Welcome to Value-Based Purchasing

We are pleased to launch Value-Based Purchasing, a new quarterly electronic journal focused on sharing information and useful strategies for value-based purchasing (VBP). We define VBP broadly as “a range of activities in which public and private purchasers engage to influence the behavior of consumers, health plans, and health care providers, so as to achieve greater value in health care.”

This e-journal continues the mission of the College for Advanced Management of Health Benefits, established in 2004 as an innovative educational program designed to promote employer engagement in value-based purchasing of employee health benefits. The College is predicated on the concept that employers can and should emphasize value of benefits (the quality/cost ratio) in their purchasing decisions, rather than focusing solely on cost, thereby increasing provider and insurer accountability for delivering high-quality care. The curriculum also promotes strategies for educating consumers and giving them appropriate incentives to further drive measurable improvements in quality and value of health care. Through a four-day education program, and follow-up support services, the College seeks to create a national cadre of employers engaged in value-based purchasing strategies.

The College is a partnership between three organizations committed to improving quality and cost-effectiveness of health care:

- **HealthCare 21 Business Coalition (HC21):** A business-led coalition of employers, health plans, hospitals, and physicians collaborating to improve the quality and affordability of health care services in the East and Central Tennessee regions.
- **National Business Coalition on Health (NBCH):** The national association of nearly 90 employer-led coalitions across the United States, representing over 7,000 employers and 34 million employees and their dependents.
- **Thomas Jefferson University Department of Health Policy (TJU):** A nationally recognized academic research, education, and consulting group, specializing in health services research and customized training programs.

The College provides a practical, intensive program of education and training for managers responsible for purchasing health care benefits in their organizations. The curriculum has been developed with the educational needs of mid-size employers in mind, since this group has virtually no other source for receiving this type of specialized training and assistance.

The College was established in the spring of 2004, with national program sponsorship provided by Johnson & Johnson Healthcare Systems. The first four-day regional training program, sponsored by AstraZeneca, was held in November 2004 in Nashville, Tennessee. In 2005, programs have been held in Phoenix (sponsored by Johnson & Johnson), Chicago (sponsored by AstraZeneca), and Minneapolis.
By the end of the first full year of operation, the College had trained over 100 employers and employer coalition leaders. Three regional programs have been planned for 2006 (see program schedule).

As we have developed and offered our programs over the past two years we have recognized that there is a void in the availability of timely and useful information for purchasers, to help them improve the value they derive from their benefits expenditures. Through this electronic journal, we hope to help fill this void. In each issue, we will feature at least two articles from value-based purchasing practitioners, researchers, and policy makers, providing useful information on how to improve value in making purchasing decisions. We also will provide viewpoint articles (editorials), news briefs, a review of recent published literature on VBP, and announcements regarding the College for Advanced Management of Health Benefits.

We welcome your feedback on this inaugural issue and look forward to your continued readership. We also hope that you will consider contributing articles and information for publication in future issues. Please contact us at any time with your ideas.

Neil I. Goldfarb
Dale Shaller
Editors, Value-Based Purchasing

Clinical Performance Measurements and Incentives Enable Value Based Purchasing

Jerry Reeves MD

The year 2005 was a banner year in health care. The average cost for family health insurance premiums exceeded the full-time annual income of a minimum wage worker. Health premiums leaped 74% in 5 years. That’s 5.5 times as fast as general inflation and 2.3 times as fast as business income growth. General Motors spent $5.2 billion on health care for its US employees, retirees and dependents. That represents $1,525 for every car and truck produced. Starbucks CEO Howard Schultz recently told lawmakers he spends more on healthcare for employees than on coffee, a situation he termed “completely non-sustainable”.

Meanwhile, overall improvements in quality and safety of health care have lagged far behind. The National Committee on Quality Assurance (NCQA) reported HMO and point of service health plan performance improved on 40 out of 43 measures of quality. However, enrollment in these types of plans declined while enrollment increased in PPO plans that usually don’t publicly report their quality performance scores. About three times as many people are enrolled in PPO health plans as in HMO health plans. Healthcare purchasers who measure PPOs’ adherence to evidence based guidelines have found performance to often be 20% to 30% lower than for HMOs. As overall quality and safety performance measures remain essentially flat and costs rapidly increase, the value of health care purchases steadily deteriorate. The deteriorating value of health services and greater availability of medical data tools to measure and report performance are compelling health benefits purchasers to take more active roles in driving health care reform. The era of accountability and transparency is upon us.

