education.

Health professions education is a dynamic area where continuous educational improvement is a source for building knowledge. Reporting of such changes in health professions education is often done using the frameworks associated with hypothesis-generating and testing approaches, ranging from case studies to randomized controlled trials.[4] Using testing methods is appropriate to answer certain questions, but the improvement that occurs in local educational settings requires, and often uses, an explanatory approach that clear aim, understanding the processes, creating an intervention, assessing the intervention's success, and modifying it for the next cycle.[5] We refer to this work as "educational improvement," which often focuses on the local needs and problems where the intervention occurred but also generates lessons that can be extrapolated to educational improvement in similar contexts.

Using the SQUIRE 2.0 guidelines as a foundation, we developed, tested, and revised the SQUIRE-EDU extension to increase the completeness, transparency, and replicability of reports that describe systematic efforts to improve the quality and value of health professions education.

Development and Testing of the

Please see the end of this article for information about the authors.

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Table 1

Standards for QUality Improvement Reporting Excellence in Education: SQUIRE-EDU

Text section and item name	SQUIRE item description	SQUIRE-EDU extension description
Notes to authors	The SQUIRE guidelines provide a framework for reporting new knowledge about how to improve healthcare. The SQUIRE guidelines are intended for reports that describe system level work to improve the quality, safety, and value of healthcare, and used methods to establish that observed outcomes were due to the intervention(s). A range of approaches exists for improving healthcare. SQUIRE may be adapted for reporting any of these. Authors should consider every SQUIRE item, but it may be inappropriate or unnecessary to include every SQUIRE element in a particular manuscript. The SQUIRE glossary contains definitions of many of the key words in SQUIRE. The Explanation and Elaboration document provides specific examples of well-written SQUIRE items, and an in-depth explanation of each item. Please cite SQUIRE when it is used to write a manuscript.	The SQUIRE-EDU extension of the SQUIRE guidelines provides a framework intended to increase the completeness, transparency, and replicability of published reports that describe systematic efforts to improve health professions education. They apply to all learning settings (e.g., classroom, simulation, clinical, etc.). The guidelines encourage the description of the process and context of educational change, use of iterative cycles, and use of data over time. Authors should consider every SQUIRE and SQUIRE-EDU item, but it may be inappropriate or unnecessary to include every SQUIRE and SQUIRE-EDU element in a particular manuscript. Not all items have an EDU extension. If there is no EDU extension, use the SQUIRE item. If there is an EDU extension, it may be used on its own or in conjunction with the SQUIRE item. Educators use a range of systematic methods to make education and healthcare demonstrably better. SQUIRE-EDU may be adapted for reporting any of these methods. Please cite SQUIRE-EDU when it is used to write a manuscript.
Title and abstract		
1. Title	Indicate that the manuscript concerns an initiative to improve healthcare (broadly defined to include the quality, safety, effectiveness, patient-centeredness, timeliness, cost, efficiency, and equity of healthcare)	**EDU 1:** Indicate that the manuscript concerns efforts to improve health professions education systems and learning
2. Abstract	a. Provide adequate information to aid in searching and indexing b. Summarize all key information from various sections of the text using the abstract format of the intended publication or a structured summary such as: background, local problem, methods, interventions, results, conclusions	**EDU 2:** Keywords include a focus on education and learning
Introduction: Why did you start?		
3. Problem description	Nature and significance of the local problem	**EDU 3:** Description of the nature and significance of the need for change in the local educational system
4. Available knowledge	Summary of what is currently known about the problem, including relevant previous studies	—
5. Rationale	Informal or formal frameworks, models, concepts, and/or theories used to explain the problem, any reasons or assumptions that were used to develop the intervention(s), and reasons why the intervention(s) was expected to work	**EDU 5:** Identify the guiding theory (learning, change, implementation, or other) and how it aligns with the need for change in the local educational system
6. Specific aims	Purpose of the project and of this report	—
Methods: What did you do?		
7. Context	Contextual elements considered important at the outset of introducing the intervention(s)	**EDU 7a:** Contextual elements for learning (e.g., setting, program, people, resources, social, geopolitical influences) before the intervention(s) **EDU 7b:** The interrelationships between the contextual elements and the local educational and healthcare systems before the intervention(s)
8. Intervention(s)	a. Description of the intervention(s) in sufficient detail that others could reproduce it	**EDU 8a:** Description of the primary interventions and co-interventions (e.g., faculty or tool development)

How has SQUIRE-EDU been used?

