Knowledge Services

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Evidence Summary

What can be done to leverage Quality Improvement practice to increase its contribution to equity (and prevent increase in inequity)?

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Disclaimer	This evidence summary contains a selection of material gathered from a search of the evidence base. It is not intended to be comprehensive and has not been critically appraised. Written by a qualified information professional, the content is based upon informed prioritisation of the search results based upon the criteria supplied by the requestor. The summary is not a substitute for clinical or professional judgement and the information contained within does not supersede national and local NHS policies and protocols.

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1. Introduction

This report describes the evidence search request, provides a brief thematic analysis of the findings and details the included references. The question asked was:

What can be done to leverage Quality Improvement practice to increase its contribution to equity (and prevent increase in inequity)?

2. Search Overview

The searches for this evidence summary were conducted in May 2019.The search strategy is included in Appendix 2. The results were then de-duplicated and screened using date/title/abstract.

The following criteria were applied:

- Limits applied to search:
  - Language: English
  - Period: last 10 years
  - Geography: [not limited]
  - Population: [not limited]
- Inclusion criteria:

        - [not limited]
- Exclusion criteria:
    - [not limited]
- Existing research
    - From previous and grey literature searches.

3. Key Messages

- The social determinants of health impact upon equity within Quality Improvement initiatives in terms of access and scope. [2, 3, 7, 10, 11]

- The 'one size fits all' approach of most Quality Improvement interventions, that are targeted to the general population, fail to address the unique needs of minority groups and the root causes of disparities. [5, 8, 9, 11]

- Quality Improvement initiatives that fail to address the root causes of disparities may improve quality for more advantaged patients and maintain or even worsen existing disparities for disadvantaged groups. [2, 5, 8, 10, 12]

- In order to address inequities in Quality Improvement initiatives there is a requirement to collect and analyse sociodemographic data on a population's social and demographic characteristics including age, sex, gender, education level, income level, disability, race and language with the purpose of informing targeted improvement. [1, 2, 4, 5, 7, 8, 9, 10, 11, 12]

- Balancing measures look to see if the Quality Improvement changes that have been implemented are causing new problems elsewhere in the system. [9]

- Action to improve contributions of Quality Improvement to equity needs to consider how changes will meet the needs of populations at risk of poor health. [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]

4. Findings

4.1 What is equity?

In defining the difference between equality and equity, Poynter et al [11] say that equality is 'sameness', while equity is an ethical construct that recognises different groups may require different approaches to achieve the same outcome. In order to embed equity into existing Quality Improvement (QI) educational efforts and to use QI methods to address equity challenges, Aysola et al [2] discuss their framework for integrating QI and health equity principles into graduate medical education. Describing equitable care as "providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status" Aysola et al [2] et al go on to state that providing equitable care is only one facet of health equity as it also includes multiple factors within society that can impact upon the health of populations. The authors further emphasise that not all QI interventions result in overall improvements. They identify three possible outcomes from QI interventions:

1) the reduction or elimination of identified disparities,
2) the continuation of existing disparities or
3) the exacerbation of disparities.

For this reason it is essential to evaluate any planned QI intervention for equity outcomes. The four-step framework Aysola et al [2] propose in order to address equity with QI initiatives involves:

1) definition of terms and concepts (e.g. Ayolsa et al [2] differentiate between health care disparities and health disparities. The latter being related to the differences in disease burdens and related outcomes resulting from social determinants of health),
2) understanding and disseminating the current knowledge of health care disparities in a field,
3) identification of health care disparities locally and application of QI methods to address them, and
4) evaluation of every QI effort for the potential equity outcome.

To facilitate the implication of the framework Aysola et al [2] list additional elements in order to integrate health equity within QI initiatives:

- Institutional leadership should ensure that quality data is reported by patient race/ethnicity, gender identity, sexual orientation, and primary language within currently available data systems and should build capacity and training to improve data collection if required.

