



VITAL2016
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Quality Impact of Health System Specialty Pharmacy Service

Brian S. Smith and Eric Dickson
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8:00am



AMERICA'S
ESSENTIAL
HOSPITALS



INTRODUCTION



Eric W. Dickson
MD, MHCM, FACEP

Dr. Dickson rejoined the faculty of the Department of Emergency Medicine in 2009 after serving in many capacities at the Carver College of Medicine and the University of Iowa Hospitals and Clinics including Founding Chair of the Department of Emergency Medicine.

He did his residency at the Emergency Medicine Residency Program of the University of Massachusetts Medical School and is a graduate of the University of Massachusetts Medical School. He received his Masters of Health Care Management from Harvard University.

He was appointed the CEO of UMass Memorial Health Care system, the clinical partner of the University of Massachusetts Medical School. His research interests include hormonal opioids and tissue protection.

INTRODUCTION



Brian S. Smith
PharmD

Dr. Smith is currently the Director of Clinical Services, Quality and Compliance for Shields Health Solutions. In this role, Dr. Smith oversees the development of clinical protocols with physician practices, medication adherence programs, staff education, quality improvement, safety and compliance.

Dr. Smith graduated from Massachusetts College of Pharmacy and Health Sciences in 1997 with a Bachelor of Science in Pharmacy and 1999 with a Doctor of Pharmacy degree. In 2000, he completed an ASHP Accredited PGY1 Residency at UMass Memorial Medical Center. After residency training, Dr. Smith was hired as a Clinical Pharmacy Specialist, Trauma/Neurosurgery/Burn at UMass.

In 2012, Dr. Smith received the Massachusetts Society of Health-System Pharmacists Service Award. Dr. Smith is also an Assistant Professor of Surgery and Graduate Nursing at University of Massachusetts Medical School where he teaches in the Pharmacology and Advanced Therapeutics courses.

AGENDA

- 1 UMass Memorial Accountable Care Organization (ACO)
- 2 What is Specialty Pharmacy?
- 3 Trends in Specialty Pharmaceuticals
- 4 Impact of Medication Adherence
- 5 Lessons from Specialty Program
- 6 Care Management Platform 2.0

WHO WE ARE



4 Affiliated Hospitals

- + Heywood
- + Milford
- + Harrington
- + Day Kimball

4 Owned Hospitals on 8 Campuses

- + Clinton
- + HealthAlliance
- + Marlborough
- + UMass Memorial Medical Center
 - Hahnemann Campus
 - University Campus
 - Memorial Campus
 - City Campus

1100 Employed MDs

550 Residents /Fellows

45 Physicians at 3 Federally Qualified Health Centers

1600 Physicians in the UMMHC MCN

CHL Community Healthlink

MRI Facilities

- + 9 Magnets
- + 1 PET/CT

Outreach Laboratories

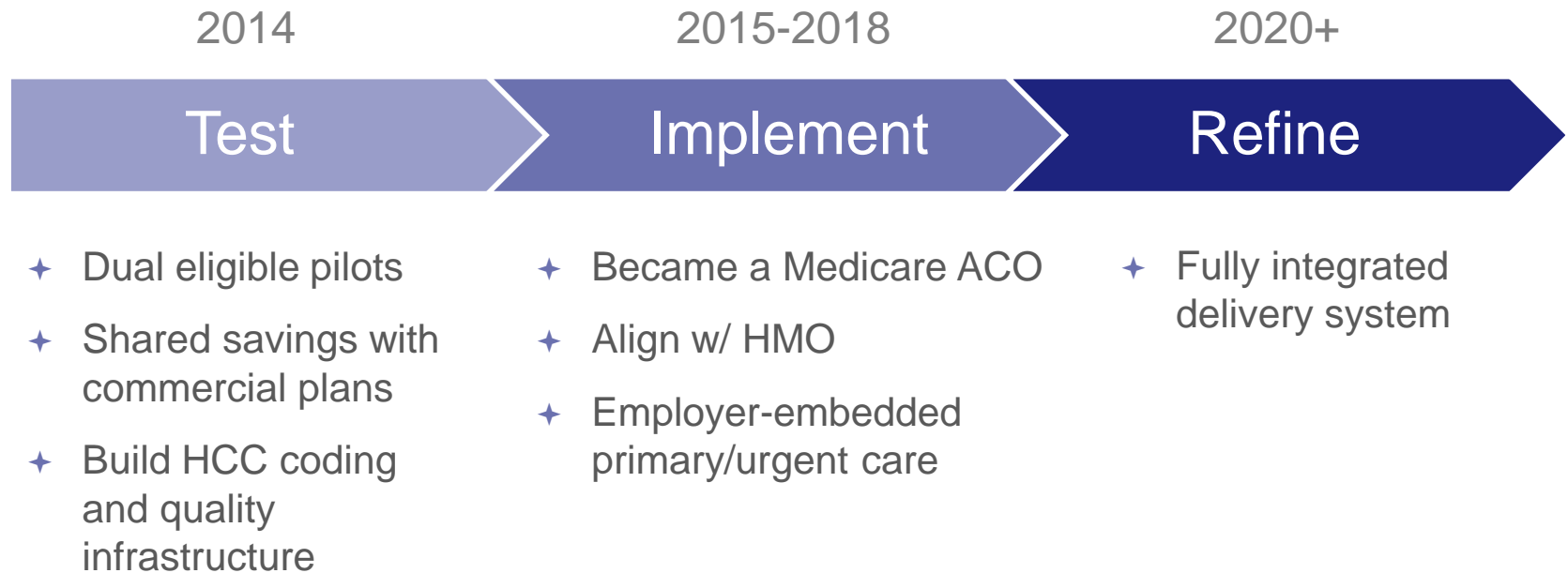
UMass Memorial ACO, Inc.

