

# Pharmacosynchrony: Road Map to Transformation in Pharmacy Benefit Management

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## ABSTRACT

As the healthcare market in the United States evolves, important new opportunities are emerging for today's pharmacy benefit management industry in helping to drive care coordination, quality improvement, and increased cost efficiency in healthcare delivery. In an effort to capture the untapped value that pharmacy benefit managers (PBMs) bring to the table and help guide this transformation, we have developed, and introduce here, the concept of "pharmacosynchrony." Pharmacosynchrony is the application of innovative clinical, analytic, and technologic pharmacy solutions to drive improved care coordination and a higher-quality, more patient-centric model of care. PBMs can employ analytics and reporting of prescription claims data to target new opportunities to monitor and improve care and drive improvements in key quality metrics. Through increased connectivity with the provider community, near-real-time prescription data and patient-specific clinical alerts can be made available to healthcare providers to allow more timely and targeted intervention. PBMs can also leverage clinical and technology solutions to increase communication and education with patients through comprehensive medication reviews, clinical education and alerts, preventive care reminders, adherence monitoring and intervention, and medication reconciliation after hospital discharge to prevent costly readmissions.

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Across the country today, our healthcare leaders are moving forward in an attempt to reengineer our healthcare system and drive much-needed improvements in access, coordination, quality, and cost-effectiveness of care delivered to our US citizens. As this reengineering unfolds, the pharmacy benefit management industry is also presented with an ideal opportunity to transform itself as a critical contributor in helping to drive these national objectives. In an effort to capture the untapped value that pharmacy benefit managers (PBMs) bring to the table and help guide this transformation, we have developed and introduce here the concept of "pharmacosynchrony." Pharmacosynchrony represents the application of innovative clinical, analytic, and technologic pharmacy solutions to drive improved care coordination and a higher-quality, more patient-centric model of care.

## CURRENT LANDSCAPE

It appears to have become universally accepted that the healthcare system in the United States is highly dysfunctional. Care remains highly fragmented and increasingly more complex, with a lack of coordination being the norm.<sup>1</sup> Population management has still not been widely adopted except as needed for a few commonly reported Healthcare Effectiveness Data and Information Set (HEDIS) measures. Meaningful use legislation has led to a significant increase in implementation of electronic health records (EHRs), but the lack of health information exchanges limits flow of information.<sup>2,3</sup> The Institute of Medicine's seminal work, "Crossing the Quality Chasm," states that all of the above leads to higher cost of care.<sup>4</sup>

As a response, payers and providers are embracing newer healthcare delivery models as promising means of improving the healthcare system. Adoption of new models such as the patient centered medical home (PCMH) and the accountable care organization (ACO) is being accelerated by healthcare reform. PCMH has become defined as a full-service primary



care practice model that supports integrated care, with emphasis on quality improvement, care coordination, and population management.<sup>5</sup> ACOs are integrated units that coordinate primary and secondary care across inpatient and outpatient domains and are dedicated to population management for chronic disease. They are built to enhance cost efficiency through reduced waste and to drive improved outcomes through tighter care coordination.<sup>6</sup> Early evidence is encouraging enhanced adoption of these models across market sectors, demonstrating that both PCMHs and ACOs can produce better-quality outcomes with lower costs.<sup>7-10</sup>

Currently, fewer than 5500 practice sites are accredited by the National Committee for Quality Assurance (NCQA) as PCMHs.<sup>11</sup> The Centers for Medicare & Medicaid Services (CMS) initially identified only 32 organizations nationally with the experience and maturity to be included in its Pioneer ACO program to test provider organizations' ability to bear high levels of shared savings and risk.<sup>12</sup>

While this transformation is encouraging, most of the provider community lacks appropriate infrastructure to support the underlying functions that turn a traditional practice into a PCMH or ACO.<sup>13</sup> Most physicians do not practice on a site that can support these functions, and contracting entities such as independent physician associations have not filled this void. Consolidation in the provider market may be changing this dynamic, but current estimates are that the majority of healthcare is provided in offices of 1 or 2 physicians.<sup>14</sup>