The Hotel Employees and Restaurant Employees International Union (H.E.R.E.I.U.) Welfare Funds provide PPO-type health insurance coverage for approximately 175,000 lives in 22 states. About 115,000 reside in Las Vegas, Nevada. This challenging population has high health care needs and limited disposable time and income. Their tendency is to delay healthcare services even though out of pocket costs are relatively low. Costs and quality of health services they receive are influenced not only by cost per unit but also by number of units of service and by the effectiveness (impacts on outcome) of those units of service. Negotiated discounts alone are insufficient to maintain affordability of health care. Therefore we have applied robust data analysis of medical, pharmacy, and laboratory claims and test results to guide our corrective actions to manage costs and improve outcomes.

Value Based Purchasing Strategies

The key steps necessary to enable purchasing of health services with higher value (higher quality and safety at affordable costs) include:

1. Comprehensive information on sources of costs and root causes of outliers
2. Risk adjusted comparisons of clinical performance and outcomes
3. A will to act on the findings
4. Multiple contacts of patients and providers to engage them
5. Incentives aligned with desired behaviors
6. Sustained interventions
7. Leverage

In this article we review how H.E.R.E.I.U. has engaged in each of these steps.

Comprehensive information on sources of costs and root causes of outliers

We created a data warehouse over 10 years by engaging internal health information technology data analysts recruited from major consulting firms as well as outside consultants who assisted with the design and the mapping of fields to unique patient and provider identifiers. Medical claims, pharmacy claims, and laboratory test results populate the data warehouse. Monthly reports from this resource show our direct medical costs are primarily driven by payments to participating physicians (35%) and hospitals (29%) and for prescription drugs (23%). Further analysis has indicated that the primary root causes of physician costs are excessive use of specialists and procedures disproportionate to the outcome improvements attributable to these services. Unnecessary visits to hospital emergency departments and outpatient surgery facilities are root causes of avoidable hospital costs. More than half of emergency room visits are for urgent conditions that could be safely handled in extended-hours urgent care clinics and more than 1/3 would be more appropriately handled in a doctor’s office or by phone. Unit costs for outpatient surgeries are usually much lower in free-standing (as opposed to hospital) ambulatory surgery facilities. Excessive prescription drug costs can often be avoided through more frequent use of safe and effective generic drug alternatives. About 1,000 Las Vegas patients fill more than 8 prescriptions per month. In our plans, the average cost per prescription is $55 less for generics than for equivalent brand drugs. Review of outlier high cost cases often reflects that failure of outpatient management is a root cause. Poor adherence to evidence based preventive care guidelines and late interventions for patients with diabetes, high cholesterol, and hypertension contribute to avoidable high hospital costs for strokes, heart attacks, and kidney failure.

Risk adjusted comparisons of clinical performance and outcomes

We analyze claims and lab result data from our data warehouse to display risk adjusted performance comparisons of contracted hospitals and doctors. For instance we show that the top performing hospital in our network in Las Vegas performs at the 82nd percentile, the lowest performer at the 3rd percentile, and the median at the 48th percentile nationally on CMS core measures (acute myocardial infarction, heart failure, and pneumonia). We compare risk adjusted average prices, complication rates and mortality rates of hospitals using 3M™ All Patient Refined Diagnosis Related Groups (APR-DRG) to compare performance variations within our network with hospitals in other States. We show that the most expensive primary care and specialist physicians in our network cost about eight times as much on average to manage common episodes in their respective specialties (ear infection, bronchitis, urinary tract infection, angina, knee surgery, etc.) compared to their least expensive peers. Primary care physicians vary widely in their prescribing of generic drugs, from as low as 30% to as high as 65%. We found that 1% of our physicians prescribed 50% of the oxycontin dispensed to our participants. Geographic variations can also be substantial. For instance, radiology costs are 3 times higher per participant in West Virginia than in Las Vegas and pharmacy costs are 36% higher per participant in Atlantic City than in Chicago.