[HTML] **SQUIRE-EDU** (Standards for QUality Improvement Reporting Excellence in Education): publication guidelines for educational improvement

G Ogrinc, GE Armstrong, MA Dolansky… - Academic …, 2019 - journals.lww.com

… of the **SQUIRE-EDU** extension over a three-year period and its key components. **SQUIRE-EDU** was … **SQUIRE-EDU** emphasizes three key components that define what is necessary in …

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1. Guidance for writing up educational improvement
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Major Components of SQUIRE

SQUIRE Key Components
1. Rationale/Theory
2. Context
3. Study of the Intervention

1. Local educational gap
   - Current local educational conditions compared to a desired future state
     - Best practices
     - Mandated future state from accreditors
   - Why was this initiative started at this site at this point in time?
2. Impact
   - Beyond learners and learning
   - Consider impact and *potential impact* on patients, families, and communities
3. Fidelity of the intervention(s)
   - Intervention is intended to be modified through each cycle of change
   - Adherence to the planned protocol within each cycle
   - Faithful use of data to inform the next cycle of change

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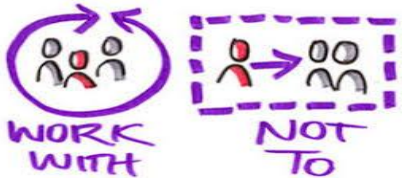
Framework for identification of curriculum gaps: A systematic approach

[1]Vinish P, [2]Prakash Pinto, [3]Rio D'Souza
Assistant Professor, Department of Business Administration
St Joseph Engineering College, Mangaluru, Karnataka, India

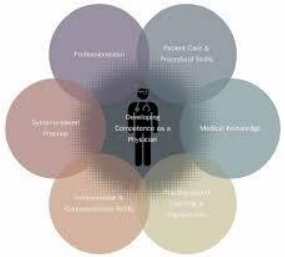
- Information gap
  - Engagement by all stakeholders in the curriculum design
- Benchmarking gap
  - Identifying and using best practices and peer comparison
  - First examining and understanding your own work processes, then searching for best practices at other organizations
- Perception gap
  - Misalignment between educators' and practitioners' view of required competencies
- Learning gap
  - Discrepancy between students' expectations and actual learning experiences

Health Professions Education Curriculum Gaps

- Information gap
  - Engaging learners and patients in the design and assessment of curriculum



- Benchmarking gap
  - Identifying and using best practices and peer comparison
  - Required elements from accreditors
  - Interesting curriculum and programs from other schools



- Perception gap
  - Misalignment between the content of our curriculum and what is needed to be successful early in one's health professional career
- Learning gap
  - The "broccoli problem"
  - Learners focus on what they want, not what they need

SQUIRE-EDU Article Example

Utilizing a Quality Improvement Strategy to Increase Faculty Engagement With Resident Learning Goals

Suzanne Reed, MD; Charles Treinen, MD; Nilay Shah, MD; Mark Ranalli, MD; Randal Olshefski, MD

From the Department of Pediatrics, The Ohio State University College of Medicine, Nationwide Children's Hospital, Columbus, Ohio

The authors have no conflict of interest to disclose

Review the Portion of the Introduction on the next PPT

- How well is the education gap described?
- What type of gap is it?
  - Information, Benchmarking, Perception, Learning
- Does it meet criteria for SQUIRE-EDU #3?

practice using LGs.[7–10] Lockspeiser et al identified 5 themes relating to meaningful creation and use of LGs for residents: program support, faculty roles, goal characteristics and purposes, resident attributes, and goal follow-through.[4] Specifically regarding faculty roles, they found that residents felt faculty support was necessary for them to be successful in creating, reflecting on, and achieving their goals. Residents particularly appreciated working with faculty who asked about their goals during rotations.[4] Though the role of faculty is important in residents' LGs achievement, it is unclear the best way to promote engagement between faculty and learner related to these LGs.

