Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

QUALITY IMPROVEMENT ORGANIZATIONS PROVIDE SUPPORT TO MORE THAN HALF OF HOSPITAL BUT OVERLAP WITH OTHER PROGRAMS

Daniel R. Levinson
Inspector General

January 2015
OEI-01-12-00650

EXECUTIVE SUMMARY: QUALITY IMPROVEMENT ORGANIZATIONS PROVIDE SUPPORT TO MORE THAN HALF OF HOSPITALS BUT OVERLAP WITH OTHER PROGRAMS
OEI-01-12-00650

WHY WE DID THIS STUDY

Past work by the Office of Inspector General and others raised concerns about Quality Improvement Organizations (QIOs), including duplication with other quality improvement efforts. Between 2011 and 2014, the Centers for Medicare & Medicaid Services (CMS) paid QIOs about $1.6 billion to improve health care for Medicare beneficiaries. During this time, CMS also spent nearly $500 million on two new quality improvement efforts, Hospital Engagement Networks (HENs) and the Community-Based Care Transitions Program (CCTP). Given QIOs' new 5-year, $4 billion contract and the importance of CMS's quality improvement objectives, it is crucial that CMS coordinate its resources to avoid duplication among its quality improvement efforts.

HOW WE DID THIS STUDY

We sent a questionnaire to a random sample of 410 Medicare hospitals asking whether they worked with QIOs or other quality improvement entities in 2013. We received a weighted response rate of 93 percent. We analyzed CMS's lists of hospitals that worked with QIOs, HENs, and the CCTP. Finally, we conducted site visits at three hospitals in two States and QIOs representing four States.

WHAT WE FOUND

In 2013, over half of hospitals participated with QIOs on quality improvement projects. All participating hospitals in our sample reported receiving benefits by working with QIOs. Eight out of ten participating hospitals also worked with other federally funded entities on the same topics as QIOs. Most participating hospitals also worked with non-Federal entities on the same topics as QIOs. Data problems and timing of other CMS quality improvement efforts hampered QIOs' ability to target eligible hospitals and avoid duplicating those efforts. QIOs reported problems in key CMS data for recruiting hospitals for infection and readmissions projects. QIOs were already recruiting hospitals when CMS awarded HEN contracts and the CCTP agreements.

WHAT WE RECOMMEND

The overlap among CMS's quality improvement efforts raises concerns about duplication of efforts and makes it difficult to attribute quality improvements to any one effort. Therefore, we recommend that CMS take additional steps to coordinate, and reduce overlap between, the QIO program and CMS's other quality improvement efforts. We also recommend that CMS determine the relative contribution of each of its quality improvement efforts. CMS concurred with our recommendations.

TABLE OF CONTENTS

OBJECTIVES

1. To determine the extent to which and the ways in which hospitals participated in Quality Improvement Organizations' (QIO) projects during 2013.
2. To determine the extent to which QIOs' projects in hospitals overlapped with projects offered by other entities.

BACKGROUND

Quality Improvement Organizations

The Centers for Medicare & Medicaid Services (CMS) contracts with QIOs to oversee and improve quality of care within the Medicare program. QIOs sign contracts, called scopes of work, to operate in the 50 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.[1]

QIOs work with institutional health care providers, individual practitioners, and beneficiaries on quality improvement projects. CMS, through its Center for Clinical Standards and Quality, develops new projects to improve specific clinical measures in each scope of work. To improve these measures, QIOs make quality measure data available to providers, offer technical assistance tailored to individual providers, and facilitate meetings at which providers and stakeholders share best practices. QIOs also oversee quality of care by conducting case reviews of individual instances of care provided to Medicare beneficiaries.

QIO Quality Improvement Projects

QIOs work on projects with different providers. In the 10th scope of work, these projects included, but were not limited to, reducing the use of physical restraints in nursing homes, increasing the use of electronic health records in physician offices, and reducing adverse drug events experienced by Medicare beneficiaries.[2] Of the $1.6 billion budgeted for the QIOs' 10th scope of work, which lasted from August 2011 to August 2014, QIOs spent about $450 million on quality improvement projects.[3]

---

[1] Social Security Act (SSA), §§ 1153(a), (b), and (c)(3), 42 U.S.C. § 1320c-2(a), (b), and (c)(3). Title II, Subtitle C, Part II, section 261, of the Trade Adjustment Assistance Extension Act of 2011, Pub. L. No. 112-40, required certain changes to QIO contracts, such as increasing the contract term from 3 to 5 years and allowing QIO contracts at the local, State, regional, national, or other geographic level (i.e., versus being limited to States or territories). These changes are effective for contracts entered into or renewed on or after January 1, 2012.

[2] CMS, QIO 10th Scope of Work, §§ C.7.2.B., C.9., and C.7.3.

[3] Department of Health and Human Services, *Fiscal Year 2014 Budget in Brief*. Accessed at http://www.hhs.gov/budget/fy2014 on May 15, 2014.

QIOs also spent $405 million on infrastructure and staffing, a portion of which supports these projects.[4]

QIOs' work with hospitals in the 10th scope of work addressed two types of quality improvement projects: reducing certain health care-associated infection rates (infection projects) and reducing hospital readmissions through improved transitions between care settings (readmissions projects). QIOs also provided technical assistance to hospitals related to Medicare quality reporting programs.[5]

In infection projects, QIOs focused on four topics: central line-associated bloodstream infections, catheter-associated urinary tract infections, clostridium difficile (c-diff) infections, and surgical site infections. In readmissions projects, QIOs worked with groups of providers, called communities, to improve transitions between care settings and reduce hospital readmissions. Communities included home health agencies, dialysis facilities, hospices, physician offices, and nursing homes, among others, with hospitals as a central component.

Hospital Eligibility and Recruitment in the 10th Scope of Work

For QIOs' infection projects, CMS planned to determine hospital eligibility from self-reported infection rates. Hospitals submit those rates to the Centers for Disease Control and Prevention's (CDC's) infection rate database, called the National Healthcare Safety Network.[6, 7] See Table 1 for eligibility criteria by infection topic.

Table 1: Hospital Eligibility for Infection Topics

Infection Topic	CMS-determined Eligibility Criteria
Central line-associated bloodstream infections	Hospitals with a central line-associated bloodstream infection rate equal to or greater than 1.5 per 1,000 central line days
Catheter-associated urinary tract infections	Any hospital
C-diff infections	Hospitals with a rate equal to or greater than 6 health care-associated c-diff events per 10,000 patient days
Surgical site infections	Hospitals participating in other infection projects

Source: QIO 10th Scope of Work, § C.7.1.B.1.

[4] Ibid.
[5] CMS, QIO 10th Scope of Work, §§ C.7.1, C.8, and C.7.4.A.
[6] 76 Fed. Reg. 51436 and 51631 (August 18, 2011).
[7] 75 Fed. Reg. 50042 and 50202 (August 16, 2010).

For QIOs' readmissions projects, CMS provided ZIP Codes that defined potential communities to recruit. One community may have included multiple ZIP Codes and provider types that worked together to reduce hospital readmissions.[8]

To recruit an eligible hospital, QIOs contacted the hospital's leadership. If the hospital voluntarily agreed to formally participate in a project for the duration of the scope of work, it signed a nonbinding memorandum of understanding.[9] CMS set improvement targets for formally participating hospitals' quality measures. It held QIOs responsible for reaching the targets in its evaluation of each QIO.

