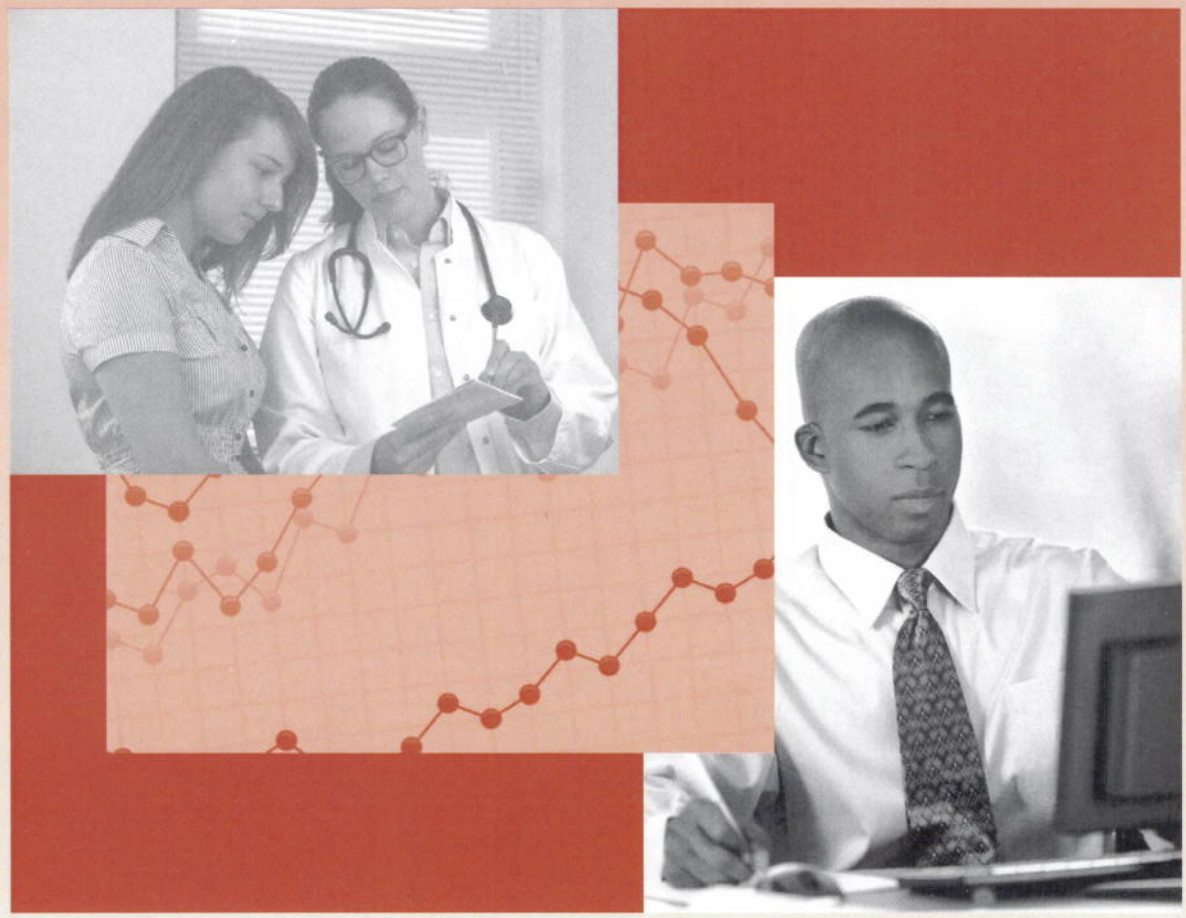
Private "Performance Feedback" Reporting for Physicians

Guidance for Community Quality Collaboratives



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Private "Performance Feedback" Reporting for Physicians: Guidance for Community Quality Collaboratives

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4. Indiana Health Information Exchange, and
5. Wisconsin Health Information Organization.

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Executive Summary

A growing number of Chartered Value Exchanges (CVEs) and other multistakeholder community quality collaboratives are now producing some type of private performance feedback report to physicians or other health care providers in parallel to their public report for consumers. In contrast to public reports, private performance feedback reports for physicians are designed to serve the measurement and improvement goals of clinicians and other health professionals, as well as health care organization leaders. Private reports focus on key performance indicators such as clinical process, clinical outcome, patient experience, and resource use measures.

Although the data sources and performance measures included in private feedback reports are often the same as those used in public reports, private reports to physicians contain a much greater level of data detail and search capabilities. Often these reports have data at the level of individual patients. This level of detail facilitates care management and followup in the context of ongoing quality improvement programs.

Community quality collaboratives face a range of considerations as they develop or redesign private performance feedback reports for physicians, including overall strategic issues and more specific elements related to report content, design, and dissemination. This guide offers 13 specific recommendations intended primarily for CVEs and other collaboratives engaged in private feedback reporting. Based on a review of the limited literature on private reports, an examination of selected examples of community quality collaborative feedback reports, and an indepth case study of one CVE's experience with private reporting, the recommendations are:

1. **Understand the goals and information needs of your target audience:** The starting point for an effective report, whether public or private, is to engage with the target audience you intend to reach. Involving physicians and other end users in this process can yield important insights and lead to greater ownership and use of the report.
2. **Identify your value-added reporting niche:** Once specific goals and needs are established, sponsors can determine which needed information they are in a unique market position to supply. A key contribution that CVEs can bring to private feedback reporting is their unique ability to provide community-level benchmarks that no single care system or heath plan can create on its own.
3. **Select performance measures that are perceived as relevant and are actionable:** These include measures that reflect important processes of care related to patient outcomes and that signal clear steps that a clinician can take to improve performance. Measures that align with those included in public reports can help reinforce their relevance, since physicians will have strong incentives to improve on those measures that are publicly reported.
4. **Include benchmarks for comparison to peers and normative standards:** Peer comparisons are important in private feedback reports if the goal is to change physician behavior, since physicians are motivated by comparative information. Comparisons to normative standards also are important, but it is helpful to make them achievable so that they cannot easily be perceived as unreasonable or unattainable and therefore be ignored.
5. **Use displays to highlight the most important patterns:** Many of the design principles for private feedback reporting are the same as for public reporting, namely, to use graphic displays and text that tell a clear story about performance that is understood and seen as useful by the target audience.

6. **Provide access to patient-level data:** An important feature of private feedback reports for physicians is the ability to view the underlying patient-level data that go into the reported performance measures. This way, the clinician can identify specific patients who have not followed management goals or are overdue for specific services.
7. **Enable physicians to correct patient-level data:** In addition to providing access to patient-level data, it is important to allow physicians to review and identify data that appear to be in error. Such a feature not only provides a feedback loop for improving data quality, but also may enhance physician trust in the report.
8. **Use sound methods and make them transparent:** Physicians' perceptions of the accuracy and completeness of the data are critical if they are to have sufficient credibility for physicians to rely on them as indicators of their need for quality improvement.
9. **Update data at least quarterly:** Timeliness of data is critical for management of patient care, as well as for tracking performance and monitoring progress toward improvement goals. While monthly reports are considered ideal, most clinicians and managers concur that private feedback reports should be updated at least quarterly.
10. **Build in capacity to view performance trends:** The ability to update reports on a monthly or quarterly basis also supports the ability to view performance measures over time through such tools as run charts and other monitoring tools.
11. **Distribute reports through multiple channels:** The most successful approach to report distribution is likely to combine multiple strategies such as email, faxed reports, mailed hard copy reports, and posting of comparative reports onsite. In addition, presentations and discussions of reports can take place as part of quality committee meetings, improvement collaborative sessions, and individual performance appraisal reviews.
12. **Embed feedback reporting as an integral part of quality improvement:** Private feedback reports are most likely to promote clinician behavior change if they are used strategically within a quality improvement program. The most successful interventions for changing practitioner behavior appear to involve interactive approaches allowing clinicians to meet and discuss improvement opportunities and challenges with their peers.
13. **Evaluate private feedback reports against reporting goals:** Like all reporting tools, private feedback reports can be enhanced through a periodic evaluation of their utility to users and their impact in helping to achieve their intended goals. Methods include focus groups, key informant interviews, user surveys, and online tracking tools for Web-based reports.

Finally, as suggested by the Cincinnati CVE case study, CVEs and other community quality collaboratives may be able to augment their private feedback reporting tool or system by developing supportive resources or services that can assist report users in applying the information to achieve their goals.

Introduction

Over the past decade, a growing body of research and online resources has emerged to provide guidance on effective practices for publicly reporting information on provider performance for consumers.[1] These recommendations are for the most part evidence based and assume that an effective report is one that contains performance information that consumers understand and find both credible and relevant. In addition, information is conveyed in a way that makes it as easy as possible for consumers to use it to make good choices among providers.

Another key audience for performance reporting is physicians themselves. Health plans and medical groups have sponsored private physician "performance feedback" reports for many years, with the intention of supporting internal quality improvement efforts as well as patient care management.

More recently, multistakeholder community quality collaboratives, including roughly half of the Chartered Value Exchanges (CVEs) supported by the Agency for Healthcare Research and Quality (AHRQ), have begun to produce some type of private report for physicians in parallel to their public report for consumers. These groups recognize that a single report designed for one audience cannot meet the needs of both. In addition, the Centers for Medicare & Medicaid Services (CMS) has sponsored pilot studies of the effects of providing individual physicians and medical groups with performance feedback based on claims data and CMS's Physician Quality Reporting System.

In contrast with public reports, private reports are often confidential and limited in distribution to those with a "need to know." Thus, little research even of a descriptive nature has been conducted on the various forms that private reporting has taken. Limited discussion of how to define and measure the effectiveness of such reports and little published evaluation research are available.[2] Therefore, the science of private "feedback reporting" for physicians is nascent at best.

