

# Comparative Performance Data for Critical Access Hospitals

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**ABSTRACT:** *Context:* Among small rural hospitals, there is a growing recognition of the need to measure and report on the use of resources and the safety and quality of the services provided. Dashboards, clinical value compasses, and balanced scorecards are approaches to performance measurement that have been adopted by many health care organizations. However, there exists very little comparative performance data specific for critical access hospitals. *Purpose:* To identify how comparative performance data for critical access hospitals (CPD-CAH) might facilitate performance and quality improvement, to assess the potential benefits and drawbacks of such data, and to identify some of the critical issues in the development and implementation of CPD-CAH. *Methods:* Assessment of discussions by participants at a rural hospital performance improvement summit and authors' analyses. *Findings:* CPD-CAH potentially could improve quality of care and patient outcomes, provide comparative data and benchmarks, inform policy development, facilitate collaboration, and enhance community relations. However, CPD-CAH could also impose an unaffordable cost, produce poor information, require complex coordination, induce a negative public reaction, and result in perverse hospital behavior. Development and implementation of CPD-CAH would require including stakeholders' assessment of its desirability and feasibility, setting objectives, establishing guiding principles, developing a method, collecting and analyzing data, and disseminating results. *Conclusions:* CPD-CAH could significantly advance CAH performance and quality improvement. However, development and implementation would be a complicated exercise requiring academic expertise and practitioner consultation. The potential value of CPD-CAH should be carefully weighed against its potential cost.

These institutions face internal and external challenges, however, that threaten their ability to fulfill this mission. Many small rural hospitals have struggled to remain open in the face of competition, accelerating capital and technical requirements, a dwindling population base, lagging economic growth, disproportionate rates of uninsurance and underinsurance, health professional shortages, and federal reimbursement policies that have disadvantaged smaller, low-volume hospitals.<sup>1-4</sup>

Over the past 4 years, unprecedented attention and resources have been targeted to small rural hospitals as a result of the Medicare Rural Hospital Flexibility Program (hereafter referred to as Flex Program), the Small Hospital Improvement Program, the Delta Initiative, and other federal and state initiatives (Note 1). Many hospitals participating in these programs have needed to strategically reposition themselves within their communities and surrounding markets, particularly those that have chosen to convert to Critical Access Hospital (CAH) status under the Flex Program.<sup>5-9</sup> For some hospitals, this strategic realignment has

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**S**mall rural hospitals are often the sole health care provider in their communities and the only source of care for many rural Medicare and Medicaid beneficiaries, uninsured individuals, and other vulnerable groups.

included adoption of performance measurement systems. While working to ensure their continued survival, many small rural hospitals are also responding to increased pressure from payers, purchasers, and consumers for greater accountability for performance in such key domains as patient safety and quality, costs, and customer service.

Among small rural hospital administrators, there is a growing recognition of the need to measure and report the use of resources and the safety and quality of the services provided.<sup>10</sup> Because no single hospital department or discipline causes poor or excellent performance, many academics and practitioners believe that performance measurement systems must include indicators that, when examined together, provide insights into the overall performance of a health care organization. Balanced scorecards,<sup>11,12</sup> dashboards,<sup>13,14</sup> and clinical value compasses<sup>15-17</sup> are approaches to performance measurement that have been adopted by many health care organizations around the world, including some small rural hospitals.<sup>18</sup> A balanced scorecard is a set of measures that gives top managers a fast but comprehensive view of the business. The balanced scorecard includes financial measures that tell the results of actions already taken. And it complements the financial measures with operational measures on customer satisfaction, internal processes, and the organization's innovation and improvement activities—operational measures that are the drivers of future financial performance.<sup>11(p71)</sup> Dashboard reporting is a natural subset of balanced scorecards and is being increasingly used to keep managers focused on critical areas that will affect overall firm performance. A perfect example is Lucent Technology, which won a Vision Award in 1998 issued by Business Finance for its dashboard reporting system. The mix of 16 financial, operating, and human resources measures is available on-line in a "drill-down" format in which managers can dig deeper if they desire. The system is extremely easy to use and focuses on critical performance drivers.<sup>13(pp30-31)</sup> The clinical value compass, named to reflect its similarity in layout to a directional compass, has at its 4 cardinal points (1) functional status, risk status, and well-being; (2) costs; (3) satisfaction with health care and perceived benefit; and (4) clinical outcomes. To manage and improve the value of health care services, providers will need to measure the value of care for similar patient populations, analyze the internal delivery processes, run tests of changed delivery processes, and determine if these changes lead to better outcomes and lower costs.<sup>15(p243)</sup>

