building a business case for an outpatient pharmacy

Viewing the pharmacy department as a “business within the business” puts healthcare organizations on track to create transformational change that can lead to a substantial ROI.

In the current payment environment, almost every healthcare organization is focused on reducing costs while improving the quality of care and creating new revenue sources. Yet one area in which to achieve these results—while also expanding services—may not be readily apparent to them: the pharmacy department, specifically outpatient retail services.

Investments in pharmacy programs by some healthcare organizations have yielded returns of 10 to 1 and even 20 to 1. A major Midwestern health system’s outpatient prescription pharmacies improved a $4 million net margin for the pharmacy department to almost $15 million in three years, for example. An academic medical center in the Midwest implemented a specialty pharmacy program in which the net margin increased from $1.8 million to $21.4 million over five years. And a hospital in the Northeast is investing $1.5 million to build an entire ambulatory pharmacy program, including construction of a new outpatient prescription pharmacy. This venture is expected to earn approximately $800,000 at the end of the first year—with a break-even point of approximately five months—and a net margin of about $19 million over the first five years.

How Organizations Should View Pharmacies

All too often, organizations have a “silo” view of pharmacy as a cost center. With this perspective, organizations may try to create what they hope will be transformational change, but they often end up adopting an incremental...
methodology. Real transformational change requires a shift in the way pharmacy is viewed within the organization.

For the three healthcare organizations described previously, this shift meant creating a pharmacy service that operates as a “business within a business.” It meant giving pharmacy a seat at the table in the C-suite to ensure that the pharmacy executive had a complete view of the organization’s strategy and was in a position to articulate how medication management could complement the organization’s improvement initiatives in patient access, clinical outcomes, and operating margin. In any health system, this approach requires a clear vision and understanding of costs, margin, ROI, and outcomes—and a realistic approach to implementation.

Pharmacy should be seen as a key driver of clinical outcomes as well as expense reduction and revenue enhancement. As care shifts toward the ambulatory setting, the primary treatment modality is medication, with pharmacists in a position to greatly affect treatment through participation in team-based care. Pharmacists are becoming the clinical choice to lead medication therapy management programs that have produced improvements in quality measures, outcomes, and costs in primary care and in specialty areas such as heart failure.\textsuperscript{a}

The statistics are staggering. One in five Medicare patients is readmitted within 30 days of discharge, and that readmission rate grows to 35 percent within 90 days while adding an estimated $17 billion to the cost of care.\textsuperscript{b} The lack of adherence to medications prescribed at discharge has long been a primary concern in health care, with studies showing a strong correlation between post-discharge adverse events and issues related to medications.\textsuperscript{c} A gap also has been noted, often attributed to issues with cost and access, between prescriptions written and drugs purchased.\textsuperscript{d}

With an increasing emphasis on reducing 30-day readmissions and enhancing transitions of care, pharmacy is well-positioned to have a rapid and positive impact in certain patient populations.

**Building and Operating a Successful Outpatient Pharmacy**

The reality is that patients obtain most outpatient medication therapy through commercial retail outlets. In the context of pharmacy as a “business within a business,” these retail pharmacies become the competition for the health system. Lacking easy access to vital patient information, such pharmacies are not in an ideal position to handle the multiple types of medication-related problems that may arise after discharge.

Outpatient prescription pharmacy services can be an effective way for hospitals to fill this care gap. When asked why they do not have such services, executives often cite a “bad taste” from a previous attempt that ended with a negative bottom line. This failure likely stems from three factors.

First, too many hospitals try to operate outpatient pharmacies as part of inpatient operations. An outpatient pharmacy should be run like a competitive business, with an integrated strategy for continuity of care and with leadership acumen in marketing, revenue generation, quality, and customer satisfaction. The last aspect is important because the interaction may be the last the

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\textsuperscript{d} Tamblyn, R., et al., “The Incidence and Determinants of Primary Nonadherence with Prescribed Medication in Primary Care: A Cohort Study,” Annals of Internal Medicine, April 1, 2014.
hospital has with a patient before he or she gets home.

Second, some hospitals run outpatient prescription pharmacies as siloed entities that operate separately from inpatient pharmacy operations, causing services to become fragmented and lack coordinated support.