As CVEs and other community quality collaboratives consider strategies for private feedback reporting to physicians and other health care providers, they will need to address basic issues such as report design and distribution. They also will need to examine their role in relation to existing and planned internal performance reporting activities of the health systems and medical practices in their markets. In contrast to public reporting for consumers, where the role of a neutral, multistakeholder collaborative is relatively well accepted as a source of objective, communitywide performance data, the role of community collaboratives in private feedback reporting is not always so clearly defined.

Many health plans and health systems, which may themselves be collaborative members, have developed very sophisticated internal reporting systems of their own based on electronic health records. In the context of these and other private performance reporting initiatives, community collaboratives will need to determine the unique value-added features that their private feedback reports can provide. The goal is to complement rather than compete with reports from their provider members or other report sponsors.

This resource document is intended to provide practical information and guidance primarily to CVEs and other community quality collaboratives interested in the design, dissemination, and use of private feedback reports on physician performance. We begin with an overview of private performance feedback reports for physicians, including a discussion of their goals and a conceptual diagram illustrating their relationship to public reports and the flow of information among participating health plans and medical groups in the context of a community quality collaborative.

We then focus the main body of the resource document on 13 specific recommendations for consideration by CVEs and other community quality collaboratives that are either currently engaged in or are contemplating private feedback reporting. These recommendations include overall strategic issues as well as more specific elements related to the content, design, and dissemination of private feedback reports.

Our recommendations are drawn from the relevant literature, examples from early private feedback report developers, and a case study we conducted with the Health Collaborative, the CVE in Greater Cincinnati. In this case study, we conducted physician focus groups and interviews with quality managers of local health systems. We wanted to assess how the Cincinnati CVE's current private feedback report might be made more useful to clinicians seeking to improve quality and care management processes.

Overview of Private Feedback Reporting for Physicians

Private performance feedback reports are aimed at serving the performance measurement and improvement goals of physicians and other health professionals as well as practice managers and leaders. They communicate objective information about performance as captured through such indicators as clinical process, clinical outcome, patient experience, and resource use measures, with the broad aim of facilitating assessments of or improvements in care.

Goals of Private Feedback Reports

As with public reports, the effectiveness of private reports can appropriately be measured in relation to the goals they are intended to serve. These goals include:

- Enabling clinicians and practice leaders to assess performance relative to peers, benchmarks, or evidence-based practice guidelines, as well as their own past performance;
- Motivating efforts to improve performance;
- Supporting patient care management; and
- Providing access to improvement tools and resources.

In measuring the effectiveness of private feedback reporting in relation to these four goals, only for the first goal can effectiveness be assessed by asking a physician to read a report and answer questions about it immediately afterwards. Success in reaching the other goals depends on what is done afterwards. The critical outcomes are not whether a report has been read and understood, but whether it has contributed to better care. This means that evaluation of the effectiveness of private feedback reporting also has to be embedded in the larger context of quality improvement and/or patient care management.

Relationship to Public Reports and Patient Registries

The first two goals listed above overlap with those of public reporting, in that private feedback reports provide a basis for assessment of clinician performance and help to motivate and focus quality improvement efforts. However, the second two goals are quite different from public reporting. Public reports give patients and consumers summary-level information to inform their choice among providers. In contrast, to be most effective, private feedback reports must give clinicians more granular information so they can take specific actions to improve performance.

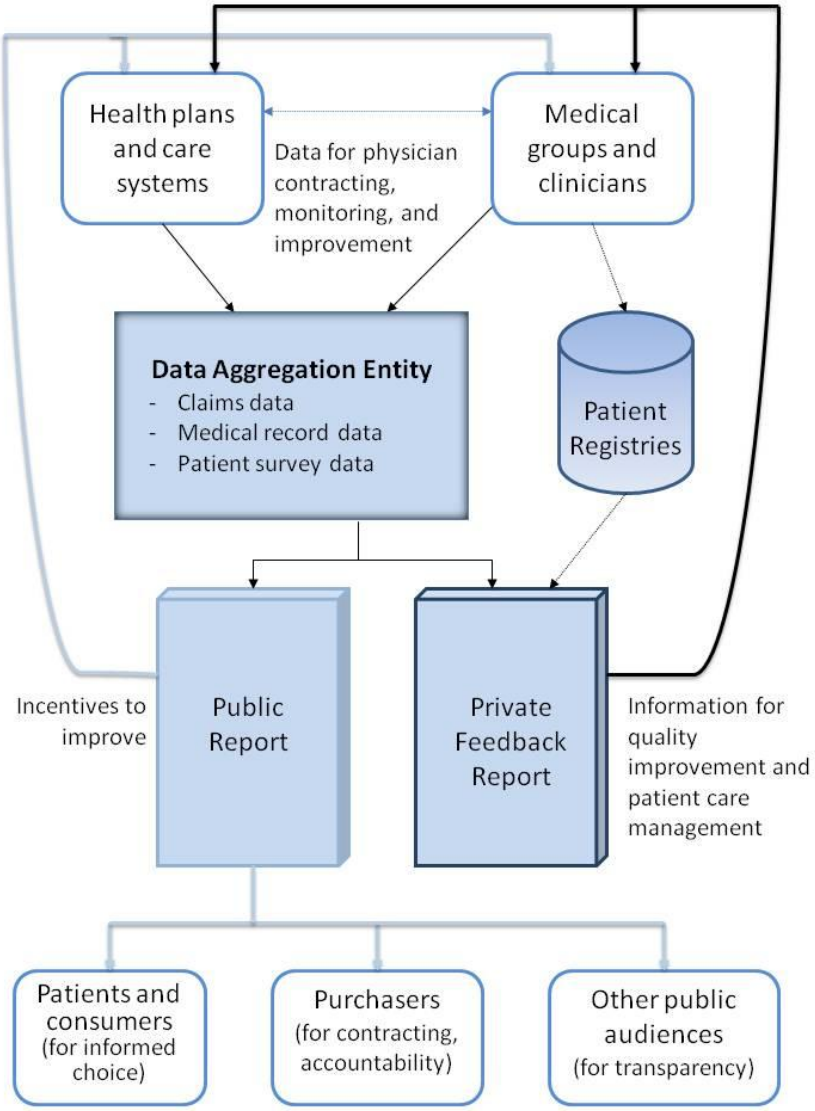
Although the data sources for public and private reports are often the same, the audiences and functions of these reports are quite different, as illustrated in Figure 1. In the context of a community quality collaborative, data from claims, medical records, or patient surveys are provided by participating health plans and medical groups to an entity such as a data warehouse sponsored by the collaborative. This entity can aggregate and transform these data into performance measures for reporting.

The performance information conveyed through public reports serves multiple audiences and provides incentives to health plans, care systems, medical groups, and clinicians to improve performance. The information and tools needed to actually implement improvements, however, are provided through the collaborative's private feedback report.

The data generated internally by these organizations can also be used for physician performance monitoring and improvement, either separately or in combination with the private feedback reports obtained through the community quality collaborative. Often, internal data are collected and maintained in patient registries. Registries are systematic aggregations of data on a defined population of patients, such as people with diabetes or patients with cancer or heart disease.

Registries may serve many purposes, such as describing the natural history of disease and measuring or monitoring safety and harm, as well as measuring quality of care.[3] When performance-related data from a registry are communicated to providers, the resulting communication can be considered a form of feedback reporting, but the registry itself is not.

Figure 1. Private Feedback Reporting Audiences, Functions, and Information Flow



Guidance for Private Feedback Reporting

Community quality collaboratives such as CVEs and others face a range of considerations as they develop or redesign private performance feedback reports for physicians. This section presents 13 specific recommendations aimed at supporting community collaboratives in this process. These recommendations are based on the following sources of information:

- An environmental scan we conducted in 2011 that reviewed the private feedback reports sponsored by five community quality collaboratives: (1) Health Collaborative of Greater Cincinnati, (2) Oregon Health Care Quality Corporation, (3) P2 Collaborative of Western New York, (4) Indiana Health Information Exchange, and (5) Wisconsin Health Information Organization (an affiliated but separate organization from the Wisconsin Collaborative on Healthcare Quality).
- Results of a survey conducted in 2010 by the Ambulatory Quality Alliance (AQA) Reporting Workgroup (AQA Alliance, 2012), which contacted 104 organizations and received completed surveys from 41 (39.4%), including 36 that identified physicians as one of their target audiences.
- Privileged communications with several health systems engaged in private reporting, as well as from a set of interviews Teleki and colleagues conducted in 2006 with informants from 12 organizations that reported performance information to individual physicians in ambulatory care settings.[2]
- A case study project we conducted in early 2012 with the Health Collaborative of Greater Cincinnati aimed at developing recommendations for improving the utility of its private "physician dashboard" report. The case study involved a series of interviews with Collaborative staff that led to a decision to obtain feedback directly from Cincinnati physicians and physician practice quality improvement managers. They provided feedback regarding their needs for performance information reporting, as well as suggestions for improving the content and functionality of the Collaborative's current physician dashboard. Insights from physician focus groups and interviews we conducted in Cincinnati are interspersed throughout the recommendations below. Further information on our case study methods, including a summary of our findings and recommendations, is provided in Appendix B.

1. Understand the Goals and Information Needs of Your Target Audience

One of the most important first steps in developing effective reports, whether public or private, is to clearly understand the goals and information needs of your target audience. In developing performance feedback reports for physicians, this step implies involving physicians and other intended users of these reports, such as quality improvement managers and practice leaders, in identifying the needs that the report can address and in developing the report itself.