Ineligible hospitals could also participate in projects; however, they did so informally without signing memorandums of understanding. In these cases, hospitals' quality measures would not factor into CMS's evaluation of the QIOs.[10]

How QIOs Conducted Quality Improvement Projects in the 10th Scope of Work

QIOs had latitude in how they accomplished quality improvement goals. They interacted with hospitals by convening group meetings, offering one-on-one assistance, and providing educational materials.

Group Meetings. QIOs facilitated group meetings by bringing together providers in need of improvement, high-performing providers, and stakeholders. These meetings were both in person and via Webinar.

One-on-One Assistance. One-on-one technical assistance is another way QIOs accomplished project goals. Unlike the group meetings, this type of assistance allowed QIOs to tailor technical assistance to a particular hospital's needs, onsite at that hospital. QIOs also responded to inquiries from hospitals on an ad hoc basis.

Educational Materials. QIOs distributed tools to assist providers with training. For example, QIOs compiled a "Change Packet" to outline potential strategies and actions hospitals could use to work towards a particular goal.

When conducting quality improvement projects, QIOs could partner with other entities in their States, such as health departments, hospital associations, and private organizations, with the prior approval of CMS.

---

[8] CMS, QIO 10th Scope of Work, § C.8.

[9] CMS, QIO 10th Scope of Work, §§ C.7.1.B.1.f and C.8.1.C.2.b.

[10] For readmissions projects, CMS evaluates QIOs partly on the statewide readmissions rate. CMS, QIO 10th Scope of Work, Attachment J-10, Table 2, Measure IC-7.

However in forming such partnerships, QIOs could not duplicate federally or State-sponsored efforts.[11]

CMS required QIOs to submit data that track their recruiting efforts, the outreach they did throughout the scope of work, and the way in which projects were proceeding. These data included memorandums of understanding, lists of participating providers, activity reports, and performance measures.[12]

The QIOs' 11th Scope of Work

In 2014, CMS announced major changes to the QIO program in the 11th scope of work, which began in August 2014. Instead of contracting with one QIO per State to conduct both quality improvement projects and case reviews, CMS awarded separate contracts for these functions. CMS also contracts with fewer QIOs than one per State, instead treating the QIOs as regional entities. Furthermore, CMS increased the length of the 11th scope of work to 5 years. It estimates that the 11th scope of work will cost a total of $4 billion. This funds quality improvement projects, overhead costs, and data assistance.[13] CMS awarded contracts to 14 QIOs to conduct quality improvement projects and 2 QIOs to conduct case reviews for the entire country.[14, 15]

Other CMS Quality Improvement Efforts

CMS also leads the Partnership for Patients, a collaboration among multiple Federal departments, States, and private entities.[16] The goals of this program are to reduce infections and reduce readmissions through improved transitions between care settings.[17] Two of the key quality

---

[11] Ibid, § C.7.1.B.3.

[12] CMS, QIO 10th Scope of Work, § F.

[13] Department of Health and Human Services, "Fiscal Year 2015 Justification of Estimates for Appropriations Committees."

[14] CMS, *CMS Launches Next Phase of New Quality Improvement Program*. Accessed at http://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2014-Press-releases-items/2014-07-18.html on July 27, 2014.

[15] CMS, *CMS Launches Improved Quality Improvement Program.* Accessed at http://cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2014-Press-releases-items/2014-05-09.html on May 20, 2014.

[16] CMS's Center for Medicare & Medicaid Innovation oversaw Partnership for Patients at its inception; however, aspects of it were transferred to the Center for Clinical Standards and Quality in December 2013.

[17] CMS, *About the Partnership for Patients*. Accessed at http://partnershipforpatients.cms.gov/about-the-partnership/aboutthepartnershipforpatients.html on May 13, 2014.

improvement efforts of the program are Hospital Engagement Networks (HENs) and the Community-based Care Transitions Program (CCTP).[18]

Hospital Engagement Networks. HENs are organizations that identify and share best practices across member hospitals. HENs do this via learning collaboratives, identification of mentor hospitals to help poorly performing hospitals, training programs, and technical assistance. In December 2011, CMS awarded $218 million to 26 entities to serve as HENs.[19]

Community-based Care Transitions Program. Under this program, CMS reimburses community organizations to better coordinate Medicare patients' discharges between provider settings. CMS awards communities 2-year agreements, which it can extend annually on the basis of performance. CMS selected the first round of communities in November 2011.[20] The CCTP is funded up to $300 million until the program ends in 2015.[21]

Concerns With QIOs' Quality Improvement Projects

Provider Recruitment. In 2011, the Medicare Payment Advisory Commission (MedPAC) found that low-performing hospitals lack resources to complete quality improvement projects.[22] A 2007 Government Accountability Office (GAO) report found that QIOs did not work with providers on the basis of need, but rather selected providers according to their willingness to work with QIOs.[23]

Duplication of Other Efforts. A 2012 GAO report found that QIOs and HENs duplicated each other's infection projects. In response to that report, CMS stated that it would address QIO and HEN duplication by the

---

[18] Ibid.

[19] CMS, *Hospital Engagement Networks: Connecting Hospitals to Improve Care*. Accessed at http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2011-Fact-sheets-items/2011-12-14.html on May 29, 2014.

[20] CMS, *First Site Selections for the Community-Based Care Transitions Program*. Accessed at http://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/downloads/CCTP_FirstSiteSelections.pdf on May 29, 2014.

[21] CMS, *Community-based Care Transitions Program*. Accessed at http://innovation.cms.gov/initiatives/CCTP/index.html on May 19, 2014. Pub. L. 113-6 § 1520.

[22] MedPAC, Report to the Congress: *Medicare and the Health Care Delivery System* (June 2011).

[23] GAO, *Federal Actions Needed to Improve Targeting and Evaluation of Assistance by Quality Improvement Organizations*, GAO-07-373, May 2007. The report evaluated QIOs' 7th scope of work. The 9th and 10th scopes of work addressed this finding by defining eligibility pools and recruitment targets.

end of 2012.[24] According to a Mathematica Policy Research report, three-quarters of QIOs reported that their 9th scope of work hospital projects overlapped with projects offered by other entities.[25] The MedPAC report found that providers work with an increasing number of Federal and private entities that focus on improving quality, which reduces providers' willingness and ability to participate in QIOs' projects. MedPAC recommended that the QIO program be fundamentally changed to provide funding directly to hospitals. This funding would enable those providers to select the entities that best fit their quality improvement needs.[26]

Data Quality. The 2007 GAO report found that QIOs' deliverables did not contain enough detail to attribute quality improvement to their projects.[27] The Institute of Medicine (IOM) called for QIOs to collect more meaningful data on quality improvement projects.[28] In 1998, the Office of Inspector General (OIG) also found incomplete and inaccurate information in QIOs' database and reporting systems. The lack of these data prevented OIG from conducting a more extensive analysis.[29]

Quality Improvement. Both the IOM and a study published in the *Journal of the American Medical Association* were unable to attribute quality improvements to QIOs' work.[30, 31]

---

[24] GAO, *CMS Innovation Center: Early Implementation Efforts Suggest Need for Additional Actions to Help Ensure Coordination with Other CMS Offices,* GAO-13-12 (Nov. 2012).

[25] Mathematica Policy Research, *Independent Evaluation of the Ninth Scope of Work* (Nov. 2011).

[26] MedPAC, Report to the Congress: *Medicare and the Health Care Delivery System* (June 2011).

