Network Adequacy 2.0 for Consumers: A Review of Hospital Network Variation in New York

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Cynosure HEALTH

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Acknowledgments

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Acknowledgments (continued)

the stage for the next iteration of this work to ensure health plan networks adequately meet the needs of diverse populations across New York State.

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Executive Summary

In its most basic form, obtaining health insurance on the individual market, as part of a business, or from Medicare or any other source means gaining access to a provider network. Whether a network can meet the comprehensive health care needs of individuals is an important consideration for regulatory oversight. The concept of network adequacy is an evolving health policy and insurance topic. As networks narrow in response to a growing marketplace imperative to lower premiums, there is increasing concern that any particular network can meet the diverse needs of a population with fewer providers. Traditional definitions of network adequacy revolve around measurable standards, such as the time and distance that consumers must travel to receive care, as well as adequate access to specialty care. With a grant from the New York State Health Foundation (NYSHealth), Cynosure Health and its partners sought a new and broader definition of network adequacy that could both better empower consumers in their decision-making and inform State regulators and policymakers on which elements constitute adequacy and the criteria that could be used to assess it.

In particular, the project sought to explore whether a health plan network's clinical quality performance could lay the foundation for an expanded definition of network adequacy—Network Adequacy 2.0. This new concept could leverage publicly available data to help consumers and policymakers understand relative network clinical quality performance and size. Moreover, as consumers select coverage and receive care at the local and regional levels, the project also sought to provide actionable information on health plans and the particular network products offered in the various regions of New York State.

This report provides an overview of key project findings, along with practical recommendations for implementing new network adequacy measures and standards, based on a hospital's network quality composite score. The analysis was limited to hospital networks, as the available data on physicians and physician groups lacked both quality and completeness.

Among the findings:

- **Some New York State regions offer residents access to primarily lower-quality hospital networks.** The analysis suggests that where a consumer lives impacts the choice of hospital networks available to them—geography is destiny. For instance, Rochester area residents have access to primarily high-quality options for commercial hospital networks, whereas residents in the Long Island area have access to primarily low-quality options.
- **Differences exist in network size, both within and across plan-product lines.** Across the commercial, Medicaid, and NY State of Health Marketplace market segments

Executive Summary (continued)

analyzed for this project, smaller networks were observed within the Medicaid and Marketplace contracted plans. Within the commercial market, there were differences in network size both across and within product lines, such as within the managed care organization (MCO) health plan networks and across non-MCO health plan networks. However, findings suggest that network size is not a strong predictor of quality.

- **There is a weak correlation between network quality and size.** More specifically, some previous research suggests that smaller networks are associated with poorer quality. However, this analysis found that there are small networks that perform exceptionally well, whereas some larger networks perform poorly. Therefore, the number of hospitals in a plan-product (network size) is not predictive of the network's clinical performance. This finding underscored the importance of providing information on both network size and quality so that consumers can make more informed decisions about the health care coverage that is right for them.

Based on the quantitative findings, technical advisory group input, and consumer focus group insights, the project team prioritized three recommendations that are feasible, practical, and relatively low-cost:

- **Create new network adequacy quality standards.** This recommendation includes two steps that represent important components of a consumer-relevant network adequacy measure. First, State agencies should take steps to develop a quality composite score for providers beyond hospitals (e.g., physician groups, nursing homes, dialysis centers). Second, State agencies should develop network quality standards that can be used to ensure that consumers in all regions of the State have access to high-quality networks.

- **Increase oversight of ultra-narrow networks.** If ultra-narrow networks are found in any market segment or region of New York State, the appropriate State agencies, health plans, purchasers, and other stakeholders should take steps to ensure consumers have access to adequately performing hospitals within their plan-product networks.

- **Report consumer-centered measures.** Stakeholders in New York State should explore ways to measure and report on important provider capabilities that will ultimately inform the next iteration of a more patient-centered view of network adequacy. Based on recommendations from the consumer focus groups conducted for this project, measures should include office hours, languages spoken, populations served (e.g., LGBTQ, people with disabilities), and physician group and hospital affiliation.

Executive Summary (continued)

This project demonstrated that it is possible to measure health plan hospital network quality using publicly available sources. New York State has already taken important steps in improving network adequacy, and has the following infrastructure in place to further accelerate the move toward Network Adequacy 2.0:

- A sophisticated Provider Network Data System (PNDS) comprising networks that are publicly available in multiple market segments (individual, commercial, Medicaid, and Medicare). New York State has a best-in-class system.
- Abundant quality metrics for hospitals in a variety of dimensions that are valid, easy-to-obtain, and link to the PNDS identifier. Some measures are available for physicians and other providers, but the linkages to PNDS are currently limited.
- A long history of consumers, purchasers, philanthropies, and policymakers that are committed to enhancing transparency to empower consumer choice.

Although more work is needed before a comprehensive consumer-centered measure of network adequacy is available for public decision-making purposes, the foundation for these efforts is available now. Given its data infrastructure, current public reporting practices, and commitment to consumers, New York State is uniquely positioned to lead the nation on this aspect of consumer empowerment.

Introduction

State-based health insurance marketplaces were implemented in 2013, as part of the Affordable Care Act. With this rollout came concerns that health plans were offering increasingly narrow networks that restricted consumer access to physicians and hospitals. For instance, one study estimated that approximately 90% of all marketplace consumers had the option of purchasing a narrow network plan.[1] Coupled with evidence that smaller provider networks are increasingly being used to control costs and offer consumers lower premiums,[2] there has been a heightened interest in ensuring that narrow networks provide adequate levels of access and quality.

In the context of the network adequacy debate, an important consideration is whether consumers have the information they need to evaluate potential trade-offs between premium costs, provider access, and network quality. Evidence shows that consumers have inadequate information as they compare health plans.[3]

New York State has taken steps to address network adequacy concerns, most notably with the implementation in 1996 by the New York State Department of Health (NYSDOH) of a Provider Network Data System (PNDS) that gathers information about provider and service networks contracted to health insurers operating in the State. The primary purpose of PNDS is to collect the data needed to evaluate provider networks for all health insurers. The New York State Department of Financial Services (DFS) uses the data to conduct network adequacy reviews, and the data are currently available through the New York State Provider & Health Plan Look-Up tool.[4] PNDS offered information for individuals covered by New York's State of Health Marketplace, but in 2018, the State expanded the tool to add commercial insurance provider networks, including dental and vision providers.[5]

NETWORK ADEQUACY 2.0

Traditionally, the federal government, state agencies, and health plans have focused almost exclusively on network adequacy standards that can feasibly be monitored and enforced. Common network adequacy requirements include reasonable geographic access to

[1] Giovannelli J., Lucia K., Corlette S., and Coriette S. Regulation of Health Plan Provider Networks, Health Affairs/Robert Wood Johnson Health Policy Brief, 2016, **https://www.rwjf.org/en/library/research/2016/07/regulation-of-health-plan-provider-networks.html**, accessed March 2019.

[2] Polsky D. and Weiner J. The Skinny on Narrow Networks in Health Insurance Marketplace Plans, 2015, **http://ldi.upenn.edu/sites/default/files/pdf/the-skinny-on-narrow-networks.pdf**, accessed March 2019.

[3] Ibid.

[4] New York State of Health Marketplace, **https://pndslookup.health.ny.gov/**, accessed March 2019.

[5] Ibid.

Introduction (continued)

providers, provider-to-enrollee ratios, and timely access to care standards.[6] Although such regulations ensure that minimum standards for access to care are in place, they do not provide information on whether the overall network quality meets a consumer's health care needs or facilitates fully informed decision-making.