It is highly desirable for physicians to be involved in the development of performance feedback reports for several reasons. First, the more heavily they are involved in development, the greater their ownership of the product and the more likely they are to use it. Second, their input helps to ensure that their interests and needs will be reflected in the product. Third, their active engagement in developing a report aimed at quality improvement helps to set the stage for

behavior change. It can be especially helpful to involve physicians in teams, since making quality improvement a collaborative enterprise helps to reinforce the notion that striving for quality is an imperative consistent with professional norms.

While the logic of doing this seems obvious, it is not always done. Engaging physicians and other relevant stakeholders takes time and effort, and scheduling time with busy clinicians faced with many competing priorities is not easy. While engaging physicians early and often can pay big dividends, not doing so can result in pursuing a course of action that fails to meet the real needs of physicians and their practices, or duplicates reporting activities already underway by the practices themselves.

For example, although the Cincinnati Health Collaborative has successfully engaged physician leaders in many aspects of their public reporting activities, the Collaborative did not conduct any initial testing or review of their private physician dashboard reports with physicians. Not doing so has contributed to a lack of awareness and use of the Collaborative's private report. Lack of physician engagement also has contributed to a widely shared view that the private report, accessible through a secure data portal, adds little value to the performance feedback information already available to many physicians through their internal systems:

> *"I don't think our physicians have logged in to look at their personal stuff; I don't know how much they are encouraged to do that. What they care about is what the public can see [on the public reporting site]."*
>
> *"There's not a reason for individual doctors to look at the portal or their reports; they have no reason to do it when the practice managers are handing them the results [drawn from their internal reporting systems]."*
>
> *"I don't think they [physicians] are finding value in the portal because we are already giving them the data quarterly, at least on the D5 [diabetes measures]."*
>
> —Cincinnati Quality Managers

To their credit, Collaborative staff recognized the need to reach out directly to physicians for their feedback and input on the private physician portal. This feedback, gathered through our case study, led to useful insights regarding what the focus and content of the Collaborative's private feedback reporting should be, as described below.

2. Identify Your Value-Added Reporting Niche

Once you have engaged your target audience to establish their information goals and needs, an important next step is to determine which valuable information you are in a unique market position to supply. For example, in our case study with the Cincinnati Health Collaborative, we learned that virtually all practices in the Cincinnati market, whether part of a large health system or unaffiliated as small, independent offices, appear to be meeting most of their performance feedback information and reporting needs on their own. However, it was also apparent that some important features of private feedback reports could only be met through the Collaborative.

Among these is the unique ability of the Collaborative to provide community-level benchmarks that no single system can create on its own:

> *"The one thing that would be helpful, that I hear from my docs, is they want data from other places that their patients go to. We have in our system…only what we have in our system. But if an eye exam was done [some place outside of our system] we won't have a record of it. Or if we were lucky and we got a report [from that place] then we'd have it. The health plans have a lot of data that we don't have, and we have data they don't have, but never the twain shall meet."*
>
> —Cincinnati Physician

Another area that almost all informants in Cincinnati agreed would be a useful value-added function for the Collaborative is to provide both the data reports and facilitation expertise to support specific quality improvement projects, modeled after a successful diabetes improvement collaborative:

> *"We spend too much time pulling the data, not enough time working the data."*
>
> *"The convening function is a good role for the Collaborative. The diabetes collaborative was a good experience. It could be expanded to other areas."*
>
> —Cincinnati Quality Managers

The importance of targeting and embedding private performance feedback reports to physicians in the context of ongoing quality improvement activities is described further below.

3. Select Performance Measures That Are Relevant and Actionable

After clearly establishing your performance feedback reporting goals and market niche, the next set of considerations relates to report content and design. To be useful to physicians, the content of measures included in feedback reports must be clinically relevant (i.e., perceived as important aspects of process of care or related to patient outcomes) and actionable (i.e., offering clear steps that a clinician can take to improve performance on the measure).

Among the private reports we reviewed, all contain performance information on clinicians (nearly always physicians), but the type of measures varies. All of the CVE reports we examined included process measures such as preventive screening rates and measures of chronic disease management, such as the D5 for diabetes care[i] and the C4 for optimal cardiovascular care.[ii] However, only two included clinical outcome measures, and none included patient experience measures, such as the CAHPS (Consumer Assessment of Healthcare Providers and Systems) Clinician & Group Surveys.

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[i] The D5 refers to a set of five clinical measures of effective diabetes management (control of blood pressure, cholesterol, and blood sugar levels; aspirin use; and no use of tobacco).

[ii] The C4 refers to a set of four clinical measures of effective cardiovascular care (control of blood pressure and cholesterol; aspirin use; and no use of tobacco).

Only the Wisconsin and Oregon collaboratives included resource use metrics, such as utilization rates and cost per episode. The data sources for these measures also varied, with some collaboratives using claims and pharmacy data submitted by health plans and others using direct submissions of clinical record data by medical groups.

Table 1. Variation in Performance Measures Used Across Five Community Collaboratives

Measure Type	Cincinnati	Oregon	Western NY	Indiana	Wisconsin
Clinical process	√	√	√	√	√
Clinical outcome				√	√
Patient experience					
Resource use		√			√

Source: Environmental scan conducted between June 2011 and January 2012.

It should be noted that the absence of patient experience measures and limited reporting of resource use and clinical outcome measures in this small sample of five collaboratives reflect the relative unavailability of these measures at the community level, not their relative importance. Indeed, these are very important performance measures and collaboratives may be in a unique position to help create communitywide data for comparison.

For example, some collaboratives have succeeded in publicly reporting patient experience measures at the medical practice or physician level (such as the CVEs in Colorado, Massachusetts, and Minnesota). In addition, the Massachusetts CVE has developed separate private feedback reports to participating medical practices that include more detail for supporting improvement. These examples illustrate how collaboratives can use their leveraging power to expand the content of performance measures available for both public and private feedback reporting.

Not surprisingly, publicly and privately reported measures tend to overlap for collaboratives that have both. Community quality collaboratives generally include all publicly reported measures in their private reports, together with additional measures that provide more detail on performance. Aligning private feedback reporting with the measures that are included in public reports reinforces their relevance, since physicians will have strong incentives to improve on those measures that are publicly reported.

4. Include Benchmarks for Comparison to Peers and Normative Standards

Peer comparisons are important in private feedback reports if the goal is to change physician behavior, since physicians are motivated by comparative information.[4] In addition, peer comparisons provide a nearly irresistible incentive to engage with a report.

Performance measures used in feedback reports typically compare individual clinician performance with one or more of the following:

- Practice site, group, or system average.
- Other individual clinicians in the practice site or group.
- Community or State average.

- Peer comparisons by type of practice, such as:
    - Safety net.
    - Rural/urban.
    - Multispecialty.
- Normative standard or benchmark, such as:
    - 90th percentile.
    - "Best in class" (top performer).
    - Achievable Benchmark of Care™ (ABC).

Effective benchmarks set goals that are achievable so that they cannot easily be perceived as unreasonable or unattainable and therefore be ignored.[5] The ABC, developed at the University of Alabama at Birmingham, provides an objective method for identifying benchmark performance levels that are already achieved by "best-in-class" clinics within a specified region. For detailed information, go to http://main.uab.edu/show.asp?durki=14503.

As with the performance measures themselves, methods that collaboratives use to compare clinician scores to benchmarks or peers vary widely, as shown in Table 2.

Table 2. Variation in Benchmarks Used Across Five Community Collaboratives

Benchmark Type	Cincinnati	Oregon	Western NY	Indiana	Wisconsin
Practice average	√	√			
Group average	√	√			
Individual doctors	√	√			
Community		√	√	√	√
Normative		√			

Source: Environmental scan conducted between June 2011 and January 2012.

Two examples of performance feedback reports using benchmarks are shown below.

Example 1. Report showing a single physician's scores (column 2) compared to selected benchmarks (columns 3 and 4)

Measure Results - Overall

Measure Name	Physician Rate	WNY Average	Physician Percentile Ranking	
Breast Cancer Screening	82.0%	70.8%	92.1%	View Details
View Affilliated Patients				
Cervical Cancer Screening	83.6%	80.1%	77.3%	View Details
View Affilliated Patients				
Cholesterol Management for Patients with Cardiovascular Conditions	89.6%	91.8%	57.4%	View Details
View Affilliated Patients				
Colorectal Cancer Screening	57.3%	63.0%	86.2%	View Details
View Affilliated Patients				
Comprehensive Diabetes Care - A1C Testing	93.8%	90.3%	62.3%	View Details
View Affilliated Patients				

Source: P2 Collaborative of Western New York.

Example 2. Report comparing physicians in the same practice site and indicating whether scores are above or below a target goal

Primary Care Physician Scorecard
Site data as of January 31, 2012

Diabetes									
Last	First	Patients	A1C <8%	BP < 140/90	LDL < 100	Aspirin	Smoking Cessation	Optimal Care	Eye Exam
Goal		25	40%	30%	35%	80%	80%	N/A	N/A
MD1	First	113	48.7%	67.3%	42.5%	98.2%	92.0%	15.0%	5.3%
MD2	First	171	66.1%	71.9%	46.2%	97.1%	80.7%	20.5%	33.9%
MD3	First	7	57.1%	71.4%	28.6%	100.0%	85.7%	14.3%	42.9%
MD4	First	308	75.0%	85.1%	42.9%	97.1%	74.7%	23.4%	3.9%
MD5	First	254	61.4%	69.7%	42.5%	98.0%	76.0%	15.0%	9.8%
MD6	First	207	56.5%	70.5%	59.4%	99.5%	67.1%	21.7%	49.3%
Site		1105	63.4%	74.5%	46.6%	97.9%	76.8%	19.9%	19.3%
UCPCN		5,596	63.6%	73.2%	48.6%	97.5%	82.0%	24.2%	19.5%

Source: University of Cincinnati Physicians.

