Implementation of a patient-focused specialty pharmacy program in an academic healthcare system

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Purpose. The development and implementation of a systemwide specialty pharmacy program in an academic healthcare system are described.

Summary. Although the system’s pharmacy department had developed specialty pharmacy services for patients with certain conditions, it was necessary to expand and standardize those services to meet the needs of all specialty clinics because (1) many of the clinics had experienced an increased volume of prior-authorization requests due to the introduction of new specialty drugs, (2) the dispensing pharmacies were operating at maximum capacity due to the previous decentralization of specialty pharmacy operations, and (3) payers had sent notice that they would require accreditation of the specialty pharmacy program as a condition of participation in their specialty pharmacy networks. To ensure standardization of services and successful preparation for increasing numbers of specialty prescriptions, all specialty pharmacy services were centralized to the healthcare system’s Pharmacy Ambulatory Clinical Care Center (PAC³). PAC³ centralized the prior-authorization process to selected specialty clinics. A call center was developed at PAC³ to provide centralized specialty pharmacy services, including 24-7 patient support, a medication adherence program, home delivery service, and patient education. The program resulted in a 137% increase in specialty pharmacy revenues over a two-year period. PAC³ processed 1860 prior-authorization cases and enrolled approximately 700 new patients in the specialty pharmacy program within nine months.

Conclusion. A specialty pharmacy program was established along with operational and infrastructure improvements, resulting in increased revenue, systemwide services, and a fully accredited specialty pharmacy.

Am J Health-Syst Pharm. 2016; 73:831-8

With nearly $87 billion in spending within the sector in the United States in 2012 alone and annual spending projected to approach $400 billion by 2020, specialty pharmacy is receiving tremendous attention and scrutiny from the healthcare industry.¹ The growth of specialty pharmacy is expected to continue to rise because specialty medications make up more than 40% of the late-stage pharmaceutical development pipeline.² Specialty drugs are typically high in cost, and their use often requires close monitoring and careful management of therapy as a part of complex treatment plans. Commonly known diseases treated with specialty drugs range from hepatitis C, rheumatoid arthritis, and conditions requiring transplant procedures to multiple sclerosis, hemophilia, cystic fibrosis, and cancer. Many patients with such diseases and conditions come to academic medical centers (AMCs) due to the complexity of the treatment and management of their conditions.³ AMCs are well positioned to successfully provide specialty pharmacy services due to the concentration of specialist medical practices in their own specialty clinics, electronic medical record (EMR) access, immediate medication access along with outpatient pharmacy ser-
vices, and clinical pharmacists embedded in ambulatory care clinics.\(^4\) Due to these competitive advantages and significant revenue growth potential, many institutions are now developing inhouse specialty pharmacies. A University HealthSystem Consortium study indicated that specialty prescriptions from an AMC could generate over $200 million annually.\(^4\) Given the high cost and complex nature of diseases and drug therapies, specialty drug management requires a significant infrastructure investment for AMCs to provide continuity of care by focusing on medication access, care coordination, medication adherence, home delivery, and patient education.

**Problem**

As an academic healthcare system, University of Utah Health Care (UUHC) provides medical services for complex health conditions, including cancer, rheumatoid arthritis, inflammatory bowel disease, psoriasis, multiple sclerosis, enzyme deficiencies, hemophilia, cystic fibrosis, conditions necessitating solid organ transplants, and hepatitis C infection. The ambulatory care pharmacy department has provided administrative and clinical pharmacy services in a number of specialty areas for many years. The solid organ transplant department was the first to successfully integrate prescription dispensing, billing, and clinical pharmacy oversight. The transplant pharmacy program was started in 1999 by placing a transplant clinical pharmacist into the service line. The pharmacy team was embedded within the transplant center and actively managed UUHC’s transplant population. A growing need for dedicated patient assistance, specialty billing, and accounts reconciliation support was soon realized. The centralized billing team began providing Medicare, Medicaid, and commercial billing support as well as financial assistance for all transplant candidates and recipients. Additionally, UUHC provides decentralized pharmacy services through clinical pharmacists and technicians in the infectious diseases, hepatology, and pulmonary clinics to manage patients with human immunodeficiency virus infection or acquired immunodeficiency syndrome, hepatitis C infection, and cystic fibrosis, respectively. Although the pharmacy department had previously developed centralized and decentralized pharmacy services for patients with selected specialty conditions, the ambulatory care pharmacy department could not keep up with demands for pharmacy services from specialty patients and clinics within our system. Many specialty clinics reported that their clinic staffs were overwhelmed by incoming prior-authorization (PA) requests due to the increased number of newly approved specialty drugs being prescribed in specialty clinics. Although UUHC was generating an increased number of specialty clinic visits and new specialty prescriptions, the prescription capture rates from certain specialty areas were stagnant. Our designated outpatient pharmacies for specialty drugs were at their maximum capacity due to the decentralized operations managed by outpatient pharmacy staff, including PA requests, refill coordination, home delivery, and medication education. Moreover, the ambulatory care pharmacy department received notifications from health insurance plans and pharmacy benefit managers regarding a new requirement of one or more specialty pharmacy accreditations, such as Utilization Review Accreditation Commission (URAC) accreditation, in order to participate in those entities’ specialty pharmacy networks. URAC is an independent, nonprofit healthcare accrediting organization with more than 30 accreditation and certification programs. URAC is widely recognized by national and local insurance payers as one of the validated accreditation programs for specialty pharmacies.\(^5\)