A will to act on the findings

Actions we have taken to achieve behavior change include changes in benefit design and coverage, communication campaigns, pay for performance programs, patient incentive programs, and network changes. We have increased participants’ out of pocket expenses for ER visits, hospital outpatient surgeries at high cost facilities, and brand drugs. We expanded our network of after hours urgent care clinics. We offer a free pharmacy with 250 generic drugs available at no out of pocket cost. We discuss present and past performance, competitors’ performance, and benchmark measures with network hospitals and doctors to develop commitment to performance improvements. We implemented a pay for performance program for high performing primary care physicians weighted 3 times as heavily on quality (guideline adherence) measures as on efficiency (Episode Treatment Group) measures. After ongoing counseling of poor performers, if there was lack of corrective action, we have discontinued contracts with physicians due to lack of business need to continue the relationship.

Multiple contacts of patients and providers to engage them

We communicate frequently with beneficiaries informing them of top performers through newsletters, shop steward meetings, provider directories and phone discussions with people choosing their doctor. Our web
site offers a one stop shop to help them find a good doctor with extended hours who speaks their language, answer questions about their benefits and claims, answer questions about their health conditions and treatment alternatives, and assist with navigating our health care system. Periodic health fairs and free flu shots reach out to engage members in early preventive care. Blue Ribbon Panels and Quality Improvement meetings with physicians, hospitals and medical opinion leaders engage professionals in collaboratively developing and implementing solutions.

**Incentives aligned with desired behaviors**

Incentives to change behaviors include recognition, rewards, rules and penalties. After recognizing top performing doctors in our directories and communications, there was a 30% market share shift from lower performing to higher performing family practitioners. Doctors who received performance bonuses offered more extended hours and joined physician panels championing improved diabetes care. Guideline adherence rates slightly improved. Requiring care plans approved by pain management specialists in order for the insurance to pay for oxycontin resulted in dramatic decrease in inappropriate oxycontin use. The sentinel effects related to discontinuing contracts with low performing physicians appeared to significantly improve hospital, physician and pharmacy cost trends.

**Sustained interventions**

Patient incentives over a four year period improved our maternity care from a baseline of late pregnancy care and high rates of premature babies. Paying $100 to pregnant patients and an additional $100 to their doctors when prenatal care included seven prenatal visits beginning in the first trimester was associated with rates of prematurity (<32 weeks gestation) and low birth weight (< 5 lbs) dropping to 50% lower than the national average.

**Leverage**

We collaborated with 23 large employers and union health trusts in Las Vegas to form the Health Services Coalition representing 320,000 lives. Initially the focus was on group purchasing of hospital contracts on behalf of all member groups to achieve better rates. We have subsequently expanded the initiatives to include hospital quality initiatives (LeapFrog, National Quality Forum, American Heart Association Get with the Guidelines Program, and NRC Picker Patient Experience Surveys as contractual performance requirements), city-wide hospitalist contracts for participating members, and a city-wide generics marketing campaign. Partnering with these additional organizations has proven effective in gaining contracting leverage. We also experienced improved generic medication fill rates, performance measures of patient experience and patient safety, and in-hospital care coordination. We are looking forward to implementing a Coalition Health Data Warehouse containing data from all members to leverage the benefits of data analysis and care improvement interventions on behalf of all members.

**Summary**

These sustained efforts have been effective in improving processes and outcomes of care and containing costs. The Table shows the comparisons of health cost trends within the Funds compared to national healthcare cost trends. We intend to continue advancing our goals of value based purchasing to sustain affordable higher quality healthcare for our beneficiaries.

**Table**

<table>
<thead>
<tr>
<th>Year</th>
<th>USA (%)</th>
<th>HEREIU Health Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>14.7%</td>
<td>5.8% (Las Vegas)</td>
</tr>
<tr>
<td>2004</td>
<td>12.6%</td>
<td>3.7% (Las Vegas)</td>
</tr>
<tr>
<td>2000-2004</td>
<td>11.4%/yr</td>
<td>8.7%/yr (Non-Las Vegas)</td>
</tr>
<tr>
<td>1995-2004</td>
<td>NA</td>
<td>5.4%/yr (Las Vegas)</td>
</tr>
</tbody>
</table>

Las Vegas programs are larger and more mature. Small group programs are younger.

