Introducing the South Dakota Quality Improvement Toolkit

A RESOURCE FOR QUALITY IMPROVEMENT IN SOUTH DAKOTA
South Dakota Cardiovascular Collaborative

Vision: Healthy people, Healthy communities, Healthy South Dakota
Mission: Improve quality of life of all South Dakotans through prevention and control of heart disease and stroke

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<th>Goals</th>
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<td><strong>I. IMPROVE DATA COLLECTION</strong></td>
<td>1. Identify and track data to support at least one heart disease and stroke policy change or recommendation by 2021.¹ <em>In Process</em>&lt;br&gt;2. Increase input into at least 4 data collection tools by organizations and/or individuals by 10% by 2021.²</td>
<td>A. Identify and promote tracking of a common set of minimum cardiovascular health data for use for both prevention and improvement of post-cardiac event outcomes.&lt;br&gt;B. Maximize community-clinical linkages (e.g. CHW, different sectors).&lt;br&gt;C. Support policies that increase access to heart disease and stroke care for priority populations.&lt;br&gt;D. Improve collaboration with tribal communities.</td>
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<td><strong>II. PRIORITY POPULATIONS</strong></td>
<td>1. Decrease the age-adjusted death rate due to heart disease in the American Indian population from 212.5 per 100,000 to 202.0 per 100,000 by 2021.³ Progress: 241.4 per 100,000 (2017)&lt;br&gt;2. Decrease the age-adjusted death rate due to stroke in the American Indian population from 48.5 per 100,000 to 46 per 100,000 by 2021.³ Progress: 48.2 per 100,000 (2017)&lt;br&gt;1. Decrease emergency response times by decreasing average ambulance chute times from 5.23 minutes in 2018 to 4.25 minutes by 2021.⁴ Progress: 5.23 mins (2018)&lt;br&gt;2. Increase the number of EMTs in South Dakota from 3,281 EMTs in 2016 to 3,850 EMTs by 2021.⁴ Progress: 3,301 EMTs (2018)&lt;br&gt;3. Identify and designate 5 cardiac ready communities by 2021. Progress: 1 community pursuing designation (2019)&lt;br&gt;1. Decrease prevalence of heart attack from 4.7% (2015) to 4.45% (5% decrease) by 2021.⁵ Progress: 4.9% (2017)&lt;br&gt;2. Decrease prevalence of stroke from 2.6% (2015) to 2.47% (5% decrease) by 2021.⁵</td>
<td>A. Promote the different models of team-based, patient-centered care (health cooperative clinic, health homes, PCMH).&lt;br&gt;B. Maximize community-clinical linkages (e.g. CHW, different sectors).&lt;br&gt;C. Support policies that increase access to heart disease and stroke care for priority populations.&lt;br&gt;D. Improve collaboration with tribal communities.&lt;br&gt;A. Utilize results of needs assessment to address infrastructure and sustainability of EMS.&lt;br&gt;B. Ensure utilization and sustainability of community-based resources and programs such as Mission: Lifeline, LUCAS, and pit-crew CPR for EMS services.&lt;br&gt;C. Identify and expand mobile integrated health programs.&lt;br&gt;D. Promote the cardiac ready community program to South Dakota communities ensuring at minimum 5 are enrolled in the program.</td>
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<td><strong>IV. PREVENTION &amp; MANAGEMENT</strong></td>
<td>1. Decrease prevalence of heart attack from 4.7% (2015) to 4.45% (5% decrease) by 2021.⁵ Progress: 4.9% (2017)&lt;br&gt;2. Decrease prevalence of stroke from 2.6% (2015) to 2.47% (5% decrease) by 2021.⁵ Progress: 2.7% (2017)</td>
<td>A. Encourage the implementation of quality improvement processes in health systems.&lt;br&gt;B. Promote awareness, detection and management of high blood pressure (clinical innovations, team-based care, and self-monitoring of blood pressure).&lt;br&gt;C. Support the expansion of prevention and lifestyle interventions in communities and for all ages across the lifespan.</td>
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Quality Improvement Toolkit

https://doh.sd.gov/diseases/chronic/heartdisease/QualityImprovement/
HEART DISEASE AND STROKE PREVENTION PROGRAM

The mission of the Heart Disease and Stroke Prevention Program is to improve cardiovascular health, reduce the burden, and eliminate disparities associated with heart disease and stroke. The program focuses on both primary and secondary prevention, detection, and monitoring of heart disease and stroke within South Dakota. We aim to prevent heart disease and stroke through public and professional education with the intention of empowering individuals and communities to adopt healthy lifestyle behaviors and build skills to initiate environmental and policy change strategies.