All pediatric residents are required by the ACGME to develop individualized learning plans at least once per year.[5] At our institution, there is no formal mechanism by which residents develop and work toward specific LGs on individual rotations. There is also no formal mechanism by which faculty engage with residents on their rotation-specific LGs, despite being explicitly evaluated by the residents on such engagement. Our institution previously developed a milestone-based tool for resident evaluation of faculty clinical teaching, to give faculty members

Educational Gap Example

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Rationale for Resident Learning Goals

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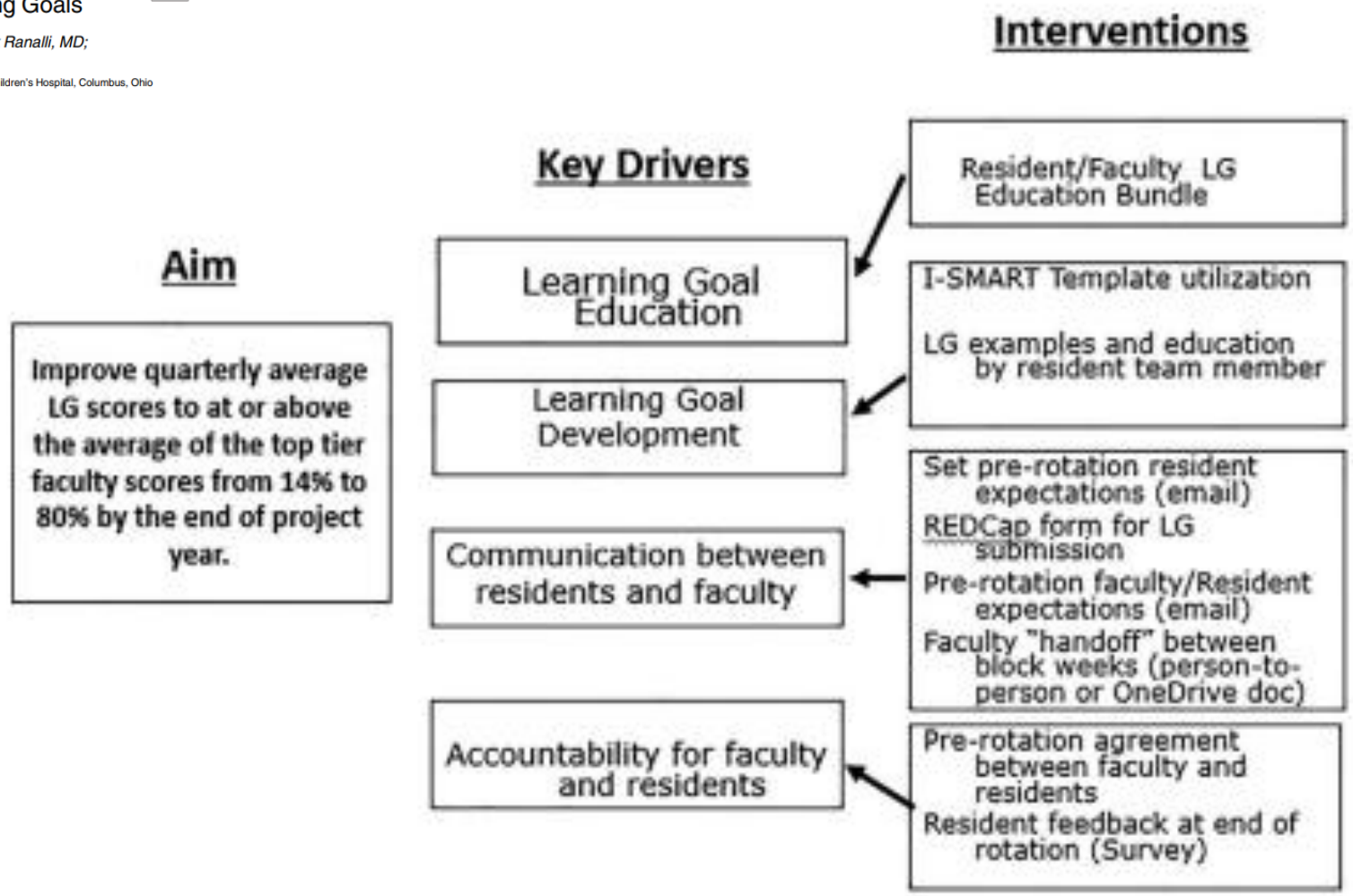

