

Data Collection Planning: Beginning with the End in Mind

Care Coordination Grantee Webinar

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Stratis Health

- Independent, nonprofit organization founded in 1971 and based in Minnesota
 - Mission: Lead collaboration and innovation in health care quality and safety, and serve as a trusted expert in facilitating improvement for people and communities
- Core expertise: design and implement improvement initiatives across the continuum of care
 - Funded by government contracts and private grants
 - We work at the intersection of research, policy, and practice
- Our organizational priorities include:
 - Improving health outcomes and reducing disparities in rural communities
 - Addressing the opioid crisis through stewardship and medications for opioid use disorder (MOUD) training and education
 - Working with community and national partners to advance health equity by understanding structural inequities such as racism, ageism, sexism, and xenophobia.

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Purpose and Objectives

The purpose of this session is to provide you with tools, resources, and guidance to support completion of our [Data Collection Plan](#) deliverable.

After this session, participants will be able to:

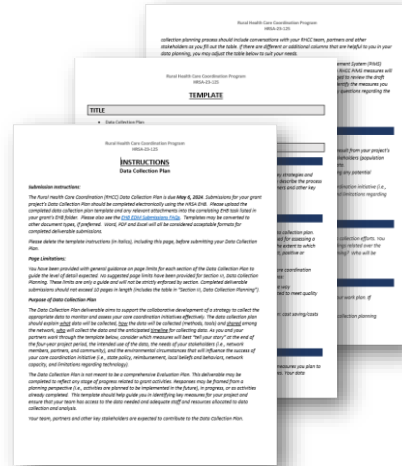
- Use the first two questions of the Model for Improvement to identify the primary questions the project will seek to answer
- Explore various kinds of measures that could be useful for the purposes of measuring project impact
- Articulate the necessary components of a data collection strategy

Quality Improvement Basics Course

- Developed by Stratis Health with funding from FORHP
- Designed to equip professionals with the knowledge and tools to start quality improvement projects.
- May be completed sequentially or individual modules and tools may be used for stand-alone training and review.
- [Quality Improvement Basics - Stratis Health](#)

Data Collection Plan Deliverable

- **Part 1: Care Coordination Initiative Background**
 - Overview of your care coordination initiative, key strategies, and primary outcomes of interest.
 - Process to produce data collection plan.
- **Part 2: Primary Evaluation Questions**
 - What questions are you seeking to answer through the data collection plan that will help tell the story of how activities were implemented and the impact of activities on processes, partnerships, and patients.



Data Collection Plan Tool

Care Coordination Initiative				
Overview of your program				
Key Activity Title	Key Activities	Evidence-Based or Promising Practice Model	Target Population of Interest	Outcome of Interest
Summarize your key strategy	What care coordination efforts will you focus on as part of this program?	Describe the evidence-based practice or promising practice model that you will use or adapt.	Who will be the primary target of your efforts?	What are you trying to accomplish?

The Model for Improvement

- Quality management model
- Answers three questions:
 1. What are we trying to accomplish?
 2. How will we know that change is an improvement?
 3. What change can we make that will result in an improvement?



SMARTIE Goal Formula

Specific	What exactly do you want to achieve?
Measurable	How will you know you have achieved it? What is the measure you will use, what is the current data for that measure, how do you want it to change?
Attainable	Is it possible to achieve? Based on best practice, average or benchmark? Too low (not challenging)? Too high (unreasonable)?
Relevant	Addresses an important business problem, aligned with strategic plans
Time-Bound	Includes a target date for achieving the goal
Inclusive	Who is impacted and involved?
Equitable	How will it address inequities?

Example Answers to Model for Improvement Questions

1. What are we trying to accomplish (the aim)?

Increase medication adherence and improve health outcomes for patients with heart disease.

2. How will we know that change is an improvement?

Measures:

- Decrease in preventable readmissions for patients with heart disease
- Increased knowledge among patients regarding heart disease including symptoms, risk factors, and treatment
- Increased uptake of cardiac rehabilitation services

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Example Answers to Model for Improvement Questions, cont.

3. What change can we make that will result in an improvement?

- a) Define the processes currently in place (e.g., process map)
- b) Identify opportunities for improvement that exist
- c) Decide what to change
 - Patient education and public health campaign to increase medication adherence
 - Self-blood pressure monitoring initiative for patients with hypertension
 - Case management for patients with cardiac disease who experience an inpatient stay
 - Cardiac rehab promotion to patients with cardiac disease who have not experienced a heart attack

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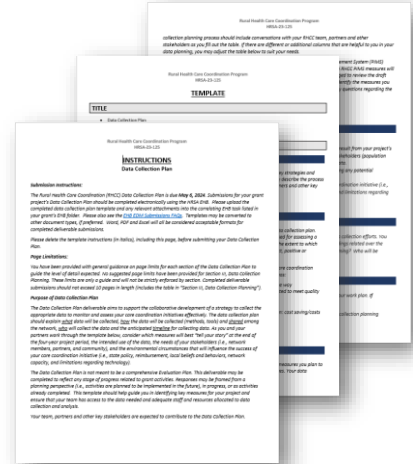
Related QI Basics Modules & Tools

- [The Model for Improvement](#)
 - [Model for Improvement and PDSA Worksheet](#)

**Measuring Impact:
How will we know that change is an
improvement?**

Data Collection Plan Deliverable

- **Part 2: Primary Evaluation Questions Cont'd**
 - Describe the focus and purpose of your data collection efforts.
- **Part 3: Data Collection Planning**
 - Identify the measures you plan to collect and monitor to answer your main evaluation questions. Define the measures.