Because the framework and indicators used in institution-specific balanced scorecards, dashboards, clinical value compasses, and other performance

measurement systems will vary across hospitals, the results of these institution-specific efforts are not comparable *across* institutions. Recently there has been interest in the development of comparative data, which would allow multi-institutional performance comparison and possible public reporting. Comparative performance data for specific hospitals is publicly available in a number of jurisdictions: for example, information is routinely published by the Pennsylvania Health Care Cost Containment Council; the Hospital Report Collaborative in Ontario, Canada; and the National Health Service in the UK.<sup>19-21</sup> In these reports, the performance of all or most hospitals in the jurisdiction is compared using a standard conceptual framework and common indicators, data definitions, and reporting processes.

Such efforts are beginning among groups of small, rural hospitals in some regions of the US, but currently the authors are not aware of any routinely available comparative performance data specifically and solely for CAHs. CAHs differ from other small hospitals on a number of dimensions that might affect the appropriate indicators of performance, including differences in Medicare reimbursement, limits on bed size and average length of stay, and relaxed staffing rules.

### **Purpose and Method**

In April 2003, the federal Office of Rural Health Policy sponsored a national summit on rural hospital performance improvement oriented toward CAHs. This paper combines an assessment of those discussions with deliberation by the authors to

1. discuss the rationale for comparative performance data for critical access hospitals (CPD-CAH),
2. assess the potential benefits and drawbacks of CPD-CAH, and
3. identify some of the issues in the development and implementation of CPD-CAH.

The national Rural Hospital Performance Improvement Summit included staff from the federal Office of Rural Health Policy, 39 state Office of Rural Health/Flex Program coordinators, and 16 individuals from other organizations including CAHs, health systems, consulting groups, and universities. The summit included presentations and discussions about performance improvement, practical applications of scorecards, state Flex Program quality/performance improvement initiatives, the use of comparative performance data in balanced scorecards and other performance measurement systems, and how the use of comparative performance data by individual hospitals

or networks of hospitals might be extended regionally or nationally. Although the summit generally focused on CAHs, most potential benefits and drawbacks of CPD-CAH are also relevant for a broader group of small rural hospitals, CAH and non-CAH alike.

**Rationale for Comparative Performance Data for Critical Access Hospitals.** The basic premise of most performance measurement systems is that financial measures alone are insufficient for measuring the performance of complex organizations. For example, the clinical value compass includes 4 points: (1) functional status, risk status, and well-being; (2) costs; (3) satisfaction with health care and perceived benefit; and (4) clinical outcomes.<sup>15</sup> The balanced scorecard includes 4 perspectives: (1) financial, (2) customer, (3) internal process, and 4) learning and growth.<sup>11,12</sup> Thus the design and content of these performance measurement systems include a combination of financial and nonfinancial dimensions and measures.

Like all hospitals, CAHs must manage in a rapidly changing environment that presents many challenges and they face additional challenges because of their small size and proportionally higher variability in demand for their services and cost per case.<sup>22-24</sup> Performance measurement systems are particularly valuable tools to strategically reposition organizations that must manage in turbulent times and markets. CPD-CAH could leverage the benefits of performance measurement by providing the data for hospital networks and others to develop a consistent and methodologically sound method of comparing performance with other similar institutions.

When performance measurement systems are implemented at an individual institution, the indicators and data collected are specific to that hospital's identified needs and data capabilities. Although developing an institution-specific performance measurement system ensures that all included elements are meaningful and that the data are or will be available, the resulting information is not necessarily comparable across institutions. CPD-CAH would use a standard conceptual framework and common indicators, data definitions, and collection processes to report performance measures for participating hospitals in a defined geographic area. Such a system would allow CAHs to meaningfully compare their performance with other institutions that face similar operating conditions (cross-sectional analysis) and over time (longitudinal analysis). To enable comparisons of performance among hospitals, the data could be reported for peer groups or adjusted for variations in case mix, size, ownership, church-affiliation, geographic location, and other factors.