**About the Author**

[Dr. Reeves is Chief Medical Officer of H.E.R.E.I.U Welfare Funds, in Las Vegas, NV. More information is available at www.culinaryhealthfund.org, or by e-mailing Dr. Reeves at jreeves@hereiu-fund-lv.com.]
Improving Health Care Quality through Value-Based Purchasing: What Can the Pioneers Teach Us?

Christine W. Hartmann, Neil I. Goldfarb, Vittorio Maio, Adam R. Roumm, and David B. Nash

The Department of Health Policy of Jefferson Medical College has been engaged in research on value-based purchasing (VBP) for the past five years. With support from The Commonwealth Fund, the Department’s research team has examined the potential of VBP to improve quality and cost-effectiveness of health care. This article summarizes this work.

Value-based purchasing (VBP) refers to a broad range of strategies which public and private purchasers of health benefits may pursue in order to obtain increased quality, safety, and cost-effectiveness of care for the populations they cover. Six currently employed VBP approaches have been identified from the literature: collecting data on quality, selective contracting, partnering with plans and providers, promoting six-sigma initiatives, educating consumers, and rewarding or penalizing plans and providers. Through the efforts of organizations such as The Leapfrog Group (Leapfrog), the National Business Coalition on Health, and numerous local and regional business consortia, as well as the single and combined activities of a number of large employers, the VBP movement has begun to gain momentum.

A multiple-case study project was conducted with 18 “pioneers” – organizations recognized as early adopters, innovators, and leaders of the VBP movement. Aggregating qualitative data across case studies revealed a number of key challenges to value purchasing, as well as strategies for overcoming the barriers. Barriers cited by the participants included those related to data availability and collection, data management, performance measurement, high cost of health care, lack of a business case for quality, active or passive resistance from system stakeholders, and lack of time. However, the leaders interviewed cited numerous ways in which they were able to overcome the barriers they had faced. The successful techniques included:

- data standardization (using standardized, publicly available measures; establishing data cooperatives; or supporting legislation aimed at increasing standardization);
- increased communication with and among, and education of, stakeholders (insurers, providers, and consumers);
- collaboration among purchasers (working with employers of the same size, engaging public purchasers, and establishing and joining coalitions);
- paying for performance (rewarding health plan and provider performance);
- using consumer incentives (moving consumers towards higher quality providers); and
- vision (having a clear and simple vision; making a long-term commitment to implementing change).

With the recent passage of the Medicare Modernization Act of 2003, the federal government has put in place incentives designed to encourage the reporting of quality data by hospitals have been put in place, and this may help facilitate increased implementation of pay for performance programs as well as increasing data standardization and communication among stakeholders. In this ever-changing environment, the lessons learned from the VBP pioneers may help all purchasers define appropriate VBP strategies for their organizations and mobilize their collective strength in the public’s interest.

[For more information, contact Dr. Hartmann at christine.hartmann@jefferson.edu]
Limited Benefit Plans: A recent Wall Street Journal Article (Vanessa Fuhrmans, January 17, 2006) highlights the pros and cons of limited benefit, or mini-medical, health plans. These plans typically cover physician visits, laboratory tests, and pharmaceuticals, with benefit limits, but offer little if any coverage for hospitalizations and other higher-cost utilization. The market for these plans is growing rapidly, and many major insurers are now offering plans of this type. While the plans may help to extend some coverage to previously uninsured employed and contracted populations, and promote access for preventive and primary care, they do not serve the traditional health insurance role of reducing risk for catastrophic events.

The Employers’ Last Stand: An article in the December 2005 issue of HealthLeaders by Philip Betbeze (available online at http://www.healthleadersmedia.com/view_feature.cfm?content_id=75917) succinctly summarizes many of the problems facing employers today, with regard to rising health care costs. As an alternative to “dropping out” of the health benefits game, the article suggests several practical strategies for improving the value of benefits and offering wellness programs and incentives for appropriate behaviors. The experiences of Sierra Pacific Resources in Nevada, and Snap-on, Inc. are spotlighted as examples of VBP initiatives which appear to be working.