- Institutions must build infrastructure to support routine reporting of quality metrics by demographic variables.
- Health system leaders should provide resources to disseminate lessons learned from equity-focussed QI work within the organisation and promote a learning health system.
- Institutions must support faculty development in QI and key health equity concepts to mentor trainees through improvement work that will invariably involve multiple stakeholders, competing organisational priorities and change management.
- Time must be prioritised in the curriculum by directors for learners to participate in equity improvement activities.

4.2 Social determinants

Boozary et al [3], in their analysis of the pathology of poverty and the need for quality improvement efforts to address social determinants of health, discuss how the social determinants of health impact upon equity within QI initiatives. They define those determinants as "the conditions in which people are born, grow, live, work and age, including income, housing and education." The authors state that whether directly or by proxy, poverty produces substantial adverse effects which healthcare systems are traditionally ill equipped to address. As opposed to restricting adverse event investigation to a single setting of care, Boozary et al [3] argue that viewing poverty as the least appreciated 'system problem' focusses attention on the socioeconomic factors involved in health care with a greater focus on the 'patient journey' across all care settings. In order to enhance equity and break down silos, QI initiatives should consider the US Institute of Medicine's six dimensions of quality: safety, effectiveness, patient-centredness, timeliness, efficiency and equity.

Cooke et al [4] state, along with others [1, 2, 5, 7, 8, 9, 10, 11, 12], that regional efforts to improve quality of care face particular challenges when addressing racial and ethnic disparities in health. Diverse populations have different needs and barriers, and the same QI intervention can affect them variably. Thus different approaches may be necessary to deliver high-quality healthcare to different populations. Cooke et al [4] describe the Roadmap to Reduce Disparities as a 6-step process that:

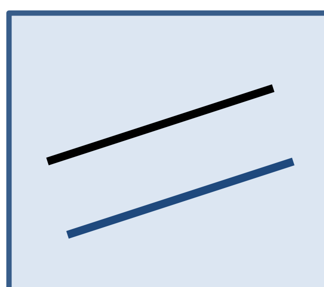
1. Recognises disparities and takes responsibility for reducing them (e.g. by collecting and disseminating performance data stratified by patient race, ethnicity and language).
2. Implements a basic QI structure and process.
3. Creates a culture of equity that incorporates equity as an integral component of all QI efforts.

4. Designs specific interventions, using tools such as root cause analysis to clearly address the underlying causes of documented disparities.
5. Implements, evaluates and adjusts the intervention.
6. Sustains the intervention.

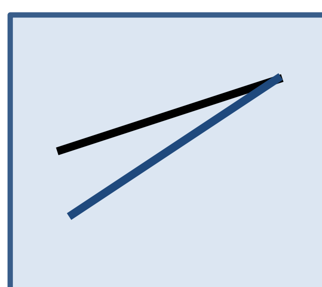
The authors advise that the Roadmap should not be seen as a linear process as various components can be implemented simultaneously or maintained throughout. Additionally, the Roadmap does not recommend any specific interventions as it proposes that organisations must tailor their interventions to their particular setting and patient population to facilitate increased equity. Cooke et al [4], and Green et al [6], recommend that multiple steps are required to integrate equity into QI which go beyond usual emphasis on race, ethnicity and language data collection and intervention selection; that the use of a QI model establishes equity as a cross-cutting dimension of every component of quality; and that there should be a move beyond any initial problems in order to progress the equity agenda in several different ways.

In their article on the leveraging of QI to achieve equity in health care Green et al [5] reiterate that disparities in health care and quality exist for racial, ethnic, linguistic and other disadvantaged groups and that these disparities are widespread and persistent. They note that whilst organisations make efforts to improve quality in general, they often make little attempt to address disparities. Uniformity in QI approach fails to account for contextual differences [11]. The 'one-size-fits-all' approach of most QI interventions that are targeted to the general population fail to address the unique needs of minority groups and the root causes of disparities. As such, they may improve quality for more advantaged patients and maintain or even worsen existing disparities for others [2, 5, 8, 10, 12].