[27] GAO, *Federal Actions Needed to Improve Targeting and Evaluation of Assistance by Quality Improvement Organizations,* GAO-07-373 (May 2007). The report evaluated QIO's 7th scope of work, which did not require QIOs to track each meeting occurrence and the providers that attended it.

[28] IOM, National Academy of Sciences, *Medicare's Quality Improvement Organization Program: Maximizing Potential* (2006).

[29] OIG, *Monitoring and Evaluating the Health Care Quality Improvement Program*, OEI-01-98-00440 (Aug. 1998).

[30] IOM, National Academy of Sciences, *Medicare's Quality Improvement Organization Program: Maximizing Potential* (2006).

[31] Claire Snyder and Gerard Anderson, "Do Quality Improvement Organizations Improve the Quality of Hospital Care for Medicare Beneficiaries?" *Journal of the American Medical Association*, Vol. 293, No. 23, pp. 2900-2907 (2005).

METHODOLOGY

Scope

This evaluation focuses on QIOs' quality improvement projects with Medicare hospitals during the 10th scope of work. We focused on hospitals' participation in these projects during 2013.

Data Sources and Collection

Hospital Questionnaire. We surveyed a stratified random sample of 410 hospitals by participation in QIO projects (from the population of 3,456 hospitals enrolled in Medicare in 2013). We received responses from 385 hospitals, for a weighted response rate of 93 percent. See Appendix A for response rate by stratum.

We conducted the survey from February to April 2014. In the questionnaire, we asked hospitals whether they worked with their QIOs in 2013 and, if they did, how they participated in projects. We asked about this time period because, as of the date of our survey, QIOs should have completed recruiting hospitals for 10th scope of work projects. Additionally, we asked about other entities that hospitals worked with on quality improvement projects in 2013. We pretested the questionnaire with hospital staff in three States.

CMS Documents. We obtained from CMS the list of hospitals that formally work with QIOs. We also obtained from CMS the lists of hospitals that work with HENs or the CCTP. We requested from CMS lists of hospitals eligible for infection projects and communities QIOs could recruit for readmissions projects.

We also reviewed CMS policy memorandums and guidance to QIOs issued throughout the 10th scope of work.

CASPER. We obtained hospital characteristic data from the Certification and Survey Provider Enhanced Reporting (CASPER) system. We analyzed data for hospitals enrolled in Medicare at the start of the 10th scope of work in August 2011.

Site Visits. We conducted site visits at three hospitals in two States and QIOs representing four States (one QIO holds contracts for two States). We purposively selected States on the basis of geographic diversity and number of Medicare beneficiaries served. We interviewed hospital staff about the quality improvement projects they work on with QIOs and other entities. We interviewed QIO staff about the methods by which they interacted with hospitals and how they recruited hospitals.

Data Analysis

Hospital Questionnaire. We analyzed the questionnaire responses to determine how hospitals participated, both formally and informally, in quality improvement projects during 2013. We determined how frequently hospitals attended group meetings, received one-on-one assistance, and used written education materials. We also analyzed the responses to determine how often hospitals worked with entities other than QIOs on the same project topics. We projected the questionnaire results to the population of hospitals enrolled in Medicare. When we did not project, we refer explicitly to hospitals in our sample. See Appendix B for confidence intervals and point estimates for data points from the questionnaire.

CMS Documents. We analyzed CMS's lists of hospitals to identify hospitals that formally worked with QIOs during the 10th scope of work and also worked with HENs or participated in the CCTP as of February 2013 and January 2014, respectively. These lists contain the entire population of formally participating hospitals. We also reviewed CMS policy memoranda and guidance for instances related to hospital recruitment and coordination with HENs.

Site Visits. We performed qualitative data analysis on the information we obtained during our site visits. For example, we reviewed the data for common themes.

Limitations

We did not independently verify the information obtained from hospitals and CMS.

Standards

This study was conducted in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

FINDINGS

In 2013, over half of hospitals participated with QIOs on quality improvement projects

Overall, 55 percent of hospitals worked with QIOs on quality improvement projects. Nineteen percent of hospitals worked on only infection projects, 10 percent of hospitals worked on only readmissions projects, and 26 percent worked on both.

Of the hospitals that worked with QIOs, most formally participated by signing memorandums of understanding to work with QIOs at the start of the projects. CMS required QIOs to report on formally participating hospitals and evaluated those hospitals' improvements throughout the project. However, CMS staff told us that CMS allowed informal participation from hospitals that did not officially sign memorandums of understanding to work on quality improvement projects. We refer to all hospitals that worked with QIOs, formally and informally, as participating hospitals.

Most participating hospitals attended QIOs' meetings and used their written materials

In 2013, the majority of participating hospitals attended most of QIOs' meetings, which included in person meetings and Webinars. Seventy-two percent of hospitals that participated in infection projects attended at least half of QIOs' meetings, and 60 percent of hospitals that participated in readmissions projects attended at least half. Fewer than 10 percent of participating hospitals attended all of QIOs' meetings. When participating hospitals attended few or no meetings, hospitals reported that limited hospital resources, such as staff and funding, most commonly influenced their infrequent attendance.

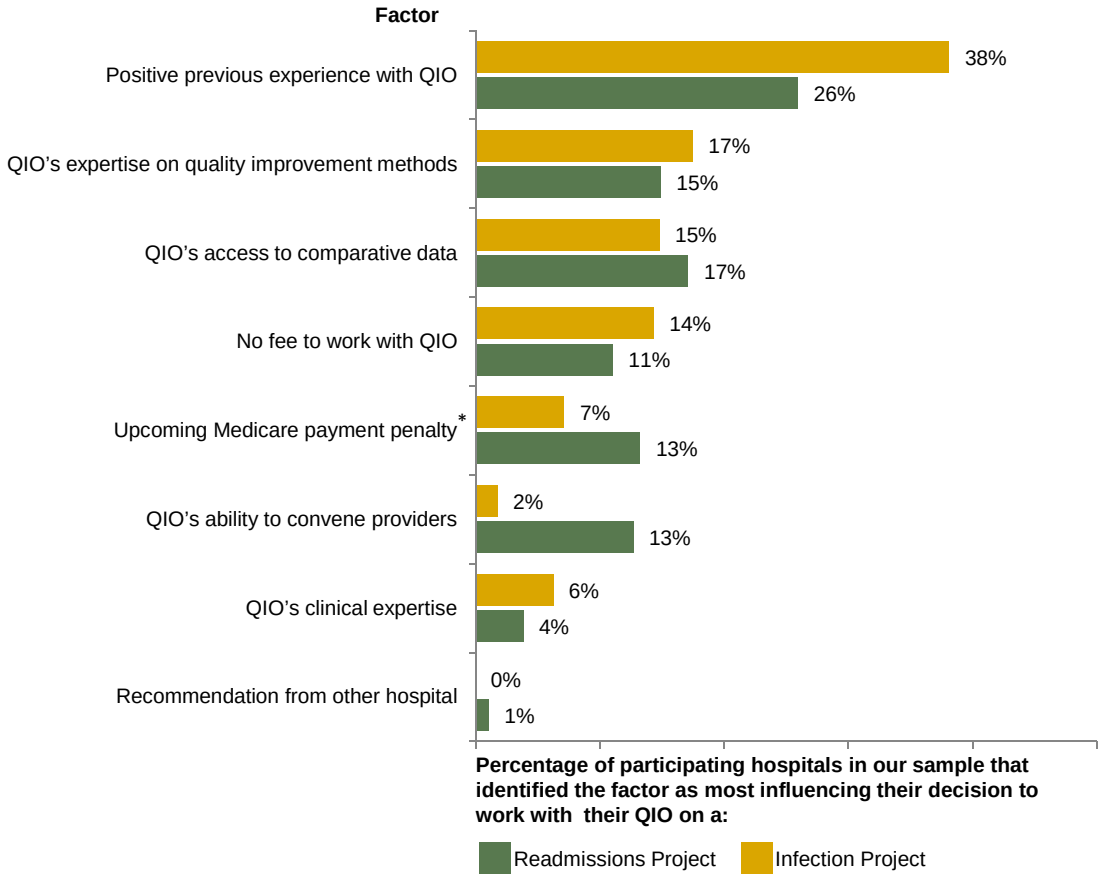
Most participating hospitals used QIOs' written materials, such as pamphlets, checklists, and protocols. Eighty-two percent of hospitals participating in infection projects used these written materials, and 70 percent of hospitals participating in readmissions projects used them.

