U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

REPORT TO CONGRESS

Fiscal Year 2021
The Administration, Cost, and Impact of the Quality Improvement Organization Program for Medicare Beneficiaries

October 2023

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Executive Summary

Section 1161 of the Social Security Act requires the submission of an annual report to Congress on the administration, cost, and impact of the Centers for Medicare and Medicaid Services (CMS) Quality Improvement Organization (QIO) Program during the preceding fiscal year. This report fulfills this requirement for Fiscal Year (FY) 2021. The statutory mission of the QIO Program is set forth in Title XVIII, Health Insurance for the Aged and Disabled, of the Social Security Act. More specifically, Section 1862(g) of the Act states that the mission of the QIO Program is to improve the effectiveness, efficiency, economy, and quality of services delivered to Medicare beneficiaries and to ensure that those services are reasonable and necessary. The quality improvement strategies of the Medicare QIO Program are implemented by area- and task-specific QIO contractors that work directly with health care providers and practitioners in their geographic service areas.

On June 8th, 2019, CMS launched the QIO Program's 12th Scope of Work (SOW) contract period to enhance the quality of services provided to Medicare beneficiaries. Five-year contracts are currently divided between two sets of QIO contractors: Beneficiary and Family Centered Care-Quality Improvement Organizations (BFCC-QIOs) serving the Medicare program's case review needs (see Tables 1 and 2) and Quality Innovation Network-Quality Improvement Organizations (QIN-QIOs) supporting healthcare delivery professionals and systems as they perform quality improvement work (see Table 3).

In March 2019, CMS launched a new contract structure for the 12th SOW BFCC-QIO contracts using multiple award/indefinite delivery/indefinite quantity (IDIQ) 5-year contracts. Four contractors—Kepro, Livanta, Avar Consulting, and Provider Resources Inc.—were awarded IDIQ contracts. Under the IDIQ, in May 2019, Task Order 01 National Coordinating and Oversight Review Center (NCORC) and Task Order 02 BFCC-QIO Case Review Services were awarded. In September 2019, Task Order 04 Beneficiary Care Management Program (BCMP) and in February 2021 Task Order 03 Claims Review Services were awarded. Under Task Order 03, Post Payment Hospital Part A Claims Review work is conducted. This includes claims review of higher weighted diagnosis related groups, hospital inpatient short stays and focused reviews. The goal of Task Order 3 is to ensure that these claims are billed and paid appropriately as per CMS policy. Also, a small business contract for the BFCC Survey Center was awarded in September 2020.

Table 1: BFCC QIO Case Review Tasks and Program

BFCC QIO Case Review Tasks	BFCC QIO Case Review Program
Task Order 1	National Coordinating and Oversight Review Center (NCORC): Provides support and assists CMS for all BFCC-QIO related activities by facilitating collaboration meetings, maintaining BFCC-QIO program dashboards, and conducting independent BFCC-QIO program evaluation and monitoring. NCORC also partners with the Clinical Data Abstraction Center and Agency for Healthcare Research & Quality to conduct reviews of medical charts for preventable patient safety events.

BFCC QIO Case Review Tasks	BFCC QIO Case Review Program
Task Order 2	Case Review Services: BFCC-QIOs help Medicare beneficiaries exercise their right to high-quality health care. They manage all beneficiary complaints and quality of care reviews to ensure consistency in the review process while taking into consideration local factors important to beneficiaries and their families. They also handle cases in which beneficiaries want to appeal a health care provider's decision to discharge them from a facility or discontinue other types of services.
Task Order 3	Claims Review Services: Conducts Post Payment Hospital Part A Claims Review work. This includes claims review of higher weighted diagnosis related groups, hospital inpatient short stays and focused reviews. The goal is to ensure that these claims are billed and paid appropriately as per CMS policies.
Task Order 4	Beneficiary Care Management Program (BCMP)
Small Business	BFCC Survey Center: Provides Beneficiary Experience Survey data about the BFCC-QIO Case Review Process. The beneficiary experience data areas include Appeals, Immediate Advocacy and Quality of Care complaints.

This Report to Congress covers FY 2021. In FY 2021, QIO Program expenditures, under Titles XVIII and XIX, totaled $625,040,169. FY 2021 covered the 18th through the 30th month of the 12th SOW contract. This report describes the main activities undertaken during FY 2021 under the 12th SOW and includes tables that illustrate the QIOs' performance compared to performance criteria. The FY 2021 report describes the measures, targets, and results for the 2nd year evaluation.