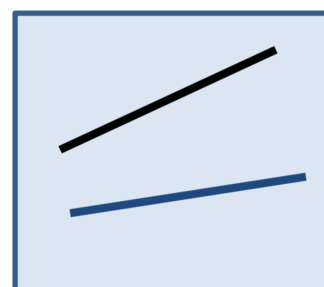
Potential equity outcomes following QI initiatives



1. Neutral disparity



2. Narrowing disparity



3.Widening disparity

4.3 Evaluation

To avoid this, the Institute of Healthcare Improvement [8] advise that QI work needs to be designed from the start to meet the needs of disadvantaged populations, which they describe as a “centreing at the margins” approach rather than a “one size fits all” assumption. It is also noted that failure to do so leads to QI design that is inadequate to be applied to subsequent population groups. Marks et al [9] list three types of measures: outcomes, process and balancing. They advise that balancing measures look to see if the changes that have been implemented are causing new problems elsewhere in the system.

Green et al [5] suggest that QI interventions can reduce disparities in three ways by:

1. Improving quality more for those with the lowest quality.
2. Preferentially targeting disparity groups.
3. Tailoring care to cultural and linguistic barriers that cause disparities thus improving care for everyone but especially for disparity groups with culturally competent QI interventions.

Equitable approaches are seldom equal, because they consider and aim to minimise the impact of avoidable differences in baseline characteristics [11]. In order to achieve a culturally competent approach to QI Green et al [5] offer three guidelines, stating that such approaches should:

1. Identify disparities and use disparities to guide and monitor interventions.
2. Address barriers unique to specific disparity groups.
3. Address barriers common to many disparity groups.

Green et al [5] identify the common barriers to caring for disparity groups as:

1. Communication barriers: language, general literacy, and health literacy.
2. Difficulty accessing and navigating the health care system.
3. Lack of person-centredness.
4. Conscious or unconscious biases in clinical decision making.

Health Quality Ontario’s [7] guidance on using sociodemographic data for targeted improvement aims to support organisations in collecting and analysing sociodemographic data on a population’s social and demographic characteristics. They state these should include age, sex, gender, education level, income level, race and language with the purpose of informing targeted improvement that addresses health inequities in their QI plans. They state that to address inequities it is essential to fully understand all aspects of the problem the QI project is tackling. To do this involves identifying the inequities; understanding the current state; and identifying the root causes that can then be addressed. Collecting and understanding the

relevant data is vital for the first two steps, with the third relating to the complexity of how the social determinants of health interact with one another to create compounding inequities requiring a coordinated, solutions-focussed approach. The Institute of Healthcare Improvement [8] suggest the use of Community Health Needs Assessments to obtain data and inform QI strategy, whilst Weinick et al [12] advise conducting disparity impact assessments. After addressing their initial three steps, the Health Quality Ontario guidance [7] advises taking the following actions:

- Work to ensure commitment and dedicated organisational support to health equity through strategic and organisational planning.
- Identify existing organisational data sources to learn about patient populations.
- Develop intake and/or sociodemographic data collection process led by well-trained staff to ensure data is collected sensitively and effectively.
- Analyse data that highlights the inequities that exist within and between populations.
- Foster partnerships to develop population-specific indicators to be used across organisations.
- Develop partnerships with community organisations to ensure that all residents and patients receive the support they need.
- Continuously monitor data and adjust interventions as required.

Poynter et al [11] conceptualise inequity as incomplete access to health care. They describe a model to detail the factors that affect access which includes the four supply-side dimensions of access; consumer partnerships; cultural competency; health information and technology; and leadership. The model also includes a demand-side dimension of wider social circumstances and a sixth dimension as health literacy, which operates as both a supply-side and a demand-side factor. They identify these six dimensions as possible levers for action, challenging practitioners to address the factors they embody.