**Analysis and resolution**

We realized that in order to further develop our specialty pharmacy program, it was important to address the aforementioned issues. Our goal was to establish a systemwide specialty pharmacy program that would result in reducing administrative burdens from clinics and outpatient pharmacies, increasing prescription capture rates, and obtaining specialty pharmacy accreditations.

**Program development and implementation.** In 2014, the ambulatory care pharmacy department began evaluating existing specialty pharmacy services to determine gaps and areas for improvement. Based on interviews and surveys conducted at our pharmacies and specialty clinics, we recognized quality-improvement opportunities such as standardizing the PA process, developing the medication adherence program, and improving patient communication and education. To ensure standardization of services and successful preparation for the increasing number of specialty prescriptions, UUHC centralized specialty pharmacy services at the Pharmacy Ambulatory Clinical Care Center (PAC).

**Step 1. Develop a centralized PA process for specialty prescriptions.** The ambulatory care pharmacy department immediately recognized that having a dedicated point of contact for all PAs and payment-related issues would reduce the waiting time for therapy after initiation of a specialty prescription. We also recognized
that there would be other added responsibilities with the centralization of PA processing, such as copay assistance and billing support. PAC initiated centralized PA processing in the rheumatology clinic (Clinic 2). The Clinic 2 leadership supported the new pharmacy PA process to improve the clinic’s efficiency and increase its prescription capture rate. Additionally, Clinic 2 had received a number of complaints from patients regarding the delayed start of their specialty drug therapies because of PA requirements and a lack of informative communication regarding PA approvals and denials. Clinic 2 had previously managed its PA requests using five medical assistants and two coordinators. The pharmacy team shadowed the clinic staff to map out the PA workflow (Figure 1). Prior to centralization, a pilot study was undertaken with selected Clinic 2 providers to test the workflow. We estimated that 2 technician full-time equivalents (FTEs) would be required to handle a projected 60 new PA cases per month. We then hired three “PA technicians” with outpatient pharmacy billing and PA experience that allowed them to be fully functional in a minimal amount of time. After the successful pilot study, the PAC team centralized the PA process from Clinic 2 (Figure 2), with services including benefits investigation, PA processing, and a patient assistance support program to remove administrative burdens on the outpatient pharmacies and clinic staff. The PAC team created a communication pool in the EMR to allow all PA communications to be streamlined and standardized. We created a group e-mail and fax number to accommodate requests not transmitted via the EMR. The PAC team also created telephone encounter templates to document all PA communications in the EMR, which allowed all clinic staff and providers to review real-time PA progress, approval, and denial information. Since the Clinic 2 centralization, PAC has taken over other specialty clinics’ PA processes, including those of the neurology, hepatology C, and gastroenterology clinics. UUHC utilizes an Epic system (Epic Systems Corporation, Verona, WI) for its EMR, which has allowed communication to be centralized. However, medication dispensing information has not been integrated with our EMR yet because we use a different vendor for outpatient pharmacies. A case management system is also one of the requirements for a specialty pharmacy but is not yet supported by our EMR.

**Step 2. Develop a call center to provide centralized specialty pharmacy services, including 24-7 patient support, a medication adherence program, home delivery service, and patient education.** Previously, the UUHC ambulatory care pharmacy department had centrally managed specialty pharmacy billing-related calls, and each outpatient pharmacy location had answered all dispensing-related calls, including patient calls. UUHC had managed specialty pharmacy patients without a call center. But since specialty pharmacy accreditations and payer contracts require call center performance measurements, we decided to create a dedicated call center for specialty pharmacy. To develop a call center at PAC to manage all specialty pharmacy calls centrally, the ambulatory care pharmacy department collaborated with the UUHC guest communications department, which handles 80,000 calls each month, answering patient calls from the hospital and community clinics and scheduling clinic visits. In order to take advantage of existing telephone infrastructures within the UUHC system, PAC and all outpatient pharmacies updated their pharmacy phones to VoIP phones. A specialty pharmacy phone tree was developed to handle calls centrally at PAC. The implementation of an automatic call distributor system was necessary to gather industry-standard phone statistics that are required by payers and specialty pharmacy accrediting bodies. As we had combined PA processing and call center functions at PAC, no additional FTEs were added for the call center. During our business hours, PAC PA technicians answer all specialty pharmacy calls. Afterhours calls are directed to an interactive voice response prompt to leave a message or hold for the hospital answering service (i.e., a dispatcher) to answer the call and page the on-call pharmacist if necessary.

