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Advancing Pharmacy Practice Through Performance Measurement: Pay-for-Performance

CE Information

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Program Goal: This monograph will improve the pharmacist's ability to explain a potential pay-for-performance model in pharmacy and how it could impact the future of pharmacy practice.

Learning Objectives: *Upon completion, pharmacists should be able to:*

1. Describe basic concepts of performance reporting, pay-for-reporting, pay-for-performance and value-based purchasing in health care and in pharmacy.
2. Explain performance reporting systems that currently are used for healthcare providers.
3. Compare and contrast current pay-for-reporting and pay-for-performance in both the public and private healthcare sectors.
4. Use a pharmacy-based medication adherence measure example to describe a potential pay-for-performance model in pharmacy.
5. Describe how pay-for-performance could impact the future of pharmacy practice.

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Introduction

Meg and her 72-year-old mother, Sue, are regular patients at ABC pharmacy. Today they arrive together, and Meg states with a sigh, "maybe you can get through to her." The pharmacist had noticed that Sue hadn't been in for several months. He thought she probably was visiting another pharmacy, but now, upon glancing at her patient record, he realizes that her last refills were five months ago and that none of her prescriptions had been transferred. Sue has minimal past medical history, except that she was diagnosed with diabetes 10 years ago. She prefers to only take generic medications because they are free with her Medicare prescription drug plan. Sue's medications include metformin 500mg (three tablets twice each day), lisinopril 5 mg daily and Tylenol PM[®] as needed. With the pharmacist's encouragement, Sue sits at the blood pressure machine to check her blood pressure, which is 152/94 mmHg. He also measures her blood glucose, which is 157 mg/dl.

In this scenario, there are numerous problems with the quality of the health care delivered to Sue. Although she failed to have her medications refilled, the system failed her in that there was no reminder or follow-up from the pharmacy, and in the meantime, her health was suffering. If Sue had an appointment with her physician before the pharmacist was alerted to this issue, her physician may have interpreted her high blood glucose and blood pressure to mean her medications were not working. Her physician may have changed her medications or increased the dosages, which may not have been the most cost-effective or clinically appropriate decision. The pharmacist feels bad that he did not follow up with Sue when he did not see her in the pharmacy, but with the increased pressure to fill more prescriptions with less staff, how could he possibly have time to follow up with all of his patients to make sure they were compliant with their medications?

It is time the pharmacy profession join other healthcare providers in being measured by the quality of care it provides. Pharmacists have the knowledge and skills to impact not only the quality of medication use, but also the impact medication use has on the cost and value in the healthcare system. The pharmacist's role is critically important, and by participating in quality initiatives that measure that impact, health care provided will be closer to the quality that is being demanded by such outside agencies as the Centers for Medicare and Medicaid Services.

The use of financial incentives in the healthcare system to boost this quality of care is often implemented as pay-for-performance, or P4P.¹ In a pay-for-performance system, providers are rewarded financially for achieving high levels of quality or for significantly improving quality of care. To date, hundreds of P4P programs have been implemented within the U.S. healthcare system, with hospitals and physicians being the primary targets of these incentive programs. However, nursing homes and home health providers also have seen rapid growth in P4P, and a small number of programs for pharmacies also have been implemented. This lesson will address the history of pay-for-performance systems, describe a number of different P4P systems already in place and describe how pharmacies may soon be part of a P4P system that would reward pharmacies for performance improvements, rather than (or in addition to) a sole focus on product reimbursement.

A Brief History of P4P

A 2005 survey of health maintenance organizations found that more than half of the HMOs used P4P incentives in their provider contracts.² Of those that used P4P, 90% had programs for physicians and 38% included hospitals. In some states, the majority of physicians may be enrolled in a P4P system. For example, Blue Cross Blue Shield of Hawaii has operated a Physician Quality and Service Recognition program since 1998. This program, run through the Hawaii Medical Service Association's preferred provider organization network, grew from 50.4% physician participation in 1998, to 77.7% in 2003. A six-year review of the impact of the financial incentive component of the program indicated that patients who visited one of the participating physicians were more likely to receive recommended care.³

Another early adopter of P4P is the Integrated Healthcare Association in California. The IHA P4P program began in 2003, and now includes eight health plans and more than 35,000 physicians in California. The program was associated with significant improvements in quality during the first two years of the financial incentives.⁴ A recent evaluation of the P4P program showed that the program continues to drive improvements in clinical quality, although significant geographic variation still exists.⁵ In 2007, IHA paid out more than \$65 million in P4P incentives to physician groups, although this amounted to less than 2% of physician compensation. The IHA estimated that at least 5%, and preferably 10%, of physician compensation should be based on performance in order to drive significant change in practice.