As a first step in improving the decision-making process, network adequacy must be defined from the consumer's perspective, which is referred to in this report as Network Adequacy 2.0. For example, consumers often choose health plans at the local level, with their regional provider network. Despite this reality, health plan performance is reported at the State level—making it difficult and complex for consumers to compare regional provider performance. Consumer-focused network adequacy measures should include languages spoken, accessibility and accommodation needs (e.g., wheelchair, vision impaired), appointment availability, proximity to public transportation, and other factors that advance consumer empowerment. A consumer's ability to compare trade-offs between network size, quality, accessibility, and cost is a policy imperative. Moving to Network Adequacy 2.0 also will require that State insurance regulators and other stakeholders have better oversight of network cost, quality, and other consumer-relevant metrics within existing resources. Finally, both public and private purchasers have a role to play in designing higher-performing networks with an understandable analysis of regional network performance.

This report provides an overview of the methods used for constructing a hospital network quality composite score; key findings; and recommendations informed by the analytic results, input from the technical advisory group, and consumer focus group feedback.

[6] Wishner J.B. and Marks J. Ensuring Compliance with Network Adequacy Standards: Lessons from Four States, Urban Institute, **http://www.urban.org/sites/default/files/publication/88946/2001184-ensuring-compliance-with-network-adequacy-standards-lessons-from-four-states_0.pdf**, accessed March 2019.

Methods

The project used publicly available quality measures and data on health plan networks to create a consumer-focused hospital network quality composite score. Although this was a more cost-effective analytical approach and helped to ensure that the methods developed could be replicated in other states, there are limitations associated with using public data sources. First, although New York State agencies and reporting entities have extensive data on hospital quality performance, similar data on individual physicians and physician group performance are sparse and often cannot be linked to the health plan network structure. Second, indicators that consumers identified as being important to their decision-making process were not readily available from public sources. These included provider characteristics (such as primary language; race/ethnicity; gender, gender identity, and sexual orientation; immigration status; and working hours) that could support better patient-provider matching. The consumer focus group sessions on network adequacy helped to supplement information that was lacking from public sources; the results are included in the Findings section of this report.

GUIDING PRINCIPLES

This project was guided by a diverse technical advisory group comprising representatives from hospital associations, consumer advocacy organizations, State agencies, and other stakeholders (a full list of members is included in the Acknowledgments on pages 1 and 2). The technical advisory group allowed stakeholders to provide input on the policy and technical details of the project's measurement approach and, ultimately, the network performance scoring and reports.

Definitions for common terms used throughout this report include:	
Region	DFS rating regions: Albany (Region 1), Buffalo (Region 2), Mid-Hudson (Region 3), New York City (Region 4), Rochester (Region 5), Syracuse (Region 6), Utica/Watertown (Region 7), and Long Island (Region 8).
Health plan	New York State health insurance provider, as defined through a combination of name and related plan identification number in PNDS.
Health plan product	The specific product line that consumers select. For this project, product lines included commercial MCO and non-MCO products; Marketplace bronze, silver, gold, and platinum products; and Medicaid products.
Network quality	This concept is based on a composite score of publicly available hospital quality measures. Project methods allowed for a combination of statistical reliability and policy-based weighting of the component measures included in the composite score (detailed more specifically below).
Network size	The number of hospitals that belong to a health plan product network by rating region, divided by the total number of hospitals in that region.
Ultra-narrow networks	Within the context of this project, an ultra-narrow network represents a health plan product network that includes only one or two hospitals. Ultra-narrow networks limit consumer choice and have important composite measurement implications.

Methods (continued)

DATA SOURCES

To construct the hospital networks, the project team used NYSDOH's PNDS. PNDS collects and publicly displays information on participating providers in the networks of health insurers in New York State. Currently, health plans electronically submit on a quarterly basis provider network data for the following: Medicaid; Child Health Plus; Fully Integrated Dual Advantage (FIDA); HIV Special Needs Plans (SNP); Managed Long-Term Care Plans; Health and Recovery Plans (HARPs); Marketplace Qualified Health Plans (QHPs); Essential Plans; and commercial networks outside of the Marketplace. This project focused on commercial, Marketplace QHP, and Medicaid networks.

Cynosure Health's analysis was limited to inpatient hospitals using service codes provided in PNDS, thereby excluding facilities such as nursing homes and psychiatric facilities. The version of PNDS used for the analysis was dated June 30, 2017, and was downloaded from the Health Data NY website.

Individual hospitals were identified using the facility operating certificate number (OPCERT) included in PNDS. Health plans were identified using a combination of name and PNDS submitter identification number. Within PNDS, indicator fields were used to determine the product line (e.g., MCO, non-MCO, Marketplace, Medicaid) for each hospital and plan it contracted with.

MEASURES

In collaboration with the technical advisory group, Cynosure Health conducted a comprehensive review of publicly available measures for New York State hospitals. This included measures available from the Centers for Medicare & Medicaid Services (CMS) and NYSDOH Health Profiles. NYSDOH Health Profiles aggregates measures from various sources, such as the Statewide Planning and Research Cooperative System (SPARCS).

A total of 275 measures were evaluated under this project, and 43 measures, including composites that represent multiple measures (e.g., hospital patient experience scores), were ultimately selected for inclusion in the composite score used for this project's analysis. A list of the final measures, along with the measurement periods and data sources, is included in the Appendix, beginning on page 27.

Methods (continued)

Measures were grouped into the following domains for evaluation and scoring purposes:	
Outcomes	The impact of an intervention (e.g., care received, medication dispensed) on the health status of patients.[7] For example, the mortality rate among heart failure patients is an outcome measure.
Intermediate outcomes	Intermediate outcome measures represent steps that have an influence on the final outcome measures. For example, a hemoglobin A1C result is a measure of blood sugar control that is predictive of a final outcome such as diabetic kidney disease or retinal disease.
Patient safety	Patient safety measures are a sub-category of outcome measures. They reflect adverse events or outcomes that should not occur in the hospital environment. For example, a central line-related bloodstream infection is a patient safety measure.
Patient experience	Measures that reflect the interactions that patients have with the health care system. For example, CMS reports a measure of patient experience through Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), which surveys patients about communication with doctors and nurses, cleanliness of the hospital environment, and pain management, among other measures.
Process of care	Measures that indicate actions a provider takes to positively impact a patient's health. These measures typically reflect best practices, such as providing patients who have chest pain or a possible heart attack with an aspirin upon their arrival at the hospital.

RELIABILITY WEIGHTING

This section explains the reliability weighting scheme used for the hospital network analysis. Reliability weighting uses both statistical properties of the measures themselves (e.g., hospital discharges) and consumer preferences about which measure domains are most important from a quality perspective.

Measure Weights

Each of the domains (outcomes, intermediate outcomes, patient safety, patient experience, and process of care) contains multiple component measures that are summarized into a domain-level score. At the individual measure level, reliability is a statistical property that describes how well the measure result can distinguish hospitals on their underlying quality. For this project, reliability describes two underlying ways in which hospital quality measures can differ from one another: (1) true underlying hospital performance and/or (2) sample sizes (i.e., how much data was collected for a particular measure).

[7] Agency for Healthcare Research and Quality, https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/types.html, accessed March 2019.

Methods (continued)

For each measure included in the analysis, Cynosure Health analyzed the measure reliability and applied a reliability weight where an estimate was available. Reliability weights are based on each measure's sample size and the underlying variation among hospitals. Where sample sizes were unavailable to calculate reliability, measures were equally weighted within their respective domains.

