

BRIEF

# Standardizing quality measurement in complex care

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**Camden Coalition**  
of Healthcare Providers



**The National Center**  
for Complex Health & Social Needs  
*An initiative of the Camden Coalition*

# Introduction

Complex care is a growing field that seeks to improve care delivery and outcomes for people with complex health and social needs — those who have multiple chronic physical and behavioral health conditions combined with social barriers such as homelessness and unstable housing, food insecurity, lack of transportation, and more.

Many individuals with complex health and social needs repeatedly cycle through multiple healthcare, social service, and other systems without lasting improvements to their health or well-being.

Complex care brings together professions, organizations, and sectors to center care around the needs, goals, and circumstances of the individual. But how can we tell if programs providing complex care are truly making a difference for their participants? Widely used metrics like cost and utilization do not reflect whole-person outcomes, and there is a stark lack of standardization among existing health and well-being metrics.

For the field of complex care to show its value in improving outcomes and to evaluate programs' delivery and impact, evaluation and quality improvement measures must be identified and standardized.

The impetus for standard quality measures for complex care comes from the *Blueprint for Complex Care (Blueprint)*, released in late 2018 by the National Center, the Center for Health Care Strategies (CHCS), and the Institute for Healthcare Improvement (IHI). The *Blueprint* assessed the state of the then-emerging field of complex care and provided 11 recommendations to strengthen and advance the field.<sup>1</sup>

One of the *Blueprint's* recommendations was to develop standard quality measures for complex care programs beyond cost and utilization. In response to this recommendation from the *Blueprint*, the National Center commissioned IHI to conduct a landscape analysis, interviews with subject matter experts, and a scan of existing quality measurement efforts pertaining to the field of complex care.

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<sup>1</sup> Humowiecki M, Kuruna T, Sax R, Hawthorne M, Hamblin A, Turner S, Mate K, Sevin C, Cullen K. *Blueprint for complex care: advancing the field of care for individuals with complex health and social needs*. [www.nationalcomplex.care/blueprint](http://www.nationalcomplex.care/blueprint). December 2018.

This brief is based on IHI's final report, *Measuring complexity: Moving toward standard quality measures for the field of complex care*. The report:

- Documents the current state of quality measurement in complex care;
- Identifies key challenges associated with complex care; and
- Details current complex care research and measurement development efforts.

This brief summarizes the findings from the report, categorized in four areas — defining the population, data availability and potential sources, measurement domains, and measures and measure concepts — along with eight recommendations for next steps the field can take to develop a standard set of quality measures.

# Findings

## **Defining the population**

Measuring the impact of complex care efforts requires first defining the *population of interest*. Who are people with complex health and social needs?

Existing published literature and interviews with subject matter experts reveal that while there are significant variations in definitions, there are also some underlying commonalities. Varying definitions of the population of interest are not surprising — individuals and communities have unique needs, and complex care programs seek to provide care that meets the needs of the individuals and communities they serve. The most common criteria used across programs are cost and utilization, chronic conditions, and risk score, followed by insurance status and social needs.

These commonalities are a good starting point to define the complex care population for the purposes of measurement and evaluation. However, some level of flexibility and imprecision will likely remain necessary due to the heterogeneity of individuals with complex health and social needs, both within and across communities.

## **Data availability and potential sources of data**

Complex care programs use data to identify eligible participants and evaluate the program's impact, but the types and sources of available data vary by program. Common sources include administrative claims data, data from electronic health records (EHRs), and data from patient-reported surveys. Standard quality measures for complex care will require some standardization of data collection across programs and communities. Even within widely-used data sources like claims data, EHRs, and patient-reported surveys, there is a large degree of variation in terms of what data are actually available.

Additionally, most common sources of data, including claims and EHR data, primarily include medical or healthcare data rather than data on social needs. While standard sources of social needs data are currently limited, there are efforts underway to more uniformly collect information on social needs and barriers at the individual and population levels.

## **Measurement domains**

As with population definitions and data availability, there is significant variability in which areas programs choose to measure. By definition, complex care programs do not aim to improve a single clinical condition, but instead work to improve health and well-being more broadly at the individual and population levels, leading to a number of potential outcome areas. Recommendation 4 suggests five potential domains in which to organize standardized measures.

Complex care programs would be able to choose measures from each of these five domains in order to accurately assess their impact on health and well-being:

- Effectiveness/quality of services
- Equity
- Health and well-being
- Service delivery
- Cost/utilization

### **Measures and measure concepts**

Despite the extensive search of measure inventories and data registries, and interviews with nearly 30 subject matter experts, only a small number of existing measures and measure concepts are directly relevant to complex care.

Overall, the report identifies 284 *measures*, which have been fully specified and tested for reliability and validity or are in some stage of measure development, and 107 *concepts*, which are ideas for measures that have not been fully specified or tested. Some populations, such as the frail elderly and the non-elderly disabled, have a robust number of existing measures. But core complex care populations, including those with multiple and/or major chronic conditions and those with social needs, have very few.