Although P4P was initiated by employer coalitions and private insurance companies, the federal government also has begun to shift towards a value-based purchasing paradigm that includes P4P.⁶ The first step for the federal government is to require providers to report information on quality and efficiency of care (i.e., pay for reporting). For hospitals and physicians, this has meant an incentive payment of up to 2% of reimbursement. For home health providers, the failure to report on quality measures will result in a 2% reduction in payment.

The Centers for Medicare and Medicaid Services has initiated demonstration projects related to P4P in recent years. Notably, the Premier Hospital Quality Incentive Demonstration began in 2003 with about 280 hospitals.⁷ Hospital quality was assessed using 34 measures across five clinical conditions (acute myocardial infarction, coronary artery bypass graft surgery, pneumonia, heart failure and hip and knee replacement). The top 50% of hospitals in each condition were recognized on the CMS Web site, and the top 20% received a financial bonus equal to 1% to 2% of their reimbursement for those conditions. Hospitals

performing in the lowest two deciles were at risk for a reduction in payment of 1% to 2%. A subsequent analysis showed that the median quality scores across all hospitals increased after the incentive program began; however the hospitals that began in the lowest deciles experienced the greatest improvement.⁸ The hospitals that participated in the P4P program also had greater improvement in quality than a control group of hospitals that only engaged in public-reporting on quality.

The CMS also is testing P4P systems for physicians, and intends to provide a report to Congress in 2010 regarding the creation of a physician value-based purchasing program. In 2005, CMS began a five-year P4P demonstration involving 10 large multispecialty physician group practices (known as the PGP demonstration).⁶ In the first year, physician groups can receive a payment for up to 80% of the cost savings they achieve. As quality measures are added to the performance scores, physicians will be able to receive payments that are based equally on cost efficiency and quality. At the end of year two of the demonstration, all participating physician groups had achieved benchmark levels for quality and had improved quality for Medicare beneficiaries within diabetes, coronary artery disease and heart failure. The 10 groups shared the \$16.7 million incentive payment.

A home health agency demonstration project also is under way to assess the value of incentive payments to HHAs. This project began in January 2008 and continues through December 2009. HHAs who volunteered to participate were randomly assigned to an intervention or control group, and the intervention group is eligible for incentive payments. The incentive pool will be derived from the estimated savings from more costly forms of health care (e.g., hospitalization) with 75% of the pool being distributed to the HHAs within the top two deciles of quality and 25% going to the HHAs with the largest improvement in quality. Since quality scores are based on an existing database known as OASIS, the HHAs will not have to collect or report any new data. However, if it is determined that no savings occurred through the use of HHAs, no incentive payments will be made.

A nursing home value-based purchasing demonstration also is in progress. As with the HHA demonstration, the nursing home demonstration is required to be budget neutral to Medicare. The incentive pool will be derived from the estimated savings to Medicare from avoided hospitalizations and subsequent skilled-nursing facility stays. The quality of the nursing facilities will be measured across four domains: staffing (turnover and staffing levels), hospitalizations (rates of avoidable hospitalizations), minimum data set outcomes and survey deficiencies (from state inspections). Facilities that score in the top 20% of performance and top 20% of improvement will be eligible for incentive payments.

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Payment Models in P4P

A plethora of P4P models have been implemented in recent years, but the Institute of Medicine has recommended that an ideal model should reward providers who attain high levels of performance at a given point in time, and also reward providers who greatly improve performance over time.¹ Models that reward current performance are important to recognize the top performers; however, these models may be deflating to the lowest performers if they perceive that they are unlikely to ever become a top performer. Thus, the providers in the lowest deciles of performance may not attempt to make improvements. Models that reward improvement in quality may be highly motivating to providers that begin in the lowest deciles of performance because these providers have the biggest opportunity for improvement. For providers who currently are in the top deciles of performance, the improvement model holds little appeal since they have less room for improvement. This especially is true if the overall level of performance is near the maximum value for a particular measure. Thus, it is important to recognize current performance as well as improvement over time.