Figure 1. *Key driver diagram, depicting drivers related to establishing resident learning goals on the inpatient pediatric hematology/oncology service.*

Major Components of SQUIRE-EDU

1. Local educational gap
   - Current local educational conditions compared to a desired future state
     - Best practices
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   - Why was this initiative started at this site at this point in time?
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   - Beyond learners and learning
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SQUIRE Key Components
1. Rationale/Theory
2. Context
3. Study of the Intervention

Impact on Learners, Faculty, Patients, Family, Community, or Health System

- Demonstrating impact on learners is straightforward
  - Health professions students score well on exams
  - They know how to learn
  - You can probably teach them anything
- Extending impact of curriculum to those beyond learner can be challenging
  - Patients, families, faculty, communities, educational programs, delivery of care
  - *Potential* impact on these elements
  - Ultimate goal of health professions education should be to improve the health care system

Impact on Learners, Faculty, Patients, Family, Community, or Health System

9. Study of the intervention(s)	a. Approach chosen for assessing the impact of the intervention(s) b. Approach used to establish whether the observed outcomes were due to the intervention(s)	**EDU 9a:** Approach used to understand the impact of the educational intervention(s) on the learner and beyond, such as impact on patients, families, the community, faculty, educational program, or the healthcare system **EDU 9b:** Approach to assess the fidelity of and the iterative changes to the planned intervention(s) over time
10. Measures	a. Measures chosen for studying processes and outcomes of the intervention(s), including rationale for choosing them, their operational definitions, and their validity and reliability b. Description of the approach to the ongoing assessment of contextual elements that contributed to the success, failure, efficiency, and cost c. Methods employed for assessing completeness and accuracy of data	**EDU 10:** Quantitative and/or qualitative measures chosen to assess the educational processes and outcomes on learners, faculty, educational programs, patients, families, healthcare systems, or communities
15. Interpretation	a. Nature of the association between the intervention(s) and the outcomes b. Comparison of results with findings from other publications c. Impact of the project on people and systems d. Reasons for any differences between observed and anticipated outcomes, including the influence of context e. Costs and strategic trade-offs, including opportunity costs	**EDU 15c:** Include the impact of the intervention(s) on learners, faculty, educational program, patients, families, healthcare systems, or communities

Impact on Learners, Faculty, Patients, Family, Community, or Health System - Example

Table 1. Barriers to Completion of Learning Goals (LGs) Identified by the Project Team Prior to the Implementation of Interventions

LGs Barrier Theme	Faculty (# of Responses)	Residents (# of Responses)	Key Driver to Address Barrier
Lack of experience with developing/refining LGs	6	5	LGs education LGs development
Faculty don't agree that LGs are appropriate/important/aligned	3	0	Accountability
Low priority on discussing LGs	6	2	Communication
Service is busy/complicated patients	4	2	Accountability communication
Lack of buy-in on the importance of LGs in general	6	1	LGs education
Unclear ownership (whose job it is to discuss LGs?)	4	1	LGs education Accountability
Faculty resistance to facilitating non- hematology/oncology specific LGs	6	0	LGs education Accountability

Utilizing a Quality Improvement Strategy to Increase Faculty Engagement With Resident Learning Goals