Comparative performance data could be used as

reference points, benchmarks, or performance standards in CAH-balanced scorecards, dashboards, clinical value compasses, and other performance measurement systems. Cleverley states that comparative data are a crucial ingredient to the success of any dashboard reporting system: "Ideally, a business would like some comparative reference points. How am I doing with respect to similar firms in my industry? How am I doing relative to my primary competitors?"<sup>13(p34)</sup> Similarly, Nelson et al<sup>16</sup> used comparative performance data in the application of the clinical value compass. By identifying gaps between delivery processes and the best results among similar organizations, comparative data can "play an integral role in clinical improvement work and can stimulate wise clinical changes and promote measured improvements in quality and value."<sup>16(p599)</sup>

In addition to their potential value for enabling CAHs to assess their performance and to adjust clinical, service, and management strategies, comparative performance data could offer CAHs the opportunity to publicly demonstrate their performance in a marketplace that is increasingly demanding such information. Such a system could conceivably provide useful data that state and federal policymakers could use to target current and future performance improvement interventions and resources through grants programs such as the Flex Program and Medicare payment policies.<sup>25,26</sup>

The potential benefits of comparative performance data have encouraged individual hospitals and groups of hospitals to explore their use. Regional initiatives are under development with rural hospitals in the Mississippi Delta region and in various states in the Midwest. It is important in the development of CPD-CAH to be aware of these efforts, to learn from their experience, and to create a system that could be integrated with these initiatives to avoid imposing an unnecessary burden on CAHs. The goal of a CPD-CAH would not be to supplant these efforts but to build upon them.

**Potential Benefits of Comparative Performance Data for Critical Access Hospitals.** Participants at the summit identified a number of potential benefits of CPD-CAH (the Table). These include the following items.

***Improved Quality of Care and Patient***

***Outcomes.*** CPD-CAH could improve quality of care and patient outcomes in a number of ways. First, the existence of comparative data would exert internal and external pressure on hospital administrators and clinical staff to improve performance and focus the attention of hospital boards on quality of care and patient outcomes. CPD-CAH would also support quality improvement

**Potential Benefits and Drawbacks of Comparative Performance Data for Critical Access Hospitals**

Potential Benefits	Potential Drawbacks
Improved quality of care and patient outcomes	Scarce resources and cost
Comparative data and benchmarks	Poor information and data quality
Information for policy development	Complex coordination effort
Facilitation of collaboration	Negative public perception and reaction
Enhanced community relations	Perverse hospital behavior and use

efforts by helping hospitals, purchasers, and others to better understand practice variations and reduce medical errors, as well as to facilitate decisions about provision of low-volume services, based on quality of care. Thinking beyond individual institutions toward a broader view of hospital performance would also be encouraged. With information provided by higher performing hospitals, clinical performance could be improved through the sharing of projects and lessons learned, best practices defined within a CAH context could be identified and adopted, and tools and programs could be developed. CPD-CAH would also facilitate adoption of quality improvement initiatives that have measurable parameters. Finally, improved quality of care and patient outcomes could lead to improved financial performance and more cost-effective care, as poor quality is often more expensive than “doing it right the first time.”

**Comparative Data and Benchmarks.** CPD-CAH could provide extensive comparative data about CAHs by using measures chosen specifically because of their relevance to these facilities. Although the ultimate value of comparative data is to improve performance, there is a need for comparative data for its own sake to better understand the causes of variations in hospital performance and to establish benchmarks specifically for CAHs. Most comparative data that are currently available include larger hospitals and are not that useful to smaller facilities.

Through CPD-CAH, standardization of data reporting, indicator definitions, and performance measurement would be possible. This would encourage a common performance framework and terminology and make appropriate comparisons more likely. Furthermore, CAH-specific standards would be more relevant and likely to be used. For example, because of low patient volume CAH occupancy rates tend to be

lower than those of large urban hospitals, and performance standards should reflect this difference.

CPD-CAH could assist hospital staff to be more proactive instead of reactive. Often the existence of a problem is not known until some extraordinary event clearly identifies it. Benchmarks would help in the identification of practice variations before problems develop.

Finally, although in some states there is movement toward establishing comparative performance data-bases, many states do not have a sufficient number of CAHs. CPD-CAH would create a large number of hospitals on which to establish benchmarks.

