SECTION 1: EVIDENCE-BASED QUALITY IMPROVEMENT, PRINCIPLES, AND PERSPECTIVES

Using Employer Purchasing Power to Improve the Quality of Perinatal Care

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ABSTRACT. Large employers have become increasingly involved in helping to set the agenda for quality measurement and improvement. Moreover, they are beginning to hold health care organizations accountable for their performance through marketplace incentives, including the public reporting of comparative quality data and the linkage of reimbursement to performance on quality measures. The Pacific Business Group on Health (PBGH) is an employer coalition that has been prominent in establishing models for collaborative quality measurement and improvement in the California marketplace.

PBGH's involvement in quality stems from an environment in which purchasers were faced with high health care costs, yet virtually no information with which to assess the value their employees received from that care. Research indicating widespread variation in performance across health care organizations and seemingly limited oversight for quality of care within the industry has further motivated purchasers' efforts to better understand the quality of care being delivered to their employees.

Using the purchasing power of employers representing 2.5-million covered lives, PBGH endeavors to encourage the transition of the health care marketplace from one that competes solely on price to one that competes on price and quality. This entails collaborating with the health care industry to develop and publicly report valid performance data for use by both large employers and consumers of health care services. It also includes communicating to the marketplace purchasers' commitment to making purchasing decisions based on quality as well as cost. PBGH efforts to measure, report, and improve quality have been demonstrated by several undertakings in the perinatal care arena, including research to assess cesarean section rates and newborn readmission rates across California hospitals. Pediatrics 1999;103:248–254; employer coalition, purchaser, quality measurement, quality improvement, report cards, perinatal quality of care.

ABBREVIATIONS. PBGH, Pacific Business Group on Health; HMO, health maintenance organization; CPQCC, California Perinatal Quality Care Collaborative; CQI, continuous quality improvement; HEDIS, Health Plan Employer Data and Information Set; CCHRI, California Cooperative Health Care Reporting Initiative; CALINX, California Information Exchange.

The last 15 years have seen sweeping changes in the way that health care is delivered in the United States. In the traditional fee-for-service model, determinations about the type and amount of care delivered were dictated almost exclusively by physicians. With the advent of managed care in the 1980s and 1990s, the nation saw health plans broaden their traditional health care financing role to become increasingly involved in decision-making around the delivery of that care.

Closely tied to the growth of managed care health plans is the influence of the health care purchasing community. Purchasers are those public and private-sector entities that buy health care benefits for groups of individuals, and may range in size from a small business providing health insurance for as few as two employees, to the California Public Employee Retiree System, which purchases health care benefits for more than one million former California state employees and their dependents.

Large purchasers are widely seen as the catalyst behind the growth of the managed care system during the last decade, when skyrocketing health care costs led employers to encourage employee movement into managed care plans. As a result, the United States has seen managed care enrollment grow from 9.1 million people in 1980 to 67.5 million people in 1996, a 642% increase throughout a 15-year period.

Few would debate that managed care has been a success with regard to controlling health care costs. However, research conducted to date comparing the care received by managed care patients versus that received by fee-for-service patients has shown mixed results with regard to quality. Furthermore, while employers have welcomed the slowdown in the rate of health care cost increases instigated by managed care, they continue to spend in excess of $200 billion a year on health care benefits for their employees. The high cost of insurance premiums has motivated purchasers to direct attention to the value they receive from that purchase. Increasingly, purchasers have begun to demand greater accountability for the quality of health care that is being delivered to their workers, from physicians as well as health plans. The goal of this article is to present the rationale for increased purchaser involvement in quality assessment and improvement and describe one employer...
The Rationale for a California Purchasing Coalition’s
Involvement in Quality

The Pacific Business Group on Health (PBGH) is a California-based employer coalition composed of 35 California employers, each buying benefits for a minimum of 2000 employees, retirees, and dependents. Current members include the Bank of America, Hewlett-Packard, Lockheed Martin, and General Electric. Collectively, PBGH members represent 2.5 million covered lives and $3 billion in annual health care expenditures. PBGH member companies have organized to use their combined purchasing power to improve the quality of health care while moderating its costs. Like any savvy consumer buying a high-end product, health care purchasers endeavor to obtain the best value for their health care dollar. Value has been broadly defined by PBGH members as the ratio of the quality of health care, as measured by patient satisfaction and health outcomes, to the cost of that care.