5. Use Displays To Highlight Most Important Patterns

Although private feedback reporting for providers is separate and distinct from public reporting for consumers, many of the design principles are the same. In both cases, the goal is to design a report with graphic displays and text that tell a clear story about performance that is understood and seen as useful by the target audience.

Clinicians are highly educated and accustomed to viewing and interpreting data displays, so they are in many respects a more forgiving audience than consumers. On the other hand, clinicians have many constraints on their time, so they may be unwilling to invest much effort in decoding an opaque or unnecessarily complicated data display in a report. Therefore, as is true for a consumer audience, it is best to design report formats that will make it as easy as possible for clinicians and practice managers to get the gist of the message in the data without having to work hard to understand the presentation.

The elements of a data display should make it as easy as possible to see the most important patterns in the data. If the main purpose is to convey relative performance of clinicians or groups, displays that order the entities from highest to lowest performance work well. If performance relative to a benchmark is important, a graphic display of the benchmark can be placed near the graphic display of individual performance to make visual comparison easy (as illustrated in Example 1 above).

Certain design features of data displays have been found to help consumers process and interpret quality information, and most of these should also be helpful for physician audiences. These helpful features include using highlighting, boldface, and text boxes or sidebars[6] and placing specific boundary lines to separate different types of information.[7] Reports with more white space and improved formatting have been found to help consumers make better decisions than they make when the same information is presented in reports lacking these features.[8]

Use of meaningful icons can help to highlight important information, but it is important to use icons consistently across all information provided to facilitate comparison and minimize confusion.[9] Text labels can be even more effective than graphic symbols in helping consumers correctly evaluate information,[10-12] since people differ in their ability to interpret graphics.[13]

Explanations of measures and scoring are often of greater interest to clinicians than to consumer audiences. Such explanations need to be clearly written, easy to find, and placed on a display in a way that does not create clutter. On a Web display, use of a hover function can make information readily available without being intrusive.

Developing an effective design requires working with members of the intended user audience, presenting mockups of possible displays and testing how understandable and usable they are. Useful guidance on creating well-designed data displays may be found at https://www.talkingquality.ahrq.gov/.

6. Provide Access to Patient-Level Data

A key feature of some online private feedback reports for physicians is the ability to view the underlying patient-level data that go into the reported performance measures. This feature of private reporting enables clinicians to identify specific patients who are not in compliance with specified management goals or who are overdue for specific services or followup and to view additional data related to the patient, such as name, age, and date of last visit. See Example 3.

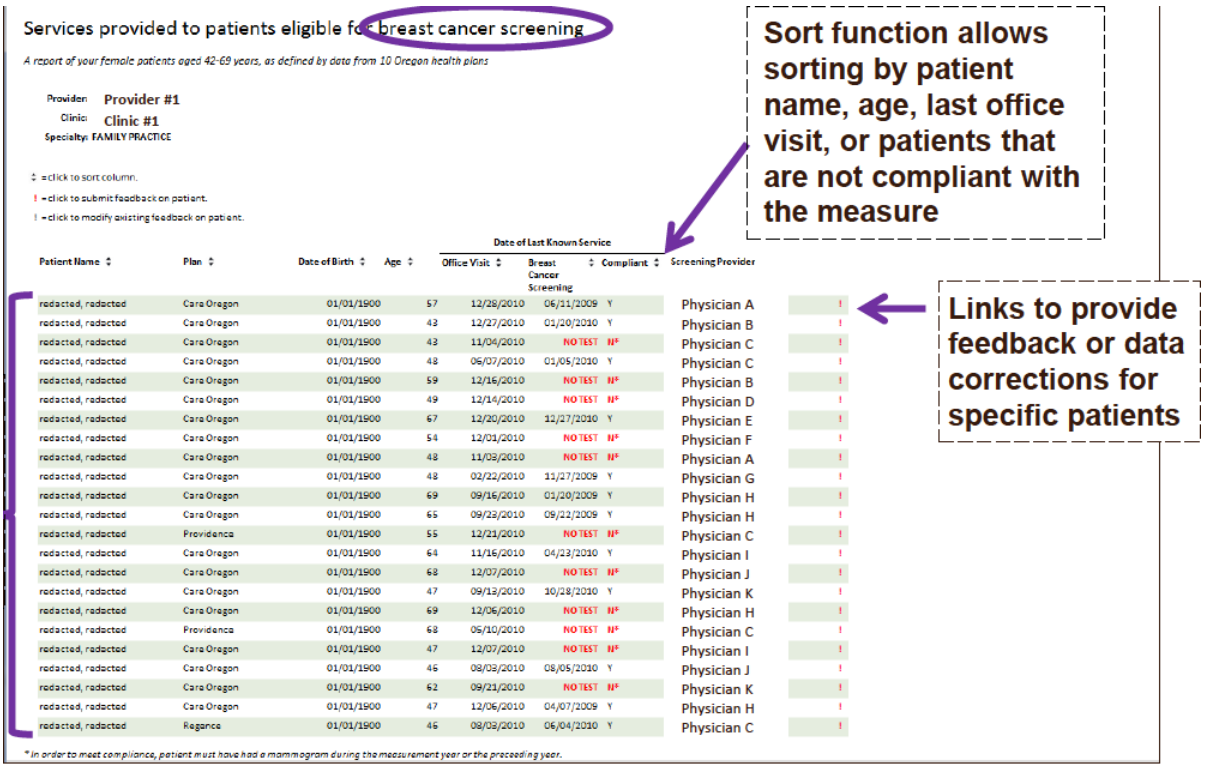
If patient-level information is shared across business entities, a Business Associate Agreement (BAA) is required in order to comply with the Health Insurance Portability and Accountability Act Privacy Rule, which protects the privacy of individually identifiable health information. The

BAA provides written safeguards that such protected information will be used only for authorized purposes, including quality assessment and improvement activities, and will not be disclosed in any way that would violate the Privacy Rule.[14]

Access to patient-level data is a key feature that differentiates private reports that are aimed primarily at assessment from those that also provide tools for improving care management. For providers to take the steps needed for improvement, they need to know where to direct their efforts. Reports that include patient-level data are more actionable than those that do not, since the clinician can drill down to patient-level data to identify where improvements can be made.

Some of our interview respondents said they present information (such as a list of specific patients due for care) in an appendix, companion report, or registry to provide the physician with guidance on specific ways to improve his or her performance (e.g., contacting patients on the list who are due for a mammogram). It is important that data be downloadable to Excel spreadsheets. It is also helpful to have the capacity to download images for use in slides.

Example 3. Online report of services provided to patients eligible for breast cancer screening

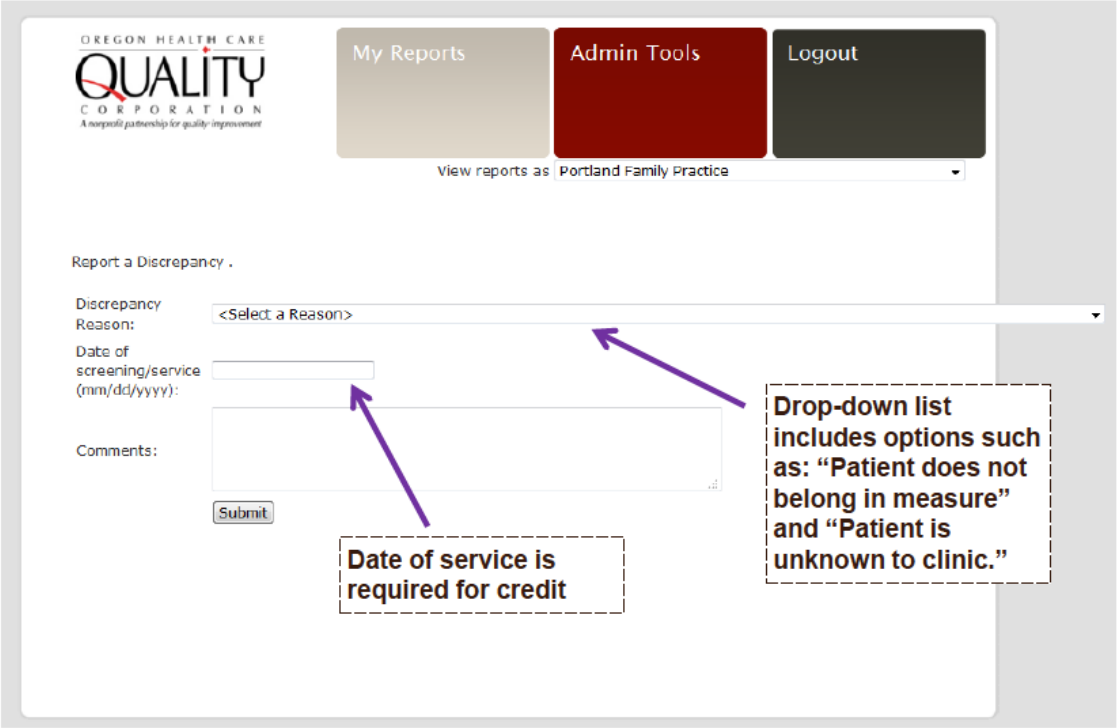


Source: Oregon Health Care Quality Corporation.

7. Enable Physicians To Correct Patient-Level Data

Access to detailed information at the patient level is a key to physicians' ability to trust the data. Online private reports that include access to patient-level data may include a function that allows clinicians to note where data appear to be in error and need to be corrected. This feature provides a feedback loop for improving data quality. The visible presence of a correction feature may also provide a basis for physicians to have greater trust in the data. See Example 4.