**Information for Policy Development.** CPD-CAH would be of value in the policy process, providing state Flex Program coordinators with better information to help them target future funds to areas of highest need and priority, coordinate scarce resources, develop state policy, liaise with hospital associations, and advocate for national policy. CPD-CAH would also augment information from other systems, such as those used by the Centers for Medicare and Medicaid Services, and provide regional data to support state and federal initiatives.

**Facilitation of Collaboration.** CPD-CAH could facilitate regional collaboration among hospitals and between hospitals and other providers. Although many CAHs network with other hospitals, they often do not have the resources to identify areas of regional need, duplications in service, or system problems. CPD-CAH would be a significant resource to organizations that want to manage health care on a regional basis, such as rural health networks. Recently, regionalization has attracted more attention, and a performance measurement system for a region could find a receptive audience among decision-makers. Data could be used to link the performance of a group of CAHs in a region to their referral hospital. CPD-CAH may also facilitate collaboration with academic institutions in program development.

In particular, CPD-CAH would provide clinicians with meaningful comparative indicators that are valid for CAHs.

**Enhanced Community Relations.** Public disclosure of CPD-CAH information could provide an opportunity for CAHs to improve their image with the community. It could be used to better explain the role of small hospitals in the community and to communicate with the people served by the CAH.

**Potential Drawbacks of Comparative Performance Data for Critical Access Hospitals.** The Table presents the potential drawbacks of CPD-CAH

identified by summit participants. These include the following items.

**Scarce Resources and Cost.** The resources required to collect and submit data for CPD-CAH could be substantial. Given the limited financial resources of most CAHs, producing the funds for the information systems, patient satisfaction surveys, and other information needs of CPD-CAH would be a challenge. The initial costs and ongoing information needs may be unaffordable for some CAHs, particularly if the information is not linked to existing survey and certification processes.

The information technology and systems staff in CAHs is typically much less extensive than in large hospitals. It is questionable whether most CAHs would have the breadth and depth of systems required to produce information for CPD-CAH. In addition, CPD-CAH would involve a steep learning curve for many hospital boards, managers, and clinicians. Substantive education about how to interpret and use CPD-CAH would be required.

**Poor Information and Data Quality.** Collecting complete, accurate, and relevant data is a second major potential cost. Inconsistent collection of data, small patient numbers, Health Insurance Portability and Accountability Act (HIPAA) obstacles, and patient confidentiality restrictions are also potential data problems.

Risk adjustment of clinical data is still a developing science (and art), and not much of this type of research has focused on small rural hospitals. Similarly, appropriate peer groups for financial comparison may be difficult to identify. The complicated and imprecise nature of risk adjustment and peer groups would require research to determine strategies and methods appropriate for CAHs to ensure that (1) the information needs are within their financial means, (2) existing methods are not simply applied without revision for these hospitals, and (3) methods reflect the diversity of hospital service environments. For example, interpretation of the comparative performance data may require understanding variations in population unemployment, average age, or specific morbidity.

Finally, selection of inappropriate performance benchmarks is a potential problem, particularly if values for large hospitals were used as the basis of comparison. For example, CAHs have different payer mixes and cost structures in comparison to large hospitals and small hospitals that are not CAHs, which may require different performance benchmarks.

**Complex Coordination Effort.** The many facets of CPD-CAH would make project management a challenge, including multiple stakeholders with diverse interests and the need for standardization of data needs

and definitions. Identification of accountabilities and responsibilities and the provision of technical assistance across a wide range of multi-disciplinary skills would be essential.

**Negative Public Perception and Reaction.** CPD-CAH could be interpreted by the public as punitive, rather than as a tool for performance and quality improvement. Some CAHs would be threatened if CPD-CAH exposed “bad practices” to public scrutiny in a way that hindered hospitals’ ability to make the necessary improvements. The result could be loss of jobs and local political fallout.

**Perverse Hospital Behavior and Use.** Concern for poor results could generate gaming of the system through data manipulation or nonreporting of data. CPD-CAH could encourage “managing the indicators” and not the organization, whereby managers focus on activities that will improve indicators at the expense of other activities that are not measured.

