SURVEY OBJECTIVES & METHODOLOGY

SURVEY OBJECTIVES

- Evaluate the structure of hospital-owned specialty pharmacies and coordinated care services among C-suite executives of Leading Health Systems (LHS);
- Understand the barriers and challenges involved in operating a specialty pharmacy; and
- Evaluate the ROI of current applications and additional value from future use cases.

METHODOLOGY

Beginning in March 2018, The Health Management Academy (The Academy) conducted an online survey of Clinical and Financial Senior Executives of LHS regarding health system specialty pharmacy models.

The 18 responding Chief Medical Officers, Chief Financial Officers, Oncology Leaders, and Chief Medical Informatics Officers represent health systems with a median revenue of $3.9 billion that own or operate 212 hospitals.
KEY FINDINGS

1. ALL RESPONDING LHS OFFER SPECIALTY PHARMACY SERVICES, WITH MOST (78%) OPERATING THEIR OWN SPECIALTY PHARMACY IN-HOUSE.
   - Internal pharmacy staff is most commonly responsible for the administrative work associated with specialty pharmacy, as well as for communicating specialty pharmacy options to patients.

2. DESPITE SOME CHALLENGES, EXPANSION OF SPECIALTY PHARMACY OPERATIONS REMAINS A TOP STRATEGIC PRIORITY FOR 2018.
   - LHS report challenges around gaining access to limited distribution specialty drugs (LDDs) written from their hospitals as well as patient utilization, identification, and retention;
   - However, 54% of health systems say growing specialty pharmacy is a top 5 strategic priority for 2018.

3. LHS SEE SIGNIFICANT CLINICAL AND FINANCIAL VALUE IN OFFERING SPECIALTY PHARMACY SERVICES.
   - A majority of health systems saw improvements in time to therapy (69%), patient approval (69%), physician approval (62%), and co-pay reduction (54%);
   - Over half (60%) of health systems claim topline specialty pharmacy revenue between $51 – 200 million.
KEY TAKEAWAY I: ALL RESPONDING LHS OFFER SPECIALTY PHARMACY SERVICES
All responding health systems offer specialty pharmacy services, with most health systems (78%) owning their own pharmacy in-house.

Health systems with a combination approach serve a majority of their patient populations (65%) through the hospital-owned specialty pharmacy.

Most LHS have been operating an in-house, or combination of in-house and contracted specialty pharmacy for the last 3 – 5 years.
Most (89%) health systems have some quantitative understanding of the opportunity associated with specialty pharmacy based on the needs of their patient population.

While some health systems report having a “ballpark number,” most (61%) have completed rigorous analyses utilizing historical data.

DO YOU HAVE A QUANTITATIVE UNDERSTANDING OF THE FINANCIAL OPPORTUNITY ASSOCIATED WITH SERVING THE SPECIALTY PHARMACY NEEDS OF YOUR HEALTH SYSTEM’S PATIENTS?

- Yes, we have performed a rigorous, bottoms-up sizing analysis using our historical prescribing data from the electronic medical record.
- We have a ballpark number but no rigorous calculations have been performed.
- No, this calculation has never been performed.
For those health systems with some in-house owned specialty pharmacy, the administrative work for specialty pharmacy – including prior authorizations and financial assistance – most commonly falls upon pharmacy staff (50%).

All health systems utilize internal resources at the hospital for this work, rather than contracting external resources.

Additionally, half (50%) of responding health systems utilize trained pharmacy staff embedded in clinics to communicate the health system’s specialty pharmacy options to patients. Fewer health systems (20%) designate this responsibility to clinical staff.
KEY TAKEAWAY II: DESPITE CHALLENGES, EXPANSION OF SPECIALTY PHARMACY OPERATIONS REMAINS A TOP STRATEGIC PRIORITY
LHS FACE CHALLENGES IN OBTAINING ACCESS TO LDDS

Less than one-fourth (23%) of health systems have access to all limited distribution specialty drugs (LDDs) written from their hospitals.

HOW SUCCESSFUL HAS YOUR HEALTH SYSTEM BEEN IN GAINING ACCESS TO LIMITED DISTRIBUTION SPECIALTY DRUGS IN YOUR HEALTH SYSTEM’S NAME?

- **LDDs have been a real challenge and we have obtained access to less than 5% of all LDDs written from our hospitals:** 8%
- **We have obtained access to some LDDs, but still less than 25% of all LDDs written from our hospitals:** 46%
- **We have notable LDDs that we are unable to fill (Celgene products, Pfizer Oncology products, etc.) but, for the most part, we have had success and have obtained access to roughly 50% of all LDDs written from our hospitals:** 23%
- **We have access to 100% of all LDDs written from our hospitals:** 23%
- **Unknown:** 8%
GOVERNMENT PROGRAMS CONSTITUTE 55% OF LHS PAYER MIX

Across specialty pharmacy operating models, health systems are more successful filling specialty pharmacy prescriptions for Medicaid and Medicare patients, than for commercially insured patients.

Additionally, the majority of payment (55%) comes from governmental sources such as Medicare and Medicaid, while only 45% of payment comes from commercial sources, on average.

Health systems report a range of 23% - 85% of their payer mix comes from either Medicare or Medicaid.

Based on your health system’s current specialty pharmacy operating model, please indicate the percentage of each patient population for which you can fill specialty pharmacy prescriptions.

What is the approximate payer mix, as a percentage, across your health system?

- Medicaid: 80%
- Medicare: 77%
- Commercial: 48%

- 45% Medicare
- 37% Medicaid
- 18% Commercial
Health systems are challenged in patient usage of their specialty pharmacy, with the majority (60%) of LHS reporting less than a third of their patients are filling at their specialty pharmacy and 60% reporting patient identification and/or retention is a challenge.