Domain Weights

Cynosure Health conducted a literature review and engaged the technical advisory group to create a domain-level weighting scheme for the overall hospital network composite score. The group evaluated weighting schemes that emphasized patient experience and outcomes or that had equal weights across priority domains (identified by the technical advisory group as outcomes, patient safety, and patient experience). The group chose a weighting approach that emphasized measures in the outcome domain. As shown below, the outcome domain was weighted highest at 40%, followed by patient safety (30%), patient experience (20%), and intermediate outcome and process of care at 5% each.

Domain	Weight
Outcome	40%
Patient safety	30%
Patient experience	20%
Intermediate outcome	5%
Process of care	5%
TOTAL	**100%**

NETWORK COMPOSITE SCORING

For this project, Cynosure Health used a composite score to characterize health plans' hospital network quality. This composite score was based on publicly reported data (see Appendix for a full list of measures). The advantage of a composite score is that it summarizes multiple quality constructs in ways that are relevant and meaningful to consumers. A disadvantage of this approach is that it reduces the level of detail available to consumers, which is referred to as dimension reduction. Common composite scores in the health care industry include the Medicare Advantage health plan star ratings, HCAHPS star ratings, and the Hospital Compare overall hospital quality star rating.

Methods (continued)

Critical steps in this project's network composite scoring process include:

1. **Review and select measures:** Determine which quality measures are available for network providers. This project focused on publicly available hospital quality measures.

2. **Calculate provider performance:** Calculate a composite score for quality performance at the individual provider (i.e., hospital) level using sound measurement techniques, as described earlier in this section of the report.

3. **Construct provider networks:** Construct and validate the health plan provider networks, including any geographic considerations for the analysis (e.g., assign regions to each). Then, match the individual providers to the appropriate health plan product networks.

4. **Calculate network performance:** To calculate network-level performance, aggregate provider entities for an overall composite score at the health plan product and network level.

Findings

The findings presented below are focused primarily on the quantitative aspects of the project. In presenting results, this analysis compares hospital network performance to a statewide average and is displayed as a z-score. At a high level, a z-score represents the number of standard deviations that a particular data point lies from the mean. For example, the analysis shows that the Mid-Hudson area (Region 3) has commercial MCO and non-MCO networks at one standard deviation below the New York State average for network performance. This represents worse-than-average performance, and is important information for Mid-Hudson area consumers, who also have the option of selecting commercial plans at or above the State average. Figure 1 shows all the regions in this analysis.

FINDING #1:

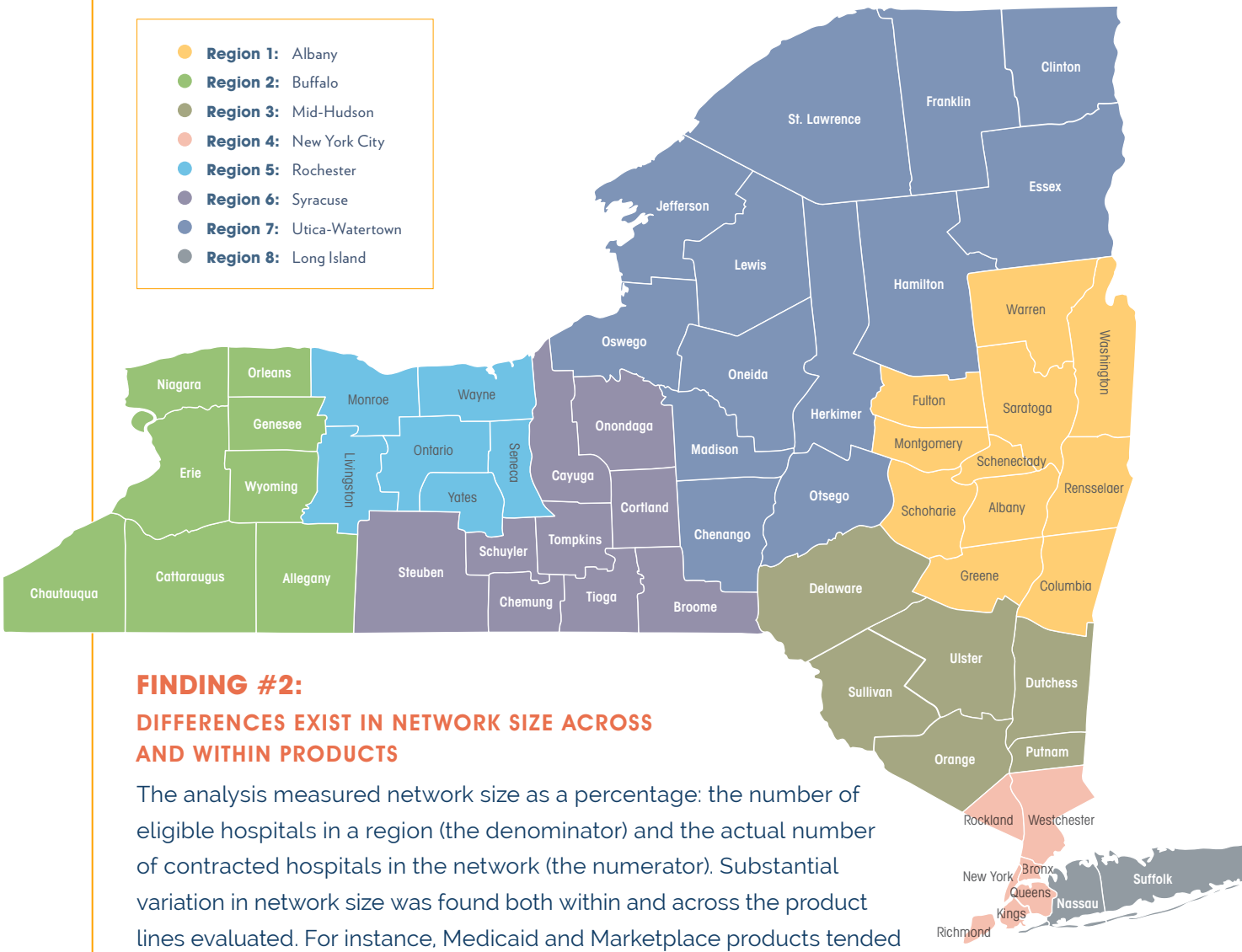
SOME REGIONS OFFER ACCESS TO PRIMARILY LOWER-QUALITY HOSPITAL NETWORKS

The analysis revealed substantial variation in network quality across DFS rating regions. This suggests that consumers in certain areas of the State have access to primarily high-quality networks, whereas others have access to a mix of network quality, and a few consumers have choices of primarily lower-quality hospital networks. Notable variations in network quality for the commercial market include better-than-average performance in all networks in the Rochester area (Region 5), markedly worse-than-average performance for many networks in the Long Island area (Region 8), and weak performance in most networks in the Buffalo area (Region 2). The Mid-Hudson area (Region 3) contains four extremely poor performing networks, whereas most of the other regions demonstrate a mixed network quality performance.

Similar to the commercial market, the Medicaid market has variation in network quality, with better-than-average performance in the Rochester area (Region 5) and weak performance for all networks in the Buffalo area (Region 2). However, Medicaid networks in the Long Island area (Region 8) were all better than average, which contrasts with the poor performance observed in the commercial market for the same region. One network in the Utica-Watertown area (Region 7) was the poorest performing Medicaid network in the State. More detailed information on variation within regions is available in the Appendix on page 24.

