The Population Health Template: A Roadmap for Successful Health Improvement Initiatives

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The Population Health Template: A Roadmap for Successful Health Improvement Initiatives

Michael Kobernick, MD, MS-HSA, MS-PopH, FAAFP
Medical Director, Clinical Account Management
Blue Cross Blue Shield of Michigan
Lecturer, Jefferson College of Population Health
Learning Objectives

• Describe the population health template as a tool to achieve and report on Quintuple Aim objectives of health improvement initiatives.

• Identify gaps in current health initiatives illustrating the needs for the template’s more organized approach.

• Apply the template to health improvement opportunities in health improvement initiatives.

• Understand the role of social determinants of health in health improvement initiatives.
The Population Health Template: A Road Map for Successful Health Improvement Initiatives

Michael Kobernick, MD, MS-HSA, MS-PopH; Denise Hammel, RN, BSN, MSN; Stacey Duncan-Jackson, MPA, BSN, RN; Juan Leon, PhD; and Drew Harris, DPM, MPH.

The population health template was designed to assist health systems and population health care organizations to achieve and report on the Quintuple Aim objectives:

- Health Outcome
- Provider Experience
- Patient Experience
- Caregiver Satisfaction
- Cost
10% of health-related activity...
Current Gaps in Population Health Programs

Population health initiatives do not often address social determinants of health.

Most often deal with broad populations.

Do not follow project planning methodology.

Health improvement issue is not clearly defined.

Measures of success are not carefully planned.

Program evaluation is not well organized.
Common Failure Points for Population Health Improvement Programs According to Population Health Experts:

- Effecting organizational change: 58.82%
- Engaging in collaborative leadership: 52.94%
- Client participation or program affinity: 35.29%
- Meeting user requirements: 23.53%
- Sustainable behavioral change: 70.95%
A Tool to Help Close the Gaps and Failure Points: The Population Health Template

This roadmap creates a standardized population health approach to project planning and execution that may be applied to all types of health improvement initiatives for a variety of populations.
Population Health Roadmap
Health Improvement Statement

• Problem statement.
• Iterative.
Population Health Roadmap
Current State

- Literature review.
- Similar initiatives.
- Evidenced-based best practices.
- Patient-generated data.
- Quintuple aim data.
- Conclusions from data.

Quintuple aim metrics:
- Health outcome.
- Provider experience.
- Patient experience.
- Caregiver satisfaction.
- Cost.

Population factors:
- Social determinants.
- Disparities.
- Behavioral health.

START
HEALTH CONCERN
CURRENT STATE
Population factors:
- Social determinants.
- Disparities.
- Behavioral health.

Quintuple aim metrics:
- Health outcome.
- Provider experience.
- Patient experience.
- Caregiver satisfaction.
- Cost.

END
Population Health Roadmap
Future State

Quintuple aim metrics:
• Health outcome.
• Provider experience.
• Patient experience.
• Caregiver satisfaction.
• Cost.

Population factors:
• Social determinants.
• Disparities.
• Behavioral health.

Stakeholder input.
• Gap analysis.
• Initiative description.
• Ultimate outcome.
• SMART goals.
• Key deliverables.
• Behavior change.
• Budget and ROI.
Population Health Roadmap
Project Plan & Execution

- Project charter.
- Risks/mutation schedule and task lists.
- Logic model milestones.
- Assessment of change in pre/post social determinants.

START
HEALTH CONCERN
CURRENT STATE
FUTURE STATE
PROJECT PLAN & EXECUTION
END
Population Health Roadmap
Program Evaluation

• Utility.
• Feasibility.
• Propriety.
• Accuracy.
(CDC)
Population Health Roadmap
Concept Map

START
HEALTH CONCERN
- Problem statement.
- Iterative.

CURRENT STATE
Population factors:
- Social determinants.
- Disparities.
- Behavioral health.