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Impact on Learners, Faculty, Patients, Family, Community, or Health System - Example

Table 2. Themes of Learning Goals (LGs) Submitted by Residents, Arranged by Category and in Order of Frequency

	Resident Submitted LGs	
Learning Goal Theme	Count N = 186	%
Hematology/oncology content	57	31
Communication skills	22	12
Complex patient management	20	11
Teaching skills	18	10
General intern skills	18	10
Intern mentoring skills (senior residents)	12	6
Knowledge transferrable to general pediatric practice or other subspecialty	11	6
General leadership skills	10	5
Procedure skills	7	4
Bedside rounding skills	5	3
Miscellaneous	6	3

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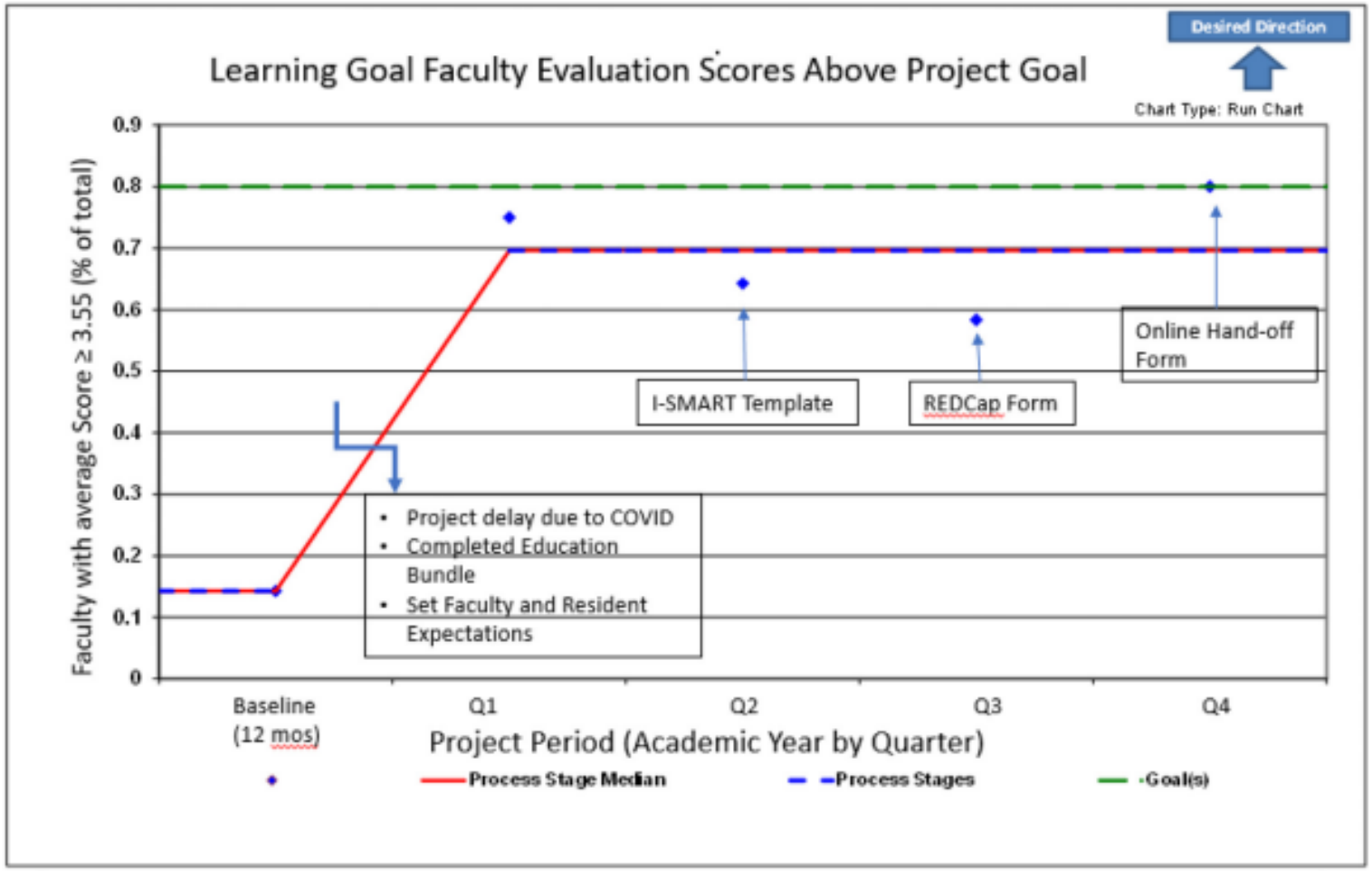
Impact on Learners, Faculty, Patients, Family, Community, or Health System - Example



