ASHP Best Practices Award

Development and Outcomes of a High-Touch, Integrated Specialty Pharmacy Model at an Academic Health System

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Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have direct or indirect interest in the subject matter of this presentation.

Authors have nothing to disclose.

Introduction

Healthcare Facility

Vanderbilt University Medical Center

- 4 hospitals
  - Vanderbilt University Adult Hospital
  - Vanderbilt Psychiatric Hospital
  - Vanderbilt Stallworth Rehabilitation Hospital
  - Monroe Carell Jr. Children's Hospital at Vanderbilt
- More than 1,000 licensed beds
- More than 2 million patient visits per year

Specialty Pharmacy Services

- 35 pharmacists, 29 technicians, 9 support staff
- 23 outpatient specialty clinical areas
- Embedded teams handle all aspects of outpatient specialty therapy management

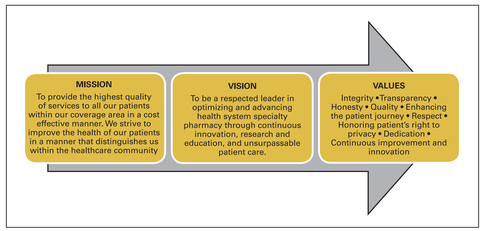
Background

- Specialty therapies have advanced the treatment of chronic, complex diseases
  - Realizing their benefit in a real-world setting hinges on successful navigation of a convoluted process from treatment decision to outcomes to ensure patient access and benefit

Purpose

- Develop innovative, high-touch care model to support patients receiving specialty medication by ensuring
  - Medication access
  - Affordability
  - Optimization of therapy

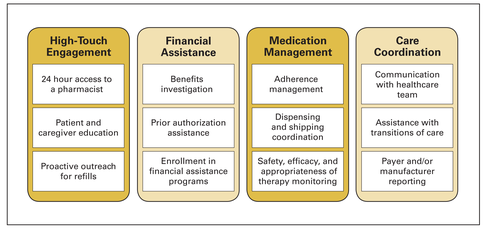
Vanderbilt Specialty Pharmacy: Missions, Vision and Values



Description of the Program

- Specialty pharmacy teams, comprised of specialty pharmacists and certified pharmacy technicians, are embedded in 23 outpatient specialty clinical areas
  - Established 2011
  - 23 outpatient specialty clinical areas
    - Adult and pediatric cystic fibrosis
    - Idiopathic pulmonary fibrosis
    - Pulmonary arterial hypertension
    - Dermatology
    - Asthma and allergy
    - General
    - Adult and pediatric endocrinology
    - Rheumatology (2 sites)
    - Hematology
    - Oncology
    - Hemophilia
    - Hepatitis C
    - Psychiatry
    - Adult and pediatric inflammatory bowel disease
    - Infectious diseases
    - HIV PrEP
    - Lipid
    - Multiple sclerosis
    - Neurology
    - Pediatric rheumatology
- Specialty pharmacy team
  - Performs comprehensive medication management
  - Completes insurance approval tasks
  - Provides on-going treatment monitoring throughout the patient journey.

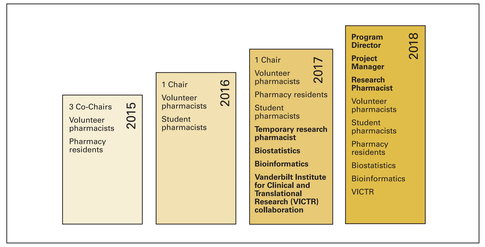
Vanderbilt Specialty Pharmacy Services: Above and Beyond



Description of the Program *(continued)*

- In 2015, Vanderbilt Specialty Pharmacy (VSP) developed a Health Outcomes and Research Program to measure its value and improve patient care using sound research

Vanderbilt Specialty Pharmacy Health Outcomes and Research Program Development



Experience with the Program

Customer satisfaction

- High patient satisfaction evidenced by consistent net promotor scores averaging above 90 [Zitter survey]
- Providers and staff rate themselves as 'extremely satisfied' with VSP services, with a 9.74/10 'likeliness to refer' rating
- VSP awarded 2019 Zitter Specialty Pharmacy Patient Choice Award
- Tangible improvements in quality of care
  - Medication access
  - Cost
  - Initiation barriers

Access

- Average time to medication shipment is 2.8 days, exceeding industry average of 10 to 15 days
- Pimavanserin access time in neurology clinic decreased from 24.5 days to 3 days
- Median therapy access time in hematology clinic was 3 days for VSP compared to 6 days for external pharmacies (OR=6.5, $p<0.001$)

Cost

- Fiscal year 2016, financial assistance efforts resulted in $5,811,640 cost savings for patients through copay and other patient assistance programs

Treatment initiation

- 315 PCSK9 inhibitor prescriptions
  - 96% approved
  - 91% resulted in treatment initiation
- Hepatitis C (HCV) therapy
  - 97% started therapy
  - Real-world reports that 37% of patients initiate therapy

Experience with the Program *(continued)*

Adherence and persistence

- Average adherence rate of 93% exceeds industry standards (November 2016-November 2017)
- High rates of treatment completion
  - HCV therapy
    - 97% successfully completed treatment
    - Real-world studies report discontinuation rate of 8.1%
  - Endocrinology clinic, patients on teriparatide after VSP integration
    - 62% more likely to complete treatment
    - 49% less likely to discontinue treatment after completing 12 months

Innovation

- Commitment to advance field of specialty pharmacy resulted in
  - Telemedicine clinics
  - Collaborative practice agreements
  - Development of quality performance standards in specialty diseases
- 2019 Health-System Specialty Pharmacy Outcomes Research Summit held to disseminate tools and knowledge other specialty pharmacies need to start or invigorate their own research efforts

Discussion/Conclusion

- The outcomes detailed above quantify the exemplary care VSP provides to patients and the benefits we convey to our healthcare partners as well as to the field of specialty pharmacy
- The integrated health system specialty pharmacy model has demonstrated decreased provider and clinic burden, decreased time to medication approval and initiation, excellent patient and provider satisfaction, substantial patient cost savings, optimal medication adherence, and overall improved continuity of care for patients on specialty medications.

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