Example 4. Patient-level feedback popup



Source: Oregon Health Care Quality Corporation

Our case study interviews with quality improvement managers in Cincinnati revealed additional benefits of providing physicians with the means to correct data. Many of the managers are investing substantial amounts of time and resources transitioning to new electronic medical record (EMR) systems and working with practice site managers and physicians to adjust to new data coding and entry protocols. Although the EMR transition process is challenging, getting physicians to focus on data accuracy in charting and engaging physicians in the process of correcting data can help engage them in using the information to provide better care:

> *"Getting physicians to verify and clean up the data is a very useful step to take because now you have physician buy-in."*
>
> —Cincinnati Quality Manager

As shown in Table 3, most of the collaborative feedback reports we reviewed include both access to patient-level data and the ability for physicians to make corrections.

Table 3. Variation in Benchmarks Used Across Five Community Collaboratives

Benchmark Type	Cincinnati	Oregon	Western NY	Indiana	Wisconsin
Access to patient data		√	√	√	
Ability to correct patient data		√	√	√	

Source: Environmental scan conducted between June 2011 and January 2012.

8. Use Sound Methods and Make Them Transparent

Physicians' perceptions of the accuracy and completeness of the data are critical if the data are to have sufficient credibility for physicians to rely on them as indicators of their need for quality improvement. Factors contributing to the credibility of the data include[2]:

- A sample size that is adequate to produce reliable performance estimates.
- Reasonable procedures for attribution of clinical responsibility, clearly explained.
- Transparent measurement and scoring processes.
- Case-mix adjustment procedures that remove the effects of patient factors that are not under the clinician's control.
- Evidence of a competent data collection process by a trustworthy entity.

In 2006, the AQA developed a set of principles to guide the reporting of performance information to clinicians and hospitals. A major focus of these principles, included in Appendix A, is on the issue of transparency. Guidelines published in 2012 by the American Medical Association emphasize the need for greater industrywide standardization of reporting formats, the importance of transparency regarding the processes used to create the report, and the need for physicians to have access to patient-level data.[15]

9. Update Data At Least Quarterly

A key feature influencing the value of private feedback reports is the timeliness of the data presented, which is largely determined by the frequency with which the data in the report are updated. Most physicians and quality managers we interviewed as part of the Cincinnati Health Collaborative case study project stated that monthly reports are ideal for both tracking performance and for monitoring patient care. All agreed that data should be updated no less frequently than each quarter.[iii]

One of the biggest drawbacks noted regarding the current Collaborative physician dashboard is the lack of timely and current data:

> *"It's just annual; it's old data."*
>
> *"They [physicians] can't use it for process improvement because they're not gonna wait that long to see if a process is going to improve an outcome."*
>
> *"A one-time snapshot each year is helpful for community comparisons but not for patient management."*
>
> —Cincinnati Physicians and Quality Managers

As noted above, timeliness of data is especially important for management of patient care. For performance assessment, longer measurement intervals are often needed to gather enough data for reliable assessment, but timeliness is still important.

[iii] The importance of timeliness of feedback to physicians' perceptions of the meaningfulness of the data has also been shown in the context of quality improvement in hospital settings. See Bradley EH, Holmboe ES, Mattera JA, et al. Data feedback efforts in quality improvement: lessons learned from US hospitals. Qual Saf Health Care 2004;13:26-31.

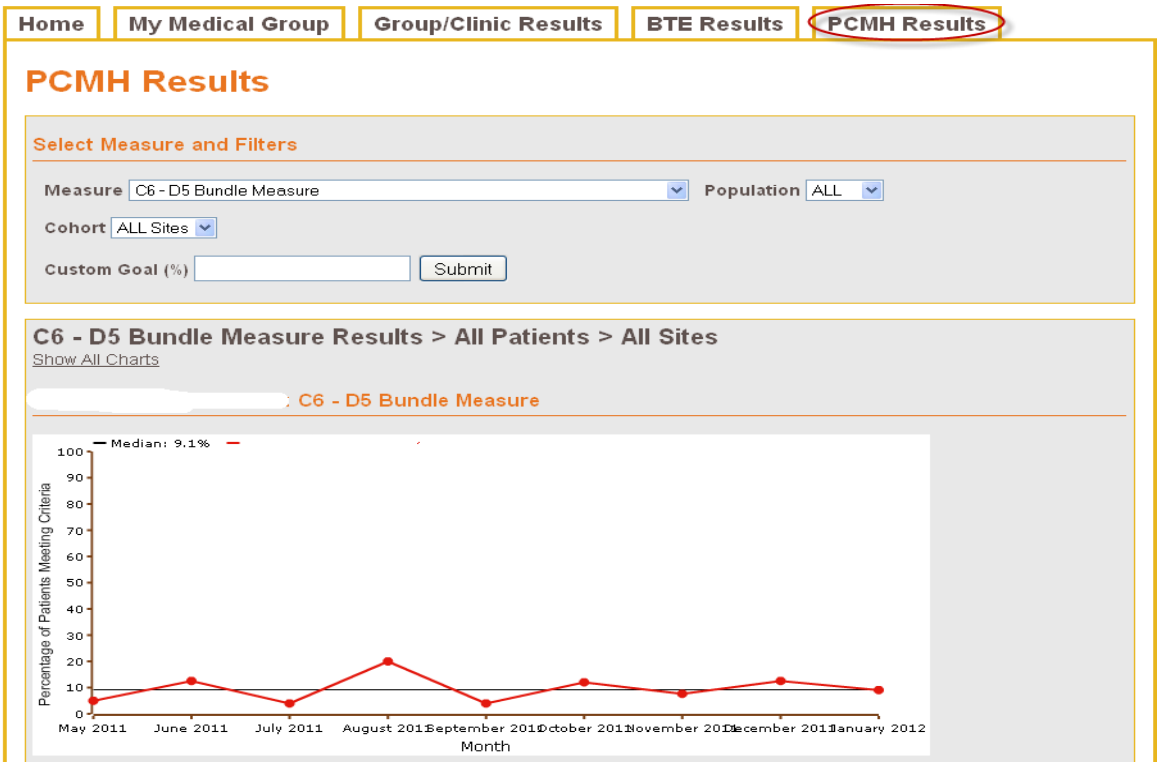
10. Build in Capacity To View Performance Trends

Another feature that enhances the value of private feedback reports for performance monitoring related to quality improvement goals is the ability to view measures over time. Monthy run charts are often used as a quality improvement tool for tracking performance against the median score or some other performance goal. See Example 5.

One aspect of the Cincinnati Health Collaborative's private data portal that was widely cited as extremely valuable by quality managers (as well as by the few physicians who were aware of it) is the component of the site supporting the diabetes quality improvement project described earlier. The features of this dashboard component that make it especially useful include its monthly updating of measures and the ability of practice sites in one system to view their performance relative to sites in other systems, a capability that no single organization has on its own.

> *"The run charts are great. I want to see trends, and drill down to specific D5 components."*
>
> —Cincinnati Quality Manager

Example 5. Monthly run chart showing results of an individual practice site participating in a diabetes improvement collaborative



Source: The Cincinnati Health Collaborative.

11. Distribute Reports Through Multiple Channels

Media usage habits of physicians (as well as other professionals and the broader public) have undergone rapid change in recent years, but not everyone has adopted electronic media in the same way or at the same pace. A study of physician-level private reports conducted in 2006 found that dissemination strategies involved the use of various media: printed hard copies; electronic static copies; and flexible, interactive Web-based versions.[2]

Producers of Web reports noted that interactive Web formats were especially helpful in allowing users to tailor information according to the amount of detail they preferred. Web-based formats are also more easily updated. Web-based formats were used by all five community quality collaboratives in our environmental scan.

Given that the best ways to reach individual physicians are likely to vary within most practice communities for some time, a distribution strategy that combines multiple approaches may be more likely to be successful in many communities. Examples of various methods that can be used to distribute private feedback reports include:

- Email messages to clinicians and practice managers with relevant reports attached as Excel or PDF files.
- Email messages to clinicians with a URL that directs them to online reports.
- Faxed reports to clinicians who do not respond to email.
- Mailed hard copy summary reports to medical groups, practice sites, and clinicians (that may supplement access to online reports).
- Posting of comparative reports onsite (to support transparency related to clinician performance).
- Presentation and discussion of private reports in the context of Quality Committee meetings, quality improvement collaborative meetings, staff meetings, and individual performance appraisal reviews.

As we noted earlier, meta-analytic studies of the most effective interventions for changing practitioners' behavior indicate that interactive approaches work best. Therefore, we recommend that community quality collaboratives not rely exclusively on dissemination strategies that get the information into the hands of individual physicians by whatever means necessary (email, fax, mail, etc.). That is a necessary beginning, but individual distribution is unlikely to achieve the kind of interactive engagement that the literature shows to be important.

