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Point of View

The Population Health Template: A Road Map for Successful Health Improvement Initiatives

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Introduction

There are several approaches to health improvement initiatives. Traditionally, in the US health care system one sees a mix of Project Management Institute methodology, which has been oriented more toward technology, infrastructure, and architectural projects. These include lean/Six Sigma or Plan-Do-Study-Act (PDSA) for quality improvement–related efforts and PRECEDE-PROCEED for public/community health initiatives. Although each of these approaches has merit, none is entirely positioned to address the unique needs of population health. This leads to project variation, inconsistent results, and difficulty determining program value.

Presented here is a brief review of the relevant literature that supports the need for a guide for population health improvement initiatives and an explanation of the elements of a template designed to facilitate these efforts. This template creates a standardized population health approach to project planning, development, and execution that may be applied to all types of health improvement initiatives for a variety of populations.

The Need for a Template for Health Improvement Initiatives

The current state of health improvement initiatives as reported in the literature suggests the need to develop a population health-specific template for health system leaders. These published reports are predominantly from work in the public or community health sector. The public health approach, including public health program evaluation, applies to large communities. For example, Community Health Needs Assessments (CHNAs) are focused on populations of individuals within the catchment area of not-for-profit institutions seeking to validate their tax-exempt status. The CHNA often identifies health improvement opportunities of indigent and underserved populations and creates interventions to address these issues of the broad population.

In addition to being broad, public health and CHNA approaches lack the detailed connection between causal assessment and intervention planning inherent in logic models. For example, the PRECEDE-PROCEED model is frequently used as a framework for health improvement activities. Glanz et al[1(p.409)] state, ''PRECEDE-PROCEED may be thought of as a road map and behavior change theories as the specific directions to a destination.'' As a logic model, Glanz et al add, ''it [PRECEDE-PROCEED] links the causal assessment and the intervention planning and evaluation into one overarching planning framework.''[1 (p.409)] Glanz et al point out ''that the PRECEDE-PROCEED also does not emphasize the specifics of intervention development methods in detail''[1(p.417)] or call out the need for leadership development, collaboration, and process improvement.

Continuous Quality Improvement (CQI) is, broadly, terminology to represent methods to improve quality and safety in health care, but more specifically focuses on methods stemming from Total Quality Management methodology. CQI, as used in this paper, refers to the methodology used to alter work process and not the more diffuse changes the proposed template would suggest. Although CQI methodologies contain elements of project planning and success measurement, they often lack behavioral change theory and a comprehensive approach to problem solving. Instead, these methodologies are focused on the specific quality, safety, or process problem in question.

The Standards for Quality Improvement Reporting Excellence[2] (SQUIRE) were developed to ''provide a framework for reporting new knowledge about how to improve healthcare.'' SQUIRE includes some elements common to

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this population health improvement template such as problem description, available knowledge, aims, measures, and analysis; however, it lacks a formal evaluation of the social determinants of health. Project planning approaches from the CQI/performance improvement space, such as PDSA, Six Sigma, and lean, all provide an organized approach to quality improvement. Although many of the steps in CQI techniques are effective in catalyzing change, they tend to focus on a specific quality problem and solution as opposed to an emphasis on the health problems of a group of defined individuals.

There is a body of literature on program evaluation in public health that is applicable to population health initiatives and may be incorporated into a standardized population