Table 2. BFCC-QIOs by CMS Region and States/Other Jurisdictions

CMS Region	BFCC-QIO	States/Other Jurisdictions
Region 1: Boston	Kepro	CT, ME, MA, NH, RI, VT
Region 2: New York	Livanta	NJ, NY, PR, VI
Region 3: Philadelphia	Livanta	DE, DC, MD, PA, VA, WV
Region 4: Atlanta	Kepro	AL, FL, GA, KY, MS, NC, SC, TN
Region 5: Chicago	Livanta	IL, IN, MI, MN, OH, WI
Region 6: Dallas	Kepro	AR, LA, NM, OK, TX
Region 7: Kansas City	Livanta	IA, KS, MO, NE
Region 8: Denver	Kepro	CO, MT, ND, SD, UT, WY
Region 9: San Francisco	Livanta	AS, AZ, CA, GU, HI, MP, NV
Region 10: Seattle	Kepro	AK, ID, OR, WA

Table 3. QIN-QIOs by States/Other Jurisdictions

QIN-QIO	States/Other Jurisdictions
Alliant Health Solutions	AL, FL, GA, KY, LA, NC, TN
Comagine Health	ID, NV, NM, OR, UT, WA
Great Plains	ND, SD
Health Quality Innovators (HQI)	KS, MO, SC, VA
Health Services Advisory Group (HSAG)	AZ, CA
IPRO	CT, DE, D.C., ME, MD, MA, NH, NJ, NY, OH RI, VT
Mountain-Pacific Quality Health	AS, AK, GU, HI, MP, MT, WY
Qsource	IN
Quality Insights	PA, WV
Superior Health Quality Alliance	MI, MN, WI
Telligen	CO, IL, IA, OK
TMF	AR, MS, NE, PR, TX, VI*

*The Virgin Islands (VI) have no nursing homes that accept Medicare.

Background

The statutory provisions governing the QIO Program are found in Part B of Title XI of the Social Security Act. The QIO Program's statutory mission is set forth in Title XVIII, Health Insurance for the Aged and Disabled, of the Act. Specifically, Section 1862(g) of the Act states that the mission of the QIO Program is to improve the effectiveness, efficiency, economy, and quality of services delivered to Medicare beneficiaries and to ensure that those services are reasonable and necessary. Part B of Title XI of the Act was amended by Section 261 of the Trade Adjustment Assistance Extension Act of 2011 (Trade Bill), which made several changes to the Secretary's contracting authority for QIOs beginning with contracts entered into or renewed after January 1, 2012. These changes include separating the functions of the BFCCs and QIN-QIOs; modifying the eligibility requirements for QIOs, the term of QIO contracts, and the geographic area served by QIOs; and updates to the functions performed by the QIOs under their contracts.

Program Administration

Description of Quality Improvement Organization (QIO) Contracts

By law, the mission of the QIO Program is to improve the effectiveness, efficiency, and quality of services delivered to Medicare beneficiaries. Based on this statutory requirement and the provisions in sections 1154 and 1867 of the Social Security Act, and CMS' program experience, CMS identified the core functions of the QIO Program as:

- Improving quality of care for Medicare beneficiaries;

- Protecting the integrity of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds by ensuring that Medicare pays only for services and goods that are reasonable and necessary and are provided in the most appropriate setting; and
- Protecting beneficiaries by expeditiously addressing: individual complaints; reviews or appeals from provider notices of discharge or termination of services; violations of the Emergency Medical Treatment and Labor Act (EMTALA); and other related responsibilities articulated in the Act and implementing regulations.

The QIOs are now categorized and known as BFCC-QIOs and QIN-QIOs, depending on the QIO functions that they perform. QIOs are private, mostly not-for-profit, organizations staffed by doctors and other health care professionals. BFCC-QIOs are trained to review medical care and help beneficiaries with complaints about the quality of care. QIN-QIOs direct and implement improvements in the quality of care available throughout the spectrum of care. QIOs are reimbursed monthly, consistent with the Federal Acquisition Regulation. The 12th SOW also includes a performance-based payment model where a portion of the QIO reimbursement is directly tied to the achievement of quantitative outcomes. This model shifts from paying for services rendered to paying QIN-QIOs for accomplishing meaningful and measurable targets as stipulated in the contract. This adjustment is a benefit to the government.

QIOs Interacting with Health Care Providers and Practitioners

QIOs work with and provide technical assistance to health care practitioners and providers, such as physicians, hospitals (including Critical Access Hospitals), nursing homes, and home health agencies. QIOs also work with practitioners, providers, beneficiaries, partners, and other stakeholders to improve the quality of health care provided to beneficiaries through a variety of health care delivery systems and address beneficiary complaints regarding quality of care. For instance, a process called Immediate Advocacy involves direct communication between QIOs and beneficiaries in which the BFCC-QIO addresses complaints raised by the beneficiary. Through this process, QIO staff work with providers and clinical staff to resolve miscommunication or other concerns voiced by the beneficiary or a beneficiary's family member. QIOs analyze data and beneficiary records to identify areas of improvements in care and ensure beneficiaries' voices are heard by addressing individual complaints and bringing their perspective into the improvement process.