FUTURE STATE
Quintuple aim metrics:
- Health outcome.
- Provider experience.
- Patient experience.
- Caregiver satisfaction.
- Cost.

PROJECT PLAN & EXECUTION
- Project charter.
- Risks/mitigation schedule and task lists.
- Logic model milestones.
- Assessment of change in pre/post social determinants.

PROGRAM EVALUATION
- Utility.
- Feasibility.
- Propriety.
- Accuracy. (CDC)

END

• Literature review.
• Similar initiatives.
• Evidenced-based best practices.
• Patient-generated data.
• Quintuple aim data.
• Conclusions from data.
Gap Example – Health Coaching

Vendor was asked to provide specific examples of how they would demonstrate value from coaching. They were given the template we will discuss to complete.

- **Year 1:** Identify a baseline using the Health Assessment (HA) Score for all HA completers. Also, identify coaching goal areas for future outcome improvements.

- **Year 2:** Collect data to compare with year 1 benchmark data (coaching participant vs. non-coaching participant).

**Discussion:**
No clear statement of health issue being addressed through coaching, the population being coached, and metrics of value.
Chronic Back Pain – Health Issue & Current State

• Health Issue
  ▪ Patients with chronic back pain will benefit from an evidence-based, protocol-driven treatment program.
  ▪ Elimination of out-of-pocket expenses will increase participation the program.

• Current State
  ▪ Musculoskeletal disorders account for 9.5% or annual employee health care expense.
  ▪ Social determinants – high out-of-pocket expenses create an economic disparity that limits an individual’s willingness to enroll in a long term program.
Current State– Musculoskeletal - Back

**Top 10 Diagnostic Groups Analysis**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plan Paid</td>
<td>% of Total Plan Paid</td>
</tr>
<tr>
<td>Musculoskeletal Disorders</td>
<td>$13,644,824</td>
<td>4%</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>$12,545,617</td>
<td>4%</td>
</tr>
<tr>
<td>Pregnancy Complications</td>
<td>$8,426,704</td>
<td>2%</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>$7,664,114</td>
<td>2%</td>
</tr>
<tr>
<td>Screening</td>
<td>$8,268,582</td>
<td>2%</td>
</tr>
<tr>
<td>ENT and Upper Resp Disorders</td>
<td>$9,473,114</td>
<td>3%</td>
</tr>
<tr>
<td>Gynecological Disorders</td>
<td>$9,717,937</td>
<td>3%</td>
</tr>
<tr>
<td>Joint Derangement</td>
<td>$8,144,000</td>
<td>2%</td>
</tr>
<tr>
<td>Back Pain</td>
<td>$7,206,563</td>
<td>2%</td>
</tr>
<tr>
<td>Chest Pain</td>
<td>$6,430,647</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$91,522,101</td>
<td>26%</td>
</tr>
<tr>
<td><strong>All Others</strong></td>
<td>$257,312,161</td>
<td>74%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$348,834,262</td>
<td>100%</td>
</tr>
</tbody>
</table>

• Includes 4 diagnoses in the Top 10 Diagnostic Group list
  • Musculoskeletal Disorders
  • Osteoarthritis
  • Joint Derangement
  • Back Pain
• Accounts for 12% of total claims spend
• Accounts for 40% of the Top 10 Diagnostic Groups
Chronic Back Pain – Future State – Initiative Description

Population – Patients with chronic neck and back pain identified though claims analysis

10-Week Intensive Treatment

• Clinical protocols and PHB proprietary medical strengthening technology and rehabilitation equipment
• Twice a week visits
• Periodic isometric evaluations to measure and document member’s progress
• Education and health coaching
• Experience survey at the end of 10 weeks

42 Weeks of Integrative Wellness

• Clinical protocols including fitness, nutrition, stress reduction, flexibility, and strength training
• Once a week visits
• Education and health coaching

• POTENTIAL ENGAGEMENT OF PUBLIC HEALTH AND/OR COMMUNITY AGENCIES IN EDUCATION AND COACHING
Chronic Back Pain – Future State – SMART Metrics