## PBMs TODAY

Currently, PBMs perform many functions for the safe and effective use of medications, including managing the preferred drug list or formulary, processing prescription claims and payment for insurance, controlling prescription costs, and utilizing programs to limit inappropriate medication use. The PBM's existing programs, claims, and communications platforms put them in the best position to support the strategic objectives set forth by health plans, provider groups, and health systems as they transition toward more sophisticated delivery models. Expansion of PBM services to increase value for patients and providers has included reducing barriers to initiating medications for chronic illnesses, improving adherence for chronic medications, and encouraging cost-effective medication use by suggesting generic medications and formulary compliance.<sup>15</sup> PBMs need to advance their role in the delivery of healthcare during this time of dramatic change in the US

## PRACTICAL IMPLICATIONS

Pharmacosynchrony, a new concept, is the application of innovative clinical, analytic, and technologic pharmacy solutions to drive improved care coordination and a higher-quality, more patient-centric model of care.

- Pharmacy benefit managers can support improved care coordination in a more comprehensive, virtual manner by:
  - Evaluating prescription claims to improve care and monitor quality metrics,
  - Utilizing claims data to stratify patients based on risk status,
  - Increasing connectivity for sharing of near-real-time prescription usage information and patient-specific clinical alerts, and
  - Performing personalized medication reconciliation.
- Pharmacosynchrony unleashes the underutilized power of pharmacy data to enhance patient care.

healthcare system. Change is necessary to improve medication use and avoid adverse events, expand connectivity to real-time prescription use, enhance reporting to evaluate patient outcomes, and leverage the clinical resources of PBMs to improve medication use by harnessing the data and making them accessible to healthcare providers.

## OPPORTUNITY TO DRIVE ENHANCED VALUE

Development of the PCMH and ACO infrastructure is a key opportunity for PBMs. Approximately 75% of healthcare costs in the United States today are driven by chronic illnesses including diabetes, cardiovascular disease, stroke, and cancer.<sup>16</sup> Pharmaceuticals represent the most powerful tools in effectively managing these conditions, decreasing their progression, and improving overall patient functionality and quality of life. While new models of care are adopted, more comprehensive and advanced means of managing prescription drug therapy remain widely overlooked and undervalued as components of these models.

Our concept of pharmacosynchrony represents a compilation of tools and services by which the PBM industry can foster improved levels of partnership with managed care clients and the provider community to support improved care coordination in a more comprehensive, largely virtual manner. Improved care coordination is the cornerstone of healthcare reform and population-based health management. Key to this partnership is the PBM's ability to leverage advanced information technology (IT) platforms while marrying such platforms with comprehensive clinical resources and expertise.<sup>17</sup> The healthcare system of the future will find much less value in the traditional business model of the PBM serving primarily as the processor of prescription drug claims and providing

basic clinical programming and analytics to manage prescription utilization only. In the world of the PCMH and ACO, the PBM will be expected to develop new levels of clinical programming, information exchange, and analytics to provide a much more robust and holistic level of support and service. The PBM must develop new means of connectivity with the provider and patient community to facilitate improved education and engagement in evidence-based standards of care.

Sophisticated data warehousing and analytics capabilities enable the PBM to perform the activities which assist health plan clients and providers with care coordination. Foremost, the PBM can employ well-validated risk adjustment methodology to claims data to assist providers in better pinpointing patients at higher risk of negative clinical outcomes. This will enable providers to more effectively target patients in need of closer follow-up and support a more judicious allocation of resources for clinical intervention. Effectively analyzed claims data will uncover patterns of prescriber and patient behavior, representing opportunities for education and intervention. A PBM's ability to integrate and effectively analyze both medical and pharmacy claims activity in a near-real-time fashion enhances these aforementioned activities, while also assisting with monitoring timely improvements in important quality metrics such as pharmacy-based HEDIS performance measures.<sup>18</sup>