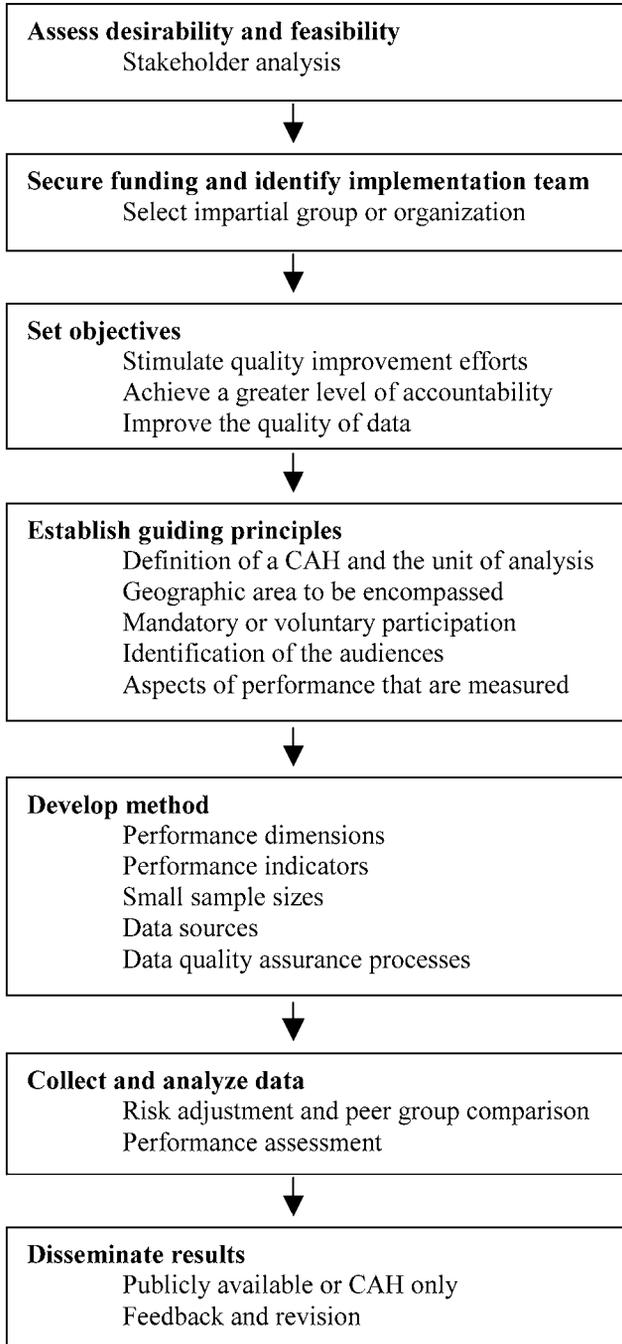
## Discussion

**Development and Implementation of Comparative Performance Data for Critical Access Hospitals.** A potential process for development and implementation of comparative performance data for Critical Access Hospitals is shown in the Figure.

**Assess Desirability and Feasibility.** The first step in the development of CPD-CAH would be to assess the desirability of such a system to stakeholders and to decide if, on balance, the benefits presented by CPD-CAH outweigh the drawbacks. If CPD-CAH is deemed to be desirable, stakeholders would need to decide if CAHs have the required resources to provide necessary information, and whether physicians, nurses, and other staff in these institutions would be supportive.

**Secure Funding and Identify an Implementation Team.** If the stakeholder analysis considers CPD-CAH to be desirable and feasible, the next question that would need to be answered is, “Who would develop and implement CPD-CAH and how would it be paid for?” Creation of comparative performance data for hundreds of hospitals is a complex process requiring more sophisticated research methods and analyses than creation of performance data for a single organization. Furthermore, in order for CPD-CAH to have credibility among participating hospitals and other users, it should be developed by a group or organization that is perceived to be impartial and objective. Organizations such as the federal Office of Rural Health Policy, the National Rural Health Association, the American Hospital Association, the Center for Medicare and Medicaid Services, and some consultants and university-based research centers have a national perspective and may

**Process for Development and Implementation of Comparative Performance Data for Critical Access Hospitals.**



qualify as neutral, impartial, and credible candidates to fill this role. A CPD-CAH unit could be established in 1 of these organizations with funding from government, foundations, and/or CAHs themselves.