Any provider or practitioner who treats Medicare beneficiaries and is paid under Title XVIII of the Social Security Act may receive technical assistance from a QIO and may be subject to review by the QIO in connection with Medicare participation. Interaction comes in a variety of forms including direct intensive QIN-QIO assistance, occasional contact with the QIO at professional meetings, visits to the QIO website, and/or BFCC-QIO case reviews.

Program Cost

Under federal budget rules, the QIO Program is defined as mandatory spending rather than discretionary spending; QIO costs are financed directly from the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds and are not subject to the annual appropriations process. QIO costs are subject to the apportionment process administered through OMB.

In FY 2021, QIO Program expenditures, under Titles XVIII and XIX, totaled $645,040,169.

Program Impact

The QIO Program impacts Medicare beneficiaries on an individual basis and the beneficiary population as a whole. In 2021, Medicare covered over 63 million beneficiaries: over 54 million people age 65 or older and 11 million people of all ages with disabilities and/or with end stage renal disease (ESRD). Data from national claims data along with other sources, show observed changes in important outcomes for Medicare beneficiaries as a result of the QIOs' efforts. Some of these observations are listed below for the period of performance of the 12th SOW contract. For process-type observations, the attribution to direct QIO work is positive (e.g., case review and Diabetes Self-Management Education and Support). For clinical care, outcomes solely attributed to direct QIO work is extremely difficult to assess, although the QIOs did contribute to these improved outcomes. The QIO Program contracts are currently divided between two sets of QIO contractors: Beneficiary and Family Centered Care-Quality Improvement Organizations (BFCC-QIOs) serving the Medicare program's case review needs and Quality Innovation Network-Quality Improvement Organizations (QIN-QIOs) supporting healthcare delivery professionals and systems as they perform quality improvement work, therefore program impact timeframes and number of facilities will vary between the two programs.

BFCC-QIO Outcomes Directly Attributable to BFCC-QIO Work

From November 2019 through September 30, 2021, the BFCC-QIOs conducted 527,218 case reviews for beneficiary complaints, appeals, and other review types.

QIN QIO Program Effectiveness in Nursing Homes

In order to determine the effectiveness of targeted response assistance provided to nursing homes, CMS directed the Independent Evaluation Contractor (IEC) analyze a sampling of nursing homes that had received targeted assistance. Out of a total of 1,975 nursing homes that had received targeted assistance, 983 facilities were evaluated for effectiveness.

QIN-QIOs -Effectiveness of Targeted Response Nursing Home Initiative - The IEC conducted a multivariate statistical analysis to determine the likelihood that the QIN-QIO Program's targeted response interventions for nursing homes decreased nursing home resident COVID-19 infection hospitalizations, and mortality, and employee COVID-19 infection for the period from May 24, 2020, through April 18, 2021.

The IEC's analysis included 983 CMS-certified nursing home facilities that received targeted response interventions from July 2020 to March 2021[1]. These facilities were matched for comparison to 710 CMS-certified facilities that were similar prior to any intervention. Facilities were matched exactly by state, and caliper matching was used for baseline COVID-19 incidence rates and parallel COVID-19 incidence trends using Euclidean distance methods for time series

[1] The analysis timeframe begins in July 2020, as that is when CMS began directing the QIN-QIOs to implement targeted responses based on high community COVID-19 infection rates ("county hot spots") as identified by NHSN data. This response included both onsite and virtual one-on-one technical assistance.

clustering. The analysis adjusted for additional covariates which include mean resident age, number of licensed beds, Five-Star Quality Rating, and weekly county COVID-19 incidence. Model estimates were made using generalized estimating equations (GEEs) with a first-order autoregressive (AR-1) correlation structure applied within a comparative interrupted time series framework.

The IEC observed the following in 983 facilities that received targeted response as compared to the matching comparison group:

- Reductions in resident COVID-19 infections of 25.2% (95% confidence interval [CI]: 13.8%, 34.0%),
- Reductions in Medicare fee for service beneficiary hospitalizations of 26.4% (95% CI: 12.5%, 36.5%),
- Reductions in resident deaths of 24.3% (95% CI: 5.9%, 36.6%),
- Reductions in employee infections of 19.1% (95% CI: 7.4%, 28.1%).

For FY 2021 cumulatively, IEC extrapolated the above results to all 3,215 facilities receiving targeted response from October 1, 2020, to April 18, 2021, to project COVID-19 events prevented by the program.