Findings (continued)

FIGURE 1: New York State Department of Financial Services Rating Regions



FINDING #2:

DIFFERENCES EXIST IN NETWORK SIZE ACROSS AND WITHIN PRODUCTS

The analysis measured network size as a percentage: the number of eligible hospitals in a region (the denominator) and the actual number of contracted hospitals in the network (the numerator). Substantial variation in network size was found both within and across the product lines evaluated. For instance, Medicaid and Marketplace products tended to have smaller networks across all regions of the State. Networks in more urban regions tended to be smaller than in less densely populated regions, but this finding was not universal. Furthermore, some insurers had nearly identical networks across products, whereas other insurers exhibited variation in network size by product within the same region. For example, a Marketplace-contracted health plan might have similar networks across the bronze, silver, gold, and platinum products, whereas a large health insurer might offer a larger network

Findings (continued)

and a smaller network as different products within the same region. Table 1 shows the variation in network size across all regions and markets of the State. Network size varies dramatically, especially in the New York City area (Region 4), Rochester area (Region 5), Syracuse area (Region 6), and Long Island area (Region 8), where the 25th percentile of network size is less than 10% of eligible hospitals and the 75th percentile is more than 68% of the eligible hospitals in these regions.

TABLE 1: Network Size – Commercial, Medicaid, and Marketplace Markets

Region	Counties	Number of Hospitals	Number of Networks	Network Size 25th Percentile	Network Size 50th Percentile	Network Size 75th Percentile
Region 1: Albany	Albany, Columbia, Fulton, Greene, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington	17	49	52.9	70.6	76.5
Region 2: Buffalo	Allegany, Cattaragus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming	27	35	37.0	66.7	88.9
Region 3: Mid-Hudson	Delaware, Dutchess, Orange, Putnam, Sullivan, Ulster	18	58	37.5	61.1	94.4
Region 4: New York City	Bronx, Kings, New York, Queens, Richmond, Rockland, Westchester	76	89	3.9	22.4	73.7
Region 5: Rochester	Livingston, Monroe, Ontario, Seneca, Wayne, Yates	12	44	8.3	50.0	91.7
Region 6: Syracuse	Broome, Cayuga, Chemung, Cortland, Onondaga, Schuyler, Steuben, Tioga, Tompkins	15	64	6.7	20.0	68.3
Region 7: Utica-Watertown	Chenango, Clinton, Essex, Franklin, Hamilton, Herkimer, Jefferson, Lewis, Madison, Oneida, Oswego, Otsego, St. Lawrence	25	60	16.0	24.9	96.0
Region 8: Long Island	Kings, Queens, Nassau, Suffolk	22	62	8.0	52.3	92.0

Findings (continued)

FINDING #3:

THERE IS A WEAK CORRELATION BETWEEN NETWORK QUALITY AND SIZE

Perhaps the most surprising finding of the project was that hospital network size and quality were only weakly correlated. That is, small, medium, and large networks usually contained both high- and low-performing hospitals, resulting in a network performance score that was not a reflection of size. Small (narrow), medium, and large networks were found to score both low and high. This finding is especially important for consumers, who might erroneously assume that larger networks would provide them with both more choice and higher quality. An important exception to this finding was the poorest-performing networks. The extremely poor-performing networks were very small, with less than 25% of eligible hospitals included in the network. These poor performing networks often comprised only one or two eligible hospitals, commonly referred to as an ultra-narrow network. If one or both hospitals were lower performing, the network was also lower performing, which limited or excluded a mechanism for consumers to receive care at higher-performing hospitals.

FINDING #4:

WHAT NETWORK ADEQUACY MEANS TO CONSUMERS

A series of regional focus groups was conducted to ensure that the consumer perspective was used to guide the project's direction and recommendations. Led by consumer health advocacy organizations, the focus groups included consumers from diverse geographic locations, racial/ethnic backgrounds, insurance status and coverage types, disability statuses, and genders, gender identities, and sexual orientations, among other characteristics. The focus groups suggested the following criteria be included in a definition of network adequacy that it is truly consumer-centered:

- Office hours after the regular work day and on weekends
- Access for people with disabilities to all network providers
- Reasonable transportation options and alternatives to network provider locations
- Language and cultural competency
- Experience with and expertise in LGBTQ-specific health issues
- Timely scheduling for nonurgent appointments

The Consumer Perspective

Expanded definitions of network adequacy should be centered around consumers' needs, interests, and experiences. Consumer health advocates, led by the Center for Independence of the Disabled New York, conducted focus groups to capture patients' feedback and experiences. The findings were used to guide project activities and ensure that the recommendations included in this report were informed by consumers.

The focus group stories extend beyond the quantitative hospital data that the report is largely based on. Rather, they feature patients' experiences when trying to seek care and access services with primary care physicians, specialists, and other providers. As additional publicly reported quality data become available, stakeholders should take steps to include physicians (or physician groups) in definitions of network adequacy, as this is a topic of interest and concern to consumers. Below are a few of their stories.

EDGAR'S STORY

Mental health is very important to Edgar, a gay Latino man who works as a patient navigator at an LGBTQ clinic in Manhattan. But after enrolling in his present health plan, Edgar was dismayed to find that his insurance network of mental health providers is very limited—and those who are in-network don't have very good patient reviews. Exacerbating this problem is the lack of network providers who have experience with LGBTQ patients or knowledge of their health issues. "It's hard enough to find an in-network mental health provider in New York City, but it becomes even harder when you're looking for one who is LGBTQ competent," says Edgar. Consequently, Edgar's been unable to find an in-network provider who makes him feel comfortable—and it isn't financially feasible for him to pay out of pocket and see someone out of network. As a result, Edgar feels he has no other option except to forgo his mental health care for the time being. "I do want to see a therapist, but I can't… right now."

Edgar has also faced challenges when attempting to use insurance company provider directories. Much to Edgar's frustration, his plan's provider directory was almost always out of date. He would often call the office of a provider in the directory, only to find out that provider was no longer participating. "There's a lapse in updating that directory," says Edgar, and it negatively impacted his ability to seek timely care. Edgar also finds it difficult to select providers based on the limited information available in the directory, which often times only includes the provider's name, office address, and phone number. "There's … no bio, no in-depth information…it's off-putting" he says. "I've even called the insurance. They'll be like 'Well, you just choose a doctor. Just choose one.' They're not really helpful," says Edgar. Without more detailed information, he has no way to ensure that he is choosing a provider who is suited to his needs. "You end up playing Russian roulette [when choosing providers]."

The Consumer Perspective (continued)

LAUREN'S STORY

For Albany resident Lauren, both limited hours and long wait times for appointments with in-network providers have had a negative impact on her family's health and financial stability.

Lauren's 9-year-old daughter Cheyenne takes five medications a day to control her asthma. When Cheyenne has an asthma attack at school and Lauren picks her up at the usual time of 4:30 p.m., it is often too late to be seen by her pediatrician, whose regular hours are 9 a.m. to 5 p.m. Consequently, Lauren has to take Cheyenne to the emergency room instead, resulting in long wait times for Cheyenne to be seen by a doctor and receive further treatment after she's been initially stabilized. Sometimes Lauren and Cheyenne have waited at the hospital until as late as 6:00 a.m. the next morning for Cheyenne to be nebulized. Frequent late-night ER trips leave both mother and daughter exhausted, with Cheyenne too tired to attend school the next day—which in turn causes Lauren to use up her limited number of sick days (and then lose pay) to stay home and watch her daughter.

Although Cheyenne's in-network pediatrician does offer limited Saturday hours (8 a.m. to 12:30 p.m.), Lauren says that if she calls after 8:30 a.m., the doctor is typically booked up by then, and the office refers her to the ER. "Have you ever tried to win a contest on the radio?" says Lauren. "That's what it's like because the Saturday appointments are so few."

Long appointment wait times with in-network providers have also proved damaging to the family. Lauren's 21-year-old son Nasier has a history of depression and related mental health concerns. Lauren once called five or six providers that accept Nasier's insurance, only to find that all of them said they weren't taking new patients or that appointments were not available for six to seven months. Lauren fears the harm to Nasier's health while he has to forgo timely treatment, as well as worries that he will forget and miss his appointment if it's that far away into the future.