Poynter et al [11] note that inequitable health care has the effect of compounding inequity. QI practice has followed the lead of the wider health sector and rarely succeeded in full appreciation of the wider social context of health. In order to deliver truly equitable QI the full determinants affecting society must be addressed.

5. References

[1] Anarella JP, Wagner VL, McCauley SG, Mane JB, Waniewski PA. **Eliminating disparities in asthma care: identifying broad challenges in quality improvement.** American Journal of Medical Quality 2017 2019/05;32(6):598-604.

[2] Aysola J, Myers JS. **Integrating Training in Quality Improvement and Health Equity in Graduate Medical Education: Two Curricula for the Price of One.** Academic medicine: journal of the Association of American Medical Colleges 2018 2019/05;93(1):31-34.

[3] Boozary AS, Shojania KG. **Pathology of poverty: the need for quality improvement efforts to address social determinants of health.** BMJ quality & safety 2018 03/06; 2019/05;27(6):421-424.

[4] Cook SC, Goddu AP, Clarke AR, Nocon RS, McCullough KW, Chin MH. **Lessons for reducing disparities in regional quality improvement efforts;** PMC3732453. Am J Manag Care, 2012 09; 2019/05;18(6):s102-5.

[5] Green AR, Tan-McGrory A, Cervantes MC, Betancourt JR. **Leveraging quality improvement to achieve equity in health care.** Joint Commission Journal on Quality and Patient Safety / Joint Commission Resources 2010 10; 2019/05;36(10):435-442.

[6] Green SA, Poots AJ, Marcano-Belisario J, Samarasundera E, Green J, Honeybourne E, et al. **Mapping mental health service access: achieving equity through quality improvement.** Journal of public health (Oxford, England) 2013 2019/05;35(2):286-92.

[7] Health QO. **Quality Improvement Plan guidance: using sociodemographic data for targeted improvement**. 2018 2019/05

[8] Institute for Healthcare Improvement. **Six Ways to Tailor Your QI Work to Reduce Disparities**. [Accessed: May 2019].

[9] Marks, A. et al. **Bringing Equity into QI: Practical Steps for Undertaking Improvement** (Part 2). Center for the Health Profession. University of California, 2012.

[10] Mutha, S., Marks, A., Bau, I., Regenstein, M. **Bringing Equity into Quality Improvement: An overview and opportunities ahead** (Part 1).

Center for the Health Professions, University of California, San Francisco, 2012.

[11] Poynter M, Hamblin R, Shuker C, Cincotta J. **Quality improvement: no quality without equity?** 2017 07; 2019/05A

[12] Weinick RM, Hasnain-Wynia R. **Quality improvement efforts under health reform: how to ensure that they help reduce disparities--not increase them.** Health Aff (Millwood) 2011 10; 2019/05;30(10):1837-1843.

Appendix 1: Evidence matrix of included publications with priority listing

Table 1: Included Publications (Listed Alphabetically by author)

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
3	[1] Anarella JP, Wagner VL, McCauley SG, Mane JB, Waniewski PA.	**Eliminating disparities in asthma care: identifying broad challenges in quality improvement.** American Journal of Medical Quality 2017 2019/05;32(6):598-604.	Over the 5-year funding period, improvements in documented asthma severity diagnosis and control classification were observed. This article describes the EDAC approach, successes, and challenges.	• Collaboration and shared learning between provider sites, health plans, and EDAC leadership contributed to substantial improvements across the suite of practice-level clinical indicators.	Case study
1	[2] Aysola J, Myers JS.	**Integrating Training in Quality Improvement and Health Equity in Graduate Medical Education: Two Curricula for the Price of One.** Academic medicine: journal of the Association of American Medical Colleges 2018 2019/05;93(1):31-34.	This article illustrates a four-step framework by describing a faculty development workshop that provides strategies and tools for embedding equity into existing QI educational efforts and using QI methods to address equity challenges.	• Identifies the need for institutional leadership to build capacity and training to improve data collection and reporting of quality metrics by demographic variables; provide resources to disseminate lessons learned; support faculty development to teach and mentor trainees through equity-related QI work; and prioritize time in the curriculum for learners to participate in equity improvement activities.	Report