The current PBM model includes electronic communication with pharmacies, plans, and employer customers. To fill the void in the new delivery systems, the PBM must improve connectivity with the provider and patient communities via new vehicles such as the Web, mobile technology, and EHRs.<sup>19</sup> Each will improve timely access to key data and information, such as patient-specific clinical alerts, permitting more proactive intervention. Improved connectivity and coordination of care can also help to prevent negative clinical complications and their associated higher expenditures. Lastly, continuous development and refinement of key quality-based performance metrics and reporting can assist in monitoring and benchmarking provider care and support new methods of quality-based payment reform.

Postdischarge medication reconciliation is another key means by which PBMs can support provider organizations and payers seeking to improve quality while lowering costs. Today, up to 20% of patients discharged from our nation's hospitals are readmitted within 30 days.<sup>20</sup> Communication strategies will be developed to enable the provider, health system, or payer to notify the PBM regarding an impending hospital discharge, by perhaps focusing on

diagnoses associated with high rates of hospital readmission. The PBM could then utilize its call center resources, including appropriate clinical personnel, to conduct a real-time medication reconciliation with the patient and/or caregiver within 48 hours of discharge. This reconciliation process will comparatively assess pre- and post-discharge medications on hand in the home, including over-the-counter medications, to ensure adequate patient understanding of these medications and their appropriate use.<sup>21</sup> This review would also encompass an evaluation of duplicate therapy, polypharmacy issues, potential drug-drug interactions, proper dosing, and appropriate prescribing and filling of postdischarge medications in accordance with national consensus guidelines and best practices.<sup>22</sup> The PBM's unique position of having pre- and postadmission medication claims simplifies the process and reduces patient confusion about complicated regimens.<sup>23</sup> Medication reconciliation is now a Joint Commission National Patient Safety Goal and has been included in the CMS Provider Quality Reporting System, primarily because it has been demonstrated to improve quality of care through reduced medication errors and decreased readmission rates.<sup>24,25</sup>

The PBM also represents an ideal partner with providers on population management and the goal of continuous quality improvement. Pharmacy claims data serve as a powerful resource to identify multiple types of care issues. No entity is in a better position to identify medication-free gaps between prescription refills or adherence issues. Additionally, claims data can be used to screen patient regimens for appropriate care in accordance with national and international standards of care and best practices. For example, the PBM can serve as an integral resource toward identification of patients with diabetes mellitus who are not receiving appropriate medications for renal and cardiovascular protection in accordance with American Diabetes Association guidelines, or patients with chronic obstructive pulmonary disease (COPD) whose prescriptions are not consistent with the current Global Initiative for Chronic Obstructive Lung Disease guidelines. Proper prescribing per disease state can be monitored and reported upon wherever there is significant clinical consensus as to the appropriate course of action.

The PBM is also in an ideal position to notify clinicians about prescriptions that have been transmitted to pharmacies but were never picked up by the patient ("primary" nonadherence). Electronic or e-prescribing transaction records and pharmacy claims activity documenting "reversed" claims (prescriptions returned to stock at the



pharmacy due to lack of patient pickup), serve as key means to identify this type of nonadherence. Enhanced connectivity with provider offices allowing Web-based access to real-time, patient-specific medication dispensing history can also give clinicians newer and more valued insights into how their patients use their medications.

The PBM can build upon the existing communication loop with the patient and provider. Incorporating PBM clinical staff as members of the care team can also play an important role in better measuring key clinical performance metrics, supporting drug information needs of other team members, and more actively engaging patients between clinical visits on healthy behaviors and care plans. Patient outreach for any quality purpose and the result of each medication reconciliation must be captured appropriately and provided back to the care team in as timely and efficient a manner possible. PBM-based Web portals can be used as a key vehicle to house these important data, to collect Health Risk Assessment (HRA) information from the patients, and in reporting. The use of IT systems to integrate medical and pharmacy claims, adherence information, and HRA tools allows for the PBM to identify the highest risk patients and provide that information regularly to the care coordination teams for better allocation of resources.