The risk of heart disease and stroke can be reduced by taking steps to prevent and control the risk factors that put people at greater risk for heart disease, heart attack, and stroke. Additionally, knowing the signs and symptoms of both heart attack and stroke, calling 911 right away, and getting to a hospital are critical to survival. It is important to note that people who have already had a heart attack or stroke can also work to reduce their risk of future events by controlling their risk factors. The more risk factors you have, the higher your risk of developing heart disease or stroke.

Heart Disease, Stroke and other Cardiovascular Disease 2018 Statistics

- Cardiovascular disease (CVD), listed as the underlying cause of death, accounts for nearly 836,546 deaths in the US. That's about 1 of every 3 deaths in the US.
- About 2,300 Americans die of cardiovascular disease each day, an average of 1 death every 38 seconds.
- Cardiovascular diseases claim more lives each year than all forms of cancer and Chronic Lower Respiratory Disease combined.
- About 92.1 million American adults are living with some form of cardiovascular disease or the after-effects of stroke.
- Direct and indirect costs of total cardiovascular diseases and stroke are estimated to total more than $329.7 billion, that includes both health expenditures and lost productivity.
- Nearly half of all non-Hispanic black adults have some form of cardiovascular disease, 47.7 percent of females and 46.0 percent of males.
- Coronary Heart Disease is the leading cause (43.8 percent) of deaths attributable to cardiovascular disease in the US, followed by Stroke (16.8 percent), Heart Failure (9.0 percent), High Blood Pressure (5.4 percent), diseases of the arteries (3.1 percent), and other cardiovascular diseases (17.9 percent).
- Heart disease accounts for 1 in 7 deaths in the US.
- Cardiovascular disease is the leading global cause of death, accounting for more than 17.9 million deaths per year in 2015, a number that is expected to grow to more than 23.6 million by 2030.
- CVD and stroke accounted for 14% of total health expenditures in 2013-2014. This is more than any major diagnostic group.

https://doh.sd.gov/diseases/chronic/heartdisease/
QUALITY IMPROVEMENT TOOLKIT OUTLINE

INTRODUCTION

Welcome to the South Dakota Quality Improvement Toolkit! This Toolkit was created through a partnership between the South Dakota Department of Health and the South Dakota Cardiovascular Collaborative. The purpose of this Toolkit is to familiarize you with quality improvement processes as a way of improving clinical quality.

- Improving Cardiovascular Healthcare
- Overview of Quality Improvement

THE QUALITY IMPROVEMENT APPROACH

Leadership creates the mandate for change  
STEP 1 Identify the Opportunity  
STEP 2 Collect Data  
STEP 3 Analyze the Data  
STEP 4 Choose an Approach/Strategy for Improvement - Plan

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STEP 5 Implement the Plan - Do
STEP 6 Evaluate the Plan - Study
STEP 7 Improve the Plan - Act
Hold the Gains - Establish Sustainable Processes

RESOURCES

Case Studies
Additional Resources

RESOURCE GUIDE & WEBINARS
APPENDICES

https://doh.sd.gov/diseases/chronic/heartdisease/QualityImprovement/
What is Quality Improvement?

Quality improvement, or QI (also known as continuous quality improvement, quality management), is an organizational approach to managing and improving the systems that support the work of an organization. It focuses on creating system-level changes so that the organization’s work meets or exceeds the needs and expectations of everyone who depends on that work.

Process and system thinking is critical to QI. All work of any kind is regarded as a process; a series of related activities or tasks aimed at producing a particular outcome. Everything that we do in health care involves processes, whether they are the defined steps in making an appointment or the multiple steps in managing the more complex needs of a person with cardiovascular disease.

QI is all about continuous improvement, a never-ending quest to improve processes by identifying root causes of problems. Process improvement involves making gradual improvements in everyday processes to reduce variation and redundancies, improve quality of services, and increase customer satisfaction.

What is the Difference Between QI and QA?

There is often confusion about the difference between Quality Improvement (QI) and Quality Assurance (QA).

