Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) September 15, 2015

Text Section and Item Name Section or Item Description 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.
 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 <u>intervention(s)</u> .
A range of approaches exists for improving healthcare. SQUII may be adapted for reporting any of these.
Notes to authors • Authors should consider every SQUIRE item, but it may be inappropriate or unnecessary to include every SQUIRE element 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.
Title and Abstract
1. Title Page 1, Line 2 Indicate that the manuscript concerns an <u>initiative</u> to improve healthcar (broadly defined to include the quality, safety, effectiveness, patient-centeredness, timeliness, cost, efficiency, and equity of healthcare)
a. Provide adequate information to aid in searching and indexing b. Summarize all key information from various sections of the text us the abstract format of the intended publication or a structured summary such as: background, local problem, methods, intervention results, conclusions
Introduction Why did you start?
Page 2, Line 2-9 Description Nature and significance of the local problem
4. AvailableSummary of what is currently known about the problem, includingPage 4, Line 16-22; knowledgerelevant previous studiesPage 5; Page 6, Line 1-9

	5. Rationale Page 7, Line 4-18	Informal or formal frameworks, models, concepts, and/or <u>theories</u> used to explain the <u>problem</u> , any reasons or <u>assumptions</u> that were used to develop the <u>intervention(s)</u> , and reasons why the <u>intervention(s)</u> was expected to work
	e 9-13. 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)
	8. Intervention(s)	 a. Description of the <u>intervention(s)</u> in sufficient detail that others could reproduce it b. Specifics of the team involved in the work
	9. Study of the e 20-21; 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)
	10. Measures Page 10, Line 17-21	 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
P	11. Analysis age 13; Page 14, Line 1-10	a. Qualitative and quantitative methods used to draw inferences from the datab. Methods for understanding variation within the data, including the effects of time as a variable
	12. Ethical N/A Considerations	Ethical aspects of implementing and studying the intervention(s) and how they were addressed, including, but not limited to, formal ethics review and potential conflict(s) of interest
	Results	What did you find?
	13. Results Page 14, Line 12-21; Page 15; Page 16	 a. Initial steps of the intervention(s) and their evolution over time (e.g., time-line diagram, flow chart, or table), including modifications made to the intervention during the project b. Details of the process measures and outcome c. Contextual elements that interacted with the intervention(s) d. Observed associations between outcomes, interventions, and relevant contextual elements e. Unintended consequences such as unexpected benefits, problems, failures, or costs associated with the intervention(s). f. Details about missing data
	Discussion	What does it mean?
Page	14. Summary e 18, Line 1-8	a. Key findings, including relevance to the <u>rationale</u> and specific aimsb. Particular strengths of the project

	a. Nature of the association between the <u>intervention(s)</u> and the
	outcomes
	b. Comparison of results with findings from other publications
15. Interpretation	c. Impact of the project on people and systems
Page 18	d. Reasons for any differences between observed and anticipated outcomes, including the influence of context
	e. Costs and strategic trade-offs, including opportunity costs
	a. Limits to the generalizability of the work
16. Limitations	b. Factors that might have limited <u>internal validity</u> such as confounding,
To. Emittations	bias, or imprecision in the design, methods, measurement, or analysis
N/A	c. Efforts made to minimize and adjust for limitations
	a. Usefulness of the work
	b. Sustainability
17. Conclusions	c. Potential for spread to other contexts
	d. Implications for practice and for further study in the field
Page 19, Line 1-7	e. Suggested next steps
Other information	
18. Funding Page 20, Line 4-6	Sources of funding that supported this work. Role, if any, of the funding organization in the design, implementation, interpretation, and reporting

Table 2. Glossary of key terms used in SQUIRE 2.0. This Glossary provides the intended meaning of selected words and phrases as they are used in the SQUIRE 2.0 Guidelines. They may, and often do, have different meanings in other disciplines, situations, and settings.

Assumptions

Reasons for choosing the activities and tools used to bring about changes in healthcare services at the system level.

Context

Physical and sociocultural makeup of the local environment (for example, external environmental factors, organizational dynamics, collaboration, resources, leadership, and the like), and the interpretation of these factors ("sense-making") by the healthcare delivery professionals, patients, and caregivers that can affect the effectiveness and generalizability of intervention(s).

Ethical aspects

The value of <u>system</u>-level <u>initiatives</u> relative to their potential for harm, burden, and cost to the stakeholders. Potential harms particularly associated with efforts to improve the quality, safety, and value of healthcare services include <u>opportunity costs</u>, invasion of privacy, and staff distress resulting from disclosure of poor performance.

Generalizability

The likelihood that the <u>intervention(s)</u> in a particular report would produce similar results in other settings, situations, or environments (also referred to as external validity).

Healthcare improvement

Any systematic effort intended to raise the quality, safety, and value of healthcare services, usually done at the <u>system</u> level. We encourage the use of this phrase rather than "quality improvement," which often refers to more narrowly defined approaches.

Inferences

The meaning of findings or data, as interpreted by the stakeholders in healthcare services – improvers, healthcare delivery professionals, and/or patients and families

Initiative

A broad term that can refer to organization-wide programs, narrowly focused projects, or the details of specific interventions (for example, planning, execution, and assessment)

Internal validity

Demonstrable, credible evidence for efficacy (meaningful impact or change) resulting from introduction of a specific intervention into a particular healthcare system.

Intervention(s)

The specific activities and tools introduced into a healthcare <u>system</u> with the aim of changing its performance for the better. Complete description of an intervention includes its inputs, internal activities, and outputs (in the form of a logic model, for example), and the mechanism(s) by which these components are expected to produce changes in a <u>system's</u> performance.

Opportunity costs

Loss of the ability to perform other tasks or meet other responsibilities resulting from the diversion of resources needed to introduce, test, or sustain a particular <u>improvement</u> initiative

Problem

Meaningful disruption, failure, inadequacy, distress, confusion or other dysfunction in a healthcare service delivery <u>system</u> that adversely affects patients, staff, or the <u>system</u> as a whole, or that prevents care from reaching its full potential

Process

The routines and other activities through which healthcare services are delivered

Rationale

Explanation of why particular <u>intervention(s)</u> were chosen and why it was expected to work, be sustainable, and be replicable elsewhere.

Systems

The interrelated structures, people, <u>processes</u>, and activities that together create healthcare services for and with individual patients and populations. For example, systems exist from the personal self-care system of a patient, to the individual provider-patient dyad system, to the microsystem, to the macrosystem, and all the way to the market/social/insurance system. These levels are nested within each other.

Theory or theories

Any "reason-giving" account that asserts causal relationships between variables (causal theory) or that makes sense of an otherwise obscure <u>process</u> or situation (explanatory theory). Theories come in many forms, and serve different purposes in the phases of <u>improvement</u> work. It is important to be explicit and well-founded about any informal and formal theory (or theories) that are used.