Data Collection Plan Tool

							Measure Plan
Measure Basics							
Measure Title	Measure Type	Measure Description	Numerator	Denominator	Performance Improvement Goal	Primary Measure Strategy	Notes
Name of your measure	Describe the type of measure: Process, Structural, Clinical Quality Measure, Financial or Other (please describe)	What is this measuring?	Describe the individuals experiencing the event or outcome of interest	Describe the total population at risk or eligible for the outcome of interest	What is your benchmark for success for this measure? (___% improvement)	Select from drop-down: Tie your measure to one of your key strategies from your Care Coordination Plan on Tab 2-CC Plan	List other applicable key strategies or relevant notes regarding your measure

Process Measures

Purpose

- Assess our processes:
 - Are they still working for us?
 - Are we using them?
 - Are we using them accurately?
- If a process or procedure is changed as part of a corrective action, it is important to know if the change actually occurred
- If the outcome improves, you want to know if it was linked to an actual change in process

Examples

- The number of patients that receive a second blood pressure check if the first measurement is elevated during an encounter
- The number of patients over 18 who are screened for pre-diabetes that are not already diagnosed with diabetes or gestational diabetes

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Clinical Quality Measures

Purpose

- Measure our outcomes
 - What was the impact on the community members?
 - Did the change in process have the desired result?
- Measuring the process is not enough if your goal is to assess whether the change you have put in place had the desired effect
- You want to see a change in outcome
 - typically focused on how the patient's health has been affected

Examples

- The percentage of patients diagnosed with hypertension that have their BP under control
- The percentage of patients diagnosed with prediabetes that have not progressed to a diabetes diagnosis within one year of the original diagnosis

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Structural Measures

Purpose

- To ensure that healthcare organizations have the necessary components in place to deliver high-quality and efficient care.
- Designed to evaluate the underlying framework and resources that support the provision of healthcare services.
- Offer insights into the capacity, capabilities, and overall readiness of healthcare systems to meet the needs of patients and communities.

Examples

- Assessing the ratio of nurses to patients, the availability of specialized healthcare professionals, and the training and education levels of staff.
- Evaluating the condition of hospitals, clinics, and other healthcare facilities, including the availability of necessary equipment and health information technology.

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Financial Measures

Purpose

- To ensure the efficient and effective management of resources available to healthcare organizations while maintaining high-quality patient care.
- Examine the budget allocation, funding sources, and financial stability of healthcare institutions to ensure sustainability and the ability to invest in improvements.

Examples

- Cost per capita or total cost of care for a specific diagnosis
- Cost per patient encounter or cost per procedure
- Length of stay for patients with chronic conditions

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Data Collection Planning

Data Collection Plan Deliverable

- **Part 3: Data Collection Planning Cont'd**
 - Determine how the data will be collected, who will collect it, where it will be maintained, and any limitations.



Data Collection Plan Tool

Measure Logistics		
Frequency of Data Collection	Data Source	Individual(s) Responsible
<i>When will you collect the data? i.e. Monthly, quarterly, annually</i>	<i>How will you obtain the data? Where is the data originating from and stored?</i>	<i>Who will collect and enter data?</i>

Data Collection Strategy: Who, When, How, and Where?

	Example 1	Example 2	Example 3
Who is collecting the data?	Physician	Survey vendor	Nurses
When are they collecting it?	Patient encounters	Weekly	Daily rounds
How are they collecting it?	Data entry	Phone surveys	Paper checklists
Where is it being kept?	EHR	Third-party platform	Charge nurse collection

Data Collection Methods

- Tally sheets
- Checklists
- Questionnaires
- Feedback interviews
- Observation
- Daily reviews
- Chart audit
- Data obtained from existing databases and systems



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Consider Data Limitations

Understanding the constraints and potential issues associated with the data to ensure that the results and conclusions drawn from the analysis are accurate and reliable.