To achieve that, collaboratives may find it more effective to encourage interactive engagement with the substantive findings in a private report by teams of physicians in the context of setting or reviewing quality improvement goals. Engagement in a collaborative task that makes use of data from private reports to advance quality improvement goals is likely to strengthen shared professional values, beliefs, and norms related to quality improvement.[16]

12. Embed Feedback Reporting as an Integral Part of Quality Improvement

The single most important lesson to be gleaned from the research literature on the effectiveness of interventions to change clinical practice is that if private reports are used as a standalone intervention aimed at changing practice primarily through a feedback mechanism, they can be expected to have only modest effects on practice. Substantial literature exists on the effects of audit and feedback on clinical practice, and the picture that emerges from scores of studies generally indicates only small to moderate change.[17]

However, substantial change can occur under certain conditions, such as the following:

- The professionals receiving feedback are not doing very well to begin with.
- The audit and feedback is performed by a supervisor or colleague.
- The feedback is provided more than once, both orally and in written form, and is accompanied by clear targets and an action plan.[18]

There are at least two reasons that change is usually quite modest. First, much of what doctors do in their practice is routinized and customary behavior.[19] It is not thought out anew on each occasion in the thorough way that is likely to have occurred when practice habits were first being formed. Routinized behaviors are hard to change unless something happens to call the usual response into question. Second, information is not in and of itself very motivating, especially for professionals who are inundated with information on a daily basis. Without a trigger prompting them to do so, doctors are unlikely to review the potential practice implications of most new information they receive.

However, private feedback reports can likely play a significant role in promoting practice change if they are used strategically within a quality improvement program. Programs to change practitioner behavior and patient outcomes are more successful when they use interactive techniques (e.g., interactive education, academic detailing, improvement collaboratives) than when they use less interactive measures such as didactic lectures and distributing print materials alone.[20] If private reports are designed and disseminated in ways that encourage physician engagement and interactive use, they have the potential to occupy a "sweet spot" on the interactivity continuum that influences intervention effectiveness.

Our case study in Cincinnati reinforces the value of using physician feedback reports as a tool for quality improvement. Practices participating in the diabetes collaborative sponsored by the Health Collaborative submit monthly uploads of data to the physician dashboard portal for a sample of patients, and the private dashboard displays run charts as well as scatter plot charts for each measure at the practice site level. Physicians participating in the diabetes collaborative expressed enthusiasm for the process of identifying and testing process improvement methods:

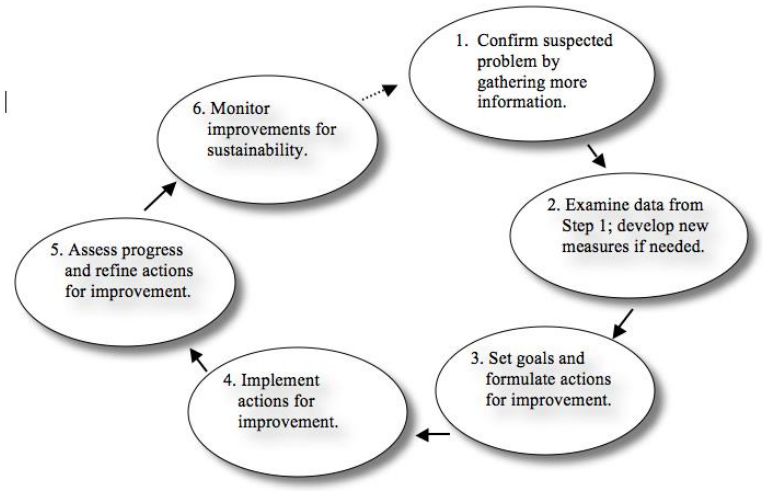
> *"It's not just the numbers; it's the interaction. It [the learning collaborative] brings us together in a different spirit."*

"Internal benchmarking is certainly useful but if we are only looking at potential for improvement in isolation, we're not challenged by what another practice might be demonstrating or trending or making a major improvement. So we benefit from that competition on one level and then certainly, more altruistically, what we can learn from each other."

—Cincinnati Physicians

Because the goals of private reporting involve identifying specific ways in which practices need to be changed and supporting those changes by providing useful information, private reporting should always be designed and refined with those goals in mind. It is helpful to consider the role that private feedback reporting can play in a six-step Plan-Do-Study-Act (PDSA) cycle (Institute for Healthcare Improvement).

Figure 2. Plan-Do-Study-Act (PDSA) Cycle



As shown in Figure 2 above,[21] the six-step PDSA cycle applied to the use of private reports would proceed as follows:

1. Use private reports to flag areas that need improvement, confirming with other data. [Plan]
2. Select performance measures. Develop new ones if needed. [Plan]
3. Set goals for improvement and write an action plan. [Plan]
4. Implement the action plan. [Do]
5. Assess progress and refine the intervention. [Study]
6. Monitor improvements to make sure they stick. [Act]

Performance measurement plays a key role in most of these steps, and private reporting serves both to inform and to motivate the actors who need to design, implement, and monitor the action plan.

13. Evaluate Private Feedback Reports Against Reporting Goals

To ensure continued effectiveness over time, private feedback reports on physician performance, like all reporting tools, should be periodically assessed for their utility to users and their impact in helping to achieve their intended goals. Patient management and quality improvement goals have different foci (the individual patient vs. patients with specific characteristics or a practice as a whole), and the role played by feedback reports for these goals is likely to differ as well. For example, aggregation of data across patients and issues of sample size and comparing across physicians become important for assessing quality at the practice level but not for managing individual patients.

Feedback can be obtained from focus groups and key informant interviews, both of which we used in assessing the Cincinnati Health Collaborative's physician dashboard (see Appendix B). Other methods for monitoring and assessing reporting effectiveness include surveys of users and, for online reports, simple tracking of user registrations and log-in activity, or Web-based tracking programs such as Google Analytics.

Evaluating the effectiveness of private performance reports against the goals of reporting requires going beyond measuring mere use of private reports; it means assessing whether private reports have provided information that has helped physicians to manage patients better or has enabled systems and practices to improve care. Obtaining feedback from users is a critical part of such an evaluation, but so is an ongoing assessment of how reports can be used in new ways to identify opportunities for improved care.

Conclusion

Our literature review, examination of community quality collaborative feedback reports, and indepth case study led us to distill a number of specific recommendations primarily for CVEs and other collaboratives engaged in performance reporting. First, it is critical for report sponsors to engage with the target audience they are attempting to reach, whether public or private, so that they clearly understand their goals and information needs. Sponsors are advised not to skip this step even if they have a general understanding of those goals and needs, since new insights are likely to emerge for all parties through such a discussion.

Once specific goals and needs are established, sponsors can determine which needed information they are in a unique market position to supply. At that point, a reporting strategy can be developed that delivers the needed information accurately and in a timely way, consistent with the guiding principles presented in this resource document:

- Select measures that are perceived as relevant and are actionable.
- Include benchmarks that allow comparison to peers and normative standards.
- Use displays to highlight the most important patterns.
- Provide access to patient-level data.
- Enable physicians to correct patient-level data.
- Use sound methods and make them transparent.
- Update at least quarterly.
- Build in capacity to view performance trends.

- Distribute reports through multiple channels.
- Embed feedback reporting as an integral part of quality improvement.
- Evaluate private feedback reports against reporting goals.

For community collaboratives already engaged in public reporting, moving to private feedback reporting for physicians will generally involve the following:

- Focusing on more granular data.
- Increasing the frequency of reporting.
- Presenting data with lower levels of reliability than public reports, yet with explicit details on levels of confidence.
- Offering the ability to compare subpopulations to test small-scale improvement initiatives.
- Providing greater capability to customize reports.
- Providing methods to help physicians engage in quality improvement.

Finally, as suggested by the Cincinnati example, it may be possible to augment the reporting tool or system itself by developing supportive resources or services that assist report users in applying the information to achieve their goals. Although the specific needs and opportunities for delivering broader services may vary from market to market, collaboratives are likely to find unmet needs in every community. These can form the basis for an expanded business line that can help make the organizations they serve more effective while contributing to the overall sustainability of their own organization.

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Appendix A: Ambulatory Quality Alliance Principles for Reporting to Clinicians and Hospitals

The Ambulatory Quality Alliance (AQA) recognizes that reporting information to clinicians on their respective performance is critical for improving quality and patient safety, as well as for promoting accountability. The following principles are designed to guide the reporting of such information to clinicians and hospitals. These principles reflect the importance of ensuring that clinicians receive valid, reliable, and useful information so they can most effectively assess and improve their performance and meet or exceed agreed-upon targets. They also emphasize the need for physician and other clinician engagement in report design.

Recognizing that consumers, purchasers, and other stakeholders also need better information to enable them to make informed decisions about treatment, coverage, and other matters related to their health care, a separate set of principles has been developed to guide public reports.[1] The principles set forth in this document should be considered in conjunction with these other principles, as well as principles for performance measurement[1] and data sharing and aggregation[1] that the AQA has already endorsed.

Content of Reports

1. Reports should focus on areas that have the greatest opportunities to improve quality by making care safe, timely, effective, efficient, equitable, and patient centered.
2. Reports should rely on standard performance and patient experience measures that meet the AQA Principles for Performance Measurement (e.g., measures should be evidence based, relevant to patient outcomes, and statistically valid and reliable).
3. Reports should include overall composite assessments of individual clinician or group performance, as well as assessments of the individual measures used for the overall composite assessment (e.g., quality or cost of care).
4. Performance data should, when available, reflect trend data over time rather than periodic snapshots to optimize data use for quality improvement. Measures used for trending should be stable (e.g., the data definitions or collection methodology do not change between intervals) unless there is compelling evidence or a justifiable reason not to be.

Transparent Methods

1. Data specifications for reported performance data, such as sample size and methods of data collection and analysis, should be explicit and disclosed to physicians and other clinicians and hospitals.
2. Clinicians whose performance is reported should be able to review and comment on the methodology for data collection and analysis (including risk adjustment). Clinicians and hospitals should be notified in writing in a timely manner of any changes in program requirements and evaluation methods.
3. Report sponsors should also make the performance results available to clinicians for review prior to any public release. To improve the accuracy of reports, mechanisms need to be in place to verify and correct reported data.
4. To the extent possible, results should accurately reflect all services that are accountable in whole or in part for the performance measured. Attribution should be explicit and transparent.