Lauren's own health has suffered, too. When Lauren experienced a cracked tooth, she quickly sought out medical care. But she soon discovered that only three dental practices accepted her Medicaid plan in the entire City of Albany—and all three had wait times that ranged from six to eight months, and even longer, for new patient appointments. While Lauren awaited her future appointment date, her cracked tooth developed a cavity and she came down with a severe infection in that area of her mouth. Lauren was in such pain that she was forced to go to the ER, where a staff member had to drain the infected area of her face of fluid. They also prescribed her antibiotics and Percocet (an opioid that has been associated with overdosing and addiction), and then referred her a dental clinic, which gave her a temporary filling. The pain persisted, however, and she endured three additional courses of antibiotics before the infection was halted.

"All of the consequences I experienced from a cracked tooth—including a severe infection, multiple rounds of antibiotics, and being prescribed dangerous opioids—arose from the fact that there wasn't an Albany dentist that would give me an appointment in less than six months," says Lauren.

The Consumer Perspective (continued)

LOUISE'S STORY

The lack of network provider locations in close proximity to where patients live is also a problem for many—particularly for people like Louise and others who have disabilities or other mobility issues. A Medicaid patient in her late 40s living in Brooklyn, Louise has multiple sclerosis (MS) and a seizure disorder. She walks with a cane because of issues stemming from MS, and also fears the possibility of having a seizure while travelling alone on the New York City subway. For these reasons, Louise prefers to see providers within close proximity to her neighborhood of Bedford-Stuyvesant. Unfortunately, she found that the network of providers in Brooklyn who accepted her insurance was very limited.

This issue came to a head in summer 2017, when Louise suffered a stroke and was hospitalized. After she was discharged, Louise was referred to a neurologist affiliated with the hospital for follow-up, only to find that the first available appointment was six months away. When the appointment day finally arrived, Louise showed up—only to find out then that the provider was out of her network. Louise recalled, "I wait hours, get up to the [reception] window, give them my [insurance] card, and they go, 'Oh, I'm sorry we don't accept this.' She gives me my card back and says, 'Next!'"

Louise then began searching for an in-network neurologist in Brooklyn on her own, using both her insurance plan's provider directory and other online resources, like ZocDoc, but with no success. "I printed out a list of 30 doctors, none of them accepted [my insurance]. I was crying because it was so frustrating," says Louise. Eventually, she had no choice but to make an appointment with an in-network provider in Manhattan—forcing her to make a lengthy 1-1/2-hour trip from her home, which involved taking the bus, transferring to the subway, and then transferring to another bus.

Recommendations

In addition to the findings outlined above, this project demonstrated that it is possible to create hospital network quality scores that support an improved, consumer-centric definition of network adequacy. Although the analysis was limited by a lack of physician network data, stakeholders can still take steps to improve the accessibility and quality of hospital networks and support consumers in the decision-making process. Furthermore, findings from the focus groups show that consumers can and should play a role in evaluating health plan networks. For consumers who visit hospitals frequently or are planning a hospital stay (e.g., expectant mothers), a hospital network quality score could help them choose between plans that may otherwise look similar in terms of costs and benefits.

The following recommendations are based on the analysis, in-depth roundtable discussions with the technical advisory group, and consumer focus groups and case studies.

RECOMMENDATION #1:

CREATE NETWORK ADEQUACY 2.0 QUALITY STANDARDS

This recommendation is grounded in the concept that what gets measured gets improved. The project demonstrated that hospital network quality could be measured using publicly available data in New York State. From this baseline measurement, two steps should be taken to help the industry progress toward a more holistic conceptualization of Network Adequacy 2.0:

Create Quality Composite Scores for Other Providers

As additional publicly reported quality data become available, the relevant State agencies should broaden the development of network clinical quality performance to include physicians (or physician groups), long-term care, and/or other providers. For example, in 2019, CMS is planning to release data from physicians and other providers under Medicare Access and CHIP Reauthorization Act legislation. Although many stakeholders anticipate challenges with data access and analysis, CMS has communicated that the agency will provide a composite of one to five stars for individual clinicians or clinician groups.

Set Network Quality Targets

For all provider types, any plan-product performing significantly below set standards should enter into discussions with relevant State agencies to determine which providers within the network are contributing to the lower quality, why these providers performed poorly, and what concrete actions could be implemented to improve network performance.

Recommendations (continued)

Regarding hospital quality, State agencies could set performance targets that are enforced at the health plan level. For instance, California's state-based health insurance marketplace, Covered California, currently sets targets for its contracted plans. As part of this policy, Covered California will eliminate hospitals that do not meet certain quality and cost benchmarks, such as hospital-acquired infection measures and low-risk C-section rates.

RECOMMENDATION #2:

INCREASE OVERSIGHT OF ULTRA-NARROW NETWORKS

NYSDOH should review the accuracy of PNDS to determine if ultra-narrow networks exist. If so, the appropriate State agencies, health plan purchasers, and other stakeholders should take steps to ensure consumers have access to adequately performing hospitals within their plan-product networks. For instance, DFS and health care purchasers could work with health plans to strengthen network performance (where needed) at the regional level.

As cited in the Findings section, poorly performing networks are particularly problematic for consumers who have a small number of hospitals in their health plan-product network to choose from. In New York State, hospitals have resources and mechanisms that can help improve and strengthen their quality performance. For instance, the Healthcare Association of New York State and the Greater New York Hospital Association can leverage several federally and State-funded hospital quality initiatives, such as the CMS Partnership for Patients' Hospital Improvement Innovation Networks, to assist in improvement efforts.

RECOMMENDATION #3:

REPORT CONSUMER-CENTERED MEASURES

New York State agencies should further explore ways to identify provider capabilities that are important to developing patient-centric network adequacy measures. For instance, the Veterans Health Administration recently began posting provider appointment availability so that consumers can access more timely appointments that meet their individual needs. Potential measures could include:

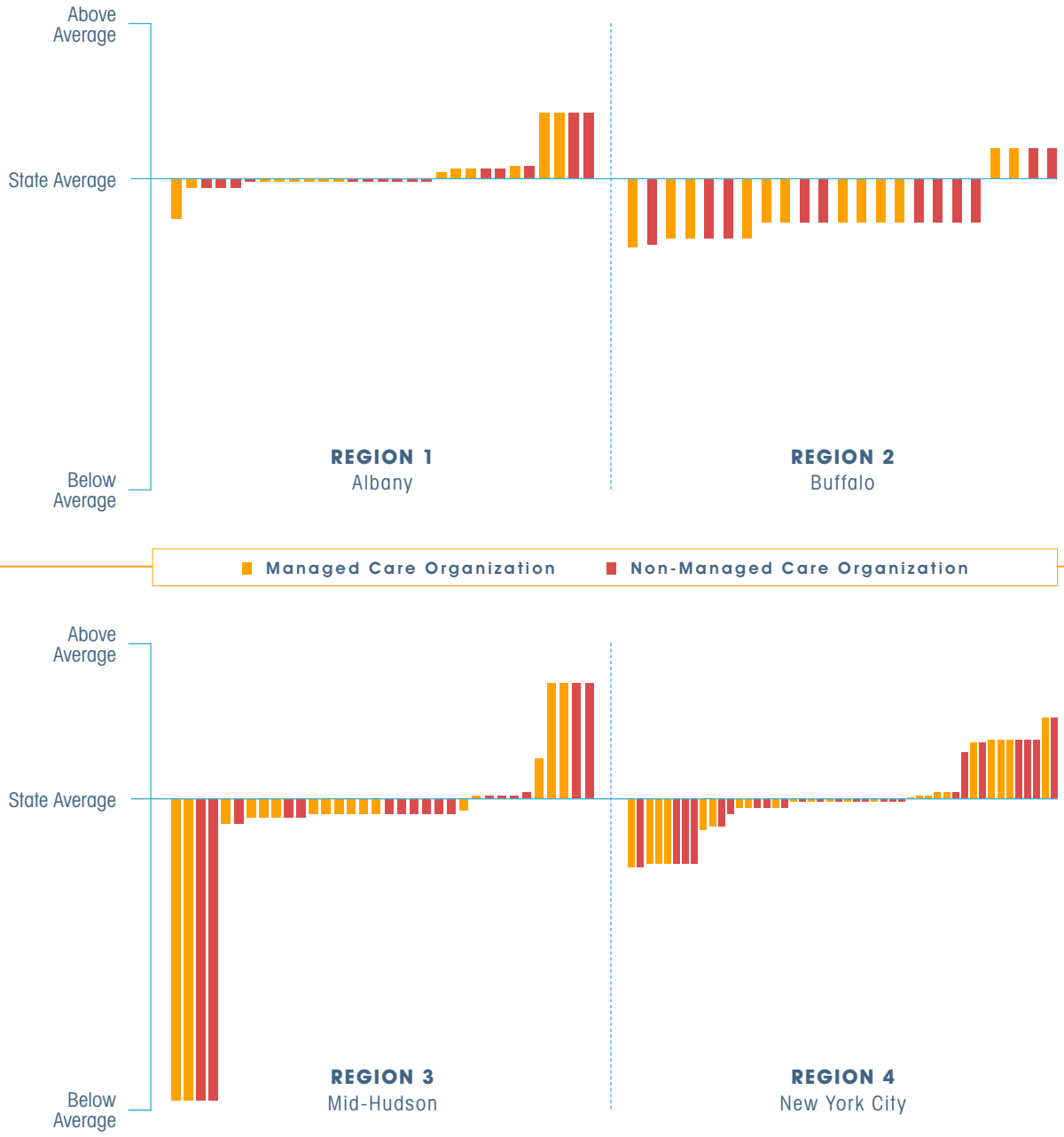
- Office location, appointment hours, languages spoken, and special services offered
- Availability of the next nonurgent appointment
- Physician group affiliation
- Hospital affiliation

Conclusion

Ensuring that consumers have access to high-quality providers when they purchase health insurance is a health plan responsibility and regulatory mandate. Historically, the emphasis has been on access—and less on quality. This project provides a way for consumers to increase their decision-making capabilities by advancing a new concept: Network Adequacy 2.0. A first step is to evaluate networks at the plan-product level by region and help consumers and regulators better understand the cost and quality tradeoffs. Creating a network quality score by market type (individual, commercial, Medicare, and Medicaid) is now possible for hospitals in New York State, and should evolve over time to include physician quality performance. With the exception of the ultra-narrow networks of less than 25% of available providers, hospital network size is not a strong predictor of hospital network quality. Policymakers should evaluate ultra-narrow networks, as well as regional variation in network performance, to advance Network Adequacy 2.0. To better empower consumers when choosing a health plan, a broad, consumer-focused definition of network adequacy ultimately should include measures that meet the unique health needs of individuals, such as access to public transportation and language preference.

Appendix

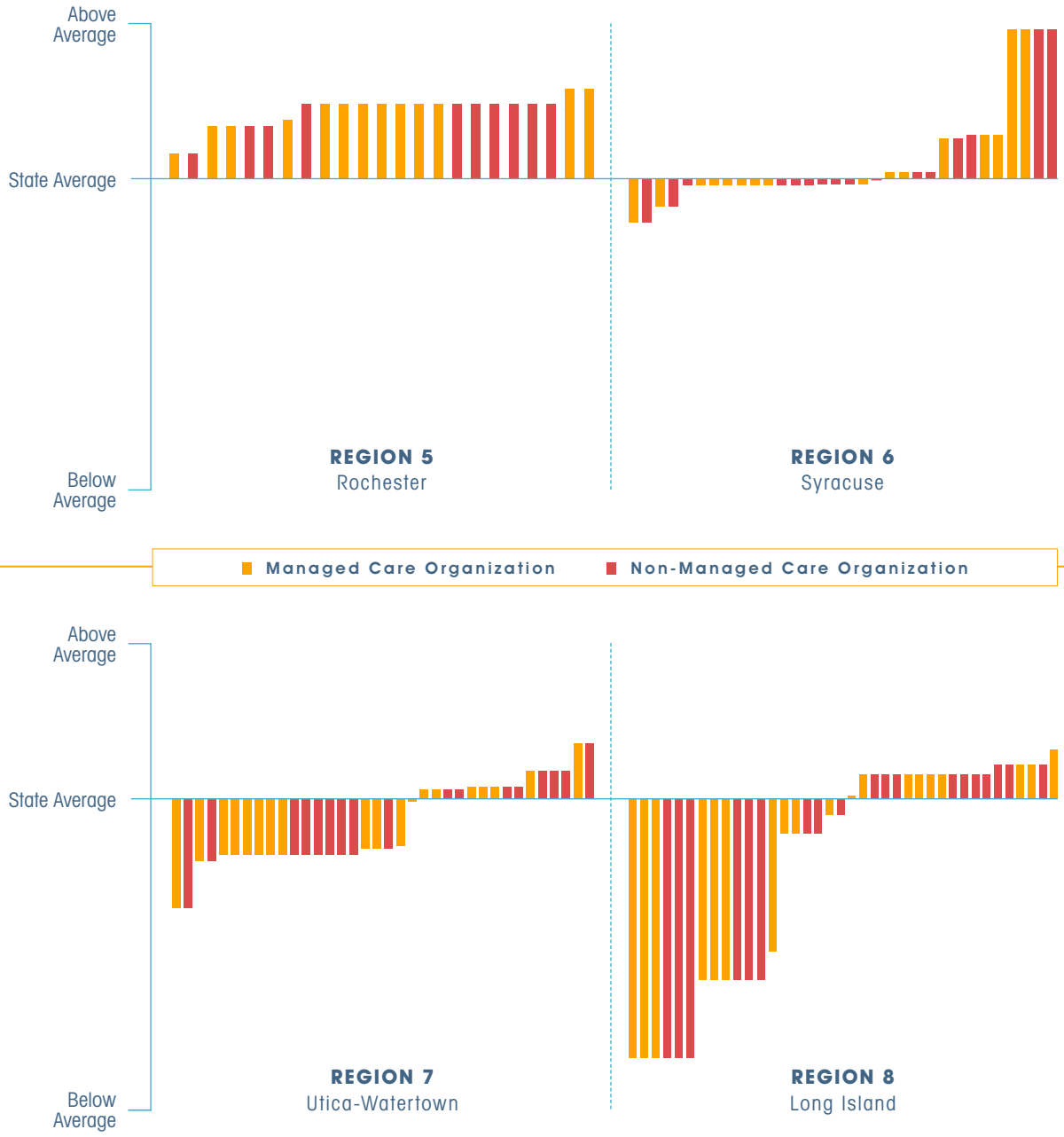
FIGURE 2: Variation in Network Quality Performance for the Commercial Market by Region