After the call center implementation, the PAC team began coordinating all refills for patients enrolled in UUHC’s specialty pharmacy program. The PAC team made monthly refill reminder calls. The refill renewal process begins by contacting patients at least seven days before the next refill due date to allow enough time to connect with patients, dispense the prescriptions, and coordinate deliveries. The PAC team offers three options to receive prescriptions: pickup from one of six specialty pharmacy locations, courier home delivery, and mail order. While coordinating refills and deliveries, technicians connect patients with the PAC pharmacists if they have clinical or medication-related questions. For each new patient starting a specialty drug, a PAC pharmacist completes an initial clinical assessment and patient education over the phone prior to the initiation of drug therapy. Once the initial clinical assessment is completed, the PAC pharmacists follow up with patients as needed or at least annually.

In addition to the use of a centralized specialty pharmacy team, clinical pharmacists and technicians were strategically placed to manage specialty patients in the clinics. An integrated specialty pharmacy practice model, which is specifically designed for the management of patients with specialty conditions, has been used to improve patient compliance with their specialty therapies. UUHC has a long history of integrating clinical pharmacists into ambulatory care clinics. The pharmacists in ambulatory care roles complete clinical assessment and medication education for their patients and have become
Figure 1. Decentralized specialty clinic prior-authorization (PA) workflow. PBM = pharmacy benefit manager.
Figure 2. The Pharmacy Ambulatory Clinical Care Center (PAC^3) centralized specialty pharmacy prior-authorization (PA) workflow. PBM = pharmacy benefit manager. The workflow for prescriptions filled internally is described. External pharmacy prescriptions are transferred after receiving PA approval.
a vital part of the care teams. In addition to the pharmacists embedded into our clinic teams, we have added pharmacy technicians to provide administrative support to patients and clinic staff. The addition of these technicians has allowed the clinical pharmacists to concentrate on the clinical care of their patients.

Step 3. Standardize pharmacy documents in the EMR, and implement a case management system. To provide high-level coordination between specialty clinics and the PAC3 team, we used the EMR to document all specialty pharmacy notes. Although the EMR was used primarily to document clinical and administrative notes for specialty patients, the EMR system lacked key functions, including refill reminders, clinical assessment documentation, and a discrete data-entry function for case management activities. Therefore, we implemented a separate case management system to provide a tool to coordinate recurring laboratory tests and refills and enable documentation of case management activities such as PA processing, refill renewals, and call attempts.

While the PAC3 team developed the centralized specialty pharmacy services, the ambulatory care pharmacy department prepared for URAC specialty pharmacy accreditation. The accreditation standards provided a framework to build and centralize services.7 URAC accreditation requires demonstration of compliance with the following categories of standards:

- Pharmacy Core—administration and organizational structure,
- Customer Service, Communication, and Disclosure—call center implementation and metrics,
- Patient Management/Specialty Drug Management—clinical patient management program, and
- Pharmacy Operations—policy and procedure for all aspects of operations and facility management.

The process for URAC accreditation took longer than 12 months of preparation at UUHC. Preparation for this accreditation also provided opportunities to develop quality-management strategies. The ambulatory care pharmacy department developed a quality-management committee consisting of the pharmacy leadership, a specialty pharmacy manager, a billing and compliance manager, a drug information specialist, and a quality consultant. Quarterly quality-management meetings are held to report and discuss quality-improvement projects, call center measurements, regulatory updates, specialty pharmacy updates, employee safety, customer satisfaction surveys, patient complaints, medication errors, and adverse events.

Program results. The program resulted in a 137% increase in specialty pharmacy revenue in fiscal year 2015 (FY15) (July 2014–June 2015), as compared with fiscal year 2013 (FY13). Although UUHC filled merely 2605 more prescriptions in FY15 versus FY13, we realized a substantial revenue increase due to new prescription capture—and the associated increased revenue generation—through the centralized PA process (Figure 3).