**Set Objectives.** Stakeholders would need to decide on objectives that reflect the expected outcomes. Possible objectives might be the following:

- Stimulate quality improvement efforts: Dissemination of performance measures would allow the identification of high performers and promote the adoption of best practices and knowledge transfer.
- Achieve a greater level of accountability: Publication of CPD-CAH would allow the public and others to assess the performance of CAHs in comparison with other CAHs.
- Improve the quality of data: CAHs rely on a wide variety of data to make management and clinical decisions. It would be imperative that comparative performance data are accurate and collected in a consistent manner. By publishing comparable data from a large number of CAHs, managers and clinicians would have an opportunity to review the data, to identify reporting variations, and to implement remedial measures to improve data quality.

**Establish Guiding Principles.** Because there are many different interests involved, it would be important early in the process for stakeholders to establish principles to govern the development of CPD-CAH, such as the following:

- Definition of a CAH and the unit of analysis: CAHs have a variety of organizational structures. In some cases, these hospitals are single legal entities and in other cases they are part of rural health networks or alliances that have many forms of shared services, management, and governance structures. Some hospitals are a part of larger organizations that have other acute care and long-term care sites. For which entities would CPD-CAH be produced?
- Geographic area to be encompassed: CPD-CAH could include hospitals from particular regions, states, or the country as a whole. CPD-CAH for all CAHs in the country may be unrealistic if heterogeneity across hospitals is extreme; however, CPD-CAH for every state would probably be an unnecessarily fine level of aggregation and would sacrifice some of the value of a comparative database.
- Mandatory or voluntary participation: Although disclosure of various types of hospital-specific information is already mandatory and could be analyzed without permission, other types of information would require consent and cooperation. Initially, voluntary participation would produce greater commitment and cooperation.
- Identification of the audiences: Hospital boards and management are typically the primary users of performance measurement systems. However, a number of other audiences also have an interest in the

performance of CAHs (eg, government, insurers, employers, the various health care professionals and the public). The types of data and the level of detail required vary with the audience, and no practical CPD-CAH could completely meet the needs of all audiences. The specific audiences and users of CPD-CAH should be identified early in the development process.

- Aspects of performance that are measured: To be most relevant to hospitals, CPD-CAH should be grounded in the real world and measure performance that is important to hospitals, physicians, and their communities. CPD-CAH may also include information that could assist in analysis of research issues (relating to quality and outcomes, for example) that have practical implications for small hospitals.

**Develop a Method.** CPD-CAH should be grounded in a conceptual framework and use rigorous analytical techniques and methods. A CPD-CAH database with extensive information about the financial, clinical, and other dimensions of CAH performance would present numerous methodological issues.

The need for transparency in methods and support for the findings would likely require a CPD-CAH development team to engage stakeholders in an extensive consultative process. A CPD-CAH advisory committee of senior hospital managers, clinicians, and others could provide practical advice to the development team. Subcommittees could provide focused technical support and feedback to researchers working in each of the performance dimensions. Committee membership should reflect the needs of the dimension. For example, a committee for clinical performance should include primarily physicians, nurses, and other clinicians. A committee for financial performance should include chief executive officers and chief financial officers.

In some rural areas, hospitals are the de facto health care system, and in other areas they are important but not the sole providers of health care. In both cases, it may be difficult (and undesirable) to measure hospital performance in isolation. This raises the question of how and whom to involve in CPD-CAH development from the communities that CAHs serve.

Methodological issues that stakeholders and developers of CPD-CAH would need to address include the following:

- Performance dimensions: At the facility level, many performance measurement systems include a mix of financial, clinical, and patient satisfaction performance dimensions. However, moving to CPD-CAH would require selection of performance dimensions that are

relevant to most CAHs, which is challenging because of their inherent variability. A careful process would be required to ensure that the comparative performance data are relevant to most CAHs and reflects important aspects of their performance.