Almost half of participating hospitals received one-on-one onsite assistance for infection and readmissions projects, typically once or on a quarterly basis in 2013.

Participating hospitals in our sample most commonly reported that positive previous experiences prompted them to work with QIOs

Participating hospitals' positive previous experiences were a larger factor in their decisions to work with QIOs than any other factor, including QIOs' expertise on quality improvement methods and access to comparative data. See Chart 1 for the factor that most influenced hospitals' decisions to participate in QIOs' projects.

Chart 1: The Factor That Most Influenced Hospitals' Decisions To Participate in Their QIOs' Projects



* For fiscal years beginning on or after October 1, 2012, Medicare reduced payments to hospitals with excess readmissions (SSA § 1886(q)).
Source: OIG analysis of data from hospital questionnaire, 2014.

All participating hospitals in our sample reported receiving benefits by working with QIOs

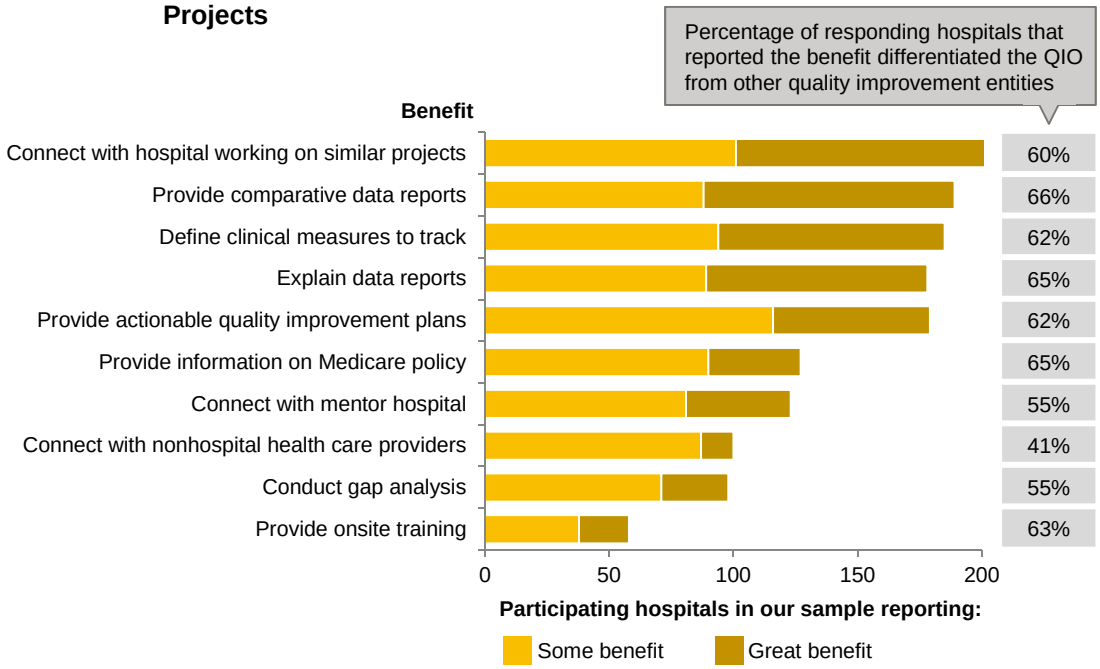
Participating hospitals reported receiving the most benefit by QIOs' connecting hospitals with other hospitals working on similar projects, defining clinical measures for hospitals to track, providing comparative data reports, and explaining data reports. Of those benefits, hospitals reported that QIOs' comparative data reports most differentiated them

from other entities that conduct quality improvement activities. These reports showed each hospital where it ranked on infection and readmissions rates within its State.

Although fewer participating hospitals reported receiving benefits from QIOs' conducting gap analyses, providing onsite training, and providing information on Medicare policy, hospitals reported that these benefits also differentiated QIOs from other entities. Gap analyses identify shortcomings in hospitals' processes and plans for improving them. See Charts 2, below, and 3, on the following page, for more information on benefits hospitals received from working with QIOs on infection and readmission projects.

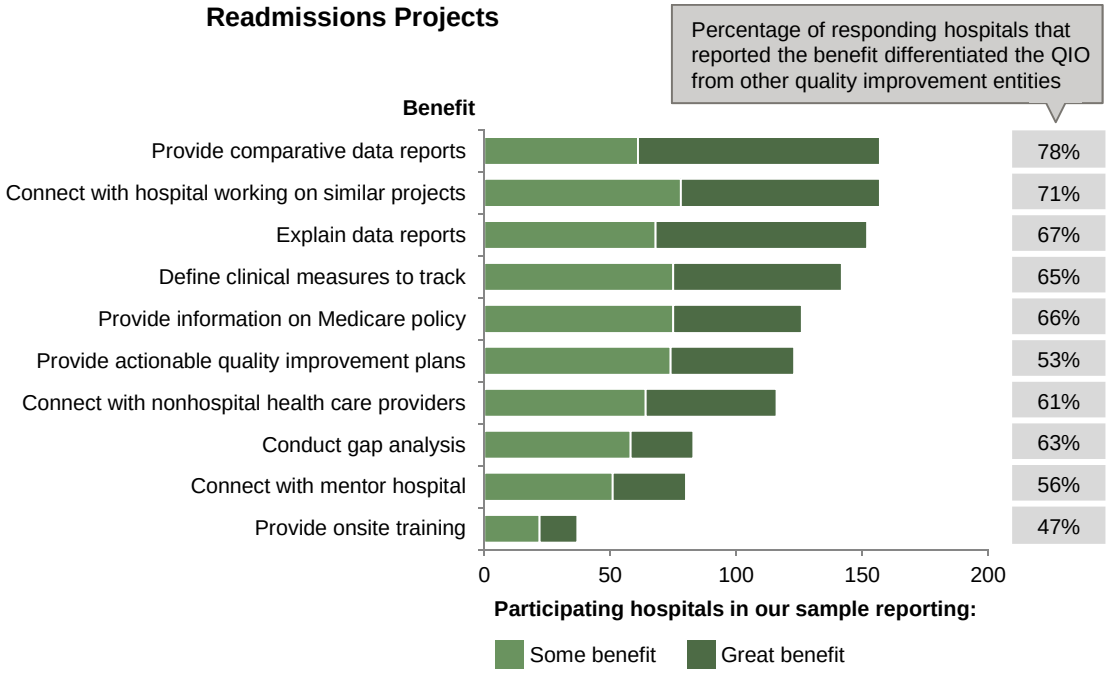
In addition to reporting specific benefits, nearly a third of participating hospitals offered positive feedback about QIOs in their responses to our questionnaire. These hospitals reported that QIOs were knowledgeable, responsive, and helpful. Five percent of participating hospitals provided negative feedback about QIOs, typically concerning lack of responsiveness from their QIOs.

