

'Identify, Stratify, and Target'

Taking National Level Analysis of Multimorbidity Patterns to the Local Level in Massachusetts

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As states grapple with growing budget concerns, rising health care costs, and the possibility of expanding Medicaid, interventions targeted toward the highest-need, highest-cost populations present an important way for states and Medicaid health plans to reduce spending and improve care for high-risk consumers.

Established in 1997, Network Health is a Massachusetts-based, nonprofit, comprehensive health plan that provides health care coverage to more than 215,000 Massachusetts residents—over 125,000 of whom are Medicaid beneficiaries and 70,000 of whom are enrollees in low- or no-cost insurance through Massachusetts' Health Connector. Like many health plans across the country, Network Health is looking for ways to better stratify and target resources for their high-need, high-cost populations.

To improve how it identifies members at risk, Network Health recently turned to a *Faces of Medicaid* analysis completed by the Center for Health Care Strategies (CHCS) and Johns Hopkins University (JHU) in 2010 that examined multimorbidity patterns among adult Medicaid beneficiaries with disabilities. The study revealed that this population has particularly high rates of physical and behavioral health comorbidities, coupled with exceedingly high health care costs. Numerous patterns of comorbidities were examined and certain patterns proved more costly than others, highlighting the opportunity to focus interventions toward particular subsets of the population.

In its earlier efforts to identify the top 10 percent costliest, highest-risk members, Network Health developed a predictive modeling strategy that incorporated Chronic Illness and Disability Payment System (CDPS) classifications, member utilization data, and geographic elements. Pano Yeracaris, MD, MPH, vice president and chief medical officer at Network Health, describes the organization's strategy stemming from its participation in CHCS' Best Clinical and Administrative Practices quality improvement collaboratives, saying, "Our whole approach has been to identify, stratify, and then target differentially, high-risk members."

IN BRIEF

This spotlight profiles one health plan's experiences in applying the methods from CHCS' analysis, *Faces of Medicaid: Clarifying Multimorbidity Patterns to Improve Targeting and Delivery of Clinical Services for Medicaid Population*, to improve how it identifies its high-risk members. The *Faces* study analyzed multimorbidity patterns among adult Medicaid beneficiaries with disabilities, along with related hospitalizations and costs, to help target clinical interventions.

Through its *Faces of Medicaid* series, CHCS has documented the complexity of Medicaid's high-need, high-cost populations and the challenges inherent in designing cost-effective delivery systems to address their needs. For more information on the *Faces of Medicaid* analyses, visit www.chcs.org.

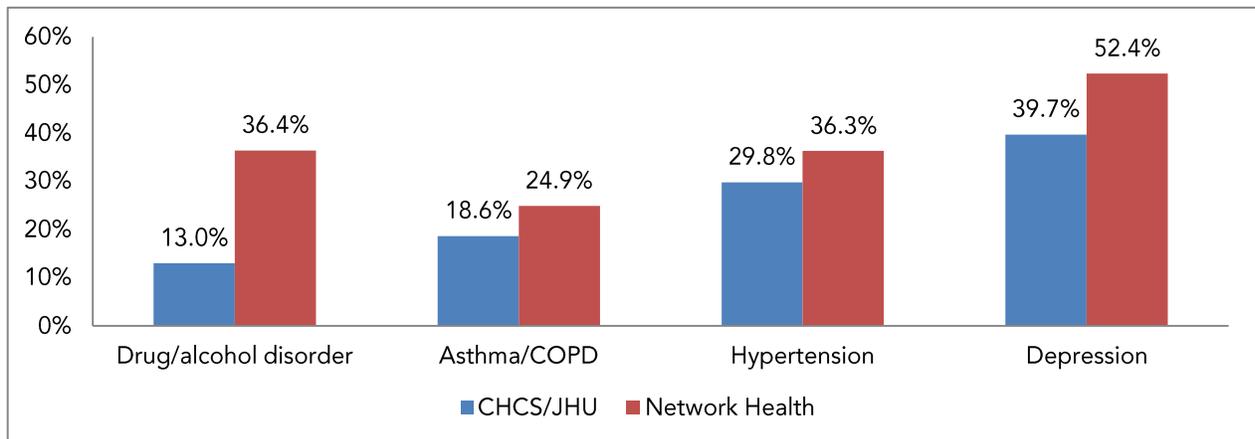
Building on these efforts, Network Health looked to the 2010 CHCS/JHU *Faces* study as an opportunity to further refine its methods for targeting interventions toward high-risk members. Using the CHCS/JHU study methodology, Network Health examined data on the organization’s approximately 11,400 adult Medicaid members with disabilities from 2010 and 2011.

Overall, Network Health’s findings mirrored those of the CHCS/JHU study, with the population showing high rates of physical and behavioral health comorbidities, as well as associated high costs. For certain conditions, such as substance use disorder and hypertension, Network Health found that its members had higher prevalence rates than the national data subset (Table 1). Additionally, the prevalence of comorbid physical and behavioral health conditions was higher among the organization’s member population (Table 2). Finally, Network Health members with hypertension, chronic heart disease (CHD), and asthma/chronic obstructive pulmonary disease (COPD) had lower rates of hospitalization than the population in the CHCS/JHU study; while members diagnosed with congestive heart failure (CHF) had higher hospitalization rates.