Figure 3. Trends of increased capture of specialty prescriptions by the University of Utah Health Care specialty pharmacy and increased pharmacy revenue in fiscal year (FY) 2014 and FY 2015 (revenue data for FY 2015 reflect the cumulative increase from FY 2013).
The PAC\(^3\) team enrolled approximately 700 new patients to the specialty pharmacy program in the nine months after the implementation of centralized operations in September 2014. The PAC\(^3\) team processed 1860 PA cases from the rheumatology and gastroenterology clinics (43% of cases in aggregate), the neurology clinic (27%), and the hepatitis C clinic (31%). The average turnaround time from referral receipt to PA approval is approximately three business days, excluding cases involving denials or appeals. After receiving PA approvals, the PAC\(^3\) team assists patients in accessing copay assistance from manufacturers and various foundations. As the number of referrals increased, PAC\(^3\) added more FTEs. In FY15, we added 8 technician FTEs and 1 pharmacist FTE (Table 1). Documentation of PA telephone encounters in the EMR greatly enhanced the communication between clinic staff and PAC\(^3\). PAC\(^3\) answered all specialty patient calls in FY15. The call center’s operational goals were to have an abandonment rate of less than 5% and an average answer speed of less than 30 seconds, as required by payers and the accrediting body. PAC\(^3\) achieved the call center goals within a month after the call center implementation, and attainment of those goals has been maintained to date. Centralized operations, including call center operations and PA processing, medication adherence, and home delivery services, have contributed to an increased specialty prescription capture rate. Although many of our pharmacy locations were already at their maximum capacity, the pharmacies handled the increased specialty prescription volume without any FTE increase during the past fiscal year; this was made possible by removing much of the responsibility for administrative tasks and patient communications from the outpatient pharmacies. Furthermore, UUHC successfully attained full specialty pharmacy accreditation from URAC in 2015. To increase our future dispensing capacity and further improve efficiency, UUHC is currently establishing a high-capacity central filling pharmacy.

**Conclusion**

A specialty pharmacy program was established along with operational and infrastructure improvements, resulting in increased revenue, systemwide services, and a fully accredited specialty pharmacy.

**Disclosures**

The authors have declared no potential conflicts of interest.

**References**

1. UnitedHealth Center for Health Reform & Modernization. The growth

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**Table 1. Pharmacy Ambulatory Clinical Care Center Workload and FTEs Added in Fiscal Year 2015\(^a\)**

<table>
<thead>
<tr>
<th>Month</th>
<th>New PA Requests Processed</th>
<th>No. Prescriptions Captured(^b)</th>
<th>No. Case Management Activities(^c)</th>
<th>No. Incoming Calls Answered(^d)</th>
<th>Mean Answer Speed (sec)(^e)</th>
<th>Call Abandonment Rate (%)(^f)</th>
<th>FTEs Added</th>
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<tr>
<td>Jul 2014</td>
<td>48</td>
<td>58</td>
<td>23</td>
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<tr>
<td>Aug 2014</td>
<td>60</td>
<td>58</td>
<td>153</td>
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<td>. . .</td>
<td>. . .</td>
<td>3 technicians</td>
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<tr>
<td>Sep 2014</td>
<td>124</td>
<td>86</td>
<td>200</td>
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<td>. . .</td>
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<td>Oct 2014</td>
<td>132</td>
<td>106</td>
<td>166</td>
<td>53</td>
<td>8</td>
<td>5</td>
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<tr>
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<td>138</td>
<td>120</td>
<td>267</td>
<td>163</td>
<td>5.5</td>
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<tr>
<td>Dec 2014</td>
<td>141</td>
<td>167</td>
<td>304</td>
<td>254</td>
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<tr>
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<td>226</td>
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<td>304</td>
<td>351</td>
<td>10</td>
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<td>263</td>
<td>408</td>
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<td>194</td>
<td>236</td>
<td>333</td>
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<td>May 2015</td>
<td>184</td>
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<td>277</td>
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<tr>
<td>Jun 2015</td>
<td>242</td>
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<td>339</td>
<td>571</td>
<td>8</td>
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<td>Total</td>
<td>1860</td>
<td>1918</td>
<td>3062</td>
<td>3059</td>
<td>9</td>
<td>3</td>
<td>8 technicians, 1 pharmacist</td>
</tr>
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</table>

\(^a\)FTE = full-time equivalent, PA = prior authorization.

\(^b\)New and refill prescriptions captured and filled internally through centralized PA process.

\(^c\)Case management activities, such as refill renewal and PA renewal calls, completed by technicians are included.

\(^d\)Incoming specialty pharmacy calls answered by PA technicians are included.

\(^e\)Mean waiting time for all callers.

\(^f\)Abandonment rate was defined as percentage of calls during which callers hung up before being connected to live agent.

\(^g\)Not applicable; call center not operational until October 2014.