Table 4. Projected Number of COVID-19 Events Prevented in Nursing Homes by the QIN-QIO Program's Targeted Response Intervention, FY 2021

COVID-19 Outcome	Projected Number of Events Prevented (95% Confidence Interval)
Resident Infections	25,151 (11,901, 38,401)
Resident Inpatient Hospital Stays (Medicare Fee-For-Service Beneficiaries Only)	5,477 (1071, 9883)
Resident Deaths	4,615 (1837, 7394)
Employee Infections	17,299 (5879, 28,718)

Rapidly evolving pandemic conditions barred the design of a randomized trial. Therefore, the model may have been inaccurate to the extent that it failed to account for unmeasured factors. Two additional limitations arise from the process of projecting from the model specifically to the QIN-QIO Program's targeted response more generally. One, the study period did not align with FY 2021. It is possible that targeted response effects were different in FY 2021 than in FY 2020. The IEC's analyses combined facilities from both time periods; the study also included follow-up and impacts in FY 2021 for facilities that were initially referred in FY 2020 but continued to receive benefits in FY 2021. Two, the projections included 2,232 facilities referred or available for follow-up in FY 2021 for which the IEC was unable to find appropriate comparison facilities. Therefore, the actual estimates may be larger or smaller than these projections. Nevertheless, this table represents CMS' best estimates of the impacts in the first six months of FY 2021. A second study is underway to address impacts that may have occurred after that time.

Beneficiary and Family Centered Care Quality Improvement Organizations (BFCC-QIOs)

The BFCC program focuses on statutorily mandated QIO case review activities, as well as on interventions to promote responsiveness to beneficiary and family needs; providing opportunities for listening to and addressing beneficiary and family concerns; providing resources for beneficiaries and caregivers in decision making; and using information gathered from individual experiences to improve Medicare's entire system of health care. Beneficiary-generated concerns provide an excellent opportunity to explore root causes of adverse health care outcomes, develop alternative approaches to improving care, and improve beneficiary/family experiences within the health care system. Beneficiary and family engagement and activation efforts are needed to produce the best possible outcomes of care. These BFCC-QIO beneficiary and family-centered efforts align with the National Quality Strategy (NQS), which encourages patient and family engagement.

Case review types include Quality of Care Reviews, EMTALA Reviews, beneficiary requested appeals of provider discharge/termination of service decisions and denials of hospital admissions, and other review types. The QIO Manual[2] describes the various case review types and provides additional detail and guidance on BFCC-QIO responsibilities for the reviews.

Table 5 contains volume data on the various case review categories.

Table 5. BFCC-QIO Case Review Volume

Category	Volume
Quality of Care	6,361
Service Terminations/Appeals	244,873
Immediate Advocacy	8,936
EMTALA	563

CMS contracted with Livanta LLC and Kepro as the two BFCC-QIOs organized among 50 states, the District of Columbia, and U.S. territories, as it relates to Task Order 02 Case Review Services. The 10 BFCC-QIO regions align with the 10 CMS Regions.

Table 6 provides national performance summary of the BFCC-QIO Program on four timeliness measures and one beneficiary experience measure for the 30th month reporting period of the contract.

[2] https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs-Items/CMS019035

Table 6. BFCC-QIO Annual Performance Criteria Measures

Measure	Target	Result
Timeliness of Beneficiary Complaints and Other Quality of Care Reviews	95%	98.9%
Timeliness of Immediate Advocacy	95%	99.6%
Timeliness of Discharge/ Service Termination Reviews	95%	96.7%
Timeliness of EMTALA	95%	99.9%
Beneficiary Experience with BFCC-QIO	85%	86.6%

How Did COVID Impact BFCC-QIOs and Beneficiaries?

The BFCC-QIOs were quick to adapt to the COVID-19 pandemic. In March 2020, the BFCC-QIOs transitioned more than 500 staff members to work from home while maintaining access, responsiveness, and timeliness in addressing the concerns of beneficiaries and families. Relying on their most expedient and beneficiary-centered case approach, BFCC-QIOs initiated a record number of Immediate Advocacy cases.

Immediate Advocacy is an informal alternative dispute resolution process used to quickly resolve a complaint submitted by telephone. With a typical volume of 350 immediate advocacy cases per month prior to the pandemic, BFCC-QIOs expanded capacity to address more than 700 cases in May 2020. Based on historical data, CMS projected 2,454 Immediate Advocacy cases and the FY 2021 actual volume equaled 8,936 cases. The BFCC-QIOs effectively leveraged Immediate Advocacy approaches to communicate with nursing homes, gather information about patient status and virtual visitation options, and help families get much-needed information about loved ones. They also helped beneficiaries and family members make sense of state legislation impacting them and connect to resources in their community. While Immediate Advocacy cases were being addressed, care navigation services were also being provided to more than 1,000 beneficiaries.