These differences illustrate how the application of national-level research and analyses at the local level may uncover further nuances. “It’s really exciting for us to learn from Network Health’s application of this analysis,” said Allison Hamblin, vice president at CHCS. “It both confirms some of the key findings from the original study, and highlights the likely under-reporting of behavioral health conditions in national datasets.”

CHCS and Network Health note that differences in findings may be somewhat attributable to the data sources. For example, the Medicaid data analyzed by CHCS/JHU include fee-for-service beneficiaries only, whereas Network Health’s data include members enrolled in a managed care plan. Secondly, Network Health manages an integrated physical and behavioral health benefit, and therefore may be more likely to capture a more complete picture of members’ behavioral health needs than can be done through national-level Medicaid data, where integration is more the exception than the rule. Lastly, as the Network Health analysis used more recent data than the CHCS/JHU study, changes in diagnostic and prescribing practices over the years, as well as state-level variation in provider practices may also be contributing factors.

Table 1 – Prevalence of Index Conditions



Source: Network Health (2012). *Multimorbidity Patterns in Adult Enrollees with Disabilities at Network Health*.

Implications for Future Work

In striving to achieve better health outcomes for its members, Network Health will use the lessons learned from its analysis to strengthen the organization's integrated care management program. Findings from the study reinforce the organization's current focus on integrating primary care and mental health/substance use disorder services, and will inform Network Health's future work in four important ways.

1. Enhancing Provider Education

Network Health will use the results of the study in its ongoing provider education efforts. Anju Joglekar, PhD, manager of program evaluation at Network Health, points out, "The data about physical and behavioral health comorbidities and expenses are very intuitive, but they suggest the possibility that providers may not be as aware of the findings as are some of the people at Network Health who work closely with the data. So, how we can educate providers with this information and how it will impact their practice patterns will be interesting."

2. Examining Substance Management Program

Based on the findings regarding high rates of co-occurring mental illness and substance use disorder among members, Network Health plans to take a closer look at the impact of mental illness on the effectiveness of its substance management program.

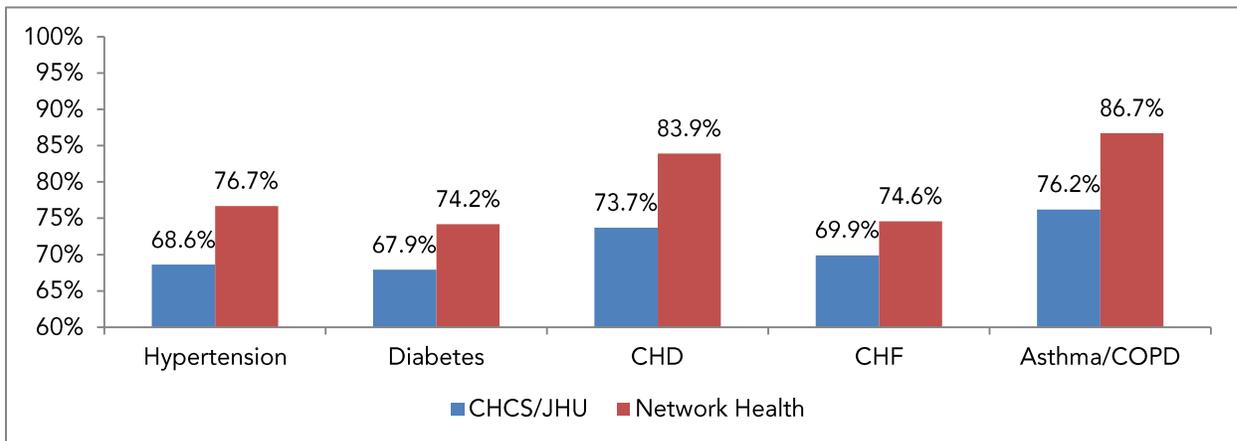
3. Targeting Congestive Heart Failure and Mental Illness Comorbidity

Based on its analysis of the prevalence of specific comorbidities and related costs, Network Health has identified members with both congestive heart failure and mental illness as a new priority cohort for targeted intervention.

4. Accounting for Missed Cases

Drawing from its experience with this analysis, Network Health's internal program evaluation methods were updated to account for the high rate of missed cases that result from including only one year of diagnostic data in program analytics. Going forward, the organization's analyses will incorporate two years' worth of data. Network Health plans to share this information through its provider education efforts to encourage better connectivity between members and primary care providers.

Table 2 – Prevalence of Behavioral Health Comorbidities



Source: Network Health (2012). *Multimorbidity Patterns in Adult Enrollees with Disabilities at Network Health*.

Conclusion

Taking a closer look at high-risk populations is an important first step in quality improvement efforts aimed at improving care while decreasing costs. Through increasing its understanding of the health needs and comorbidity patterns within its member population, Network Health is making strides toward better targeting and integrating care for its high-risk and high-cost members.

About the Center for Health Care Strategies

The Center for Health Care Strategies (CHCS) is a nonprofit health policy resource center dedicated to improving health care access and quality for low-income Americans. In collaboration with state and federal agencies, health plans, providers, and consumer groups, CHCS pursues innovative and cost-effective strategies to better serve Medicaid beneficiaries.

This spotlight is a product of CHCS' *Rethinking Care Program*, an initiative made possible by Kaiser Permanente Community Benefit to identify new strategies for improving health care quality and controlling spending among Medicaid's highest-need, highest-cost populations. For more information about the *Rethinking Care Program*, as well as tools for improving care management for Medicaid beneficiaries with complex needs, visit www.chcs.org.