Regions 5, 6, 7, and 8 continued on next page ›

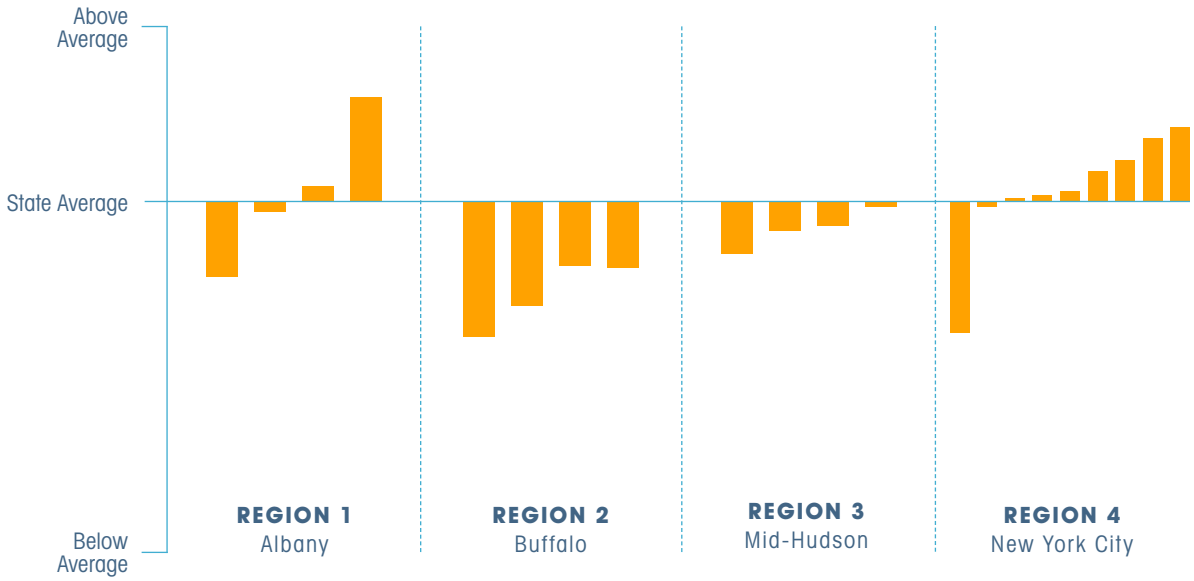
Appendix (continued)

FIGURE 2: Variation in Network Quality Performance for the Commercial Market by Region



Appendix (continued)

FIGURE 3: Variation in Network Quality Performance for the Medicaid Market by Region



Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Intermediate Outcome	Episiotomy	Episiotomy	An incision (cut) sometimes made to enlarge the vaginal opening.	10/30/17	1/1/15-12/31/15	New York State Department of Health
Intermediate Outcome	Fed Exclusively Breast Milk	Fed exclusively breast milk	Infants who were fed only breast milk (i.e., no formula or water) since birth. Based on live born infants, excluding infants who were admitted to the NICU or transferred to or from another hospital. This describes what the infant was fed between birth and discharge from the hospital (or day 5 of life for infants hospitalized more than 5 days).	10/30/17	1/1/15-12/31/15	New York State Department of Health
Intermediate Outcome	OP-23	Head CT scan results for acute ischemic stroke or hemorrhagic stroke	Percentage of patients who came to the emergency department with stroke symptoms and received brain scan results within 45 minutes of arrival.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	IQI90	Mortality for selected procedures	Composite of IQI 8, 9, 11, 12, 13, 14, 30, 31.	6/29/17	10/1/14-9/30/15	New York State Department of Health-Statewide Planning and Research Cooperative System
Outcome	IQI91	Mortality for selected conditions	Average of the observed-to-expected ratio of IQI 15, 16, 17, 18, 19, 20.	6/29/17	10/1/14-9/30/15	New York State Department of Health-Statewide Planning and Research Cooperative System
Outcome	MORT-30-AMI	Acute myocardial infarction 30-day mortality rate	Death rate for heart attack patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	MORT-30-COPD	COPD 30-day mortality rate	Death rate for chronic obstructive pulmonary disease (COPD) patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	MORT-30-HF	Heart failure 30-day mortality rate	Death rate for heart failure patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Outcome	MORT-30-PN	Pneumonia 30-day mortality rate	Death rate for pneumonia patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	MORT-30-STK	Stroke 30-day mortality rate	Death rate for stroke patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	PCI-ALL	All PCI	Number of all percutaneous coronary intervention (PCI) cases and deaths occurring during the same hospital stay in which a patient underwent PCI and on deaths that occur after hospital discharge but within 30 days of the procedure.	7/3/17	2012-2014	New York State Department of Health-Statewide Planning and Research Cooperative System
Outcome	PCI-CABG	CABG	Number of all coronary artery bypass grafting (CABG) cases and deaths occurring during the same hospital stay in which a patient underwent CABG and on deaths that occur after hospital discharge but within 30 days of the procedure.	7/7/17	2012-2014	New York State Department of Health-Statewide Planning and Research Cooperative System
Outcome	PCI-nonemergency	Non-Emergency PCI	Number of nonemergency PCI cases and deaths occurring during the same hospital stay in which a patient underwent PCI and on deaths that occur after hospital discharge but within 30 days of the procedure.	7/3/17	2012-2014	New York State Department of Health-Statewide Planning and Research Cooperative System
Outcome	READM-30-AMI	Acute myocardial infarction 30-day readmission rate	Rate of readmission for heart attack patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	READM-30-COPD	COPD 30-day readmission rate	Rate of readmission for COPD patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	READM-30-HF	Heart failure 30-day readmission rate	Rate of readmission for heart failure patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Outcome	READM-30-HIP-KNEE	30-day readmission rate following elective primary total hip arthroplasty and/or total knee arthroplasty	Rate of readmission after hip/knee replacement.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	READM-30-HOSP-WIDE	30-day hospital-wide all-cause unplanned readmission (HWR)	Rate of readmission after discharge from hospital (hospital-wide).	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	READM-30-PN	Pneumonia 30-day readmission rate	Rate of readmission for pneumonia patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Outcome	READM-30-STK	Stroke 30-day readmission rate	Rate of readmission for stroke patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Patient Experience	H-HSP-RATING-STAR-RATING	CMS star rating (linear score)	CMS star rating for overall hospital quality (linear score on which the star rating is produced).	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Patient Safety	CDI	CDI hospital onset	*Clostridium difficile* laboratory-identified events (intestinal infections), referred to as CDI. Hospital onset means when stool sample is obtained on day four or later during the hospital stay. Measured as infections per 10,000 patient days.	3/29/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	CLABSI-overall	All bloodstream infections	The CLABSI Overall Standardized Infection Ratio (SIR) summarizes the average performance across all available types of ICUs. The SIR compares the infection rates in a small population (a hospital) to infection rates in a standard population (New York State in the same year), after adjusting for risk factors that might affect the chance of developing an infection.	3/29/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	COMP-HIP-KNEE	Hospital level risk-standardized complication rate following elective primary total hip arthroplasty and total knee arthroplasty	Rate of complications for hip/knee replacement patients.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Patient Safety	CRE	CRE hospital onset infection rate: all body sites	Carbapenem-resistant *Enterobacteriaceae* (CRE) indicators which had onset at the hospital. All body sites include bloodstream, urinary tract, respiratory system, and skin/soft tissue.	3/30/17	1/1/15-12/31/16	New York State Department of Health Hospital
Patient Safety	HAI-2	CAUTI in ICUs and select wards	Catheter-associated urinary tract infections (CAUTI) in ICUs and select wards.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Patient Safety	HAI-5	MRSA blood infections	Methicillin-resistant *Staphylococcus aureus* (MRSA) blood laboratory-identified events (bloodstream infections).	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Patient Safety	PPC-1	Stroke and intracranial hemorrhage	Stroke and intracranial hemorrhage: cardiovascular-respiratory complications categorized as a major potentially preventable complication (PPC)-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-10	Congestive heart failure	Congestive heart failure: cardiovascular-respiratory complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-11	Acute myocardial infarction	Acute myocardial infarction: cardiovascular-respiratory complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-12	Cardiac arrhythmias and conduction disturbances	Cardiac arrhythmias and conduction disturbances: cardiovascular-respiratory complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-14	Ventricular fibrillation/ cardiac arrest	Ventricular fibrillation/cardiac arrest: extreme complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-15	Peripheral vascular complications except venous thrombosis	Peripheral vascular complications except venous thrombosis: cardiovascular-respiratory complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-18	Major gastrointestinal complications with transfusion or significant bleeding	Major gastrointestinal complications with transfusion or significant bleeding: gastrointestinal complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Patient Safety	PPC-19	Major liver complications	Major liver complications. Categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-2	Extreme CNS complications	Extreme central nervous system (CNS) complications. Categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-25	Renal failure with dialysis	Renal failure with dialysis: extreme complications categorized as a major-PPC level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-27	Post-hemorrhagic and other acute anemia with transfusion	Post-hemorrhagic and other acute anemia with transfusion: other medical and surgical complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-35	Septicemia and severe infections	Septicemia and severe infections: infectious complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-38	Post-operative wound infection and deep wound disruption with procedure	Post-operative wound infection and deep wound disruption with procedure: perioperative complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-4	Acute pulmonary edema and respiratory failure with ventilation	Acute pulmonary edema and respiratory failure with ventilation: extreme complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-45	Post-procedure foreign bodies	Post-procedure foreign bodies: perioperative complications categorized as a major PPC-level of complication	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-47	Encephalopathy	Encephalopathy: other medical and surgical complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-49	Latrogenic pneumothorax	Latrogenic pneumothorax: reactions categorized as a major PPC-level of complication	7/17/17	1/1/15-12/31/15	New York State Department of Health