Rewarding Current Performance

For models of P4P that reward current performance, the threshold for the performance payment may be based on a predefined threshold or based on performance relative to the other providers in the program. The latter approach is sometimes called a tournament model.⁹ When using a pre-defined threshold, a payer usually sets the threshold at a level that is slightly higher than the current average for performance, but not so high as to appear unattainable. Thus, most providers have an incentive to improve. An example would be to reward any provider who had at least 90% of his diabetic patients receive an A1c test during the past year. This level is just slightly higher than the current national average of 88.1%.¹⁰

A variation on this model is to base the payout on the percentage of members who received appropriate care. For example, if a provider had 85% of diabetic patients receive an A1c, the provider would receive 85% of the total payout for which it is eligible. Another variation is to reward the provider a fixed amount per patient, multiplied by the number of patients that are provided ideal care. For example, the pharmacist could receive a payment of \$10 per patient for every patient who maintains a high level of adherence to target medications. These “current performance” models may be appealing to providers who like the predictability of payment if they reach the threshold. The downside for the payer is the possibility of nearly all providers reaching the threshold and the payer needing to make an extraordinary payout. This risk could be minimized by establishing an incentive pool and dividing the pool amongst all the providers who achieve the threshold.

A more common approach to rewarding current performance is to reward the top proportion of performers. In this approach, the providers are ranked according to their performance on a set of measures and then divided into deciles of performance (e.g., providers are divided into 10 equally sized groups based on relative performance). Generally, the top decile will receive the largest payment (e.g., 2% bonus) followed by the second decile (e.g., 1% bonus). The other 80% of providers would receive no incentive payment. In some instances, the payers

have heightened the stakes by adding a payment decrease for providers in the bottom two deciles of performance. This is sometimes implemented by initially withholding 2% of payments to all providers throughout the year. At the year's end, the providers in the bottom decile receive no additional payment, while the providers in the top decile receive 4% additional compensation. The providers in the middle deciles receive 2%. There have been numerous variations on this theme. The appeal of this model for the payers is that the overall payout is fixed.

Rewarding Improvement Over Time

As with the model for current performance, the thresholds for rewarding improvement can be a fixed amount or relative to other providers. Some P4P programs set fixed targets for a percentage improvement from period to period, but may vary the targets based on the starting point of the provider. For example, a health plan may set targets for a percentage improvement of generic dispensing rate in its pharmacy network; however, the target varies by the starting point of the pharmacy. A pharmacy that starts with a baseline GDR of 50% may have a target improvement of 3% in the following six-month period, but a pharmacy with a baseline GDR of 70% may have a target of only 1% improvement. The lower target for improvement in the pharmacy with higher current performance is based on the assumption that the lower performing pharmacy has greater capacity for improvement.

In some “improvement models” of P4P, the payer provides the incentive payment to the providers that have improved the most. Thus, the top 10-20% of providers will receive an additional payment. Some payers prefer this approach since it provides predictability in the amount of incentive payments. This approach also is appealing to providers that may start with the lowest baseline score on a measure. These providers still can achieve significant improvement even if their resulting performance still is well below their peer average.

One challenge is that the payouts for this model cannot begin until enough time has lapsed to measure the change in performance. Thus, even when a mixed-model approach is used, the first round of payment usually is based on current performance, and improvement is not a factor until the second round.

How Much is Enough?

Another consideration of P4P is whether the incentive for good performance (or penalty for bad performance) is sufficient to motivate providers to improve performance. A P4P program is unlikely to stimulate improvement if the costs or hassles of improvement outweigh the potential monetary reward. However, payers also want to limit their financial risk and may face budgetary constraints in the amount that can be paid. Some also may believe that they should not have to pay “extra” just to get providers to deliver good care.

There is no clear evidence on the amount of financial incentive that is minimally necessary to drive improved performance. The amount of incentive required to drive behavior also may differ between providers. The CMS incentives for hospitals typically are 1% to 2% of Medicare-related revenues for the top hospitals; however this percentage may equate to several million dollars.