<table>
<thead>
<tr>
<th>Soft Measure</th>
<th>Unit</th>
<th>Expected Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Level</td>
<td>Visual Analog Scale</td>
<td>Decline</td>
</tr>
<tr>
<td>Back Function</td>
<td>Oswestry Disability Index</td>
<td>Improve</td>
</tr>
<tr>
<td>Neck Function</td>
<td>Neck Disability Index</td>
<td>Improve</td>
</tr>
<tr>
<td>Daily Functioning</td>
<td>Patient Centered Outcome</td>
<td>Improve</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>Assessment of Quality of Life</td>
<td>Improve</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Survey</td>
<td>Satisfied</td>
</tr>
</tbody>
</table>
### Chronic Back Pain – Future State – SMART Metrics

<table>
<thead>
<tr>
<th>Hard Measure</th>
<th>Unit</th>
<th>Expected Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Care</td>
<td>Dollars</td>
<td>Decline</td>
</tr>
<tr>
<td>Fees for Program</td>
<td>Dollars</td>
<td>Will assist in decreasing cost of care</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>Dollars</td>
<td>Positive</td>
</tr>
</tbody>
</table>
Chronic Back Pain – Project Plan and Execution

**Project Status**
- Kick off complete
- Resources engaged
- SFTP server accounts set up
- ABS data extract in process
- Communications team engaged
- TPA claims data extract completed

**Next Steps**
- Finalize the Pilot ROI
- Finalize the Pilot Measures and Reports
- Finalize Pilot Contract
- Program Leaders to Tour Facilities
- Complete analysis and initial pilot program identification
- Review the pilot populations
- Initiate communications review process
Chronic Back Pain – Program Evaluation

Pain Score Results

<table>
<thead>
<tr>
<th></th>
<th>Maximal Score</th>
<th>Initial (n=73)</th>
<th>Endpoint - 20 Visits (n=61)</th>
<th>6 Months (n=41)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>9.03</td>
<td>3.98</td>
<td>4.61</td>
</tr>
</tbody>
</table>
Chronic Back Pain – Project Plan and Execution

Pre and Post-Program Claims

- Pre-Program Claims (n=59) = $836,675
- Post-Program Claims (n=59) = $424,264
- Difference Between Pre and Post = $412,411

61 members completed 20 visits. Two members were omitted because they termed from and their post-program claims were not available.
## Chronic Back Pain – Program Evaluation

<table>
<thead>
<tr>
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<th>Actual Results</th>
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<tr>
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<td>Visual Analog Scale</td>
<td>Decline</td>
<td>Declined, met goal of Pilot</td>
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<td>Improved, met goal of Pilot</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>Assessment of Quality of Life</td>
<td>Improve</td>
<td>Declined, however, results were high</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Survey</td>
<td>Satisfied</td>
<td>Satisfied, met goal of Pilot</td>
</tr>
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## Chronic Back Pain – Program Evaluation

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<td>Cost of Care Declined</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>Dollars</td>
<td>Positive</td>
<td>Positive (1.31:1)</td>
</tr>
</tbody>
</table>
Population Health Leadership Series & PopTalk Webinar Series

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>March 27, 2019</td>
<td>Mary Cooper, MD, JD</td>
<td>Population Health Quality &amp; Safety</td>
</tr>
<tr>
<td>April 24, 2019</td>
<td>Harm Scherpbier, MD, MS</td>
<td>Population Health Analytics</td>
</tr>
<tr>
<td>May 29, 2019</td>
<td>Katherine Schneider, MD, MPhil, FAAFP</td>
<td>Patient Engagement is Not an App</td>
</tr>
<tr>
<td>June 26, 2019</td>
<td>Olivia Banyon, MPH</td>
<td>Connecting the Dots with Diabetes Management: From Analytics to Virtual Engagement</td>
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</tbody>
</table>

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