PBGH has achieved some measure of success in reducing the cost component of that ratio, or the amount that PBGH Negotiating Alliance members pay for health care premiums. Via collective negotiations with California health maintenance organizations (HMOs) between 1994 and 1998, the employers participating in the PBGH Negotiating Alliance rolled premiums back by 12.8%, saving participating employers a sum that has been conservatively estimated as more than $36 million. The results of these collective negotiations demonstrated the strength of multiple large employers negotiating en masse.

PBGH has similarly begun to apply their skills in collective persuasion to the quality arena. Historically, large corporations rarely considered demanding documentation of performance when making health care purchasing decisions. In an environment in which strong corporate financial performance allowed for generous benefit packages and the United States health care system was widely touted as best in the world, there seemed to be no need to present evidence of high quality care. In fact, there was no scientific knowledge of how well the health care system was actually performing, either within or outside of the industry. Only when concerns about quality shortfalls began to be publicized did purchasers begin to take a more active role in demanding evidence of quality.

Along with other health care industry watchers, employers took notice of the growing body of research presenting evidence of variation in the health care received by Americans. Purchaser attention was drawn to John Wennberg’s small area studies demonstrating substantial differences in the rate of procedures and treatments performed from region to region. This variation raised concerns about the performance of unnecessary procedures, many of which were not only costly, but had the potential to pose additional risks to patient health. In the 1984 Health Affairs article that alerted the policy and employer communities to his studies, Wennberg stated that “...the type of medical service provided is often found to be as strongly influenced by subjective factors related to the attitudes of individual physicians as by science.”

Further research provided evidence that variation in use of services continued to exist when assessing patterns of care across patients having the same indications for treatment and when controlling for patient characteristics and comorbidities. Health services research has now progressed to the point where there is clear evidence linking certain processes of care and the outcomes of that care. Measurement activities assessing the frequency with which these recommended processes are performed, or not performed, have also demonstrated widespread variation in the use of services designed to maximize patient outcomes. As researchers have begun to produce more studies comparing, on a risk-adjusted basis, the actual outcomes of care, further evidence of substantial differences in quality of care has emerged—differences that may have significant implications for the health status of patients.

Employer involvement in quality assessment has been further fueled by the increasing recognition of how thinly quality management has been supported by the health care industry. Health plans, fee-for-service, and managed care alike have been unable to assess the quality of care being provided to their members. This is substantially rooted in the failure of the health care industry to develop clinical information systems. Although the United States has seen the development of sophisticated information systems for the tracking and management of financial transactions, manufacturing inventories, and even the delivery of overnight mail, there has been little corresponding investment in information management systems by health care organizations. The establishment of data systems to track, in a manner that provides safeguards for patient confidentiality, the services delivered to patients, is vital for ensuring appropriate patient management and the continuous evaluation of the quality of care being provided by doctors, medical groups, and hospitals.

Weaknesses in ascertainment and management of quality are echoed by a poverty of health plan collaboration in quality management with providers. As health plans in California have begun to delegate greater degrees of financial risk to physician groups and hospitals, financial and clinical decision-making are increasingly taking place at the provider level. Furthermore, the financial incentives being instituted, by both health plans and medical groups, have been perceived as potentially leading to the underutilization of health care services—a situation that may result in substandard patient outcomes. In this environment, efforts to assess, manage, and improve quality of care require the establishment of collaborative working arrangements between HMOs and the provider groups with which they contract. However, in a 1998 PBGH survey of 150 California physician groups, the groups reported collaborative HMO initiatives to improve quality of care around specific clinical conditions in fewer than 30% of the HMO contracts. Furthermore, the effectiveness of the
HMO quality improvement initiatives that were undertaken was regarded as excellent or good by only 11% of contracting groups, whereas almost 60% of contracting groups considered the programs’ effectiveness to be poor or very poor.7

These findings highlight the importance of purchaser involvement, and pressure, in signaling the health care industry that purchasing decisions will be based on quality as well as cost. The challenge to communicating this message through action lies in the limited supply of comparative performance data with which to assess, in a scientifically sound manner, the quality of care provided by physicians, hospitals, and plans.

PBGH sees its role as collaborating with the health care industry to facilitate a movement toward a market-based model for purchasing health care. The underlying tenets of our quality initiatives are to measure plans and providers on methodologically-sound performance criteria, share the results of those comparative measurement activities with the health care entities involved, and provide appropriate incentives for those organizations to act to demonstrative improvement in those areas.