- Performance indicators: Literature reviews would be an obvious first step in identifying relevant performance dimensions for small hospitals. At a minimum, indicators should be selected using criteria such as (1) scientific soundness—each indicator should be reliable (repeated measures of the indicator produce the same result) and valid (the indicator measures the characteristic under review); (2) relevance—each indicator should be considered useful to the users; and (3) feasibility—each indicator should be available for a reasonable cost. In addition, extensive work around the definition of specific indicators may be necessary. For example, the definitions of many commonly cited financial ratios vary by textbook, and it would be important to obtain consensus on what exactly is meant by each. Comprehensiveness and conciseness are opposing forces that influence the indicator selection process. A simple rule such as restriction of the number of indicators in each performance dimension to 10 or fewer is 1 approach. An iterative indicator selection process would be required because initial indicators may have unforeseen data quality or implementation problems.
- Small sample sizes: Some CAHs may not treat a sufficiently large number of specific patient types to ensure statistical validity. For example, if patient satisfaction is included in CPD-CAH, total monthly inpatient discharges may also be less than the number of patients required to generate a valid and comparable sample. This may be addressed by expanding sampling time frames or by the use of moving averages.
- Data sources: Data used in each performance dimension would vary by source, method of collection, and time period. Many types of financial and clinical data are routinely collected and reported to a third party. However, primary data collection would be required if (1) some routinely collected data did not conform to the specified data definitions, formats, and time frames; and (2) a performance dimension such as patient satisfaction was included in CPD-CAH.
- Data quality assurance processes: Recent clinical data quality studies have revealed evidence of variations in coding patient diagnoses and procedures.<sup>27</sup> Interhospital variations in financial reporting have also been identified. CPD-CAH would require a comprehensive and systematic data-quality monitoring program to ensure that performance

variations are true practice differences and not reporting differences.

**Collect and Analyze Data.** Based on a standard conceptual framework and common indicators, data definitions, and reporting processes, comparative performance data could be produced and analyzed, including the following:

- Risk adjustment and peer group comparison: CAHs vary along a number of dimensions including case mix, facility size, ownership, service mix, geographic location, and payer mix. To ensure valid comparisons across facilities, appropriate data adjustment must occur. Variation in case mix may make risk adjustment necessary for clinical performance indicators. Different payer mixes and cost structures among CAHs of different size, network affiliation, ownership, and so on may make creation of peer groups necessary for comparative financial reporting. Patient satisfaction is also known to vary by clinical program<sup>20</sup>; therefore, it may be important to control for service mix.
- Performance assessment: It is not easy to translate information about specific hospitals into performance scores. For many types of hospital performance there are no accepted benchmarks or standards that define the “best” or “right” value. Some options for performance assessment would be simple reporting of raw indicator values, standardized indicator values, or assignment of hospitals to different performance groups. In addition, the methods of performance assessment will vary by performance dimension because the data have different characteristics. Statistical rules appropriate to the data and sample sizes will be required. In general, the statistical issues and political complexities of defining the parameters of good and poor performance cannot be understated. Until absolute definitions of performance are available, the best strategy may be to emphasize continuous improvement.

**Disseminate Results.** Stakeholders must decide whether CPD-CAH would be publicly available. An approach that is likely to be preferred by hospitals is a gradual one. In the beginning, performance results could be confidential in order to allow hospitals to assess indicator validity, identify data quality problems, and become familiar with the intent and output of CPD-CAH. In later years, results could be made public. High-performing hospitals would be identifiable and could provide excellent learning opportunities for quality improvement. Low-performing hospitals would be able to identify areas for investigation and potential improvement. In any case, continuous feedback from CAHs about the face validity, relevance, and usefulness of CPD-CAH, as well as data quality

issues, would be an essential part of the development process.

## Conclusion

CPD-CAH would be a significant advance in supporting small hospital performance and quality improvement. The disclosure of valid performance information that hospitals deem important would provide practical improvement tools and allow hospitals to learn from one another through best practices and benchmarking techniques. However, development of CPD-CAH would be a significant exercise requiring identification of a funding source and an implementation team with technical research expertise and the ability to consult with a wide audience of hospitals, practitioners, communities, and others. The success of CPD-CAH will depend on the adequacy of the development process and the extent to which issues and concerns are addressed.

## Notes

1. In 1997, the Rural Hospital Flexibility Program was created by Congress to enable small hospitals that meet specific designation criteria to convert to an alternative licensure status as a critical access hospital (CAH). CAH designation gives very small, rural hospitals greater flexibility for providing emergency, outpatient, and short-stay inpatient services and provides Medicare (and in some states, Medicaid) reimbursement on a reasonable cost basis (see Rural Hospital Flexibility Program National Tracking Team<sup>28</sup>). As of March 2004, 891 CAHs had been licensed. For a good discussion of the implications of CAH status, see Christiansen.<sup>29,30</sup> The Delta Initiative is a 3-year federally funded project for hospital performance improvement and a rural development network in Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

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