The PBM also has numerous tools at its disposal to deliver a more personalized approach to patient care. Existing resources such as call centers, Web portals, mobile technology, and decentralized clinical staff can surround the patient and provider with a variety of support services. Targeting high-risk patients for outreach for disease-specific coaching will drive more effective education and improve quality. Patients can be contacted when it appears that their regimen may be missing key components, such as the patient with diabetes not on a key medication as discussed above. High-risk patients can also be contacted when a prescription goes unfilled to determine what the barrier may be and how it can be overcome. Innovative rewards-based programming can be established via drug benefit design to promote improvements in adherence and preventive care, such as vaccinations, smoking cessation, and routine lab monitoring. Of course, the medication reconciliation function described earlier is also a key example of a more personalized approach to care coordination and quality improvement.

The PBM can further support the transition of care by collaboratively developing and providing the necessary data and reporting to the clinician groups and health plans. These can be as simple as traditional reports looking at

generic prescribing, to as complex as patient-specific gaps in care analyses and provider-based “report cards,” comparing individual physician prescribing patterns with those of their peers and benchmarking best practices across a wide range of metrics. These should include quality metrics as well as cost, by supporting measures such as proper asthma and COPD prescribing. Antibiotic use should be monitored and addressed if found to be at odds with practice guidelines. Specialists’ prescribing should also be monitored so that primary care physicians participating in PCMH and ACO models can better evaluate their choice of specialist partners.

All of the above represent key changes in the PBM service model that should drive improved quality and lead to cost savings. The PBM should not lose sight of the fact that traditional pharmacy benefit design also represents opportunity for change and improvement in supporting this paradigm shift. Today’s pharmacy benefit needs to be designed intelligently to encourage cost-effective medication use. Real-time e-prescribing tools simplify the prescribing process and guide decision making for clinicians. Automating drug utilization management tools such as step therapy and prior authorization helps reduce administrative burden for providers, thereby freeing time for more quality-based initiatives. Identification of patients who are underutilizing medications will lead to better, more cost-effective disease management for their chronic conditions.

## POTENTIAL CHALLENGES

To achieve all of the aforementioned objectives will not be a simple undertaking. A more competitive and demanding marketplace will compound the challenge facing the PBM industry to make the necessary investments in IT resources. IT vendors such as those providing EHRs, e-prescribing platforms, medical claims processing, and laboratory data management must be open to collaborating with the PBM to openly share data and information in a consistent fashion. PBM clients such as health plans, large employers, and state agencies must also embrace the clinical and economic value of enhanced data sharing and integration with the PBMs. The provider community must be willing to embrace PBM personnel and systems as a key component of the newly evolving healthcare delivery team and alter practice patterns to capitalize on advanced sharing of key information and data from PBM providers. Currently, there is a paucity of evidence demonstrating patient benefits achieved with these new advanced clinical services from PBMs. Studies on patient outcomes with the new expanded services will need to be performed.



## SUMMARY

In short, the concept of pharmacosynchrony moves the PBM industry away from its traditional role as an administrative support resource for payers in managing pharmacy benefits. Pharmacosynchrony unleashes the underused power of pharmacy data, advanced IT systems, and comprehensive clinical resources to drive the PBM industry into a closer relationship with health plans, employers, provider systems, and patients. It provides these entities with a multidimensional suite of tools and resources to better manage drug therapy to attain better healthcare, better health outcomes, and lower costs. Only through this foundational shift in functional capacity will the PBM industry attain the type of alliance with its industry partners that will inevitably help to drive this nation's healthcare to higher levels of quality and cost-efficiency. In doing so, the industry will also engender the opportunity to earn a higher standing within the US healthcare system and within society as a pivotal resource in driving positive change.

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