Results from the Premier Hospital Demonstration indicated that the 1% to 2% incentive may lead to improved performance across all hospitals. In the Integrated Healthcare Association of California P4P program for physicians, the average incentive payment in the second year of the program was approximately 1.5% of total physician group compensation.⁴ Modest improvements in care were noted following the implementation of the P4P program, but it is not clear whether the payments were the main stimulus for improvement. The IHA estimated that P4P payments may need to exceed 5% of physician compensation to produce substantial improvements in care.⁵

The majority of P4P programs have focused on awarding bonuses for high performance or improved performance. However, some programs may include a financial penalty if a provider fails to achieve minimal thresholds on performance measures or is ranked in the bottom 1 or 2 deciles relative to other providers.^{1,11} Theoretically, this should heighten the stakes for participants in the P4P program and should encourage the lowest performing providers to dramatically improve performance to move out of the bottom deciles. However, if the poorest performing providers also are the poorest financial performers (as is the case with some hospitals that provide a disproportionate share of indigent care), there also is a risk that the penalties will divert needed funds away from the providers that may need them the most.

Which Model is Best?

Werner and Dudley conducted a simulation of various P4P strategies for hospitals using data from Medicare for 2005. They concluded that no single P4P model was ideal for simultaneously achieving the goals of rewarding high quality, giving all providers an incentive to improve and creating a payment gradient between high-performing and low-performing hospitals. The model should be selected based upon the goals of the P4P program, the baseline data for the targeted providers and the availability of funds for incentive payments.

Choosing the Right Measures of Performance

Regardless of the payment model, it is imperative that appropriate measures of performance be selected. Ideal measures will be relevant and important, scientifically sound, feasible and usable for quality improvement. All of these properties are important to ensure the credibility of the P4P

program and provider engagement in the program. Above all, the providers must perceive that they can have an impact on the performance scores. If a performance measure is affected greatly by factors that are unrelated to the quality of the provider's care, it is unlikely that significant improvements will occur through P4P, and providers may be discontented.

This especially may be true in the case of the "current performance" model of P4P combined with the use of measures that are perceived as being outside of the provider's control. In this situation, the P4P model actually may have unintended consequences for provider behavior. For example, if providers were rewarded based upon their relative performance to other providers on a measure of patients' adherence to medication regimens, and if the adherence scores are driven heavily by patient socio-economic characteristics, then providers have a disincentive to provide care to patients that are deemed likely to be nonadherent. An extreme response would be for providers to move out of geographic areas that are populated by poorly adherent patients.

Pay for Performance in Pharmacy

There are two levels at which P4P can be implemented for driving improvements in the pharmacy sector. One level is that of the pharmacy benefit manager and/or prescription drug program, and the second level is that of the community pharmacy. Within the Medicare Part D benefit, the

drug benefit is provided through private drug plans (either as stand-alone prescription drug plans or Medicare Advantage Plans). Thus, the CMS could expand its value-driven healthcare initiatives to include rewards to top-performing drug plans. The CMS currently lacks the statutory authority to implement P4P for drug plans, but it can provide public reports on drug plan quality to the public (as referenced in lesson two of this series, Pharmacy Report Cards).

If drug plans undergo increased scrutiny of the quality of medication use by their enrollees, this should prompt multifaceted efforts to enhance quality. If a plan identified a performance deficit on a quality measure, it could "drill down" its analyses to the pharmacy level and determine which pharmacies were contributing positively to quality and which ones were not. Plans could pursue a "carrot" or "stick" approach to improving quality within its pharmacy network. A stick approach by a plan could be to eliminate a poorly performing pharmacy

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from its network, but this approach could create difficulties in access for members, and increase complaints from members and employers. Nonetheless, the threat of being removed from a pharmacy network based upon poor quality may result in heightened attention by pharmacies to the quality of their services.

A more positive strategy for drug plans is to implement a pay-for-performance program that rewards pharmacies that achieve high levels of quality or that significantly improve quality over time. This carrot approach may help to facilitate improved quality while maintaining broad access to pharmacy services for members. The reward could involve higher payment for medication therapy management services for high-performance pharmacies, or a bonus for top performers. Unfortunately, a major impediment to this approach is a lack of funds available within drug plans to create a reward pool. Although Medicare Advantage drug plans could reap the benefits of improved medication utilization through fewer hospitalizations of members with chronic diseases, the stand-alone drug plans do not directly benefit from efforts to boost medication adherence or to identify patients with under-treatment of their diseases. Thus, they are less likely to create P4P programs that are focused on improving the quality of drug therapy. This could be addressed directly by employers and public payers creating an incentive pool that could be used to reward pharmacies that boost quality.