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
1	[3] Boozary AS, Shojania KG.	**Pathology of poverty: the need for quality improvement efforts to address social determinants of health.** BMJ quality & safety 2018 03/06; 2019/05;27(6):421-424.	Discussion on how the social determinants of health can impact on equity within QI initiatives.	• 6 dimensions of quality from the US Institute of Medicine.	Editorial
2	[4] Cook SC, Goddu AP, Clarke AR, Nocon RS, McCullough KW, Chin MH.	**Lessons for reducing disparities in regional quality improvement efforts;** PMC3732453. Am J Manag Care, 2012 09; 2019/05;18(6):s102-5.	Regional efforts to improve quality of care face particular challenges when addressing racial and ethnic disparities in health. Diverse populations have different needs and barriers, and the same QI intervention can affect them variably. Thus different approaches may be necessary to deliver high-quality healthcare to different populations.	• Use 6 step roadmap which go beyond usual emphasis on REL data collection and intervention selection. • Use a QI model that establishes equity as a cross-cutting dimension of every component of quality. • Move beyond initial problems and progress equity agenda in several ways.	Case study
1	[5] Green AR, Tan-McGrory A, Cervantes MC, Betancourt JR.	**Leveraging quality improvement to achieve equity in health care.** Joint Commission Journal on Quality and Patient Safety / Joint Commission Resources 2010 10;	Disparities in health care and quality for racial, ethnic, linguistic, and other disadvantaged groups are widespread and persistent. Health care organizations are engaged in efforts to improve quality in general	• To achieve equity in health care, hospitals and other health care organizations should move toward culturally competent QI and disparities-targeted QI interventions to achieve equity in health care, a key pillar of quality.	Research article

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
		2019/05;36(10):435-442.	but often make little attempt to address disparities.		
3	[6] Green SA, Poots AJ, Marcano-Belisario J, Samarasundera E, Green J, Honeybourne E, et al.	**Mapping mental health service access: achieving equity through quality improvement.** Journal of public health (Oxford, England) 2013 2019/05;35(2):286-92.	Improving access to psychological therapies (IAPTs) services deliver evidence-based care to people with depression and anxiety. A quality improvement (QI) initiative was undertaken by an IAPT service to improve referrals providing an opportunity to evaluate equitable access. QI methodologies were used by the clinical team to improve referrals to the service. The collection of geo-coded data allowed referrals to be mapped to small geographical areas according to deprivation.	• This article highlights the importance of QI in developing clinical services aligned to the needs of the population through the analysis of routine data matched to health needs. Mapping can be utilized to communicate complex information to inform the planning and organization of clinical service delivery and evaluate the progress and sustainability of QI initiatives.	Case study
1	[7] Health QO.	**Quality Improvement Plan guidance: using sociodemographic data for targeted improvement**. 2018 2019/05	The purpose of this guidance is to support organisations in collecting and analysing sociodemographic data – on a population's social and demographic characteristics including age, sex, gender, education level, income level, race and language – with the aim of	• The complexity of how the social determinants of health interact with one another to create compounding inequities requires a coordinated, solutions-focussed approach.	Guidance

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
			informing targeted improvement that addresses health inequities in their QI plans.		
1	[8] Institute for Healthcare Improvement.	**Six Ways to Tailor Your QI Work to Reduce Disparities**. [Accessed: May 2019].	If health care hopes to achieve equitable care for all patients, providers have to understand that QI can actually worsen disparities.	• "Centreing at the margins" rather than "one size fits all". Failure to do so leads to QI design that is inadequate to be applied to subsequent population groups. • Apply Community Health Needs Assessments to inform QI strategy.	Guidance
1	[9] Marks, A. et al.	**Bringing Equity into QI: Practical Steps for Undertaking Improvement** (Part 2). Center for the Health Profession. University of California, 2012.	The intent of this guide is to offer practical information for organisations to augment QI efforts in ways that will allow them to improve quality and equity of care.	• Without REAL data there is no truly effective means for identifying inequities and best practices that improve care. • Use SMART objectives: specific, measureable, attainable, realistic and timely. • Three types of measures: outcomes, process and balancing. Balancing measures look to see if the changes that have been implemented are causing new problems elsewhere in the system.	Guidance