Chart 2: Benefits Reported by Hospitals Working With QIOs on Infection Projects



Source: OIG analysis of data from hospital questionnaire, 2014.

Chart 3: Benefits Reported by Hospitals Working With QIOs on Readmissions Projects



Source: OIG analysis of data from hospital questionnaire, 2014.

Eight out of ten participating hospitals also worked with other federally funded efforts on the same topics as QIOs

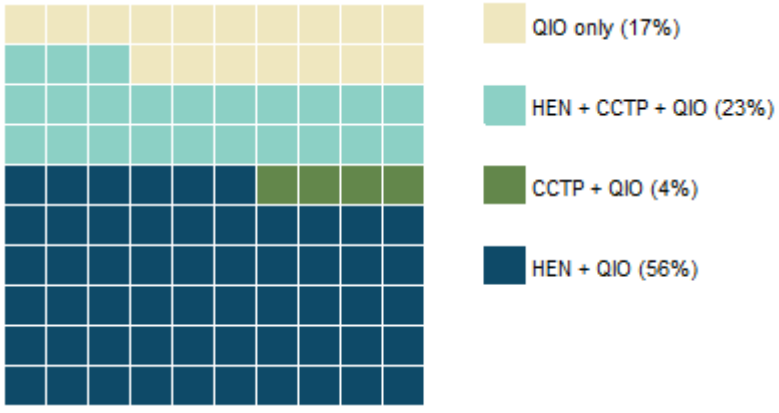
Eighty-one percent of participating hospitals also worked to reduce readmissions and the same types of infections with federally funded efforts in 2013. This includes 74 percent of participating hospitals that also worked with another CMS quality improvement effort, HENs, on those projects. A 2012 GAO report found overlap between QIOs and HENs and raised concerns about CMS's management of those programs. CMS agreed with GAO's recommendation to quickly address this overlap. CMS issued a memorandum to QIOs about HENs that recognized the potential risk of duplication of effort, in the absence of continuous coordination and communication. It encouraged QIOs to coordinate with HENs through various methods, such as jointly offering training, notifying one another of new recruitment, and tracking hospitals that work on both efforts.[32]

[32] CMS, Revised: Coordination and Communication between the Hospital Engagement [Network], SDPS Memo Number 12-402-CO (January 3, 2013).

To learn more about the potential duplication that we identified through the hospital questionnaire, we analyzed CMS data to determine the overlap of CMS's quality improvement efforts at formally participating hospitals (i.e., hospitals that signed memorandums of understanding to work with their QIOs). To do so, we analyzed CMS's lists of hospitals that signed up to formally participate in QIOs' projects, hospitals that work with HENs, and hospitals that participated in the CCTP.

According to these data, 83 percent of formally participating hospitals worked on similar topics with at least one of these two other CMS quality improvement efforts. Seventy-nine percent of formally participating hospitals worked with HENs, and 27 percent participated in the CCTP. CMS instructed QIOs to work with hospitals and help organize communities to apply to the CCTP, but provide ongoing assistance only to those that were not selected.[33] See Chart 4 for the portion of formally participating hospitals that worked on other Federal efforts.

Chart 4: Portion of Formally Participating Hospitals That Worked on Other CMS Quality Improvement Efforts During the 10th Scope of Work



Source: OIG analysis of CMS data, 2014.

The QIOs we visited reported that they were aware of the potential for overlap with HENs. Staff at one QIO we visited stated that they attempted to avoid duplicating HENs' efforts by focusing their catheter-associated urinary tract infection efforts on different units within the same hospital.

When hospitals commented on Federal program overlap, the majority viewed it negatively. One noted that "there seems to be increasing redundancy in targeted improvement efforts, particularly since the introduction of the HEN." Another remarked on "the fragmented nature of all of the Federally funded programs focused on quality and patient

[33] CMS, QIO 10th Scope of Work, § C.8.1.C.1.

safety." Alternatively, some hospitals noted that QIOs and HENs collaborate well and "share resources, speakers, and expertise."

Most participating hospitals also worked with non-Federal entities on the same topics as QIOs

Eighty-five percent of participating hospitals also worked with entities outside the Federal Government on infection and readmissions projects in 2013. These entities included insurers, private entities, and hospital associations, as well as local and State government programs.

See Table 2 on the following page for the types of entities that hospitals worked with on the same topics as QIOs.

Table 2: Types of Entities That Participating Hospitals Worked With on the Same Topics as QIOs

Entity	Hospital (#)	Hospital (%)
Hospital Association	1,194	67%
State / Local Government	686	39%
Private Entity	638	36%
Insurer	541	31%
Other Government Contractor	155	9%

Source: OIG analysis of data from hospital questionnaire, 2014.

Staff at the three QIOs we visited reported that they collaborated with both public and private entities on group meetings. One QIO reported forming a formal partnership with its State's Department of Health and its State's Hospital Association, which received HEN funding. Members of the partnership host meetings together and promote one another's Webinars.

One hospital reported that "all of [its] interactions with the QIO on improvement projects [were] through participation in collaborative events." The three hospitals we visited, each of which worked with its QIO on infection projects, also worked with two or more non-Federal entities on infection projects. These entities included statewide patient safety collaboratives, private consulting groups, and hospital associations.

About 10 percent of hospitals declined to work with QIOs when recruited by them. Hospitals reported that limited resources and working with other entities on similar quality improvement projects influenced their decisions to decline. In fact, staff at one QIO we visited said they had difficulty recruiting hospitals for infection projects because many Federal, State, and local agencies were working on similar projects.

Data problems and timing of other CMS quality improvement efforts hampered QIOs' ability to target eligible hospitals and avoid duplicating those efforts

To identify hospitals eligible to work on certain infection topics, QIOs needed baseline infection rates from CMS.

In the second half of 2011, CMS launched three quality improvement efforts: QIOs' 10th scope of work, HENs, and the CCTP. These three efforts each had similar goals to reduce infection rates and hospital readmissions. HENs and CCTPs began 5 and 4 months, respectively, into the 10th scope of work.

QIOs reported problems in key CMS data for recruiting hospitals for infection and readmissions projects

CMS did not require hospitals to report c-diff rates to CDC's infection rate database until January 2013, after QIOs' recruitment period had concluded for that topic.[34] Therefore, those data were largely incomplete and unavailable for QIOs to use to identify eligible hospitals. The QIOs we visited implemented workarounds to identify eligible hospitals, including analyzing claims data, asking hospitals what their infection rates were, and getting data from the State departments of health. See Chart 5 on the following page for a timeline of CMS's quality improvement efforts.

Indeed, when we reviewed CMS policy memorandums issued to QIOs during the 10th scope of work, we found examples of QIOs' concerns and confusion about recruitment for infection projects.[35]

Furthermore, CMS could not provide us with lists of hospitals eligible to participate in infection projects. Without the lists, we could not determine the extent to which QIOs recruited hospitals most in need of improvement.