LIFE Flight

Ronald McDonald Van

Fairlawn Rehabilitation Hospital & Outpatient Center

FOCUS ON POPULATION HEALTH



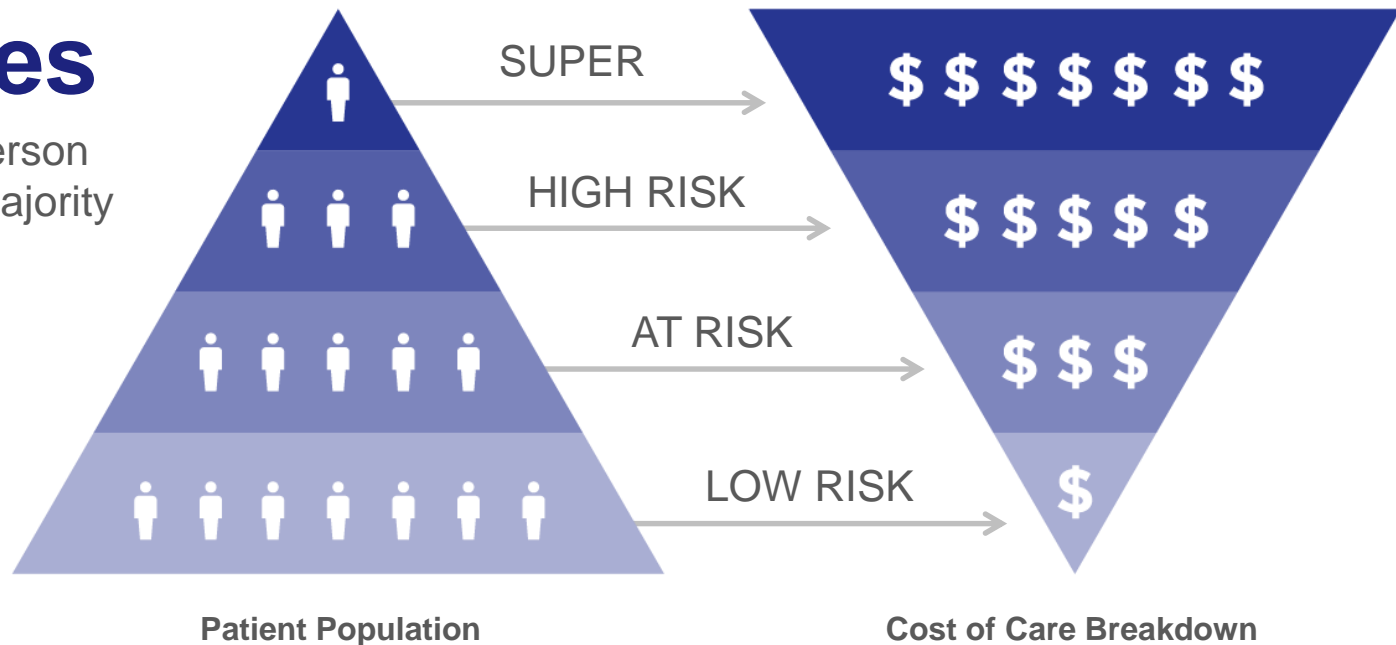
UNDERSTANDING YOUR PATIENT POPULATION

The sickest 5%

of the population spends

50 times

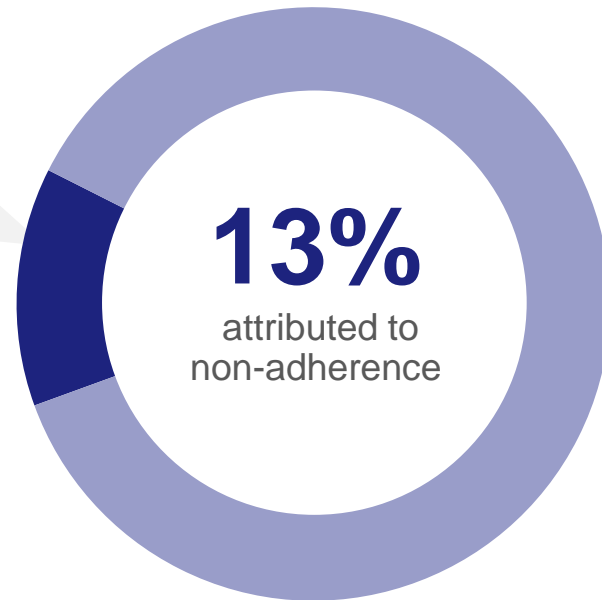
as much per person
as the healthy majority



COST OF MEDICATION NON-ADHERENCE

Medication non-adherence adds an estimated **\$290 billion** of unnecessary cost to the US health care system.

Total Health System Costs



■ Costs Attributed to Non-Adherence ■ Other

Source: NEHI Research Brief, "Thinking Outside the Pillbox: A System-wide approach to Improving Patient Medication Adherence for Chronic Disease." NEHI, 2009.

SPECIALTY PHARMACY AS THE FOUNDATION OF ACO

“This really is an innovative approach, but I’m afraid we can’t consider it. It’s never been done before.”



DEFINITION OF SPECIALTY PHARMACY

“ Specialty pharmacy focuses on **HIGH COST, HIGH TOUCH** medication therapy for patients with complex disease states.”



WHAT DEFINES “SPECIALTY PHARMACY”?

85% **High cost**
ANSWERED

73% **Requires special handling, storage, and distribution**
ANSWERED

81% **Treats complex disease requiring special monitoring**
ANSWERED

67% **Limited distribution from manufacturer**
ANSWERED

74% **Treats orphan, uncommon, or rare disease**
ANSWERED

66% **Indicated for disease already classified as specialty**
ANSWERED

Source: EMD Serono Specialty Digest, 10th Edition. 2014.