There are only a few examples of P4P programs for pharmacies. Humana implemented a P4P program for its pharmacy network with the goal of rewarding pharmacies that help to increase the utilization of generic drugs. In this program, the generic dispensing rate, or GDR, at each network pharmacy is tracked on a semi-annual basis. Based upon the pharmacy's GDR within each six-month period, a target for increase in GDR is established for the following six months. The targets for improvement are set on a sliding scale, such that pharmacies with low GDR have higher targets for the percentage increase in GDR. Pharmacies that are above the network average for GDR have smaller targets for increase in GDR. If a pharmacy achieves its target level of increase in GDR, the pharmacy receives an increase in its reimbursement for drugs for the following six months.

The Future for Community Pharmacy P4P

As employers and CMS continue their movement towards value-based purchasing, there will be heightened demands for transparency in the quality of care being provided. Although community pharmacies have been immune to many of these demands, it is likely that we soon will see reports on the quality of care provided by community pharmacists. The Pharmacy Quality Alliance, is a collaborative initiative committed to the mission of improving the quality of medication use across healthcare settings through a collaborative process in which key stakeholders agree on a strategy for measuring and reporting performance information related to medications. Several demonstration projects sponsored by the PQA have shown that the creation of pharmacy report cards is feasible. Although these report cards have been used by pharmacies only for quality improvement, there inevitably will be a call for public reporting of the report card results. Drug plans may use the reports to inform their members about the relative quality of pharmacies within their plan's network. Consumer advocacy groups also may call for the release of the report cards to better inform the public about safety issues in pharmacy.

If the quality of medication utilization is an important factor in the overall value of health care, it makes sense to incentivize all providers who can impact the use of medications. Physicians have been participating in P4P programs wherein medication measures are used to determine the physician's payment. If pharmacists can affect the quality of medication use, then it stands to reason that pharmacists or pharmacies be included in P4P systems. The inclusion of pharmacists in P4P programs can signal the recognition of the profession as an important component of safe and effective care.

As with physician P4P programs, it will be important for pharmacy P4P to be based on appropriate measures of quality. The PQA has tested numerous potential measures of pharmacy quality, and a few of the measures appear to have some of the properties of ideal performance evaluation.¹³ The measures related to medication adherence reveal that patients' adherence to key chronic medications has substantial room for improvement and that there is variation between pharmacies. Although the PQA has not yet tested the ability of community

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pharmacists to drive improvements in adherence, there have been studies that demonstrated the ability of pharmacists to increase patients' adherence to medications.^{14,15} There also is evidence that providing feedback to physicians on their patients' adherence can lead to improvements in adherence.¹⁶ The PQA is planning to support research to assess whether feedback to pharmacists on their patients' adherence to medications can facilitate improved adherence by patients.

One concern with using adherence measures for P4P is that patients ultimately are in control of whether they refill a prescription or take the medication. However, this criticism could be levied at almost any performance measure. Patients choose whether they get a flu shot, have their A1c checked or fill their beta-blocker prescription after a heart attack. Pharmacists and physicians may not control their patients, but they can influence them. The difference between control and influence should be considered when designing the P4P model.

If a pharmacy P4P model is implemented with adherence measures, it may be best to structure the model to reward improvement in adherence rather than current levels of adherence. It also would be wise not to use a penalty to withhold payment to pharmacies that have a patient population with low levels of adherence. The pharmacy does not control the patients' adherence, and it may be unreasonable to punish the pharmacy for serving a population with poor adherence rates. However, if we assume that pharmacists can influence adherence, then we may want to reward pharmacies that are able to dramatically improve the adherence of their patients to key medications.