New Name for CAHPS: “Consumer Assessment of Healthcare Providers and Systems” is the new name, with the same acronym, for what formerly was the “Consumer Assessment of Health Plans Study.” According to the Overview found on the CAHPS website, “CAHPS develops and supports the use of a comprehensive and evolving family of standardized surveys that ask consumers and patients to report on and evaluate their experiences with health care.” While the initial focus of the CAHPS project was on developing a survey tool to assess consumer perceptions of their health plans, several newer tools are examining consumer perceptions of hospital care and care provided by ambulatory care offices and group practices. More information on the CAHPS family of tools and how they may benefit VBP efforts can be found at www.cahps.ahrq.gov. CAHPS Connection, an electronic newsletter on the CAHPS project and its application also is available via this site.

Consumer Dissatisfaction with Consumer-Driven Health Plans: A recent report from the EBRI/Commonwealth Fund Consumerism in Health Care Survey (http://www.cmwf.org/publications/publications_show.htm?doc_id=326359) discusses consumer satisfaction with consumer directed health plans (CDHP) and high deductible health plans (HDHP), and raises concerns regarding impact on access to care. The survey found that 63% of respondents with comprehensive health insurance were “extremely or very satisfied with their health plan, compared with 42 percent of CDHP enrollees and 33 percent of HDHP participants.” Consumers with CDHPs and HDHPs were “significantly more likely to avoid, skip, or delay health care because of costs…with problems particularly pronounced among those with health problems or incomes under $50,000.” These findings suggest that employers with CDHPs and HDHPs in place need to be vigilant in monitoring access to care, and ensuring that front-end benefit cost savings do not come at the expense of longer term impacts on workforce health and productivity.

Upcoming Conferences:

Disease Management Colloquium: Thomas Jefferson University’s Department of Health Policy will once again host the Disease Management Colloquium, an executive education course on Disease Management. The dates for this year’s event are May 10-12. The conference includes a track focused on employer DM initiatives. Visit www.dmconferences.com for more information on the program agenda, venue, sponsors, and registration.

Incentives and Rewards Workshop: The National Business Coalition on Health and The Leapfrog Group on Patient Safety will co-host their second annual, two-day, multi-stakeholder workshop on the implementation of two national incentives and rewards (I&R) initiatives: one focusing on hospital care performance improvement, Leapfrog’s Hospital Rewards Program, and the other focusing on ambulatory care performance improvement, Bridges to Excellence. The meeting will be held in Chicago on July 19th and 20th. For more information visit www.nbch.org.

NBCH 11th Annual Conference: The National Business Coalition on Health has announced that the theme for this year’s national conference is “Revitalizing Health Care: Communities Collaborating as Architects for Change.” The meeting will be held November 5th-7th in New Orleans. For more information visit www.nbch.org.
Each issue of Value-Based Purchasing will provide a summary of recent articles from the published VBP literature. In this issue, we spotlight several recent publications regarding pay-for-performance programs and financial incentives for quality care.

“Early Experience With Pay-for-Performance: From Concept to Practice” (JAMA. 2005;294(14):1788-1793, by Meredith B. Rosenthal, PhD, Richard G. Frank, PhD, Zhonghe Li, MA, and Arnold M. Epstein, MD, MA

The concept of paying for performance is becoming increasingly popular in health care. Stakeholders who demand more for their money are rewarding providers who practice better quality care or who demonstrate improvements in such. The underlying objective of paying for quality is to realign reimbursement policies to promote better quality care. As a result, more than 100 incentive-based programs have spawned across the country, driven mainly by purchasers and payers such as the government, health care insurers, employers, and employer groups. To date, little is known about the impact of these nascent initiatives.

A study from the Harvard School of Public Health calls into question the true impact of incentive-based programs. The researchers evaluated a prototypical pay-for-performance program on the quality of care provided to patients of a California-based health plan. The results were compared to those of patients receiving care from a separate California physician group in which no pay-for-performance scheme was in place. Among the three indicators of quality examined, the pay-for-performance group demonstrated substantially greater improvements on only one of the measures. In light of the results, the researchers suggest that perhaps the incentives were too modest to warrant serious changes to provider behavior, or that the true impact of pay-for-performance would be seen more long term and was not captured in this study. As pay-for-performance programs mature, additional studies like this one will help elucidate whether paying for better quality is truly increasing value in health care purchasing.