Assessing Quality Through Comparative Performance Measurement

To rectify the poverty in quality of care information, PBGH has chosen to focus a significant portion of its quality resources on the review of perinatal services. The rationale for this lies in the demographic makeup of the PBGH employers’ populations. In 1997, more than half of the PBGH companies’ workforce was female. Among these women, 70% were of childbearing age. For many companies, health care services for pregnancy and childbirth are among the most commonly sought services in the employee population, and also the most costly. A Georgia State University study reported on in Business and Health8 found that poor birth outcomes cost employers and employees 5.6 billion dollars, an amount estimated as ~3% of aggregate after tax corporate profits in 1990.

The earliest PBGH involvement in perinatal quality measurement took place in 1989. At that time, the Maternal and Child Health Database—developed by Ronald Williams9 of the University of California at Santa Barbara for the California Department of Health Services—provided data on risk-adjusted perinatal mortality rates for each California hospital with deliveries and identified those hospitals that had statistically significantly higher, or lower than average mortality rates for newborns. PBGH used these data to initiate a dialogue with those hospitals deemed as outliers. Facilities with lower than expected risk-adjusted perinatal mortality rates were congratulated for their better than average performance, whereas those hospitals with higher than expected newborn mortality rates were asked to review their practices around newborn quality of care. The initial purchaser foray into quality measurement was characterized by collaboration with the research community and communication with the hospitals for whom there was comparative performance data.

Demonstrating to hospitals the purchaser interest in outcomes around perinatal health was a first step in signaling the market that purchasers were not only taking note of quality information in the California marketplace, but also planned to hold providers accountable for their outcomes.

PBGH’s next quality measurement project targeted cesarean section rates for study. Cesarean section was identified as a procedure that varied widely across geographies without corresponding evidence of differences in clinical outcomes. Furthermore, the quadrupling of cesarean section use between 1960 and 1990 had raised concerns about the appropriate-ness of cesarean section utilization.10 Magnifying those concerns was the dramatic variation in cesarean section rates noted for a variety of nonclinical factors, particularly hospital ownership and patient source of payment.11–14 An initial analysis of 1987 statewide data by Randall Stafford, MD, of the University of California–Berkeley had indicated both hospital-to-hospital and regional variations in California cesarean section rates.

In collaboration with Dr Stafford, PBGH initiated a review of cesarean section use for privately-insured deliveries in the San Francisco Bay Area in 1989. The data for that year showed an overall cesarean section rate in Bay Area hospitals of 24.8%. For privately-insured deliveries, hospital cesarean section rates ranged from 13.6% to 44.4%, a ratio of 2.8 between the lowest and the highest rates. After adjusting for the role of clinical complexity in these variations, the ratio of highest to lowest hospital cesarean section rates was still 2.7. Variation of this magnitude, that is unexplained by differences in severity, provided indications that cesarean sections were being performed unnecessarily in California and demonstrated the potential for reductions in cesarean section rates.

After data analysis, PBGH engaged in follow-up with the 10 hospitals with higher than expected risk-adjusted cesarean section use, and a discussion was initiated concerning the facilities’ delivery practices. The analysis was repeated in subsequent years using 1992 and 1994 data, and was also expanded to include California hospitals statewide. Follow-up measurement showed a steady decline in cesarean section rates for privately-insured patients, to 23.0% in 1992 and 20.4% in 1994. While a national educational effort was being made to reduce unnecessary cesarean sections during the same period, it is likely that purchaser efforts to disseminate the analyses and notify hospitals of their accountability with regard to use of cesarean sections may have been a factor in motivating changes in practice among California hospitals.

PBGH’s most recently-completed perinatal quality measurement project is a study evaluating the association between newborn discharge timing and rehospitalization rates within the first 28 days of life. Hospital stays for newborns and their mothers after uncomplicated vaginal delivery had decreased from 4 days in 1970 to 2 days in 199215 and to 1.1 days in 1995.16 Despite the lack of population-based research on the quality of care implications of this cost-cutting
This study analyzed the population of healthy newborns in California between 1992 to 1995 to: 1) evaluate trends in early infant discharge and newborn rehospitalization rates in California; 2) assess the impact of early discharge on the risk of infant rehospitalization during the perinatal period; 3) calculate hospital-specific risk-adjusted rates of rehospitalization for newborns within the first 28 days of life; and 4) build scientific evidence to inform initiatives legislating lengths of maternity hospitalization.