Similarly, there are gaps within a number of domains or measurement areas that are core to complex care as well. For example, there are no existing specified measures for equity, only measure concepts. Most existing specified measures for health and well-being address a specific condition or subpopulation, and few examine health or well-being more broadly.

Additionally, many existing measures will need refinement since some specifically exclude groups in the complex care population such as individuals with advanced illness, frailty, cognitive impairment, or experiencing homelessness.

# Recommendations

Based on the report's findings, the eight recommendations described below will improve measurement and identification of people with complex health and social needs, and begin to standardize measures of complex care program effectiveness for both accountability and quality improvement purposes.

## **Recommendation 1: Determine a process for measure development/alignment based on intended use(s) of the measures.**

Measures used for *quality improvement* of a single program don't require a high degree of standardization. In contrast, measures used for *accountability* purposes, such as evaluating the effectiveness of a program, require a greater degree of standardization and rigor. This will allow programs to compare themselves to other similar efforts in reliable and valid ways. Furthermore, standardizing accountability measures will give the field the ability to assess complex care's advancement and impact.

The process for measure development depends on whether the measures are intended for quality improvement, accountability, or some mixture of the two. In all likelihood, different stakeholders will have different measurement needs. Defining the desired goals and intended uses of the final set of measures at the beginning will enable the development of a roadmap and an efficient timeline that uses resources and time wisely.

## **Recommendation 2: Determine a pathway toward a standard denominator.**

Creating a common definition for the population of interest (i.e., people with complex health and social needs) is a larger question that the field of complex care is grappling with, but clarity in this area is necessary for the development of standard quality measures for the field.

However, this doesn't mean that all measurement work should wait until there is zero ambiguity in the definition (or definitions) of people with complex health and social needs. One option is for groups to continue identifying individuals using their own pre-determined criteria while detailed information on the criteria used is collected systematically. Standard definitions could then be developed based on commonalities to increase alignment across programs.

Assuming that there will always be heterogeneity across individuals in the complex care population, another option is to standardize the logic by which individuals are identified across programs. This heterogeneity also means that there will likely be subpopulations that need to be defined. As this work continues, the complex care field will need to determine how much lack of standardization is acceptable.

### **Recommendation 3: Consider alternative approaches to standardization.**

An alternative to standardizing the population definition or screening criteria could involve standardizing the data definitions to which screening tools are mapped. For example, larger efforts like the Gravity Project are working to define code sets for needs related to social determinants of health that can be standardized across electronic health records. Using such standardized code sets would enable individual complex care programs to tailor specific screening tools to their population's needs and still produce a standard set of data that could be aggregated and used for comparisons.

### **Recommendation 4: Target measurement, standards, and data stratification within five domains.**

The report proposes five domains and subdomains for complex care measurement. The proposed domains are intended to broadly represent health and not just healthcare, and could serve as the starting point for developing and selecting validated measures.

These domains are based on the desire to capture outcomes, processes, and structures beyond just cost and utilization and to enable measurement focused on patient-driven priorities.

#### ***Proposed complex care measurement domains and subdomains***

- **Effectiveness/quality of services:** Measures primarily address processes and outcomes of care. Proposed subdomains, based on indicators of highly effective care already in use by programs across the country, include:
  - Admissions/readmissions
  - Community tenure
  - Experience with care
  - Follow-up
  - Function
  - Medication management
  - Retention
  - Social needs
- **Equity:** Though some measure concepts exist for this domain, equity can also be assessed by *stratifying* and comparing data by measures like race/ethnicity, gender, insurance status, income or education, neighborhood, and other factors.
- **Health and well-being:** Focused on person-centered measurement, this domain includes concepts like goal-concordant care and goal-directed attainment.
- **Service delivery:** Measures could be targeted through a combination of quality improvement interventions and standards as well as patient-reported outcome measures. Proposed subdomains include:
  - Access (e.g., integration of social services, cross-sector alignment)
  - Coordination
  - Workforce assessment
- **Cost/utilization:** Measures are derived from traditional administrative claims data sources as well as data sources on social needs (e.g., housing, transportation, insurance status).

### **Recommendation 5: Promote the development and selection of measures based on patient-driven priorities.**

Effectiveness assessments must center on what is most meaningful to people participating in complex care programs, engaging them at the beginning of the measurement development work to ensure alignment with their priorities.

To ensure patient-centered measure development and selection, the complex care field can draw on recent work in this area, including guidance<sup>2</sup> from the Centers for Medicare & Medicaid Services and a white paper<sup>3</sup> from the Pharmacy Quality Alliance, National Health Council, and National Quality Forum outlining how patients should be involved throughout the measurement lifecycle. The National Center's National Consumer Scholar program is a great source of consumer expertise for any future efforts to develop complex care measurements at the field level.