Finally, some hospitals use their outpatient pharmacies as a safety net and serve only patients who are uninsured or underinsured. Although this is a noble and much-needed mission, these hospitals are forgoing a significant margin opportunity.

The following strategies illustrate how hospitals can use outpatient pharmacies to improve care and boost revenue.

Implementing “Meds to Beds.” The most effective way to improve post-discharge outcomes may be to provide bedside delivery of prescriptions and counseling through a discharge prescription program, commonly dubbed “Meds to Beds.” In our experience, this type of concierge service achieves completion rates of 97 percent to 100 percent for medication reconciliation at discharge, with discharge prescription-capture rates of between 35 percent and 60 percent. In contrast, a passive discharge prescription program typically has a prescription-capture rate of 15 to 20 percent, while missing out on opportunities to better educate patients about medications and positively affect transitions of care.

Meeting employee pharmacy needs. Employee prescriptions represent a significant opportunity to keep revenue within the organization. Just as most health systems with health plans offer incentives for members to get their care from that entity—given that such a strategy is more cost-effective and keeps revenue within the organization—a similar approach should be considered for the employee prescription benefit instead of leaving it to external vendors.

Adding a specialty pharmacy. Specialty pharmaceuticals—high-cost medications used in complex or difficult-to-manage patient populations—include treatments for transplantation, cancer, hepatitis, multiple sclerosis, rheumatoid arthritis, some forms of blood clotting, HIV/AIDS, chronic heart failure, and infertility. Specialty medications may account for as much as 30 percent of prescription benefit dollars while representing 10 percent or less of prescription volume. Specialty pharmacy is the fastest-growing segment of prescription medications, increasing at a rate of 15 to 20 percent annually; in a recent report, these medications are projected to reach 60 percent of total drug spend by 2018.

The majority of hospitals allow specialty medications to be provided to patients and employees by outside commercial entities because they see the service as being a relatively complex undertaking. However, there are significant benefits to providing this service internally, including improved patient and provider satisfaction, better coordination of care, improved clinical outcomes, and significant financial returns. At the large Midwestern academic medical center mentioned near the beginning of the article, the specialty pharmacy program is generating approximately $20 million in annual net margin. Given the anticipated growth in this area, it is critical that health systems develop a strategy to optimize the management of patients who receive these medicines.

Improving medication reconciliation. Inaccurate medication reconciliation at admission is a leading cause of medication errors during a hospital stay. In 2007, an Institute of Medicine report found approximately 1.5 million preventable adverse drug events (ADEs) annually in the

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United States, at an average cost of $8,750.\(^g\) Furthermore, ADEs have been implicated in some 7,000 deaths a year.\(^h\)

Too often, the responsibility for medication reconciliation falls to a physician or nurse, both of whom are among the most expensive resources and have the least amount of time to perform the work. A comprehensive medication history takes 15 minutes, on average, yet physicians typically spend two to four minutes and nurses five to seven minutes on this task, based on our observations and experience.

One approach that can improve medication reconciliation is to have appropriately trained pharmacy extenders (technicians and students) dedicated solely to this function. This low-cost approach uses personnel at the top of their licenses and capabilities while freeing up costly physician and nursing time for more direct patient care.

**Building the Business Case**

After committing to view pharmacy as a business within the business, organizations can use the following steps to build and present the case for developing these new services.

**Evaluate organizational data.** As part of this step, organizations should consider the following questions:

- How large is the patient population?
- Does the organization have hospital-based outpatient clinics? If so, what type?
- Does the organization have specialty patient populations as described above? If so, what are the volumes for each area of practice? Where do these patients get their specialty medications filled?
- Is there an opportunity to utilize internal pharmacies to provide prescriptions for the organization’s employees and their dependents?

These are important considerations when forecasting prescription volumes, types of prescriptions (i.e., brand, generic, and specialty), costs, and revenue.

**Evaluate the organizational infrastructure.** In determining whether existing infrastructure can support a new program and what the startup costs will be, the following questions should be considered:

- Does the organization have an existing outpatient prescription pharmacy that is underperforming?
- What are the space requirements? Is the available space sufficient to operate an outpatient prescription pharmacy?
- What capital will be required to make the operation run efficiently?
- What software platform is appropriate for this operation? What other IT software and hardware will be needed?