The need to realign payment policies to promote higher quality health care and better outcomes for patients has been illuminated in a number of studies. Researchers in the Department of Health Policy at Thomas Jefferson University sought to determine if reimbursement rates for different types of surgery encouraged the use of best practices and promoted high quality care. The researchers systematically reviewed studies of six types of surgery that may be performed as traditional, open surgical procedures, or as laparoscopic procedures, which are forms of minimally invasive surgery (MIS). Clinical and economic outcomes of the open procedures were compared to those of the corresponding minimally invasive procedures. The researchers then considered the level of reimbursement provided by Medicare for each type of surgery to determine if procedures producing the best outcomes were also receiving the highest rates of reimbursement.

The investigators concluded that minimally invasive procedures lead to better outcomes as compared to the open procedures. MIS was associated with decreased length of hospital stay, decreased hospital costs, and faster return to work or other activities. Average Medicare reimbursement for these procedures, however, was generally lower. This suggests that providers are being paid more for procedures that do not promote the best outcomes for their patients, leading to higher expenses for payers and longer periods of time away from work. This study underscores the need to realign incentives to not only promote better quality care but also to reduce health care expenditures.


Many pay-for-performance strategies have evolved from the multitude of initiatives that have emerged over the past few years. One approach for improving quality in surgical interventions comes from a single large private payer in Michigan. Birkmeyer and colleagues describe the Blue Cross Blue Shield of Michigan and Blue Care Network (BCBSM) program not as a “pay-for-
performance” initiative but rather a “pay-for-participation” model which compensates providers for simply collecting data and implementing quality improvement initiatives. BCBSM is providing incentives for participation in three surgical quality improvement initiatives in various areas of surgery.

The program strives to foster collaboration among hospitals and surgeons, identify areas for improvement, and implement and evaluate improvement activities. Proponents anticipate quality improvement and cost savings in surgical care. The authors suggest that, “Michigan is particularly fertile ground for payer-sponsored quality improvement initiatives,” since it, “is home to several very large employers with a long history of seeking value for the health care that they purchase.” They go on to describe some of the challenges in implementing such a program. The main challenges include achieving buy-in and maintaining participation from surgeons, and of course funding. Despite these challenges, the project is moving forward and the impact of such a program design is anticipated.

“Asurgeon compensation: ‘Pay for performance,’ the American College of Surgeons National Surgical Quality Improvement Program, the Surgical Care Improvement Program, and other considerations” (Surgery. 2005;138(5):829-836), by R. Scott Jones, MD, FACS, Cynthia Brown, and Frank Opelka, MD, FACS

As the paradigm shift to pay-for-performance transpires, Jones and colleagues offer a framework for surgical quality improvement that integrates an incentive-based scheme. The three-phase outline emphasizes the need to align fiscal incentives with high quality care and optimal outcomes. The authors note, “the primary goal of pay-for-performance programs must be improving health quality and safety.” In doing so, health care purchasers and payers also expect to get more for their dollar.

The first phase of the plan involves implementing a “pay for reporting” system promoting collection and reporting of administrative surgical data. The second phase extends to a “pay for participation” program, similar in theory to the program in Michigan. Surgeons will be rewarded for reporting on a broad set of performance measures, regardless of outcomes. The third phase of the system ties in a Medicare pay-for-performance piece to reward physicians who achieve the best outcomes. The authors set forth a series of principles for which Medicare should incorporate to ensure fair incentives for all surgeons across various specialties and practice settings. Of note, such a system should include a positive reward system rather than a punitive reimbursement policy to ensure accuracy of data, and recommends that surgeons be involved in the design of measures and payment policies.

As we have seen, pay-for-performance is a hot topic in health care, but it is not limited to surgery. Stemming increases in health care spending is a formidable task, but health care purchasers are in a unique position to demand more value for their health care dollars. Pay-for-performance is attempting to do just that by realigning payments with better outcomes and higher quality. Though the results have been mixed to date, much more will be learned about the impact of these programs as they develop.

Program Schedule

The College for Advanced Management of Health Benefits holds three four-day training programs each year. The 2006 schedule includes the following programs:

February 21-24, 2006 Las Vegas, NV
April 24-27, 2006 Philadelphia, PA
September 18-21, 2006 Charlotte, NC

For more information, or registration materials, please contact Jeannine Kinney, Program Coordinator, at jeannine.kinney@jefferson.edu or 215-955-1709.

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