The study pointed to significant differences in rehospitalization and early discharge rates across hospitals. Among hospitals with at least 200 deliveries annually, the risk-adjusted rate of rehospitalization ranged from 0 per 1000 to 86 per 1000 healthy newborn births, and the unadjusted rate of same day discharge ranged from 0% to 62% of healthy newborns. The clinical, process, and organizational factors that may help to explain this variation are not clear from this study; further research designed to improve understanding of the reasons behind this variation among hospitals will be required.

Similar to efforts in the cesarean section and perinatal mortality analyses, PBGH disseminated findings from the Newborn Readmissions Study to all hospitals reported on in the study in July 1998. PBGH is an advocate of using scientific evidence to inform health care policies and practices at every level. Given the report’s implications for mandating lengths of stay, PBGH will be taking the additional step of disseminating the results to policy makers. PBGH will also host a symposium to discuss best practices in discharge planning, with an open invitation to all hospitals to attend. With the symposium providing a context, the newborn rehospitalization data can be used to stimulate a dialogue among institutions for sharing best practices in discharge planning—a process that can ultimately lead to statewide improvements in perinatal outcomes.

One limitation of the PBGH measurement activities described above concerns the nature of the data available for conducting risk-adjusted hospital analyses. These research projects were based on hospital discharge and vital statistics data sets collected by the California State Department of Health Services and the California Office of Statewide Health Planning and Development. Although the state currently provides the most comprehensive set of information available for measuring quality of care among hospitals, the data are still limited to those elements that appear on the hospital discharge record and the birth certificate. As such, it lacks clinical patient-level information that may be important predictors of outcome and would allow full risk-adjustment. California Office of Statewide Health Planning and Development data also suffer from a lack of real-time availability; public use data sets are often not available until 2 years after the hospital’s delivery of the service. This issue substantially impedes the application of these data for use in performance measurement. Practice patterns may change between the period in which the service was actually provided and the date in which the data are made available for analysis. This issue of data timing also severely affects the ability of hospitals to gauge their efforts at improving quality.

The quality measurement model for the future is a collaborative project currently being planned under the auspices of the California Perinatal Quality Care Collaborative (CPQCC), of which PBGH is an executive committee member. CPQCC is designed to measure and report out indicators of perinatal quality of care for infants hospitalized in California neonatal intensive care units. Hallmarks of the project include the real-time reporting of data on the outcomes of neonatal intensive care unit newborns; training of medical records staff to ensure consistency in coding practices across hospitals; audits to check the accuracy of the coded record against the medical chart; and a risk-adjustment model based on clinical variables, rather than administrative data. In addition to its goals to collect and report out standardized and audited data on perinatal health care practices and outcomes, CPQCC also has plans to design and implement continuous quality improvement (CQI) initiatives in collaboration with the California Regional Perinatal Programs and the State Department of Maternal and Child Health.

Although hospitals have received the bulk of PBGH attention around perinatal quality, PBGH also collaborates with the major California health plans on data collection and reporting for the Health Plan Employer Data and Information Set (HEDIS), currently the standard in performance indicators for health plans nationwide. California HMOs and PBGH collect and report two HEDIS measures for perinatal care: prenatal care in the first trimester and check-ups after delivery. Two lessons have been learned from the annual HEDIS data collection process.

Historically HEDIS has focused on process measures of care, particularly around preventive care. Although the National Committee for Quality Assurance continues to expand the set of performance measures to include processes of care for chronic conditions and outcomes, these efforts have been hampered by the limited accessibility of patient medical information. The annual HEDIS data collection process has demonstrated the difficulties that health care organizations have in providing evidence of even preventive care service delivery. Although every effort is made to find documentation of patient receipt of services within the administrative database, medical chart review continues to be required in a significant fraction of HEDIS collection efforts. The annual medical record search is both time-consuming and costly and points to the need for improved information systems to document patient care.

The second lesson highlights the difficulty in reducing variation and improving quality of care. The prenatal care rate, which measures the percentage of women documented as receiving prenatal care within the first trimester, has been collected in California since 1993. The 1997 prenatal care rate of 83%
Developing Incentives to Motivate Quality Improvement

Although PBGH’s efforts to assess comparative performance have provided important evidence of the state of quality being delivered by California health care organizations, the purchaser role does not end with measurement activities. PBGH is building a comprehensive set of strategies designed to motivate continuous quality improvement through the application of both price incentives and volume incentives.