- Data Reliability
- Data Completeness and Missing Values
- Data Accuracy and Validation
- Process Standardization
- Population Representativeness
- Consideration of External Factors

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Consider Environmental Influence

Monitor ongoing and upcoming changes in healthcare policies and regulations:

- New policies, changes in reimbursement models or payment structures, or changes in coding practices

Recognize the impact of cultural and social determinants on patient health outcomes:

- Socioeconomic status, language, transportation, education, cultural preferences, and available community resources

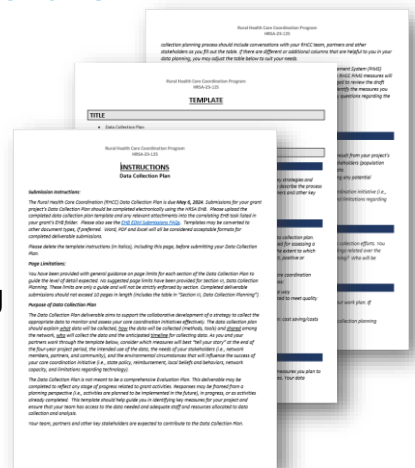
Related QI Basics Modules & Tools

- [Data Basics](#) and [Data Basics Example](#)
- [Data Collection and Monitoring](#)

Data Analysis, Communication Planning, and Work Plan Implications

Data Collection Plan Deliverable

- **Part 4: Data Analysis**
 - Describe the approaches you will use to analyze and interpret data, discuss limitations to the data, and explain environmental circumstances that will influence success of your initiative.
- **Part 5: Communications/Dissemination Planning**
 - Who is interested in what you are doing and how will you communicate the findings from your project over time?



Data Collection Plan Tool

Analysis & Communication Strategy		
Data Analysis Strategy	Limitations and Environmental Considerations	Communication Strategy
Describe your analysis strategy: Mapping, Trend chart, dashboard	Are there any limitations to the data? What external factors might have influence on these efforts? Will these efforts potentially have any influence on external factors?	Describe your communication strategy: Engaging key partners, storytelling, feedback mechanisms

Work Plan Implications

• Part 6: Work Plan Implications

- Based on the work you did to put together your data collection plan, what (if any) adjustments need to be made to your work plan?



Related QI Basics Modules & Tools

- [Data Analysis](#) and [Data Analysis Example](#)
- [Communication Basics](#)
 - [Communication Plan](#)
- [QI Charters and Work Plans](#)
 - [Work Plan](#)

Data Collection Plan Demo

Rural Health Care Coordination Program Data Collection Plan Tool

Introduction to this spreadsheet:

This data collection plan tool aims to support the collection of the appropriate data to monitor and assess your care coordination initiative effectively. This tool assists with what data should be collected, how the data will be collected (methods, tools), who will collect the data, and the strategies for analysis, evaluation, and communication. The intention plan considers which measures will best "tell your story" at the end of the four-year project period, the intended use of the data, the needs of your stakeholders (i.e., resource needs, partners, and community), and the environmental circumstances that will influence the success of your care coordination initiative (i.e., state policy, reimbursement, local beliefs and behaviors, network capacity, and limitations regarding technology). This tool was developed to help guide the identification of all measures for your project and ensure that you have access to the data needed and adequate staff and resources allocated to data collection and analysis. Your team, partners and other key stakeholders are expected to contribute to the Data Collection Plan.

To cycle through the various tabs in this spreadsheet, use the small horizontal arrows located in the bottom left-hand corner of this tool. Some tabs also have hyperlinks to navigate to related tabs and/or resources.

For any questions about the data in this spreadsheet or about analyzing assessment results in your state, please contact Susan Brass with the Stratis Health Team at the sbrass@stratishealth.org.

Guide to the tool tabs:

Throughout the tools, any cells that are shaded yellow indicate that the tool populates another cell somewhere in the workbook.

The option to sort or filter returns by column has been built into some of the tool tabs.

For detailed information on setting or filter, visit here: [Setting](#)

For detailed information on filtering in Excel, visit here: [Filtering](#)

When using the tool tabs, you may wish to print out a certain result you're displaying. To do so, you should first make sure you are on the correct tab with the tool results you'd like to print. Then click on the "Print" menu in the top left of each window and select the "Print" option. You may customize any of the settings in the print menu to suit your preferences. Note: print views are set up for each tool tab.

This tool contains a template to outline the key strategies, activities, target populations, expected outcomes, evaluation methods, and environmental considerations in alignment with your care coordination initiative.

Measurement Plan

This tab contains a measure plan template to outline the measures, logistics, and strategies needed to align with your care coordination initiative.

1 Start Here 2 CC Plan 3 Measure Plan

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Measure Plan													
Measure Basics							Measure Logistics			Analysis & Communication Strategy			
Measure Title	Measure Type	Measure Description	Numerator	Denominator	Performance Improvement Goal	Primary Measure Strategy	Frequency of Data Collection	Data Source	Individuals Responsible	Data Analysis Strategy	Communication Strategy	Limitations and Environmental Considerations	
None of your measure	Describe the type of measure: Process, Structure, Clinical Quality Measure, Physical or Other (please describe)	What is this measuring?	Describe the numerator element of interest	Describe the denominator element of interest	What is your benchmark for success for this measure (% improvement)?	Identify the strategy. The performance is one of your key strategies from your Care Coordination Plan or the 2CC Plan	List other applicable key strategies or related ones negatively your measure	When will you collect the data? (i.e. safety, quarterly, annual)	How will you obtain the data? Where is the data originating from and stored?	How will you obtain the data? Who will collect and enter data?	Describe your analysis strategy: Mapping, Trend charts, dashboards	Describe your communication strategy: Engaging key partners, developing media materials	What are any limitations in the data? What external factors might have influence on these efforts? Will these efforts generate data or influence in external sectors?

Questions?

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