Here are some distinguishing factors:
Suggested First Meeting Activity Details

1. Introduce team members and roles, review agenda, and set ground rules
   - Assign a recorder/scribe and a timekeeper for the meeting. Team members may choose to rotate these tasks from one meeting to the next.
   - Review the agenda and describe the purpose and objectives of Step 1.
   - Make introductions and outline team member roles. It is important that everyone knows who is in the room and why they have been invited to participate.
   - Describe the team’s reason for existence and what they are expected to accomplish.
   - Set meeting ground rules and determine how you will make decisions as a group. This is an important task at the beginning so that everyone understands the expectations. See Appendix A and the Resources section for more information.

2. Describe the Aim statement and seek consensus
   - This is a critical step and it is important to take the time to clearly define your Aim statement.
   - In developing your Aim statement you should consider these three questions:
     - What are we trying to accomplish?
     - How will we know that a change is an improvement?
     - What change can we make that will result in improvement?
   - It will be important that the Aim is measurable with a defined time frame. It is also important to identify how it will be measured and how you will know when you have achieved it. Consider using the SMART goal format when developing an Aim statement. See Appendix B for more information.
   - Your final Aim statement should be based on data, so the Aim statement may change as you learn more about the process. It will be important to continually check in with the team and with the Project Sponsor to obtain consensus on any changes that are made. Use the data as part of your justification for the change.

TIP: The Institute of Healthcare Improvement (IHI) uses a model developed by the Associates for Process Improvement (API):
While IHI and API both emphasize the importance of this step, they agree that it is not critical to get it perfect right away, or even to go in the order they are listed here.
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ACCELERATED QI OPTION

Step 5 is where the alternative rapid approach differs from the more methodical steps to quality improvement. Instead of planning an entire multi-component process in great detail before implementation, it relies on a more incremental approach.

To accelerate Step 5, simple changes from the overall improvement design from Step 4 are tried out on a trial basis, one at a time. Each trial includes simple measurements to evaluate its success. For the process you want to test out, such as the Information Summary, you will need at least one provider and care team to agree to test it out. They will need to provide you feedback on how the process went, including an approximate amount of time it took to complete the tasks. If tests and improvements are made in rapid succession, you can more rapidly get to your goal with something that can be implemented system-wide. For many processes, this should only take weeks rather than months.

The keys to this accelerated approach involve four principal activities:
1. Plan small strategies that can be tested within a week’s time. Be sure each change is compatible with the overall improvement plan, and that each trial would help to answer concerns about the new process. Ask one or two people to undertake the week-long test and provide them with the instructions, information, and tools they will need. Carefully choose a few measurements to evaluate the trial. Make sure the data will be simple to collect.
2. Try one or more changes on just a small number of cases (usually 5-10).
3. Evaluate the results of the trials.
4. If the trial is successful, refine the process to prepare it for full implementation (which will happen in Step 6).

Rethink those strategies that did not work well and make the necessary improvements.

RESOURCES

Plan-Do-Study-Act Cycle
Plan-Do-Study-Act (PDSA) Worksheet
From the Institute for Healthcare Improvement
http://www.ihi.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx

This page describes the PDSA cycle and provides a worksheet to document a test of change. Brief videos explaining PDSA cycles are also available on the page.

Science of Improvement: Testing the Changes
From the Institute for Healthcare Improvement
http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx

This page describes the Science of Improvement: Testing the Changes.

Thank You Case Study Participants!

Melissa Gale and Heather Bowar at Avera St. Benedict Health Center

Sandra Ruesch and Karen Weber at Brookings Health System

Sandy Josko, Susanne Parks, Elliot Nelson, Sarah Johnson, Bridget O’Brien, and Jill Swanson at Sanford Health – Sioux Falls Region

Nancy McDonald at Great Plains Quality Innovation Network
Quality Improvement Webinar Series

The Value Case for Initiating Quality Improvement (QI)
This webinar gives an overview of how payers perceive quality improvement (QI) efforts and how it impacts reimbursements. It also discusses the importance of different QI initiatives and how QI can impact the bottom line for organizations fiscally. The webinar is presented by Kathi Mueller from the South Dakota Department of Social Services and Dr. Preston Renshaw, Chief Medical Officer for Avera Health Plans and Dakotacare.

Telling the Quality Improvement (QI) Story
This webinar discusses the basics of QI, what it is and how it is used. It also discusses quality improvement and its impact on population health. The webinar is presented by Holly Arends from the South Dakota Foundation for Medical Care and Patti Brooks from Avera Health Plans.

Implementing Quality Improvement in Rural Areas
This webinar allows us to hear from practitioners in the field as we present case studies of how quality improvement has been used in rural settings, examining the successes and challenges.
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