Through the Beneficiary Care Management Program, BFCC-QIO staff adapted their tools and approaches to address a growing range of issues facing some of the most populations in most need of medical care. For example, people experiencing homelessness found that many shelters were not accepting patients recently discharged from a hospital. To meet the pressing needs of these beneficiaries, BFCC-QIO staff worked closely with social workers at hospitals to find other community-based resources and support beneficiaries through the transition.

The BFCC-QIOs also adapted their communication strategies to meet an increased need for timely, pertinent information. With the availability of rapidly evolving answers to “frequently asked questions” and links to state health department websites, the BFCC-QIOs were ready for incoming calls while also beginning a communications outreach campaign.

The BFCC-QIOs communicated up-to-the-minute national information using prominent website messaging, social media, and newsletters. The BFCC-QIOs used their websites as a primary communication channel for clinicians and beneficiaries, putting out messaging on their home pages about COVID-19 and linking to the Center for Disease Control and Prevention (CDC) and

CMS websites. The BFCC-QIOs also sent newsletters via email to communicate information directly to subscribers. The BFCC-QIOs prepared and distributed special editions of their newsletters to more than 18,500 key clinicians and other stakeholders with pertinent information about COVID-19.

Leadership and collaboration were key to the BFCC-QIO rapid and beneficiary-centered response to the COVID-19 pandemic. While BFCC-QIO staff were addressing individual beneficiary needs, leaders across the BFCC-QIO organizations were working closely with CMS to identify informational needs and ensure consistent messaging. In addition, the BFCC-QIO Medical Directors identified COVID-19 as the single most urgent topic for ongoing discussion, with a goal of ensuring clear, standardized approaches to protecting beneficiaries and ensuring they receive safe, high quality of care.

Quality Innovation Network-Quality Improvement Organizations (QIN-QIOs)

The purpose of the QIN-QIO contract is to procure expert healthcare quality improvement services from qualified contractors to improve care for Medicare beneficiaries in nursing homes and communities. QIN-QIOs work with providers and communities on data-driven quality initiatives to improve patient safety, reduce harm, and improve clinical care at local and regional levels. The primary goals of the QIN-QIOs are to promote effective prevention and treatment of chronic disease, make care safer by reducing harm caused by the delivery of care, promote effective communication and coordination of care, and make care more affordable.

The 12th SOW contracts were awarded to 12 QIN-QIO contractors on November 7, 2019. Each QIN-QIO contractor covers a region that includes as many as twelve jurisdictions, across the United States, the District of Columbia, and U.S. territories.

For the 12th SOW, QIN-QIOs aligned with agency and administrative priorities by utilizing innovation, broad quality improvement initiatives, and data-driven methodologies to achieve five broad goals:

- Improve Behavioral Health Outcomes, Focusing on Decreased Opioid Misuse
- Increase Patient Safety
- Increase Chronic Disease Self-Management (Cardiac and Vascular Health; Diabetes; Slowing Chronic Kidney Disease and Preventing ESRD
- Increase Care Coordination
- Improve Nursing Home Quality.

Each goal has an established set of quality measures for nursing homes, communities, or both that hold the 12 QIN-QIOs accountable for measurable outcomes. Although the pivot to address the COVID-19 pandemic refocused the FY 2020 and FY 2021 activities of the 12th SOW, QIN-QIOs were still preparing for some of the Task work that would be occurring in FY 2021. Special attention was given to those activities that may be impacted by the COVID-19 pandemic and/or health disparities reduction. Some of those activities include:

- Adverse Drug Events Data Collection and Support
- Quality Reporting Programs and Supporting Clinicians in the Quality Payment Program
- Improving Medicare Beneficiary Immunization Rates with a Special Focus on Reducing Disparities
- Improving Identification of Depression and Alcohol Use Disorder in Primary Care and Care Transitions for Behavioral Health Conditions.

During the 2nd year of the 12th SOW, QIN-QIOs continued enrollment to reach Long Term Care targets and began enrollment of Community Partnership entities. Activities to support Quality Improvement Initiatives related to the public health emergency were directed where they were needed most.

Table 7. QIN-QIO Setting/Activity and Task Areas

Care Setting/Activity	Task Area
Long-Term Care	Contract-Specified Provider-based Quality Improvement Services Intended to Better Resident Outcomes in 9,803 Nursing Homes
Community Coalitions	Contract-Specified Community-based Quality Improvement Services Intended to Better Outcomes in the Medicare Beneficiary Population in 414 Communities
Targeted Response Quality Improvement Initiatives (TR-QIIs)	Ad-hoc Quality Improvement Projects to Address Immediate Identified Needs, Emerging Trends, etc.*

*This was particularly useful to quickly address infection control at the unexpected onset of the COVID-19 pandemic.