There are several other types of measures that could be incorporated into a P4P system for pharmacies. The PQA has worked with the National Committee for Quality Assurance to test measures related to the safety of drug therapy. In fact, one of these measures already is being used by CMS to evaluate safety within Medicare drug plans. This CMS-adopted measure addresses the use of high-risk drugs in the elderly. Drug plans that have fewer elderly patients on the high-risk drugs receive a higher safety rating from CMS. Thus, it is likely in the near future that some drug plans will ask their network pharmacies to help in curtailing the use of these drugs, and may integrate this measure into a P4P system. Other measures tested by the PQA and the NCQA include the appropriateness of drug use in selected subpopulations. For example, one measure assessed the proportion of diabetic patients with hypertension who are receiving an angiotensin-converting enzyme inhibitor or angiotensin receptor blocker.

The amount of payment tied to performance is another important consideration for pharmacies, as is the distribution of the incentive payments to the pharmacy staff. The economic premise that underlies pay-for-performance is the notion that providers will seek to maximize their revenue and will take actions that are in their best financial interest. The incentive should outweigh the costs to improve performance. Thus, if a pharmacy had to hire an additional technician to free up the pharmacist to spend more time on patient counseling, then the incentive should be sufficient to offset the cost. However, the pharmacy also should consider that there is an indirect cost to poor performance when pharmacy report cards are made public. If the public perceives the pharmacy to be a low-quality pharmacy relative to others in the community, the pharmacy may lose business. Thus, the addition of the technician may be warranted to offset the loss of business, regardless of the P4P payments.

It also is important for the pharmacy to consider rewarding the individuals within the pharmacy who help to generate the improved performance. This may motivate staff members to strive for improvement, since they will anticipate a financial reward for their achievement of improved performance. It is difficult to estimate how large a reward is required to stimulate greater attentiveness to a patient's adherence since no studies have examined this type of P4P model. However, it is likely that drug plans will begin experimenting with these incentives as more pressure is brought to bear on the plans to improve quality while controlling long-term costs.

Two examples of P4P models are shown in *Tables 1 and 2*. Both models incorporate three

categories of measures and each category contains multiple measures. In most P4P models, the individual measures within a category are combined into a composite score (perhaps by taking the average of the scores on individual measures). The current performance model rewards the pharmacy by giving a fixed amount for each patient that conforms to the desired parameter of performance (e.g., the number of patients on a target drug that have a medication possession ratio $\geq 80\%$). The improvement model rewards the pharmacy based on improvement in the percentage of patients meeting a threshold. Other derivations on these models could be to reward only the pharmacies that are in the top two deciles of current performance or improvement.

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Table 1: Example of Pharmacy P4P Based on Current Performance

	Medication Adherence	Medication Safety	Appropriateness: Asthma/Diabetes
# of Patients	200	300	100
# Quality Measures	4	3	4
Composite Quality Score	60% (120 adherent pts)	90% (270 pts meet criteria)	93% (93 pts meet criteria)
Incentive	\$10/pt	\$4/pt	\$3/pt
Bonus Payment	\$10 x 120 = \$1,200	\$4 x 270 = \$1,080	\$3 x 93 = \$279

Table 2: Example of Pharmacy P4P Based on Improvement

	Medication Adherence	Medication Safety	Appropriateness: Asthma/Diabetes
# of Patients	200	300	100
Score in 2006	60%	90%	93%
Score 2007	70%	93%	92%
Improvement	10%	3%	none
Incentive	\$1/pt/1% increase	\$0.50/pt/1% increase	\$2/pt/1% increase
Bonus Payment	\$1 x 200 x 10 = \$2,000	\$0.50 x 300 x 3 = \$450	\$2 x 100 x 0 = \$0

Conclusion:

The advent of pharmacy pay for performance is near. A small number of drug plans are beginning to implement simple models of P4P to drive improvements in selected measures of efficiency or quality. These models may be coupled with public reports on pharmacy quality to heighten the stakes for pharmacies and stimulate improvements in areas on which drug plans are being evaluated. Community pharmacy owners and managers should become aware of the opportunities, as well as the risks, when these models are implemented. A proactive pharmacy may begin efforts now to identify strategies for boosting performance so that such patients as Sue will be more adherent to their medications, and the pharmacy will come out "on top" when reports cards and P4P systems are implemented.

For more information about the PQA and PQA pharmacy measures, visit www.pqaalliance.org.

This information in this lesson also will appear in a book entitled "Pharmacy Quality" to be released by McGraw-Hill in 2010. Editors: David Nau and Terri Warholak

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