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Patient Safety	PPC-5	Pneumonia and other lung infections	Pneumonia and other lung infections: cardiovascular-respiratory complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-50	Mechanical complication of device, implant and graft	Mechanical complication of device, implant and graft malfunctions, infections from devices; reactions categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-52	Infection, inflammation and other complications of devices, implants or grafts, except vascular infection	Infection, inflammation and other complications of devices, implants, or grafts, except vascular infection: malfunctions, infections from devices; reactions categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-56	Obstetrical hemorrhage with transfusion	Obstetrical hemorrhage with transfusion: obstetrical complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-57	Obstetric lacerations and other trauma without instrumentation	Obstetric lacerations and other trauma without instrumentation: obstetrical complications categorized as a major level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-58	Obstetric lacerations and other trauma with instrumentation	Obstetric lacerations and other trauma with instrumentation: obstetrical complications categorized as a major level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-6	Aspiration pneumonia	Aspiration pneumonia: cardiovascular-respiratory complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-60	Major puerperal infection and other major obstetric complications	Major puerperal infection and other major obstetric complications: obstetrical complications categorized as a major level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-63	Post-procedural respiratory failure with tracheostomy	Post-procedural respiratory failure with tracheostomy: extreme complications categorized as a major level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Patient Safety	PPC-65	Urinary tract infection	Urinary tract infection: infectious complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-9	Shock	Shock: extreme complications categorized as a major PPC-level of complication.	7/17/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PPC-ALL	PPC - 32	PPC measures for the 36 major PPCs combined.	12/11/17	1/1/15-12/31/15	New York State Department of Health
Patient Safety	PSI-10	Postoperative kidney and diabetic complications	Post-operative acute kidney injury requiring dialysis.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-11	Post-operative respiratory failure	Post-operative respiratory failure rate.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-12-POSTOP-PULMEMB-DVT	Perioperative pulmonary embolism or deep vein thrombosis rate	Serious blood clots after surgery.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-13-POST-SEPSIS	Post-operative sepsis rate	Blood stream infection after surgery.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-14-POSTOP-DEHIS	Post-operative wound dehiscence rate	A wound that splits open after surgery on the abdomen or pelvis.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-15-ACC-LAC	Accidental puncture or laceration rate	Accidental cuts and tears from medical treatment.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-3-ULCER	Pressure ulcer rate	Pressure sores.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Patient Safety	PSI-6-IAT-PTX	Latrogenic pneumothorax rate	Collapsed lung due to medical treatment.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-7-CVCBI	Central venous catheter-related bloodstream infection rate	Infections from a large venous catheter.	4/27/17	10/1/14-9/30/15	New York State Department of Health-Statewide Planning and Research Cooperative System
Patient Safety	PSI-8-POST-HIP	Postoperative hip fracture rate	Broken hip from a fall after surgery.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-9	Perioperative bleeding/bruise	Perioperative hemorrhage or hematoma rate.	12/21/17	7/1/14-6/30/16	Centers for Medicare & Medicaid Services
Patient Safety	PSI-90	Patient safety for selected procedures composite	This score combines information for common patient safety problems in the hospital. The score displayed is a ratio compared with the national average of 1.0 (PSI 90).	4/27/17	10/1/14-9/30/15	New York State Department of Health
Patient Safety	SSI Overall	All surgical site infections	The overall SSI Standardized Infection Ratio (SIR) is calculated as the sum of the observed number of surgical site infections divided by the sum of the predicted number of surgical site infections.	3/30/17	1/1/15-12/31/16	New York State Department of Health
Patient Safety	VTE-6	Hospital-acquired potentially preventable venous thromboembolism	Patients who developed a blood clot while in the hospital who did not get treatment that could have prevented it.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Process of Care	IMM-2	Immunization for influenza	Patients assessed and given influenza vaccination.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services

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Appendix (continued)

TABLE 2: Hospital Network Composite Measures

Domain	Identifier	Name	Description	Published Date	Date Range	Source
Process of Care	IMM-3-OP-27-FAC-ADHPCT	Influenza vaccination coverage among health care personnel	Health care workers given influenza vaccination.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Process of Care	IQI22	Vaginal birth after cesarean (VBAC) delivery rate, uncomplicated	Vaginal births per 1,000 deliveries by patients with previous cesarean deliveries. Excludes deliveries with complications (abnormal presentation, preterm delivery, fetal death, multiple gestation diagnoses, or breech procedure).	6/29/17	10/1/14-9/30/15	New York State Department of Health-Statewide Planning and Research Cooperative System
Process of Care	IQI33	Primary cesarean delivery rate, uncomplicated	First-time cesarean deliveries without a hysterotomy procedure per 1,000 deliveries. Excludes deliveries with complications (abnormal presentation, preterm delivery, fetal death, multiple gestation diagnoses, or breech procedure).	6/29/17	10/1/14-9/30/15	New York State Department of Health-Statewide Planning and Research Cooperative System
Process of Care	OP-2	Fibrinolytic therapy received within 30 minutes of emergency department arrival	Outpatients with chest pain or possible heart attack who got drugs to break up blood clots within 30 minutes of arrival.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Process of Care	OP-4	Aspirin at arrival	Outpatients with chest pain or possible heart attack who received aspirin within 24 hours of arrival or before transferring from the emergency department.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Process of Care	OP-5	Median time to ECG	Average (median) number of minutes before outpatients with chest pain or possible heart attack got an ECG.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Process of Care	STK-4	Thrombolytic therapy	Ischemic stroke patients who got medicine to break up a blood clot within 3 hours after symptoms started.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services
Process of Care	VTE-5	Warfarin therapy discharge instructions	Patients with blood clots who were discharged on a blood thinner medicine and received written instructions about that medicine.	12/21/17	1/1/16-12/31/16	Centers for Medicare & Medicaid Services

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