Community Partnerships

QIO work in the community included areas covering 49 million Medicare beneficiaries in 34,000 zip codes. The QIOs coordinated efforts with Partners for Community Health (PCH). PCHs are a network within the respective QIOs' geographical service areas. They are established by the QIO and comprised of healthcare providers from various clinical settings, and local non-clinical community support/service organizations, including faith-based entities, to work together on quality improvement initiatives like care coordination, chronic disease management, AND emergency preparedness. Enrollment is a voluntary process where stakeholders agree to partner with the QIO. After enrollment, QIOs and PCHs are encouraged to develop innovative projects, such as methods to coordinate care of beneficiaries across the care continuum, to achieve optimal outcomes for the beneficiaries.

Health Equity: In order to advance health equity efforts, a subset of the 34,000 zip codes were identified as priority zip codes. These zip codes demonstrated health inequities as determined by The University of Wisconsin's Area Deprivation Index (ADI), USDA's Food Access Research Atlas, and CDC's Social Vulnerability Index (SVI). Eleven million beneficiaries are in these priority zip codes. QIO began enrollment of PCHs in the priority zip codes in the latter part of 2021, with enrollments continuing through November 2022. These priority zip codes will receive

augmented focus in health disparity reduction once enrollment is complete, in addition to the quality improvement work undertaken for all enrolled zip codes providers. The augmented focus will include training to help providers develop a Culturally and Linguistically Available Services (CLAS) implementation action plan utilizing the HHS CLAS checklist. Additionally, QIN-QIOs work with community stakeholders to promote public health awareness, disseminate information, and seek community level feedback on various healthcare topics, including COVID-19, relevant to reduction of healthcare disparities.

Long-Term Care—Nursing Homes

The purpose of this activity is to provide targeted assistance to nursing homes serving small, rural, and the most vulnerable populations to improve nursing home quality. Prior to the pandemic, the QIN-QIOs had just begun recruiting nursing homes to participate in their technical assistance programs based on CMS' pre-pandemic 12th SOW goals. As part of their recruitment, the QIN-QIOs targeted nursing homes most in need of quality improvement, specifically facilities with a Star rating of Four Stars or less based on the latest available Nursing Home Compare data. Each QIN-QIO was required to reach its proposed target number of nursing homes, contributing to collectively achieving CMS' national recruitment goal. Due to the COVID-19 pandemic, the QIO Program had to pivot to help reduce the spread of COVID-19 infection in nursing homes. The older population was and continues to be disproportionately affected by COVID-19 and have higher rates of severe COVID-19 infection, hospitalization, and death from the disease compared to younger populations. As a result, infection control within nursing homes became the priority of the QIO Program, and quality improvement efforts in other areas were deferred through the end of FY 2021.

Table 8. Pandemic Response Chronology

Date	Pandemic-Related Activity
3/13/2020	The President declared the COVID-19 pandemic to be a national emergency (in effect as of 3/1/2020). CMS issued blanket waivers (retroactive to 3/1/2020) that included expanded telehealth services. CMS directed QIN-QIOs to provide support to nursing homes in the use of telehealth technology, with the aim of increasing use of telehealth services by nursing home residents.
4/21/2020	QIN-QIOs started providing weekly and later biweekly updates to CMS on states' actions and resources available to support nursing homes in responding to the pandemic.
4/23/2020	CMS modified the QIN-QIO contracts to focus specifically on infection control, adjusted enrollment criteria to include the nursing homes with the greatest infection control needs, and changed the enrollment deadline for communities and nursing homes from May 2020 to November 2020. CMS identified nursing homes that received infection control deficiencies during facility surveys. CMS directed QIN-QIOs to provide infection prevention training and infection control program development to these nursing homes.

4/29/2020	QIN-QIOs began weekly outreach to provide technical assistance to nursing homes when infection control deficiencies were identified during surveys of those nursing homes.
5/8/2020	QIN-QIOs began providing technical assistance to nursing homes for enrollment and reporting into the CDC's National Healthcare Safety Network (NHSN) in response to a CMS-published interim final rule requiring nursing homes to report COVID-19 facility data to the NHSN and to residents and their representatives/families.
5/28/2020	QIN-QIOs began providing a series of weekly trainings on infection control to all enrolled nursing homes.
5/31/2020	Weekly NHSN data became available for each nursing facility, which provided faster identification of COVID-19 infections. This allowed CMS to more rapidly direct technical assistance to impacted nursing homes.
7/1/2020	CMS began directing the QIN-QIOs to implement targeted responses based on high community COVID-19 infection rates ("county hot spots") as identified by NHSN data. This response included both onsite and virtual one-on-one technical assistance.
7/28/2020	CMS instructed the QIN-QIOs to develop content for the COVID-19 training for nursing homes that was posted on the Quality, Safety and Education Portal (QSEP) in August. The QIN-QIOs provided scenario-based content, pre- and post-test results, questions to be delivered to the learner, animation, graphics, real-life examples, and video clips for 30-minute modules for their assigned topics. See Targeted COVID-19 Training for Nursing Homes Instruction.[3]
8/10/2020	CMS began hosting a Weekly QIN-QIO TR QII Actionable Insights Peer Sharing Call Series**.** During these calls, the QIN-QIOs shared effective interventions and knowledge gained from working on the TR-QIIs.
5/2021	The American Recovery Plan Act (ARPA) of 2021 was enacted in March 2021 to provide QIO funding for infection control and vaccination uptake support to skilled nursing facilities relating to the prevention or mitigation of COVID-19. In May 2021, as part of a Directed Change Order (DCO), QIO QIN contracts were modified for this purpose in Medicare-certified nursing homes.
5/2021 and subsequent months	ARPA funding allowed for continued infection control and vaccination uptake support in Medicare-certified nursing homes.