Average Faculty Score ≥ 3.55	3	9	9	7	12
Total Faculty Evaluated	21	12	14	12	15

Figure 3. *Run chart showing the percentage of faculty who achieved average Learning Goal (Milestone 3) faculty evaluation scores above the project goal. Presented by quarter. Preproject baseline data presented as a single annual average.*

Aim: Improve quarterly average LG scores to at or above the score of the top tier faculty from 14% to 80% within a year.

Does this figure convince you that there was impact on the faculty from these interventions? Why or why not?

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SQUIRE Key Components
1. Rationale/Theory
2. Context
3. Study of the Intervention

What does fidelity of the intervention mean?

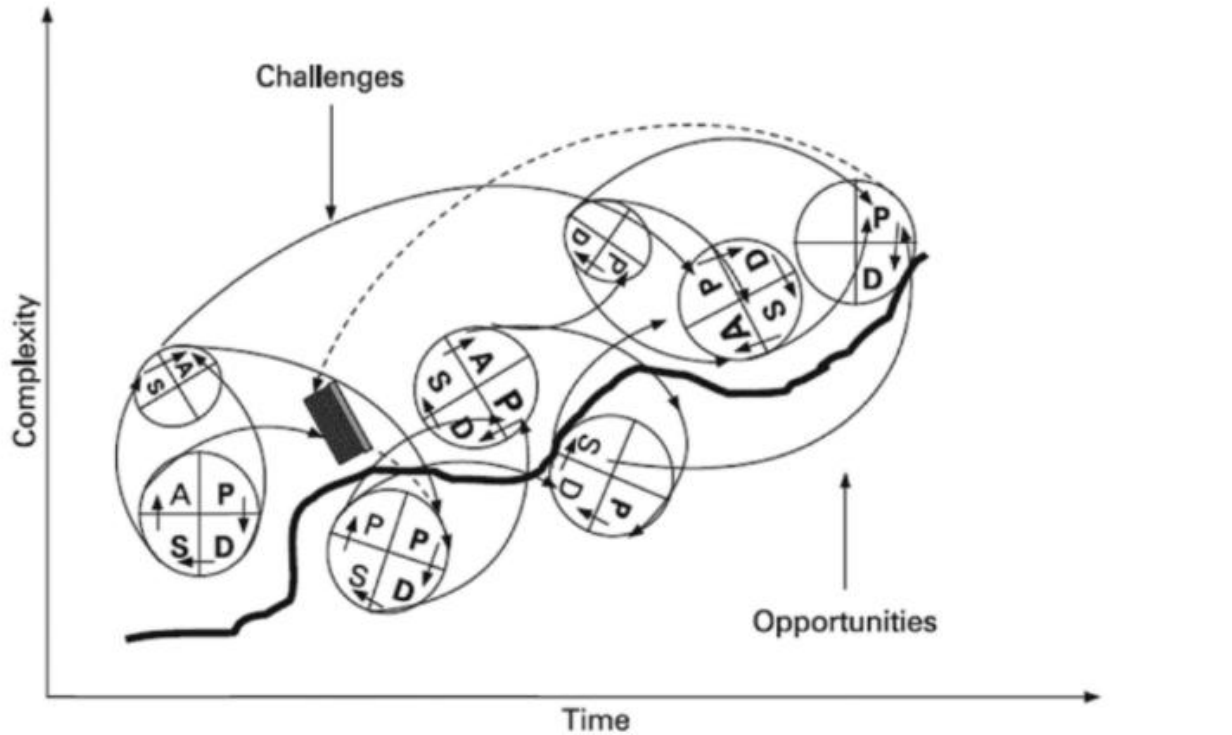
Research

- Degree to which the intervention is implemented as intended by the protocol
- Intervention design
- Adherence to protocol
- Training of research team
- Maintain the integrity of the study so that results are valid and reliable