### **Recommendation 6: Develop and/or select a core set of measures for longitudinal evaluations of program effectiveness paired with additional sets based on the populations of interest and prioritized domains of care.**

Identifying a core set of no more than five measures that go beyond cost and utilization, and using those measures to collectively track outcomes across complex care programs, is a necessary step in advancing the field. This approach enables programs to standardize how they assess their impact. The core set of measures may also be supplemented by additional sets of measures focused on subpopulations, other priority domains, or processes and outcomes that are closely linked to driving improvements in the core set of measures. While some work will be needed to develop new measures in gap areas (i.e., equity, health and well-being), many measures already exist and may be adapted for complex care.

### **Recommendation 7: Collaborate with key partners working in this space.**

A number of groups were identified as potential partners in measurement development, including the National Committee for Quality Assurance (NCQA); Health Leads, which is currently working on implementing their patient-reported What Matters Index; and Center for Health Care Strategies, which is conducting the Advancing Integrated Models demonstration project.

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<sup>2</sup> Centers for Medicare & Medicaid Services. *CMS Quality Measure Development Plan: Supporting the Transition to the Merit-based Incentive Payment System (MIPS) and Alternative Payment Models (APMs)*. Baltimore, MD: Centers for Medicare & Medicaid Services; 2016. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-BasedPrograms/MACRA-MIPS-and-APMs/MACRA-MIPS-and-APMs.html>.

<sup>3</sup> Pharmacy Quality Alliance. *The Patient Engagement in Quality Measurement Rubric: A Guide to Patient Partnership in the Quality Measure Lifecycle*. Pharmacy Quality Alliance; 2019. <https://www.pqaalliance.org/assets/Research/PQA-Patient-Engagement-Rubric.pdf>.



Groups that have expertise in measurement, especially in some of the gap areas identified, can help with the technical process of measure development, testing, and implementation. Collaboration with organizations like the Center to Advance Consumer Partnership will help ensure that patient priorities are driving measure selection.

**Recommendation 8: Build capacity and processes to capture best practices and innovative approaches used in the field for broader dissemination.**

There is a great deal of work happening across the United States to improve care for people with complex health and social needs. As the field of complex care moves toward standardized measures and other data collection methods to assess program effectiveness, it will be important to collect information and share best practices on a national level. Broad dissemination of successes and failures will help advance complex care.

# Next steps

Complex care quality measurement is attracting growing interest across the country.

The Complex Care Field Coordinating Committee, led by the National Center for Complex Health and Social Needs and including the Institute for Healthcare Improvement, seeks to convene an expert working group to advance this work and integrate lessons from other measurement projects happening within the complex care field. The working group would create a set of target measures, standards, and data stratification within the five recommended measurement domains, which would allow the complex care field to expand the conversation about value beyond cost and utilization. Advances in quality measurement will help the field demonstrate impact, identify promising and best practices, and accelerate learning and quality improvement.

# Acknowledgements

This brief is based on the report *Measuring complexity: Moving toward standardized quality measures for the field of complex care*, authored by Heidi Bossley, Faculty at the Institute for Healthcare Improvement, and Keziah Imbeah, Research Assistant at the Institute for Healthcare Improvement. This brief was prepared by Hannah Mogul-Adlin, Communications Manager at the Camden Coalition of Healthcare Providers, in consultation with the report's authors.

The *Measuring complexity* report was chartered and overseen by the Complex Care Field Coordinating Committee (FCC) as a first step in developing a set of standard measures that can be used by programs across the country. The FCC was launched in 2019 to oversee complex care field-building activities taking place across the country and to be accountable to fulfilling the 11 recommendations outlined in the *Blueprint for Complex Care*. The five organizations of the FCC were chosen based on their investment in developing the field, strong networks, and system-level perspectives. They are:

- Alliance for Strong Families and Communities
- Camden Coalition's National Center for Complex Health and Social Needs (project lead)
- Center for Health Care Strategies
- Community Catalyst's Center for Consumer Engagement in Health Innovation
- Institute for Healthcare Improvement

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## About the Camden Coalition

We are a multidisciplinary nonprofit working to improve care for people with complex health and social needs in Camden, NJ, and across the country. The Camden Coalition works to advance the field of **complex care** by implementing person-centered programs and piloting new models that address chronic illness and social barriers to health and wellbeing. Supported by a robust data infrastructure, cross-sector convening, and shared learning, our community-based programs deliver better care to the most vulnerable individuals **in Camden** and **regionally**.

Through our **National Center for Complex Health and Social Needs** (National Center), the Camden Coalition works to build the field of complex care by inspiring people to join the complex care community, connecting complex care practitioners with each other, and supporting the field with tools and resources that move the field of complex care forward.