Targeted Response Quality Improvement Initiatives

With the severity of COVID-19 spreading throughout nursing homes, CMS reprioritized the QIN-QIOs to provide intensive one-on-one support on CDC guidelines and infection control practices to nursing homes with identified health delivery deficiencies and/or high COVID-19 infection rates. CMS leveraged a preexisting section of the QIN-QIO contract designated for Quality Improvement Initiatives (QIIs) to provide targeted response (TR) to those facilities in greatest need based on data and expanded its focus and requirements. A QII is any formal activity designed to serve as a catalyst and/or support for quality improvement that uses proven methodologies to achieve these improvements. The improvements may relate to safety,

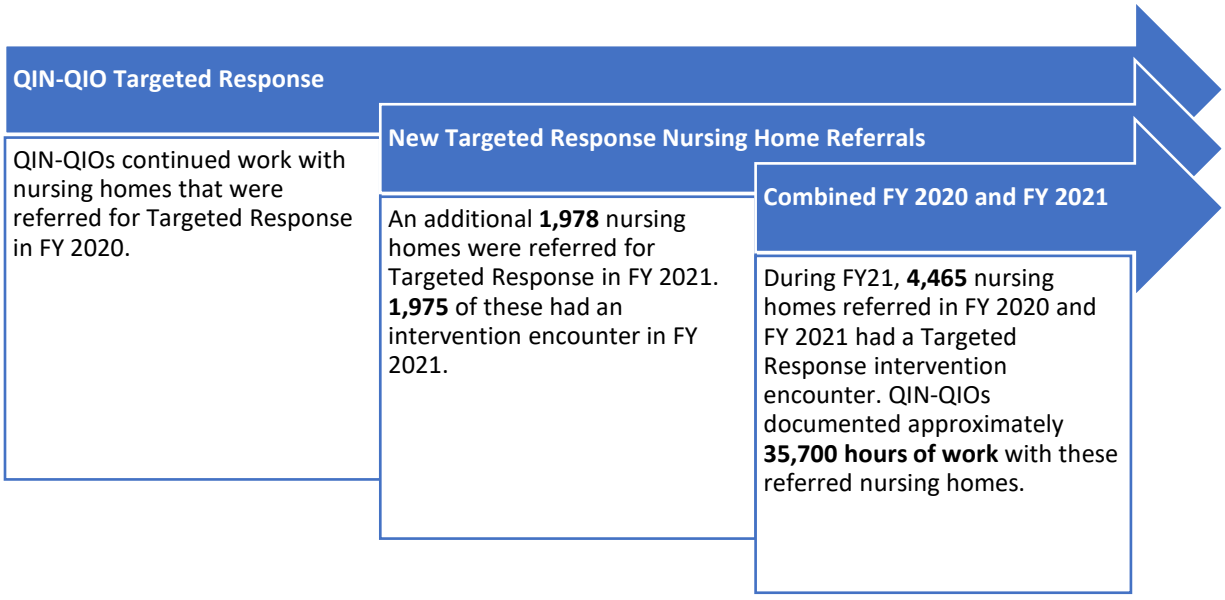
[3] https://qsep.cms.gov/COVID-Training-Instructions.aspx

healthcare, health, and value and involve providers, practitioners, beneficiaries, and/or communities.

TR-QIIs were developed specifically to combat the pandemic. CMS used data from infection control practice deficiencies documented during CMS and state survey inspections, county COVID-19 rates, and nursing home COVID-19 case counts to identify and refer facilities in greatest need of direct assistance to QIN-QIOs for TR-QIIs each week. In each referred facility, the QIN-QIOs provided onsite or virtual intensive support within five days of referral and provided continuing support until the QIN-QIO documented clear evidence that the problem had been addressed, a process that usually took from six to nine months. The QIN-QIO assisted providers and/or practitioners in identifying the root cause(s) of concern, developing a customized plan to address concerns, coaching the facility's administration or staff in implementing at least one process or system-based improvement consistent with the plan, and providing support to monitor changes in processes and outcomes.