Taking heed of the adage to put “your money where your mouth is,” PBGH has incorporated financial incentives for performance on quality measures into the annual HMO negotiation process. Starting in 1996, PBGH’s Negotiating Alliance set performance targets for health plan performance based on a wide set of quality indicators, including the HEDIS measure for prenatal care. Each health plan puts at risk 2% of the total amount paid by PBGH member companies for premiums. Once the latest HEDIS data become available, PBGH determines which of the targets have and have not been met. HMOs that have not met set targets are contractually obliged to rebate a portion of their premium payments to the PBGH employers, the total being determined by the number of targets that were missed by the HMO.

Recognizing that the delivery of care is undertaken by physicians and hospitals, and not the HMO, PBGH is also actively pursuing additional methods to reward superior quality of care at the provider level by increasing reimbursement, as well as patient volume, to demonstrated high-quality providers. PBGH believes that the health care system should financially reward those providers that are able to demonstrate better health outcomes for their patients. In theory, directing additional reimbursement to high-quality providers encourages all providers to set higher standards of care for their patients, thereby raising the boat for patient care across California. One of the challenges to implementing a system designed to reward physicians and hospitals for performance is the need for further development of standardized quality measurement at the provider level.

Report Cards to Increase Accountability

Tied implicitly to the concept of financial incentives are volume incentives, in which a health plan or provider would receive more, or less, business as a result of initiatives being undertaken within the market. The key PBGH mechanism with which to influence provider and plan volume is the public reporting of performance data. PBGH publishes annual report cards that grade health plans, hospitals, and provider groups on a set of quality indicators. Among the perinatal-oriented report cards PBGH produces are scores based on hospital-level cesarean section rates, hospital-level newborn readmission rates, health plan prenatal care rates, and health plan maternity check-up rates.

These report cards have a number of different audiences, the primary one being the managers of PBGH member companies responsible for making purchasing decisions of health plans for their employees. In addition to making use of performance data within the PBGH negotiations, individual companies may use the information in one-on-one discussions with their contracting health plans. The availability of these data provide employers with an important tool for holding organizations accountable for their performance in maintaining and improving care for their populations.

Our second audience is the California health care consumer. PBGH believes that consumers have a right to information about the quality of the services being provided by their health plans and doctors. Moreover, PBGH is committed to motivating consumers to make purchasing decisions based on quality. To support consumers’ access to quality information for use in health care decision-making, PBGH has developed HealthScope, a set of consumer-oriented report cards and educational materials. HealthScope has two components: a website (http://www.healthscope.org) that includes report cards on hospitals, health plans, and provider groups in addition to educational information on the managed care system and the importance of preventive care; and a print brochure including a subset of our report cards which can be ordered free of charge via a toll-free number (1–888-244–2124). These materials are also provided to PBGH member company employees during the health plan enrollment period, the time when individuals will be most likely put the information to use. Educating consumers to use quality information is intended to direct individuals to higher quality organizations, which serves the dual purpose of rewarding those organizations with greater market share and giving consumers the information they need to choose the best quality providers.

Our third audience for public reporting is the health care community itself. Health plans can use the performance information on hospitals and provider groups in their contract negotiations with those groups. The report cards also provide invaluable data for health care organizations that see value in benchmarking themselves against their peers in the regional marketplace. PBGH is one of the few organizations in the state to provide comparative data on performance to plans and providers, and the results are often eye-opening to those organizations with regard to the quality of care they deliver when compared with their neighbors. Shedding light on comparative performance is intended to stimulate quality improvement efforts among health care organizations.
Recognizing Superior Organizations

PBGH is using the concept of Blue Ribbon Awards to recognize publicly those health plans, hospitals, and physician groups that provide superior quality services. In 1997, PBGH scored major California health plans on performance in four categories: quality, cost, data, and partnering. Points awarded in each category were based on quantitative indicators of performance. For example, the quality score was made up of health plan performance on HEDIS, patient satisfaction surveys and accreditation status, while the data score was based on the plan’s demonstrated ability to capture HEDIS data electronically from administrative data systems. The 1997 Blue Ribbon HMO Award recognized Kaiser Foundation Health Plan, who widely marketed their award in the statewide press during the annual health plan enrollment period.