Modeling and generating the business case for these new services requires an understanding of the many factors and nuances that are related to prescription fulfillment and billing. Identifying appropriate software and hardware components requires a detailed understanding of what functionality will be needed within the scope of the services to be provided. Design of the space should be considered with an understanding of work flows within an outpatient pharmacy.

**Coalesce the previous steps into a staffing plan.** This step should focus on patterns of hospital and ED discharges, hours of service that are appropriate for the majority of discharges, and the staffing level of pharmacists and pharmacy technicians needed based on projected prescription volumes.

Organizations that serve uninsured or underinsured patients may want to also consider including a medication assistance program with appropriately trained personnel.

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\(^g\) Aspden, P., et al., *Preventing Medication Errors: Quality Chasm Series*, Institute of Medicine, 2007.

PROJECT EXPENSES AND SERVICE MARGINS. Questions to answer in this step include the following:

> How cost-efficient are the organization’s group-purchasing and wholesaler agreements?
> Is the organization a 340B-covered entity?
> Is the organization a for-profit or not-for-profit entity?
> How are each of the organization’s competitors positioned in the market space?
> What are the payment rates and projected revenues, as well as projected savings?

BACK TO THE ROI

Generating the 10-to-1 or 20-to-1 ROI is not as simple as “build it and they will come.” Success requires a carefully developed plan with a comprehensive scope, backed by conservative estimates. To achieve the largest returns, a strategic investment often is required on the front end, with the full engagement and support of hospital leadership. The most robust programs rely on an integrated approach that leverages the skills of both inpatient and outpatient practitioners who have a common goal to support the prescription-capture program and a clear vision for achieving this goal. The “Meds to Beds” approach coupled with an overarching ambulatory strategy to support patient care outcomes will propel significant financial returns, as in the following cases.

A LARGE MIDWESTERN HEALTH SYSTEM. The data in the exhibit above are from a large system that includes hospital- and medical office-based outpatient prescription pharmacies. The system uses a robust ambulatory program, including pharmacists in specialty clinics and embedded in patient-centered medical homes, as well as a comprehensive “Meds to Beds” program. Discharge prescription-capture rates range between 40 percent and 60 percent overall and greater than 90 percent for all transplant specialty prescriptions.

A MIDWESTERN ACADEMIC HEALTH CENTER (AHC). The AHC implemented specialty pharmacy programs for patients and university employees. As the exhibit below shows, the AHC has realized a dramatic increase in annual margin contribution since the inception of the programs.

A LARGE NORTHEASTERN MEDICAL CENTER. The organization is investing in a comprehensive ambulatory pharmacy program that is anchored and
CASE NO. 3: AN AMBULATORY PHARMACY PROGRAM AT A LARGE MEDICAL CENTER

<table>
<thead>
<tr>
<th>Ambulatory Pharmacy</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tr>
<td>Revenue</td>
<td>$12,600,554</td>
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<td>Expenses</td>
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<tr>
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<td>$4,234,730</td>
<td>$4,888,465</td>
<td>$5,794,252</td>
</tr>
</tbody>
</table>

Source: Visante, Inc.

financially supported by a new outpatient prescription pharmacy (see the exhibit above). The medical center is adding 35 FTEs to appropriately staff the initiative.

These three examples indicate what is possible when an organization embraces transformational change. Once an organization has decided to move forward, its ability to optimize the “business of pharmacy” will require leadership, vigilance, and continued innovation to sustain and build on the financial gains. In short, this area offers a significant opportunity to achieve a high level of customer service, improved coordination in care transitions, improved quality metrics, and a substantial contribution to the overall margin of the organization.

About the authors

**Gregory S. Burger, MS, RPh, FASHP,**
is vice president, hospital and health system services, Visante, Inc., St. Paul, Minn. (gburger@visanteinc.com).

**James A. Jorgenson, MS, RPh, FASHP,**
is CEO, Visante, Inc., St. Paul, Minn., and a member of HFMA’s Utah Chapter (jjorgenson@visanteinc.com).

**James G. Stevenson, PharmD, FASHP,**
is president, hospital and health system services, Visante, Inc., St. Paul, Minn., and a professor at the University of Michigan College of Pharmacy, Ann Arbor, Mich. (jstevenson@visanteinc.com).

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