Finally, CMS did provide QIOs with lists of ZIP Codes to identify communities for readmissions projects. However, the three QIOs we visited described using other methodologies to recruit for readmissions projects. In fact, CMS later redefined eligible hospitals as those that were part of any community interested in working on readmissions projects.[36]

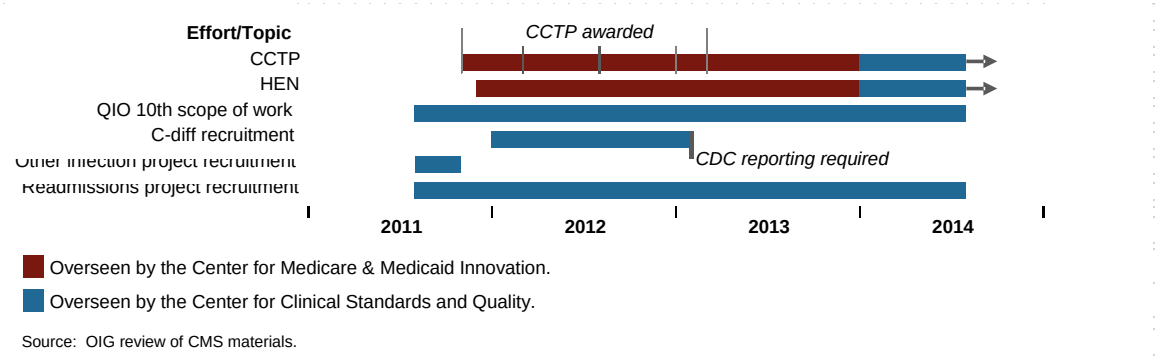
---

[34] 76 Fed. Reg. 51476, 51631 (August 18, 2011).

[35] CMS, Questions and Answers Regarding the 10th Scope of Work, SDPS Memo Number 11-222-GN (August 23, 2011); Questions and Answers Regarding the 10th Scope of Work, SDPS Memo Number 11-299-CO (October 21, 2011).

[36] CMS, Revised: Questions and Answers Regarding the 10th Scope of Work, SDPS Memo Number 12-041-GN, Q.486 (February 10, 2012).

Chart 5: Timeline of CMS Quality Improvement Efforts



Source: OIG review of CMS materials.

QIOs were already recruiting hospitals when CMS awarded HEN contracts and CCTP agreements

CMS announced the HENs 5 months into the 10th scope of work. HENs began recruiting hospitals after QIOs had already concluded their recruitment for some infection topics. Furthermore, CMS awarded the first round of CCTP agreements 4 months into the 10th scope of work and continued to select communities into 2013. This timing would have made it difficult for QIOs to avoid duplicating the HEN and CCTP efforts. See Chart 5 on the previous page for a timeline of CMS's quality improvement efforts.

In fact, two of the QIOs we visited told us that CMS asked them to not duplicate HENs' efforts even though CMS had not identified the HENs or the hospitals with which HENs were working. Another QIO we visited had greater awareness of HENs at their launch because it was in an official partnership with an entity that received HEN funding. That QIO also subcontracts for a HEN.

CONCLUSION AND RECOMMENDATIONS

QIOs reached more than 50 percent of hospitals, and those hospitals valued working with QIOs. However, QIOs' quality improvement projects overlapped efforts of other Federal, State, and private entities. Over 80 percent of hospitals that worked on quality improvement projects with QIOs in 2013 also worked with other federally funded quality improvement efforts on similar topics, raising questions of duplication among Federal efforts. In addition, 85 percent of these hospitals also worked with non-Federal entities on similar topics.

CMS funding for the QIOs' 10th scope of work, HENs, and the CCTP totals about $1 billion to work on the same topics.[37] With limited Federal resources, it is crucial to know the effectiveness of each effort.[38] Although overlapping efforts may produce greater benefits together than one effort alone, overlap makes it difficult to attribute quality improvement to any one effort. Knowing the effectiveness of each effort is key to effective management of CMS's quality improvement resources.

Finally, the overlap among CMS's quality improvement efforts raises concerns about how well CMS coordinates those efforts. It is important to ensure that CMS coordinate its efforts and resources to avoid duplication. Previous work by GAO identified the potential overlap among QIOs and other Federal efforts and raised concerns about CMS's coordination of its quality improvement efforts. In December 2013, CMS consolidated oversight of its efforts by moving HENs under the Center for Clinical Standards and Quality, the same Center that oversees QIOs.[39] Our findings underscore that overlap remains a concern.

Therefore we recommend that CMS:

---

[37] This amount includes CMS funding for the duration of each effort.

[38] Peter Pronovost et al., "Did Hospital Engagement Networks Actually Improve Care?" *The New England Journal of Medicine*, Volume 371, Number 8, August 21, 2014, pp. 691-693.

[39] CMS, Proposed Realignment of the Partnership for Patients Function from the Center for Medicare & Medicaid Innovation to the Center for Clinical Standards and Quality (July 11, 2013). The CCTP remains under the Center for Medicare & Medicaid Innovation. We conducted the analysis for this report before CMS's consolidation.

Take additional steps to coordinate, and reduce overlap between, the QIO program and CMS's other quality improvement efforts

Reducing overlap among QIOs, HENs, and the CCTP could lead to better use of limited Federal funds and more targeted assistance to hospitals in need of improvement. CMS's consolidation of efforts under one Center was an important first step. CMS should further coordinate efforts to ensure that they are complementary and not duplicative. It could specify which hospitals each effort should target or focus each effort on a specific problem. CMS could also consolidate the efforts themselves.

Determine the relative contribution of each of its quality improvement efforts

CMS should determine how each of its individual improvement efforts affects quality improvement. We realize that each effort may be better at improving quality in different settings or uniquely contributing towards a larger goal. However, identifying the relative contribution of each effort would help CMS to allocate its resources more efficiently.

Furthermore, we acknowledge that attributing quality improvement to a single effort can be difficult and that improvement may unfold over a longer horizon than a single scope of work or project period. However, CMS could consider intermediate metrics, such as the percent of poorly performing providers successfully recruited and retained through the duration of the project, provider attendance at meetings and training sessions, and provider feedback on the utility of Federal assistance. Finally, CMS should ensure that it has access to baseline data before using metrics to define hospital eligibility.

AGENCY RESPONSE AND OFFICE OF INSPECTOR GENERAL RESPONSE

CMS concurred with both recommendations.

Regarding the first recommendation, CMS stated that it will continue its ongoing efforts to reduce duplication. It said that its Quality Council oversees and coordinates the QIO Program, the Partnership for Patients, and other quality improvement initiatives. CMS noted that although these initiatives share similar goals, they avoid duplication by collaborating and using different methods to drive improvement.

Regarding the second recommendation, CMS stated that it evaluated whether the QIO program achieved its aims for past scopes of work and will include intermediate metrics in its 11th scope of work. CMS also evaluated HENs. CMS's evaluations found that hospitals exhibited quality improvement; however, it could not attribute that improvement to QIOs or HENs.

We support CMS's actions to continue to coordinate and evaluate its quality improvement initiatives. OIG requests details on CMS's efforts and the results of those efforts in its final management decision.

We made one change to the report based on CMS's technical comments. For the full text of CMS's comments, see Appendix C.

APPENDIX A

Sampling Methodology

We sampled from four mutually exclusive strata based on the CMS list of hospitals formally participating (i.e., hospitals that signed memorandums of understanding) in projects with QIOs during the 10th statement of work. This resulted in a sample of 410 hospitals; we sent those hospitals a questionnaire asking the extent to which and the ways in which hospitals participated in QIOs' quality improvement projects. See Table A1 below for the size and response rate for each stratum.

