Chapter 6: Develop a Data Strategy

CHAPTER OVERVIEW

As you initiate PRAPARE data collection, it is important to develop a strategy and system for reporting your data so the data can be effectively communicated to providers, community partners, payers, policymakers and other stakeholders to promote community transformation and other related efforts. Your strategy should include plans to meet your organizational vision and goals as well as considerations to integrate PRAPARE data into a larger national data warehouse to contribute to a critical mass of data for effective delivery system transformation.

This chapter provides strategies and sample tools to help you in developing the data strategy including sample reporting templates and data integration planning.

©2015. National Association of Community Health Centers, Inc., Association of Asian Pacific Community Health Organizations, and Oregon Primary Care Association.® PRAPARE and its resources are proprietary information of NACHC and its partners intended for use by NACHC, its partners, and authorized recipients. Do not publish, copy or distribute this information in part or whole without prior written consent from NACHC.
DATA TOOLS

1. Building a data strategy
2. Data documentation and reporting templates
3. Data reporting and presentations
4. Data integration
5. Population-level planning
After you collect PRAPARE data, what will you do with it and how can you use it to add value to your practice? It is important to develop a data strategy to understand how best to organize the data so that you can make informed decisions and help you achieve your intended organizational goals. This data strategy serves as a roadmap and plan to define what to do with your data, how the data will help achieve your organizational goals, as well as who will access it, the content that you will share to make the most out of the data, and how to support these activities. The following is a checklist of steps to consider in developing a data strategy.
DEVELOPING AN ORGANIZATIONAL DATA STRATEGY
STEPS FOR CONSIDERATION

1. Identify your organizational objectives for PRAPARE data collection. These should be aligned with your organizational vision. What are your specific goals for collecting PRAPARE data? Who is the audience? Always keep your endpoint in mind throughout the implementation.

2. Develop a workplan for how to achieve your objectives. This should include development of reporting requirements and database to support it.

3. Include clinic staff and all stakeholders in the planning of the strategy. In order to be successful, your data strategy should be developed using a participatory process with relevant stakeholders.

4. Assess how your data technology and infrastructure can support your plan. What data technology do you have that will make your data strategy possible?

5. Leverage existing collaborations and initiatives. Assess existing services and partnerships and determine where efficiencies are possible.
After developing your data strategy, you will need to develop data documentation and reporting requirements guidelines that are aligned with your objectives. These guidelines can help you define, organize, manage, and report your PRAPARE data. You can use the sample PRAPARE data documentation and reporting template that includes PRAPARE data elements to help you get started.

As a result of populating this reporting template, you will have valuable data on your patients' social determinants of health that will help your organization consider strategies to address your patients' risk.
Data Documentation of PRAPARE for Implementation

The PRAPARE data documentation includes coding specifications and instructions for all PRAPARE measures. These specifications can be used to help you develop your internal PRAPARE database that can integrate other clinic data sources. For example, you can link the PRAPARE measures with enabling services or health outcomes and conduct analyses to better understand and address your patients’ health.
PRAPARE Reporting Template Sample

The PRAPARE reporting template includes:

1. Raw Frequency Measures that can identify the most common social determinants for your patients

2. Process Evaluation Measures that can identify missing data and help you assess the feasibility of PRAPARE questions for your patients

3. Population Characterization Measures that can help you better understand your patients’ complexity.
Once you have developed your reporting template and populated the report, you can use the data to develop helpful tables and graphs that can be presented to staff and other stakeholders to better understand your patients' risks and develop new interventions and re-allocate resources as needed, in collaboration with community partners and other stakeholders.

 Keeping in mind your original data strategy objectives, your display of PRAPARE data should transform the information into actionable knowledge. The following sample report can be used to help you get started. Consider the measures to be analyzed, cross-tabbed or cross-referenced to produce the results for your local clinic needs. The ability to perform analyses and reporting is critical for organizations to manage health of their patients and enhances their capacity to make more evidence-based decisions.
Data! Data! Data!

SAMPLE DATA PRESENTATION
The following questions can be used to brainstorm with staff after the results are presented:

**Data Discussion Questions**

1. What initial questions do you have based on current data presented?

2. What observations across communities did you observe? Which of them are surprising?

3. What are the key takeaways that we are learning from these data snapshot shots?

4. What explains stark variation, such as what we see in material security?

5. What other data runs would be helpful? Are you doing any already?
   1. Other correlations between SDH factors and with individual SDH and outcomes (need patient level information): (ex: are people who are very stressed also socially isolated and/or high on financial questions? Or, how does educational status correlate with outcomes?)
As part of your larger data strategy, you may consider sharing data with others such as your network or primary care association, so that PRAPARE data can be integrated in a larger state or national data warehouse that can support larger transformation, funding, advocacy, and other related efforts. Integration of standardized PRAPARE data is important to help build critical mass that will more effectively move the dial in our nation's upstream community transformation efforts. The following is a sample of considerations to keep in mind for integration into a larger data warehouse of patient social determinants of health data.
CONSIDERATIONS FOR INTEGRATION OF PREPARE DATA INTO A NATIONAL DATA WAREHOUSE

1. Determine data use for national social determinants of health (SDH) data warehouse (e.g., research, policy, or continuity of point of care).

2. Determine the stakeholders (e.g., researchers, lobbyists, clinical services, social services, etc.)

3. List the data elements needed to be captured to share for each type of use and type of stakeholders. i.e. demographic (birthplace, race, etc.), clinical diagnosis and procedures, social services, etc.

4. Determine the type of data warehouse technology. i.e. traditional fact and dimensions tables, big data, or both depending on implementer.

5. Determine which format is suitable to transmit data (e.g., existing data structures like C-CDA or custom data structures).

6. Pick a small subset of data elements to test implementation.

7. Determine standardized codes to use (i.e. ICD-10, CPT, CPTII, etc.) or standardize custom codes for selected subset.

8. Pick a small subset of participating stakeholders to test implementation.

9. Expand both data elements and participants in controlled phases.
PRAPARE data reports and presentations to stakeholders can help start meaningful dialogue regarding population health planning efforts to improve the health and wellbeing of populations and health equity between population groups. This population health planning checklist provides step-by-step recommendations to help you get started.

To help you in understanding how to link PRAPARE data to other clinic data sources to achieve population health planning, we also provide a sample correlational analysis on the impact of the social determinants of health on hypertension outcomes. Please keep in mind that this analysis used aggregate-level data but patient-level data will be far more effective in this analysis. We will update our analysis samples as they are ready.

As some organizations may be interested in using PRAPARE for risk scoring and stratification, we also provide a real world example from a clinic on how to use PRAPARE data to identify at-risk patients so that they can better address their social determinants before they become more complex and overuse emergency room services. These health system initiatives are consistent with the Triple Aim goals and save the health care system billions of dollars.
CORRELATIONS!

View examples of correlation analyses that could be used for population-level planning.
Acknowledgements

The resources provided in this chapter are derived from the pioneer community health centers in Hawaii, Iowa, New York, and Oregon who pilot tested PRAPARE. We extend special thanks to the following organizations: Alliance Chicago Community Health Services, Health Center Network of New York, Hudson River Health Care, La Clinic Del Valle, OCHIN, Open Door Family Medical Center, People's Community Clinic, Siouxland Community Health Services, Waianae Coast Comprehensive Health Center, and Waikiki Community Health Center for their contributions in this chapter.

References