Portrayal of Performance Differences

1. Results of individual clinician or group performance should be displayed relative to peers. Any reported differences between individual providers or groups should include the clinical relevancy of the findings.

Report Design and Testing for Usability

1. Practicing physicians and other clinicians should be actively involved in the design of performance reports.
2. Report formats should be designed to be user friendly and easily understood and should be pilot tested before implementation.
3. Data displays in reports should highlight meaningful and actionable differences in performance.
4. Reports should be continually improved so that they are increasingly effective and evaluated for potential unintended consequences.

Collaboration

1. Clinicians and hospitals should collaborate to share pertinent information in a timely manner that promotes patient safety and quality improvement.

Appendix B: Case Study: The Cincinnati Health Collaborative Physician Dashboard

To gain an indepth understanding of how a CVE-sponsored private report might be enhanced to better meet the needs of community providers, we engaged in a case study project with the Health Collaborative (HC) of Greater Cincinnati aimed at developing recommendations for improving the utility of its private "physician dashboard" report. The case study involved a series of interviews with HC staff that led to a decision to obtain feedback directly from Cincinnati physicians and physician practice quality improvement managers. We sought feedback regarding their needs for performance information reporting, as well as suggestions for improving the content and functionality of HC's current physician dashboard.

The following sections present a brief description of the Collaborative's public and private reporting Web sites, the process we followed for obtaining feedback from Cincinnati physicians and practice leaders, and a summary of our findings and recommendations based on this input.

HC Public and Private Reporting Web Sites

HC is a nonprofit organization founded in 1992 that brings together multiple stakeholders in the Cincinnati region—including physicians, employers, health plans, hospitals, and community groups—to work on collaborative ways to improve the quality of care. A major focus of HC's work has been the development of a public reporting Web site (http://yourhealthmatters.org).

Launched just over 3 years ago, YourHealthMatters (YHM) presents comparative health care quality information regarding the treatment of diabetes (based on the D5 measures) and cardiovascular disease and screening rates for colon cancer. Users can access quality ratings for participating primary care practices related to how well they achieve specific treatment goals with their patients in these three areas.

By emphasizing health goals associated with these conditions, the Collaborative hopes to encourage patients and doctors to work together to achieve better health care results. The Web site also includes educational information about patient experience surveys, and HC plans to add ratings for these and other topics in the future.

The data for YHM come from voluntarily participating medical practices that annually submit the clinical information needed to report these quality measures. Currently, 135 medical practices from 20 medical groups are participating, representing 443 primary care physicians. Participating practices submit medical record data electronically according to detailed submission guidelines through a separate, secure Web site or "data portal." On this secure data portal, participating practices and physicians also can get access to detailed data, called a "physician dashboard," related to the publicly reported measures so they can use this information as a tool for quality improvement.

In addition to the measures publicly reported on YHM, the private portal includes data related to patient body mass index, as well as some additional process measures related to diabetes and cardiovascular disease. These additional measures are submitted to comply with reporting requirements of both the National Committee for Quality Assurance (NCQA) and Bridges to Excellence (BTE) practice recognition programs.

Similar to the data publicly reported on YHM, the private dashboard presents scores for each of these measures at the individual practice site level. However, unlike YHM, data on the private portal also can be viewed either rolled up to the appropriate medical group or system levels, or drilled down to the individual physician level assigned to a given practice site. (Note that scores for individual physicians can be viewed only by users affiliated with the physician's medical group.)

For practices participating in a special diabetes quality improvement collaborative, the private portal displays additional charts and graphs related to practice site performance on the D5 measures. Currently 24 practices are involved in this collaborative, which was initiated as part of a patient-centered medical home project sponsored by the regional health information exchange known as HealthBridge.

Despite the progress made by HealthBridge to create a communitywide infrastructure to support the electronic transfer and collection of health care data, many health systems in Cincinnati still face barriers in using HealthBridge to exchange standardized data. When it became clear that HealthBridge could not support the pooling of data needed for the diabetes improvement collaborative, HC's private portal provided an alternative solution. Practices participating in the diabetes collaborative submit monthly uploads of data to the HC portal for a sample of patients, and the HC private dashboard displays run charts as well as scatter plot charts for each measure at the practice site level.

Process for Obtaining User Feedback on the HC Physician Dashboard

To develop useful recommendations for HC on ways to enhance the current private physician dashboard to better meet the needs of its intended audience, in consultation with HC staff, we decided to seek empirical feedback directly from users. Our process for gathering this feedback consisted of two major steps:

- **Focus groups with physicians.** We conducted two focus groups with primary care physicians (PCPs) recruited from the group of PCPs who participate in the YHM public reporting Web site. Focus group participants included a mix of gender, specialty, years in practice, health system representation, and practice settings.
- **Interviews with quality improvement managers.** In addition to the physician focus groups, HC staff determined that it was important to obtain feedback and perspectives separately from the quality improvement managers of the major health systems. Separate one-on-one conversations with these managers were considered helpful for promoting an open dialogue that might otherwise be constrained by the presence of the physicians they work with or representatives of other health systems in the market. One-hour interviews were held with a representative group of managers responsible for participating in the YHM public reporting process, including the submission of required data through the private portal.

Key Findings

Information Needs of Physicians

Individual physicians expressed the need for information that will help them improve the care they provide to patients. Physicians said that information should be provided at the patient level and indicate which patients need followup reminders to get services they require to manage their conditions. To be useful, such information for managing patient care should also be timely and up to date:

> *"If data are more than 24 hours old, it's old hat at this point."*

A few participants described their access to such information systems within their own organizations:

> *"I have access to a data warehouse and can pull real-time information on my diabetic patients. I can also look up other docs. It's a good tool to be more proactive, to reach out to patients that may be deficient in areas we want to target."*
>
> *"We can see up-to-date information on a patient level. It's very helpful."*

Physicians are also mindful of the need to monitor their performance on selected measures:

> *"I get reports every 3 months on diabetes, cholesterol, hypertension, etc., from corporate. It helps us to know where we stand."*
>
> *"I want my numbers to look good."*

Another key need expressed by physicians is for practical strategies and "best practices" for improving their management of the conditions and topics that are the focus of public reporting:

> *"I've been to many of the steering committee meetings and…the amazing thing to me is the lack of the 'how do we do it better' discussion…how do we improve? That discussion has actually gone backwards, because we've diluted down the measurement goals; for instance, the initial goals for diabetes have been backed off."*
>
> *Where I see this [the HC physician dashboard] being helpful is to be able to see where other practices might be doing better, and then reach out to them and ask, what are you guys doing that's successful? Ideally we could do this systemwide. Use it as a springboard for best practices."*

One physician who participates in the diabetes quality improvement collaborative expressed strong interest in seeing data at the practice level over time. Of note, he was not aware that the HC private portal was the platform supporting this information display:

> *"It is very helpful to see what other sites are doing, then reach out to find out how to improve."*

A major information need not currently being met for any of these physicians is the ability to access patient compliance information when the patient receives care or services outside of their organization:

> *"The one thing that would be helpful, that I hear from my docs, is they want data from other places that their patients go to. We have in our system…only what we have in our system. But if an eye exam was done [someplace outside of our system] we won't have a record of it. Or if we were lucky and we got a report [from that place] then we'd have it. The health plans have a lot of data that we don't have, and we have data they don't have, but never the twain shall meet."*

> *"The biggest obstacle we face is getting data on patients that don't show up. If they have not been in for 12 months, we don't get that information. We need to find the patients who are not there for their appointment."*

These last two comments point out the need for cross-organizational exchange and sharing of data on a population basis. Perspectives on the role of HC in meeting this need are noted below.

Concerns Expressed by Physicians

In addition to identifying specific information needs, focus group participants expressed a variety of concerns related to public reporting and the demands placed on them for complying with internal and external performance goals.

Several physicians expressed frustration over being held accountable for what they view as patient behavior beyond their control:

> *"Why should I get penalized because my patient is obese and noncompliant, when I try as hard as I can to call them back and yell and scream, and their A1c is still at 10 and their blood pressure is still off the wall. This health grading…the whole concept…I just don't get it."*

> *"I know what I should be doing for my patients. Don't tell me what to do with my patients. Tell the patient what they need to do!"*

Concerns were also expressed about the accuracy of the data being reported, in part based on their own experience with the challenges of accurate coding and entry of data on their patients in new electronic medical record (EMR) systems. Other data concerns are related to small numbers and a multitude of factors they perceive as contributing to differences in reported measures that are not attributable to physician performance. These include lack of resources to support patient compliance (e.g., certified diabetes educators), patient characteristics that influence scores, and a shift to mandatory use of generic drugs that requires a long-term process of bringing patients up to speed on medication adherence.

Some physicians complained about not having enough compensated time built into their days to actually understand and use internal information systems. Some are relying on care coordinators to do this work for them.

Other frustrations expressed by physicians relate to the lack of incentives for public reporting and quality improvement and consumer disinterest in the performance measures that are reported:

> *"No one is paying for quality in town. BTE is only paying for diabetes. No patient looks at the YHM site to find out how we're doing, even those who pay a premium to come to [a concierge practice]."*
>
> *"Patients don't understand quality; they may understand service. But even health plans and payers don't pay attention to quality. They are concerned about use and cost."*
>
> *"We need incentives. We are doing this quality reporting now out of the goodness of our heart. What we get paid for is to push patients out the door."*
>
> *"We also need to turn around payment and compensation internally [to focus on quality]."*

Information Needs of Quality Improvement Managers

In addition to supporting the information needs of physicians described above, a major need expressed by quality improvement managers is to be able to respond to external reporting requirements of health plans and certifying organizations such as NCQA and BTE, as well as Centers for Medicare & Medicaid Services meaningful use and Physician Quality Reporting Initiative standards. The other major information need facing these managers is to support internal quality improvement goals related to physician performance.