### Approximately What Percentage of Your Patient Base Is Filling at Your Specialty Pharmacy Today?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–5% of patient base</td>
<td>10%</td>
</tr>
<tr>
<td>6–15% of patient base</td>
<td>20%</td>
</tr>
<tr>
<td>16–30% of patient base</td>
<td>30%</td>
</tr>
<tr>
<td>30+% of patient base</td>
<td>30%</td>
</tr>
<tr>
<td>Unknown</td>
<td>10%</td>
</tr>
</tbody>
</table>

### How Much Do Patient Identification and Retention Limit the Growth of Patient Use of Your Pharmacy?

<table>
<thead>
<tr>
<th>Limit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>We struggle with patient identification and retention</td>
<td>40%</td>
</tr>
<tr>
<td>We struggle with patient identification but have strong patient retention once therapy is started</td>
<td>10%</td>
</tr>
<tr>
<td>We can identify patients but have a hard time ensuring patients continue to fill through our pharmacy</td>
<td>20%</td>
</tr>
<tr>
<td>Patient identification and retention have not limited our growth to date</td>
<td>30%</td>
</tr>
</tbody>
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SPECIALTY PHARMACY IS HIGH PRIORITY AS LHS INCREASINGLY TAKE ON RISK

Over half (62%) of responding health systems currently participate, or are planning to participate, in ACO agreements—fully capitated agreements or hybrid agreement in which the health system shares the risk associates with the patient’s total cost of healthcare.

Reflective of health systems’ focus on cost and quality, growing specialty pharmacy is a top 5 priority for over half (54%) of responding health systems.

DO YOU CURRENTLY PARTICIPATE OR HAVE PLANS TO PARTICIPATE IN ACO AGREEMENTS?

- Yes: 62%
- No: 15%
- Unknown: 23%

DO YOU CONSIDER THE ADDITION OR EXPANSION OF A SPECIALTY PHARMACY ONE OF YOUR HEALTH SYSTEM’S TOP 5 PRIORITIES FOR 2018?

- Yes: 54%
- No: 46%
- Unknown: 0%
KEY TAKEAWAY III: LHS SEE CLINICAL AND FINANCIAL VALUE IN OFFERING SPECIALTY PHARMACY SERVICES
SPECIALTY PHARMACY HAS LED TO IMPROVEMENTS IN CARE METRICS

Although LHS experience operational challenges, specialty pharmacy has led to improvements across a variety of care metrics for health systems.

HAS YOUR HEALTH SYSTEM'S CURRENT SPECIALTY PHARMACY MODEL IMPROVED THE MOST IMPORTANT CARE METRICS?
LHS ARE SEEING FINANCIAL RETURNS FROM SPECIALTY PHARMACY

Over half (60%) of health systems have a topline specialty pharmacy revenue between $51 – 200 million; however, specialty pharmacy still represents less than 10% of net income at most (69%) health systems.

**WHAT IS THE ANNUAL TOPLINE REVENUE FROM YOUR SPECIALTY PHARMACY PROGRAM?**

<table>
<thead>
<tr>
<th>Revenue Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0–50 million</td>
<td>30%</td>
</tr>
<tr>
<td>$51–100 million</td>
<td>20%</td>
</tr>
<tr>
<td>$101–200 million</td>
<td>40%</td>
</tr>
<tr>
<td>$200+ million</td>
<td>0%</td>
</tr>
<tr>
<td>Unknown</td>
<td>10%</td>
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</table>

**INDICATE THE IMPORTANCE OF PHARMACY RELATED NET INCOME TO THE OVERALL FINANCIAL PERFORMANCE OF YOUR HEALTH SYSTEM.**

- Pharmacy is less than 5% of net income: 23%
- Pharmacy is less than 5%–10% of net income: 8%
- Pharmacy is less than 10%–20% of net income: 31%
- Pharmacy is less than 20% of net income: 38%
- Unknown: 0%
CONCLUSIONS

- Reflective of the financial pressures integrated delivery networks are experiencing – and with an understanding of the financial and clinical value associated with specialty pharmacy – all LHS have some sort of specialty pharmacy operating model.

- Operating specialty pharmacy services presents health systems with challenges primarily oriented around patient awareness and engagement. Despite these challenges, LHS are seeing substantial financial returns ($51-200 million) from such operations. As specialty pharmacy operating models are gradually refined and optimized, we can expect LHS to generate greater returns.

- Given this value proposition, leveraging specialty pharmacy remains a top priority for LHS. As health systems become increasingly responsible for managing the total cost of care, specialty pharmacy is uniquely positioned. In particular, as risk contracting (e.g., accountable care) with government payers – notably Medicare and Medicaid – grows among LHS, demand for and utilization of specialty pharmacy services will likely increase.
PARTICIPATING HEALTH SYSTEMS
ABOUT THE SURVEY

ABOUT THE HEALTH MANAGEMENT ACADEMY

The Health Management Academy (The Academy) supports the Top-100 health systems in the United States. Its services are uniquely predicated on understanding the priorities, challenges, and opportunities of health systems with significant scale and community impact. Since its inception in 1998, The Academy has served as the definitive trusted source for peer-to-peer learning in healthcare delivery and an industry-leading resource for market research and policy analysis.

ABOUT SHIELDS

Shields Health Solutions, the largest specialty pharmacy integrator in the US, partners with non-profit health systems to help them create their own best-in-class specialty pharmacies, or rapidly accelerate the growth of their existing pharmacies.

THE ACADEMY EXTENDS ITS APPRECIATION TO SHIELDS FOR PROVIDING THE FUNDING FOR THIS PROJECT.