Table A1: Size and Response Rate, by Stratum

Stratum	Hospitals (N)	Hospitals Sampled (n)	Hospitals Responded (#)	Response Rate
Infection projects only	562	100	98	98%
Readmissions projects only	486	100	92	92%
Infection and readmissions projects	251	100	95	95%
No projects	2,157	110	100	92%
Total	**3,456**	**410**	**385**	**94%**

APPENDIX B

Point Estimates and Confidence Intervals

Data element description	Weighted frequency	95-percent confidence limit (#)		Percent	95-percent confidence limit (%)	
		Lower	Upper		Lower	Upper
QIO project participation						
Only infection projects	630.6	490.6	770.7	19.7	15.7	24.4
Only readmissions projects	315.0	214.5	415.4	9.9	7.1	13.5
Both infection and readmissions projects	824.3	659.8	988.8	25.8	21.0	31.2
Participating hospitals	1,005.0	951.1	1,059.0	31.4	29.5	33.4
Meeting attendance for QIO infection projects						
All	112.2	50.6	173.8	7.7	4.5	13.0
Most	596.0	472.5	719.5	41.0	33.5	48.9
Half	345.7	220.2	471.2	23.8	17.0	32.2
Few	243.2	150.0	336.5	16.7	11.5	23.7
None	39.2	0.0	92.1	2.7	0.7	9.8
Unable to determine	118.6	41.4	195.7	8.1	4.3	14.9
Meeting attendance for QIO readmission projects						
All	99.7	40.4	159.0	8.8	4.8	15.3
Most	373.1	264.2	482.0	32.7	24.9	41.7
Half	209.1	124.2	294.0	18.4	12.4	26.4
Few	249.4	145.5	353.2	21.9	14.8	31.1
None	44.1	2.6	85.6	3.9	1.5	9.6
Unable to determine	163.9	76.3	251.5	14.4	8.6	23.1
Frequency of QIOs' onsite assistance for infection projects						
Weekly	-	-	-	-	-	-
Monthly	43.6	17.7	69.5	3.0	1.6	5.5
Quarterly	242.7	150.1	335.3	16.7	11.5	23.6
Annually	312.9	223.5	402.3	21.5	16.1	28.1
Never	765.0	596.0	933.9	52.6	44.5	60.6
Unable to determine	90.7	32.3	149.2	6.2	3.3	11.5
Frequency of QIOs' onsite assistance for readmissions projects						
Weekly	-	-	-	-	-	-
Monthly	48.4	25.3	71.5	4.2	2.6	6.9
Quarterly	246.7	149.1	344.4	21.7	14.9	30.5
Annually	216.7	120.8	312.5	19.0	12.5	27.9
Never	494.8	363.3	626.3	43.4	34.5	52.8
Unable to determine	132.7	60.7	204.6	11.6	6.8	19.2
Use of QIOs' written materials for infection projects						
Did use	1,197.0	1,015.0	1,379.0	82.2	75.3	87.6
Did not use	169.4	94.8	244.1	11.6	7.5	17.6
Unsure	88.8	29.9	147.7	6.1	3.2	11.5
Use of QIOs' written materials for readmissions projects						
Did use	792.5	632.9	952.2	69.6	60.3	77.5
Did not use	215.5	131.3	299.7	18.9	12.9	26.8
Unsure	131.2	52.4	210.0	11.5	6.4	19.8
Overlap with other Federal efforts						
Overlap with HENs	1,302.0	1,117.0	1,486.0	73.5	66.3	79.7
Overlap with any other Federal efforts	1,438.0	1,247.0	1,629.0	81.3	74.8	86.4
Overlap with non-Federal efforts						
Overlap with hospital association	1,194.0	1,016.0	1,372.0	67.5	60.0	74.1
Overlap with State/local government	686.3	536.6	835.9	38.8	31.8	46.3
Overlap with private entity	637.6	502.7	772.4	36.0	29.4	43.2
Overlap with insurer	541.1	408.7	673.5	30.6	24.2	37.7
Overlap with government contractor	154.5	88.8	220.3	8.7	5.7	13.2
Overlap with any other non-Federal efforts	1,505.0	1,315.0	1,695.0	85.0	78.5	89.8
Response rate						
Overall weighted response rate	3197	3085	3309	93.2	89.1	95.8
Infection project only stratum	550.8	512.8	547.5	98.0	93.1	99.4
Readmissions project only stratum	447.1	425.1	469.2	92.9	86.7	96.4
Infection and readmissions project strata	238	290.0	246.9	95.0	90.3	97.5
No project stratum	1,961	1,852	2,070	91.7	85.0	95.6

APPENDIX C

Agency Comments

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

Date: OCT 3 1 2014

To: Daniel R. Levinson
Inspector General

From: /S/
Marilyn Tavenner
Administrator
Centers for Medicare & Medicaid Services

Subject: OIG Draft Report: *QIOs Work with a Substantial Number of Hospitals, However their Projects Overlap with Other Efforts,* OEI-01-12-00650

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the Office of the Inspector General's (OIG) draft report. CMS is committed to improving the quality of health care for all Medicare beneficiaries and being a good steward of taxpayer dollars by continuously striving to maximize the effectiveness and efficiency of initiatives and services it oversees. The Quality Improvement Organization (QIO) Program is one of the largest federal programs dedicated to improving the effectiveness, efficiency, economy, and quality of services delivered to Medicare beneficiaries. The Partnership for Patients initiative includes the Hospital Engagement Networks (HENs) and the Community-based Care Transitions Program (CCTP) as well as numerous stakeholders, including physicians, nurses, hospitals, employers, patients and their advocates, and the federal and State governments. CMS takes pride in the fact that all participating hospitals in the selected sample reported receiving benefits from working with QIOs, as noted in the OIG draft report. The OIG also reported on feedback from hospitals stating that QIOs collaborated well with other quality improvement efforts.

CMS has taken a holistic approach to improving the quality of health care for patients and families by implementing multiple initiatives with shared goals, but distinct activities. QIOs and the Partnership for Patients initiative, including the HENs and the CCTP, capitalize on their respective, distinct strengths. The Partnership for Patients initiative complements the QIOs to help provide a more comprehensive way of aligning quality improvement efforts and ensuring implementation of quality improvement activities. As part of its stewardship of resources, CMS has taken steps to identify and eliminate duplicative activities between the QIO Program and other quality initiatives in the Partnership for Patients. Since 2012, CMS has worked to collaborate, prevent duplication, and continuously monitor the efforts of HENs and QIOs, including developing clear plans to identify respective accountabilities and arrangements to ensure no duplication of effort. The distinctive roles of CMS's quality initiatives are:

- The QIOs worked with hospitals under the Medicare-funded 10th Scope of Work to reduce hospital-acquired infections (HAIs) and worked with communities to reduce hospital readmission. The QIOs have highly specialized expertise in data collection and

analysis and offer educational and technical assistance to community-based organizations. QIOs only assist those community-based organizations that are not a part of the CCTP. Once a community-based organization is accepted into the CCTP, the QIO should no longer provide technical assistance to that organization.