For 1998, Blue Ribbon Awards are being expanded to include physician groups and hospitals. Similar to the Blue Ribbon HMO award, scoring for these awards will be based on quantitative measures of performance in the three categories quality, data, and partnering. In scoring for the Blue Ribbon Hospital award, for example, multiyear performance in the PBGH Cesarean Section and Newborn Readmissions studies will be factored into the quality category. The partnering category will provide points to those hospitals that have elected to participate in the California Perinatal Quality Care Collaborative initiative. Award winners will be publicly acknowledged by PBGH through press releases, an awards ceremony, and the inclusion of the Blue Ribbon Award winner names in the HealthScope consumer information materials. The intent is for these winning organizations to parlay the award recognition into a larger market share, thereby bringing more patients into organizations that have demonstrated superior performance.

Supporting CQI Into the Future

In the long term, PBGH would like to see comparative quality measurement become so ingrained within the health care industry as to no longer require the purchaser presence as a catalyst. With this goal in mind, PBGH is actively supporting and building structures for quality measurement and improvement into the calculus of must-do activities for the health care community. The California Cooperative Health Care Reporting Initiative (CCHRI) is an excellent example of success in this area.

CCHRI is a collaborative of major California health plans, providers, and purchasers established in 1993. Administered by PBGH, but governed in equal parts by an executive committee representing the three parties, CCHRI’s original goal was to undertake the standardized collection, auditing, analysis, and reporting out of HEDIS data among California health plans. Specifically, CCHRI hires one vendor to undertake the above processes for all health plans participating in the annual data reporting effort. In this way, purchasers were assured that comparative health plan HEDIS measures were based on the same data collection, auditing, and analytic methodology across all participating health plans; physician groups were visited by one vendor, rather than by multiple health plan vendors, for HEDIS data collection; and plan costs for data collection reflected the efficiencies gained through economies of scale.

In 1998, CCHRI is now an organization for whom collaborative HEDIS data collection is a given. Furthermore, CCHRI has significantly expanded the range and scope of its activities. CCHRI now oversees the member satisfaction survey initiated by PBGH, is undertaking a project for reporting out HEDIS data at the physician group level, and has embarked on a collaborative CQI project around care for diabetes.

The California Information Exchange (CALINX) is PBGH’s next step in organization building for quality improvement. CALINX has brought together the key stakeholders in the California marketplace to develop standardized systems for the electronic transfer of clinical data. Under the current system of paper charts, a specialist seeing a newly-referred patient has no access to that patient’s medical chart kept in the primary care physician’s office. Under the system envisioned by CALINX, patient medical information would be shared via electronic information systems across the full network of providers, such that patient medical and prescription history would be readily accessible to all physicians treating the patient. Availability of electronic information in this manner can improve the coordination and management of patient care and result in improved health outcomes. Ultimately, PBGH envisions a system of data sharing in which clinical data are stripped of unique patient identifiers, and channeled to a central database for health plan and researcher use in improving population care management.

CONCLUSION

The United States practice of tying health insurance benefits to place of employment, characterized as “almost an accident of history” in a recent issue of the New England Journal of Medicine, has been the central tenet of the American health insurance system since the end of World War II. Although the wisdom of employer-based health insurance has been debated extensively within the health policy community, such a system remains the reality in the foreseeable future. As long as employers remain the predominant purchasers of health care, PBGH intends to be active in holding health care organizations accountable for the services they provide. However, PBGH also believes that whatever entity is responsible for buying health care services, be it employers, government agencies, or independent purchasing pools, the quality received for the health care dollar should always be the preeminent purchasing decision.

PBGH has established an agenda and framework designed to communicate this message to the health care organizations providing services to our member employees. However, achievement of this agenda depends extensively on the industry’s willingness to collaborate with purchasers on performance measurement and improvement. PBGH believes it is in
the long-term interest of the health care community to do so. In a 1997 series of articles written on the topic of quality, the New England Journal of Medicine\textsuperscript{18} noted that “physicians owe it to themselves and their patients to master the substantive issues that underlie current discussions about the quality of care” in addition to becoming involved in “research, teaching and policy formulation concerning the quality of care.” This involvement will “elevate the overall performance of our health care system.”\textsuperscript{19} PBGH welcomes increased collaboration with the health care community, as we work to insure that purchasers have the information we need to make quality-based buying decisions. This includes having access to performance data that is timely, valid, and reproducible, and which ensures a level playing field for comparing institutions. With this information, purchasers and consumers can reward those organizations that deliver superior care in a timely and efficient manner, and thus insure continued excellence within the United States health care system.

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