CMS referred 1,978 nursing homes to work with the 12 QIN-QIOs in FY 2021.The 12 QIN-QIOs reported engaging in targeted response with 1,975 of the referred nursing homes. Including those nursing homes referred in FY 2020, the QIOs reported engaging in targeted response with 4,465 facilities over a two-year period, in FY 2020 and FY 2021. In total, QIN-QIOs spent approximately 35,700 hours working with nursing homes as part of their TR QIIs in FY 2021. Additional information regarding the effectiveness of the targeted response efforts are included in the report beginning on page five, in the section titled: *Effectiveness of Targeted Response Nursing Home Initiative.*

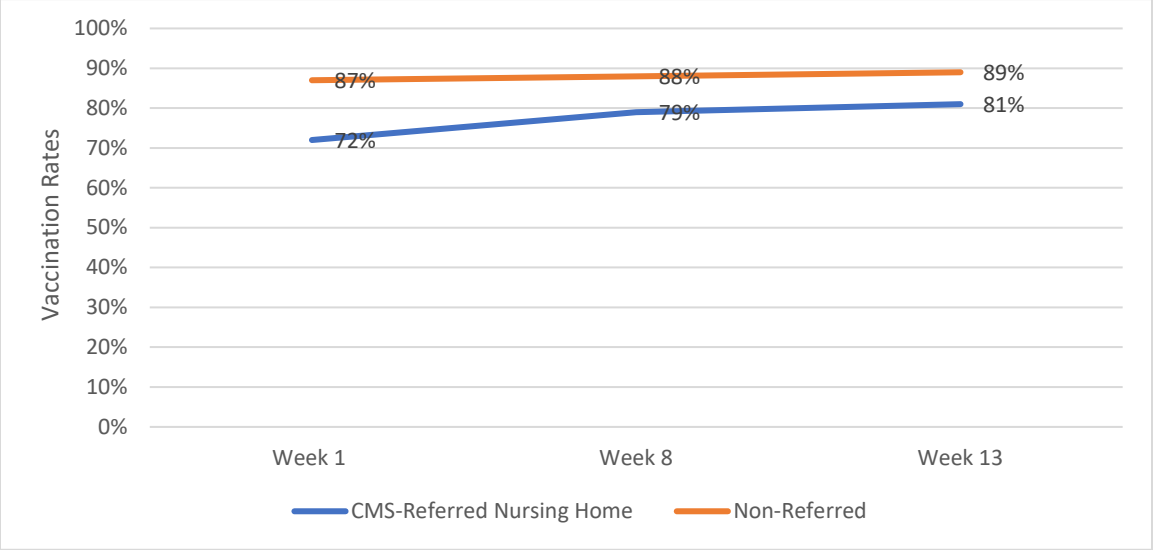
Figure 1. QIN-QIO Targeted Response Intervention Encounters



In FY 2021, CMS referred 1,322 nursing homes with low initial COVID-19 vaccination rates of residents and/or staff. Of these, 902 received one-on-one targeted assistance to increase vaccination uptake of the primary COVID-19 vaccine. Nursing homes with QIN-QIO assistance in increasing COVID resident vaccination rates improved more than facilities that did not have

QIN-QIO assistance. Facilities referred for assistance from July to September with low initial series vaccination rates had a gross improvement of nine percentage points after 13 weeks of work, whereas non-referred facilities only had a gross improvement of two percentage points. CMS referrals for COVID vaccination improvement are based on NHSN data. Improvement is shown based upon both NHSN data and QIO self-reported data.

Figure 2. QIN--QIO COVID-19 Vaccination Efforts for Nursing Home Residents*



*Week 1 after CMS referral to Week 13 (end of FY 2021).

Table 9. Content of Targeted Response Delivered to Unique Nursing Homes in FY 2021

Content of Targeted Response	Estimated Number of Nursing Homes
Infection control and prevention	1,383
Hand washing or hand hygiene	2,802
Personal protective equipment	998
Any other content	2, 570

Conclusion

Medicare beneficiaries, like all Americans, deserve to have confidence in their health care system. The goal of the QIO Program is to improve the effectiveness, efficiency, economy, and quality of services delivered to Medicare beneficiaries and to ensure that those services are reasonable and necessary. The work of the QIO Program has been and continues to be a driving force for improvements in health care in the Medicare program. This report covers the second year of the 12th SOW. As with 2020, the COVID-19 pandemic response and infection reduction efforts continued to be the primary focus of the work of the QIO program. However, nursing home and community enrollment, partnership building, and development of interventions were

also included as part of the QIO work and remained an important aspect of the assistance provided to nursing homes and communities.