- The CCTP works with community-based organizations and focuses on providing care transition services across the continuum of care to high-risk Medicare beneficiaries. The CCTP is managed by the Center for Medicare and Medicaid Innovation while the other aspects of the Partnership for Patients initiative and the QIO Program are managed by the Center for Clinical Standards and Quality. The hospitals participating in the CCTP are required to attend tri-yearly learning collaboratives with their community-based organizations, which have featured educational sessions for hospital partners. The CMS project officers provide education and assistance to hospitals about best practices when challenging partnerships or poor referral practices are revealed on monthly calls with the community-based organization.
- The HENs (which are mostly hospital systems and state and national hospital associations) have strong relationships with hospital administrators. HENs are primarily concerned with the hospital portion of the continuum and thus make excellent partners for participation in the CCTP. CCTP, in contrast, works across the continuum of care and focuses on care transition services. CMS has conducted assessments to locate areas of duplication between QIOs and HENs and implemented appropriate mitigation strategies where duplication was identified. CMS has continued to coordinate and monitor activities between the HENs and QIOs by regularly assessing future changes in the work plans of QIOs and HENs and the relationships of QIOs and HENs to avoid duplication.

Through these efforts, CMS is continuously working to reduce overlap and encourage alignment of quality improvement activities between all payers, state and local entities, and across federal programs. When all groups are working in the same direction, we are more likely to achieve the common goal of reduced patient harm.

OIG Recommendation

The OIG recommends that CMS should take additional steps to reduce overlap between the QIO program and CMS's other quality improvement efforts.

CMS Response

CMS concurs with this recommendation. As described above, CMS has continued its efforts to reduce duplication and encourages alignment between all payers, state and local entities, and across federal programs. Another effort to coordinate activities and reduce duplication is oversight by the CMS Quality Council, which convenes every area of the Agency that contributes to quality improvement and ensures CMS activities are in alignment with the National Quality Strategy.[1] The Deputy Administrator for Innovation and Quality and CMS Chief Medical Officer is the Agency-wide executive responsible for the Council as well as the QIO Program and the Partnership for Patients initiative.

[1] http://www.ahrq.gov/workingforquality/

It is important to note that focus on the same goals through different means does not necessarily equate to duplication, waste, or inefficiency. Large scale quality improvement cannot occur using a compartmentalized approach as it requires coordinated action to address the same topics from different areas of expertise across different programs. Interaction between the programs and initiatives is more collaborative than duplicative.

The QIO Program and the Partnership for Patients initiative are voluntary in nature with no requirement for hospitals to participate. Hospitals have chosen to be involved in these efforts to improve patient care by focusing their activities on shared goals, such as reducing readmissions. CMS believes that the alignment of multiple federal and private quality improvement entities and other initiatives has been a positive contributing element to significant national changes. For example, the Agency for Health Care Research and Quality (AHRQ) National Scorecard, and the Medicare Fee-for-Service 30-day readmission databases both document highly significant, unprecedented declines in certain hospital infections and in readmissions between 2010 and 2014.[2]

OIG Recommendation

The OIG recommends that CMS should determine the relative contribution of its quality improvement efforts.

CMS Response

CMS concurs with this recommendation. CMS agrees it is important to determine which interventions are most effective in creating the desired outcome, but also acknowledges that relative attribution is difficult absent methodologies such as randomized controlled trials. CMS agrees with the recommendation for interim performance metrics and has included these types of metrics in the current (11th) Statement of Work for the QIO Program. CMS has also developed a contract monitoring and evaluation plan to ensure that the QIO Program is achieving its aims and adding value. CMS previously addressed the question of attribution through an evaluation of the QIO program in 2011 by Mathematica Policy Research.[3] This report found that QIOs' work directly led to improvement in four of twelve targeted measures of quality that we evaluated, with the remaining eight quality measures having improved as well; however, it was difficult to link the improvement directly to QIOs. The evaluator noted that these findings may be partially explained by other quality improvement activities occurring simultaneously in the field, thus making attribution very difficult. Despite the question of attribution, the report showed that more than three-fourths of hospitals and nursing homes with QIO contacts said the contacts themselves or resources provided by the QIO staff led to changes that improved care for their patients, thus achieving the stated goals of the program.

Evaluation efforts are also underway for the Partnership for Patients initiative to assess the relative contribution of the HENs' efforts to the significant improvements in the reduction of harm, as reported in the AHRQ National Scorecard. A preliminary evaluation of the Partnership

---

[2] http://innovation.cms.gov/Files/reports/patient-safety-results.pdf

[3] Mathematica Policy Research, 2011, Independent Evaluation of the Ninth Scope of Work, QIO Program: Final Report, page ix. http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityImprovementOrgs/Downloads/MPRReport.pdf

for Patients found evidence that rates of hospital-acquired conditions fell in several areas but efforts remain underway to attribute these changes to the HENs.[4] CMS additionally is evaluating and tracking community-based organizations in the CCTP for targeted performance thresholds on quality and utilization measures such as focusing on 30-day all cause readmission rates, and will also monitor 90- and 180-day readmission rates, mortality rates, observation services, and emergency department visits. These evaluations are in progress, and findings are anticipated in the coming year.

[4] http://innovation.cms.gov/Files/reports/PFPEvalProgRpt.pdf

ACKNOWLEDGMENTS

This report was prepared under the direction of Joyce M. Greenleaf, Regional Inspector General for Evaluation and Inspections in the Boston regional office, and Kenneth R. Price and Russell W. Hereford, Deputy Regional Inspectors General.

Ivan E. Troy served as the team leader for this study, and Alyson J. Cooper served as the lead analyst. Central office staff who provided support include Kevin Farber and Meghan Kearns.

Office of Inspector General

http://oig.hhs.gov

The mission of the Office of Inspector General (OIG), as mandated by Public Law 95-452, as amended, is to protect the integrity of the Department of Health and Human Services (HHS) programs, as well as the health and welfare of beneficiaries served by those programs. This statutory mission is carried out through a nationwide network of audits, investigations, and inspections conducted by the following operating components:

Office of Audit Services

The Office of Audit Services (OAS) provides auditing services for HHS, either by conducting audits with its own audit resources or by overseeing audit work done by others. Audits examine the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities and are intended to provide independent assessments of HHS programs and operations. These assessments help reduce waste, abuse, and mismanagement and promote economy and efficiency throughout HHS.

Office of Evaluation and Inspections

The Office of Evaluation and Inspections (OEI) conducts national evaluations to provide HHS, Congress, and the public with timely, useful, and reliable information on significant issues. These evaluations focus on preventing fraud, waste, or abuse and promoting economy, efficiency, and effectiveness of departmental programs. To promote impact, OEI reports also present practical recommendations for improving program operations.

Office of Investigations

The Office of Investigations (OI) conducts criminal, civil, and administrative investigations of fraud and misconduct related to HHS programs, operations, and beneficiaries. With investigators working in all 50 States and the District of Columbia, OI utilizes its resources by actively coordinating with the Department of Justice and other Federal, State, and local law enforcement authorities. The investigative efforts of OI often lead to criminal convictions, administrative sanctions, and/or civil monetary penalties.

Office of Counsel to the Inspector General

The Office of Counsel to the Inspector General (OCIG) provides general legal services to OIG, rendering advice and opinions on HHS programs and operations and providing all legal support for OIG's internal operations. OCIG represents OIG in all civil and administrative fraud and abuse cases involving HHS programs, including False Claims Act, program exclusion, and civil monetary penalty cases. In connection with these cases, OCIG also negotiates and monitors corporate integrity agreements. OCIG renders advisory opinions, issues compliance program guidance, publishes fraud alerts, and provides other guidance to the health care industry concerning the anti-kickback statute and other OIG enforcement authorities.