Table 1. Population Health Improvement Template with Explanation

Template Topic	*Explanation*
Health Issue to be Improved Upon	Succinct problem statement
Current State - Population Addressed	
Population Factors	Social Determinant - Determine the predisposing, enabling, and reinforcing factors such as income and social status; social network supports; education; employment/working conditions; social environments; physical environments; personal health practices; biology and genetic endowment; gender; culture, upstream factors, inherent bias.
Disparity Issues	Define the specific disparities identified for the population.
Behavioral Health Factors	Individual, family, and community readiness to change, psychological, engagement, educational, and social issues.
Literature Review	Describe the results in the literature of initiatives attempting to address the identified health issue.
Similar Initiatives the Population Was Exposed to and Results	Describe the results in the literature of initiatives attempting to address the identified health issue *specific to the population identified above*.
Evidence-Based Best Practices	Describe the evidence-based practices or expected outcomes related to the health problem.
Current Population Patient-Generated Data	Are there any data or input specifically from the population?
Data Related to Meeting the Quintuple Aim.	*Health outcomes*- Delivering high-quality care that improves health outcomes *Provider experience* - Creating an exceptional experience for providers *Patient experience* - Ensuring an exceptional experience *Caregiver satisfaction* – Family or individual caregiver experience *Cost of care* - Making health care delivery more affordable
Summary Conclusions from Data	List the important conclusions from the data that help frame the health issue being addressed.
Desired Future State	Health Issue Restated Based on Data Analysis
Population	Social determinants (as in current state), disparity issues, behavioral health factors.
Stakeholder Input	Stakeholder chart.
Stakeholder Input	Stakeholder needs and expectations.
Stakeholder Input	Stakeholder initiative suggestion and prioritization.
Gap Analysis	Difference between current and future states.
Proposed Initiative Description	Project statement. Definition of ultimate outcome – key deliverables. Stakeholder input and sign-off. Budget and financial return on investment. Behavior change opportunities and measures. SMART measures of success compared to baseline. Secondary return on investment related to clinical outcomes and experience.
Project Implementation	
	Create project charter. Define risks and mitigation. Project and team communication schedule. Task identification and responsibility chart. Assessment of pre and post social determinant improvement expectations, such as disparity–barrier elimination, upstream factors addressed, and behavioral changes. Presentation to stakeholders for feedback and sign-off. Implement and monitor progress.
Project Evaluation & Close	
	Close project – record and share results. Evaluate process, impact, and outcome.

SMART, specific, measurable, achievable, results-focused, and time bound.

health approach. Millstein and Wetterall[3(p.222)] recommend that steps be followed in an evaluation. These steps include evaluating elements of improvement activities such as problem definition, evaluation, data or evidence, conclusions, and sharing of lessons. In addition to following a common format and steps, standards for effective evaluation are suggested. These standards should reflect utility (meeting the needs of intended users); feasibility (be realistic, prudent, diplomatic, and frugal); propriety (behave legally, ethically, and with due regard for the welfare of those involved and those affected); and accuracy (reveal and convey technically accurate information). Attention to these standards will result in an objective and fair program evaluation.

What also is unique to successfully managing population health initiatives but more likely associated with quality improvement is the need to incorporate a solid base of evidence into the project approach through data collection and analysis. The infusion of data into a population health initiative assists in focusing efforts and reducing the variation in outcomes often associated with other methodologies.

The Template

The elements and accompanying explanations are shown in Table 1. Elements were selected by synthesizing the literature, identifying gaps, and including factors that have proven successful in other studies. They were validated by survey as very important by a group of population health leaders of an integrated health system and faculty at an academic institution. The template includes 5 distinct areas: (1) clear issue definition or health concern statement, (2) current state, (3) future state, (4) project implementation, and (5) program evaluation.

The success of an initiative relies on a well-articulated *health improvement statement* derived with stakeholder input that answers specific questions related to the population health goals, objectives, and measurements. It shapes the focus and scope of the subsequent stages. The *current state* gathers information that helps understand the variety of forces impacting the health issue in question. It includes the population factors of social determinants, disparities, and behavioral health implications that when left unaddressed hinder the success of an improvement initiative. In this phase, the literature is reviewed to understand what has already been done, evidence-based best practices are identified, and data related to the quintuple aim (health outcomes, provider and patient experience, caregiver satisfaction, and cost of care) are all aggregated into conclusions from the current state analysis. Next, the *desired future state* is defined, resulting in a refined health improvement statement that now includes stakeholder input. Once clearly articulated, it is compared to the current state using a gap analysis.

This leads to a proposed initiative that is designed to close the gap and includes key deliverables, stakeholder sign-off, budget and return on investment, behavior change opportunities and measures, SMART (specific, measurable, achievable, results-focused, and time bound) goals, and secondary return on investment related to clinical outcomes and experience. This enables the *project implementation* process, which requires a clear project charter, understanding the risks and how to mitigate them, clear communication and task identification, and a well-defined process to monitor progress. A successful implementation requires *project evaluation and close*, consisting of defining the evaluation parameters early in the project, recording and sharing the results, and evaluating the project process, impact, and outcome.

Conclusion

The template provides a population health–based, results-oriented project planning methodology that is needed for successful initiatives. It addresses the need clearly illustrated in the literature. The elements have been validated as very important by population health experts. The discipline of following the template requires that the population health improvement team take the time to clearly define the improvement they are seeking, whom it will affect, and how it will be measured. The addition of population health assessment to the current and future state analyses adds a dimension to the initiative not previously formally incorporated into initiatives. The next steps include the creation of a toolkit to guide its use, validation in active health improvement initiatives, and the development of a workbook to add depth to the element explanations provided above.

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