Improvement

- Iterative changes to a system
- Expected that the intervention(s) will be modified through each cycle of change
- Adherence to the planned protocol within each cycle of change
- Faithful use of data to inform the next cycle of change

Figure 7-9. Revised Model of Successive PDSAs with Barriers, Background Interference, and Incomplete Cycles



* Each c

Source: Tomolo A, Lawrence R, Aron D. A case study of translating the ACGME practice-based learning and improvement requirements into reality: Systems quality improvement projects as the key component to a comprehensive curriculum. *Postgrad Med J* 2009 Oct;85(1008):530–537. Used with permission.

Reporting on Fidelity of Interventions - Example

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Intervention 2: Faculty Team Communication Regarding Specific LGs

Three days prior to each rotation, a project team member emailed the incoming resident team and all faculty assigned to that rotation, summarizing the project and soliciting submission of resident LGs. Residents were asked to submit 2 to 3 LGs for their upcoming inpatient hematology/oncology rotation. Initially, LGs were emailed to the project co-leader, who compiled them into one document to distribute to rotation faculty members. Faculty were asked to review the LGs prior to starting their inpatient time. Missing LGs or clarifications were addressed with the project co-leader. Faculty members were asked to complete an "educational handover" from week to week, commenting on progress made by each resident on their LGs during their time on service. Initially, the handover was completed by email or verbal communication, but subsequently transitioned to an on-line, editable, shared document accessible to all faculty.

Intervention 3: LGs Development

It became clear early on that the detail and clarity of residents' LGs were impacting the faculty's ability to address them adequately. Initial resident LGs utilized various formats and were not always concise and clear. Starting block 4, the I-SMART (Important, Specific, Measurable, Attainable, Realistic, Time-Based) LGs template[17] was incorporated explicitly in the solicitation of resident LGs to better prompt reflection and streamline goals.

To further address explicit expectations and ease-of-use of LGs tracking systems, starting block 7, the process of submitting LGs was transitioned to a secure REDCap data collection survey with both SMART prompts and discrete LGs categories, which were based on evaluation of LGs themes from the first 6 months. This was intended to further encourage self-reflective SRL and accountability. This transition to REDCap also decreased logistical burden in collecting and collating LGs. To further promote accessibility and ease-of-use, REDCap surveys were available on laptop and mobile devices, available via hyperlink or QR code, and under 5 minutes in length.

What might've been…

The Influence of Teaching Setting on Medical Students' Clinical Skills Development: Is the Academic Medical Center the "Gold Standard"?

Patricia A. Carney, PhD, Greg Ogrinc, MD, MS, Beth G. Harwood, MEd, Jennifer S. Schiffman, MPH, and Nancy Cochran, MD

- Educational gap
  - Clarity about the concern for disparate educational experiences from learners in different settings
  - Opportunity to explore co-producing the experience with students, community-based faculty, and patients
- Impact beyond learners
  - What are the other outcomes beyond OSCE scores?
  - Were there benefits beyond OSCEs? Detriments to student skills?
- Fidelity of interventions
  - Broad categories of student setting (AHC, AHC-affiliated, community-based) decreases the opportunity to improve the experience at each of these

Summary

- SQUIRE-EDU helps one publish more complete reports of QI applied to educational systems
  - Educational gap
  - Impact beyond learners
  - Fidelity of changes
- Applicable to the many methods and philosophical approaches used to improve the quality and value of educational systems