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
				• When planning for spread it is important to acknowledge that one size does not fit all.	
1	[10] Mutha, S., Marks, A., Bau, I., Regenstein, M.	**Bringing Equity into Quality Improvement: An overview and opportunities ahead** (Part 1). Center for the Health Professions, University of California, San Francisco, 2012.	This guide focuses on how to improve performance and highlights what infrastructure is needed, how to define metrics and use data, and how to tailor care to reduce disparities.	• Disparities remain a common marker of poor health system performance. • Improvements in equity cannot be made without high quality race, ethnicity, and language (REAL) data. Concerted effort must be devoted to making the case for collecting and using this data. • QI may not benefit all populations equally. Careful measurement and analysis is vital to ensure that these efforts result in improved equity. • Interventions to improve health equity must be tailored to overcome barriers and meet the needs of populations experiencing unequal care. • Start small, identify goals for improvement, and track performance in reducing disparities.	Guidance

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
1	[11] Poynter M, Hamblin R, Shuker C, Cincotta J.	**Quality improvement: no quality without equity?** 2017 07; 2019/05A	This paper sets the scene for a shift in the Health Quality & Safety Commission's strategic priorities, to include equity as one of the four new areas of focus. It puts forward a blueprint for how equity could be achieved as part of continuous QI in health care.	• Standardisation can be problematic when pursued to the point of uniformity. For a QI initiative to be successful it must be adaptable to local needs. • Equality is 'sameness', while equity is an ethical construct that recognises different groups may require different approaches to get the same outcome. • Uniformity fails to account for the contextual differences between people, such as age, gender, ethnicity, socioeconomic status, disability, number and severity of health conditions and access to primary care. • Equitable approaches are seldom equal, because they consider and aim to minimise the impact of avoidable differences in baseline characteristics. • Inequitable health care has the effect of compounding inequity. QI practice has followed the lead of the wider health sector and rarely	Research article

Priority 1. Must know 2. Should know 3. Could know	Author / Title	Publication, reference & date	Aim / Methods	Conclusion / Key Points	Notes / Study Type
				succeeded in full appreciation of the wider social context of health. • Six dimensions that are important drivers of equity in health QI.	
1	[12] Weinick RM, Hasnain-Wynia R.	**Quality improvement efforts under health reform: how to ensure that they help reduce disparities--not increase them.** Health Aff (Millwood) 2011 10; 2019/05;30(10):1837-1843.	Despite persistent evidence of continued racial and ethnic disparities in health care, little explicit attention has been paid to how quality improvement activities might affect disparities. This article highlights the challenges to ensuring that quality improvement efforts reduce racial and ethnic disparities.	• Make certain that quality improvement efforts measure disparities and improvements in them. • Effort required not to create perverse incentives for providers to avoid serving minority patients. • Application to institutions where minority patients are most likely to receive care. • Fully engage minority patients despite language or other barriers. • Develop disparities impact assessments to measure the effect on reducing disparities.	Analysis & commentary

Appendix 2: Search Strategy

Bibliographic Databases	Search strategy (inc. limits and filters)
Medline	1. "quality improvement".mp. or *Quality Improvement/ 2. *Health Equity/ or equity.mp. 3. inequal*.mp. 4. *Healthcare Disparities/ or *Health Status Disparities/ or disparity.mp. 5. 2 or 3 or 4 6. 1 and 5 7. limit 6 to (english language and humans and yr="2009 - Current") ***Number of records selected:*** 33 results (from 485)

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