To meet these internal and external information and reporting needs, most managers are investing substantial amounts of time and resources transitioning to new EMR systems and working with practice site managers and physicians to adjust to new data coding and entry protocols. Although the EMR transition process is challenging, getting physicians to focus on data accuracy in charting has benefits. For example, engaging physicians in the process of correcting data can help invest them in using the information to provide better care:

> *"Getting physicians to verify and clean up the data is a very useful step to take because now you have physician buy-in."*

Many quality managers expressed frustration with the inability of most standard EMR systems to generate the reports they need for both internal and external purposes. Some are purchasing add-on systems to generate needed reports or are working with their information technology (IT) departments to develop customized solutions.

Awareness and Use of the HC Physician Dashboard To Meet Identified Needs

Most physicians are not aware of the physician dashboard and do not personally access the information:

> *"I didn't know we could [access the portal]. I didn't know there was a behind-the-scenes report. There are certain people in our group—IT and quality people—who run the reports and keep us all in check."*
>
> *"Personally, I never have used the site. There are people in the business office that do."*
>
> *"I doubt if any of our docs are accessing the site…to be honest, the only reason I go is to see how we rank against everyone else. I go once a year when we put the data up there."*

Several physician focus group participants commented that there is very little difference between the private dashboard and the public reporting site:

> *"But you don't really have to go into the portal to see that…you can get it from the public Web site…even though I can get a little more detail on the back end [through the portal]."*

Quality managers are all aware of the portal because they use it to upload data for public reporting. Even so, most of the managers were not familiar with the capabilities of the physician dashboard. They all expressed skepticism that their physicians were aware of the dashboard:

> *"I don't think our physicians have logged in to look at their personal stuff; I don't know how much they are encouraged to do that. What they care about is what the public can see [on YHM]."*
>
> *"There's not a reason for individual doctors to look at the portal or their reports; they have no reason to do it when the practice managers are handing them the results."*
>
> *"I don't think they [physicians] are finding value in the portal because we are already giving them the data quarterly, at least on the D5."*
>
> *"The private portal is not viewed by physicians but by administrative staff that pull data from the community to graph comparisons for leadership."*

One of the biggest drawbacks noted about the HC dashboard is the lack of timely and current data:

> *"It's just annual; it's old data."*
>
> *"They [physicians] can't use it for process improvement because they're not gonna wait that long to see if a process is going to improve an outcome."*
>
> *"A one-time snapshot each year is helpful for community comparisons but not for patient management."*

All of the quality managers are using their own internal EMR and related information systems to create the reports they need. Although some systems are more advanced than others in terms of capability and timeliness, even the small, unaffiliated practices have developed reporting systems. Some systems are updated every night and can be accessed in real time to look up complete registries of patients for multiple conditions. More commonly, quality managers are developing monthly or quarterly reports that are shared with practice managers and quality committees and may also be sent directly to physicians as an email attachment.

One current feature of the HC private portal that was widely cited as extremely valuable by quality managers (as well as the few physicians who were aware of it) is the component of the site supporting the diabetes quality improvement project described earlier. The features of this dashboard component that make it especially useful include its monthly updating of measures and the ability of practice sites in one system to view their performance relative to sites in other systems, a capability that no single organization has on its own:

> *"The run charts are great. I want to see trends and drill down to specific D5 components."*

However, to make the HC data portal even more useful, some managers expressed interest in uploading not just a sample of patients manually, but a complete set of records for all patients through their EMRs:

> *"I would rather upload a complete patient census than manually abstract a sample, which is very time consuming. This would need to be EMR driven and would work for all the systems that have EMRs. We could then compare to other practice sites and track for QI purposes."*

Another aspect of the diabetes quality improvement component of the HC portal that was widely praised goes beyond the reporting function itself to the value of the learning collaborative that HC has convened to support practices in identifying and testing process improvement methods:

> *"It's not just the numbers; it's the interaction. It [the learning collaborative] brings us together in a different spirit."*

> *"Internal benchmarking is certainly useful but if we are only looking at potential for improvement in isolation, we're not challenged by what another practice might be demonstrating or trending or making a major improvement. So we benefit from that competition on one level and then certainly, more altruistically, what we can learn from each other."*

Role of HC Moving Forward To Support Physician Information Needs

Given that all practices in the Cincinnati market, whether part of a large health system or unaffiliated as small, independent offices, appear to be meeting most of their performance information and reporting needs on their own, opinions were mixed regarding the future role of HC in this arena.

Most quality managers acknowledged the important foundational role that the HC public and private reporting Web sites played in moving physician practices to focus on their internal reporting systems:

> *"The [HC dashboard] was actually my jumping off point for what I did…as far as what do we want to report…if this data is going on a public Web site, then we need to be looking at it every month and not just once a year when it's time to do the data submission…to be able to anticipate what we're going to be reporting."*

Moving forward, most focus group participants and quality managers expressed skepticism that HC could create a community-level information system that would complement what organizations are doing internally by centrally linking together each EMR:

> *"How can we get this to the community level? I would need to give you data out of my EMR. Clearly that's what I'd love to see happen but knowing the political issues behind it, I struggle to see how that would ever happen. We struggle now to share basic data [through HealthBridge], let alone that level."*

> *"Getting systems on the same platform with their EMRs seems unreal."*

"From the system perspective, the Collaborative needs to go whole hog or get out of the business. Because it [the current HC dashboard] is just not useful. We're all doing something… to do exactly this [what the dashboard does]. They [HC] would have to get us all to agree to put the data in and have one system we use for looking at it, or just don't bother."

"To move things forward, there has to be a commitment to either make it work as a community or to let each system go on its own way. A lot of tension exists among [the health systems]. It's time to say we have an integrated EMR across the community or go our separate ways."

"The Health Collaborative provides value by generating ideas and catalyzing action. Now it's up to us to make this happen in our own systems. This not a sustainable effort [for HC] since you need real-time data and internal operations to support it."

"The idea of a future communitywide data warehouse has some appeal but the downside is that systems will remain competitive and unlikely willing to share all of their EMR data even if technically they can connect."

One area that almost all participants agreed would be a useful value-added function for HC is to provide both the data reports and facilitation expertise to support specific quality improvement projects, modeled after the successful diabetes improvement collaborative.

"We spend too much time pulling the data, not enough time working the data."

"The Collaborative should focus less on being the community database, and focus more on skill building for QI."

"The convening function is a good role for the Collaborative. The diabetes collaborative was a good experience. It could be expanded to other areas."

"Physician practices are notoriously not experienced in any kind of process improvement.

Patients are being called back and examined in office settings exactly as they were 30 years ago…Getting them to change…in the medical home model…or even having office staff working at the top of their licensure to take away some things that physicians don't need to be doing…is not simple. If we want to have them change, we have to have a way to measure and show them the improvement in a pretty rapid period of time."

One final area noted by many participants is the unique ability of HC to provide community-level benchmarks that no single system can create on its own. However, several quality managers noted that such community benchmarks should go beyond the mean or median to include percentile distributions and to provide trend data over time.

Recommendations

Our recommendations for HC were built directly on the very clear and compelling feedback obtained through the physician focus groups and interviews we conducted with quality managers.

Although originally conceived to seek input on ways to improve the design of the HC physician dashboard reports, the comments and perspectives gathered from the target audience for these reports made it clear that the major issue HC faces is not one of report design. Rather, it is a more fundamental set of issues related to the strategic positioning of HC in a rapidly evolving health care information marketplace.

All of the physician practices we spoke with are meeting all or most of their performance information and reporting needs on their own. Moreover, the likelihood of HC building an integrated EMR at the community level for exchanging real-time information needed for improvement appears remote at best. Therefore, we recommended that HC focus its limited resources and unique collaborative role in the Cincinnati market in the following ways:

- **Report the private data needed for specific quality improvement initiatives.** The clear value provided by HC in supporting the diabetes quality improvement project suggests that the private data portal could be used for similar projects, thereby filling an important niche. The current limitations of HealthBridge in meeting the data exchange needs across multiple practices provides an opportunity for HC to fill this role at least in the near future, or to work in concert with HealthBridge to overcome the data exchange constraints that limit the electronic uploading of data needed to monitor progress on a monthly or quarterly basis.
- **Provide enhanced support for the quality improvement activities of participating practices.** It is clear that the requisite experience and skill set for designing and maintaining quality improvement processes within Cincinnati physician practices are in extremely short supply. This is a need that is apparent even within the largest and most technically advanced health systems. We recommended that HC fill an important community need by expanding the current quality improvement consulting, facilitation, and training services they provide to reach a larger number of practices. Such an expanded consulting role could also serve as an important business line for helping to ensure sustainable HC operations.
- **Provide community benchmark data for health systems and practices to import into their internal reporting systems.** Another unique role for HC is to continue creating and disseminating communitywide benchmark data that no single organization can develop on its own. However, it's not clear that a separate physician dashboard is needed to support this function, since the YHM public report includes this information. As noted above, expanding the metrics provided through this benchmarking (to include the full distribution of scores and other helpful comparative statistics) would enhance the value of these community benchmarks even further.

Our interviews and focus groups revealed strong support for HC as an important community resource for facilitating health care improvement among Cincinnati physician practices. By listening closely to the information needs of this key audience and identifying those products and services that HC is in a unique position to supply, we concluded that the Collaborative will be poised to continue providing value for its multiple stakeholders while helping to maintain its own organizational viability.