SPECIALTY MARKET

U.S. Pharma Market

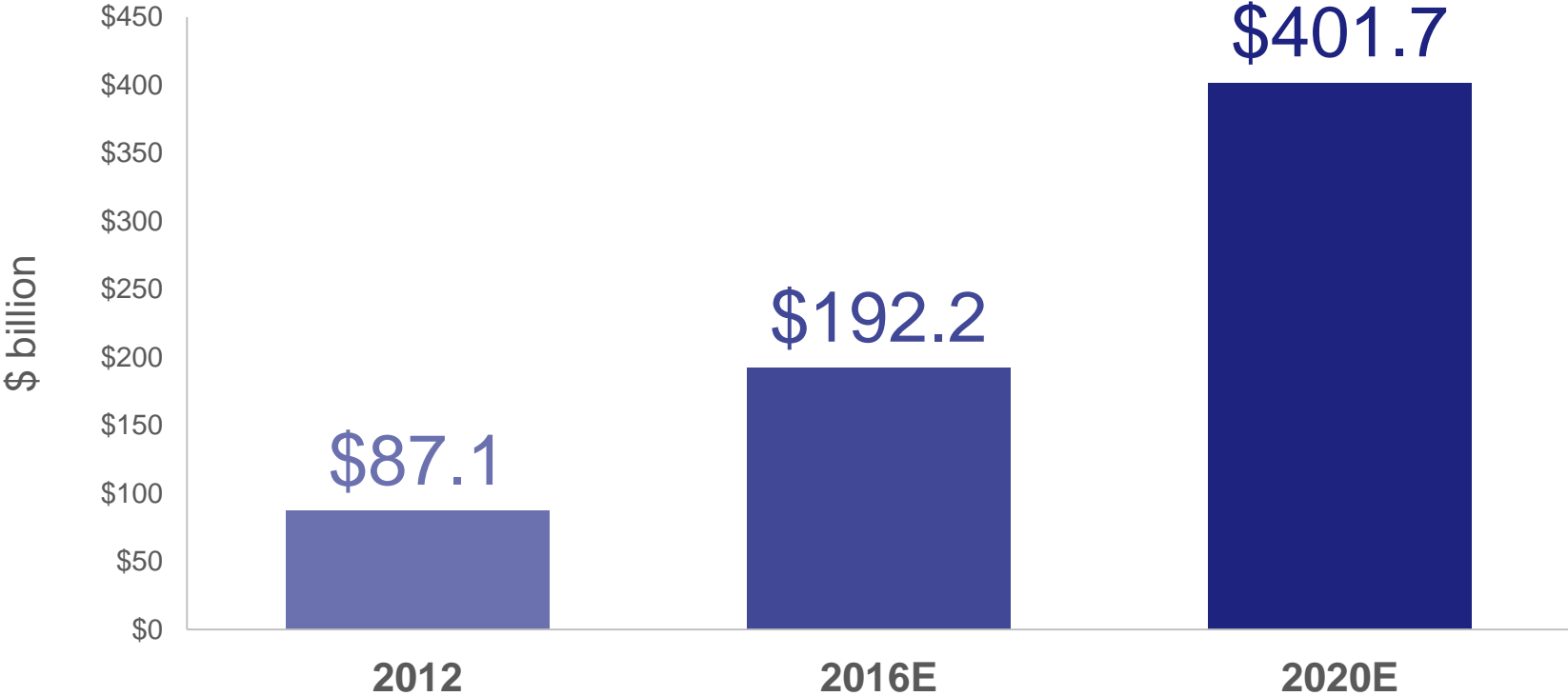


Specialty Market Breakdown (2014)

Oncology (including oral solids)	\$41.2
Rheumatoid Arthritis/Crohn's	\$20.6
HIV/AIDS (including oral solids)	\$13.8
Multiple Sclerosis	\$13.8
Renal	\$6.1
IVIg/Hemophilia	\$5.6
Hepatitis	\$9.7
Macular Degeneration	\$3.5
Anti-Coagulant	\$1.9
Growth Hormone	\$1.7
Transplant	\$1.6
Pulmonary Arterial Hypertension	\$2.4
Other	\$13.1
Total (\$ billion)	\$135.1

Source: JP Morgan "Healthcare Technology & Distribution" 08 January 2015.

SPECIALTY PHARMACY IS RAPIDLY GROWING



UMASS SPECIALTY PHARMACY CARE MODEL



Traditional Pharmacy



Patient leaves hospital, fills script at local pharmacy

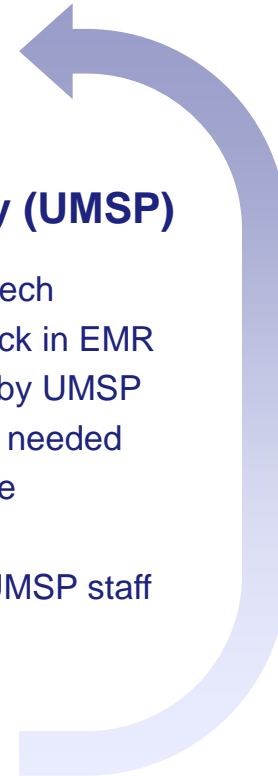


UMass Specialty Pharmacy (UMSP)

- ✦ Dedicated pharmacist/pharm-tech
- ✦ Complete drug interaction check in EMR
- ✦ Prior authorization completed by UMSP
- ✦ Co-pay assistance advocate if needed
- ✦ Delivery in the clinic or to home
- ✦ Patient Support Center
- ✦ Feedback to care team from UMSP staff




Script filled through UMSP care team



Information flows back to clinicians

STRATEGIC POSITIONING – UMASS SPECIALTY PHARMACY

	RETAIL	HOSPITAL	
Staff embedded in clinic	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Shared EMR	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Data Analytics	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Hospital Ownership	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Prior Authorization	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Billing	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Mail Order	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Patient Support Center	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Adherence Monitoring	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

THE VALUE OF BRINGING ON STRATEGIC PARTNERS

**Integration
with the Clinic**



**Clinician Facing
Services**



**UMass Specialty
Pharmacy**

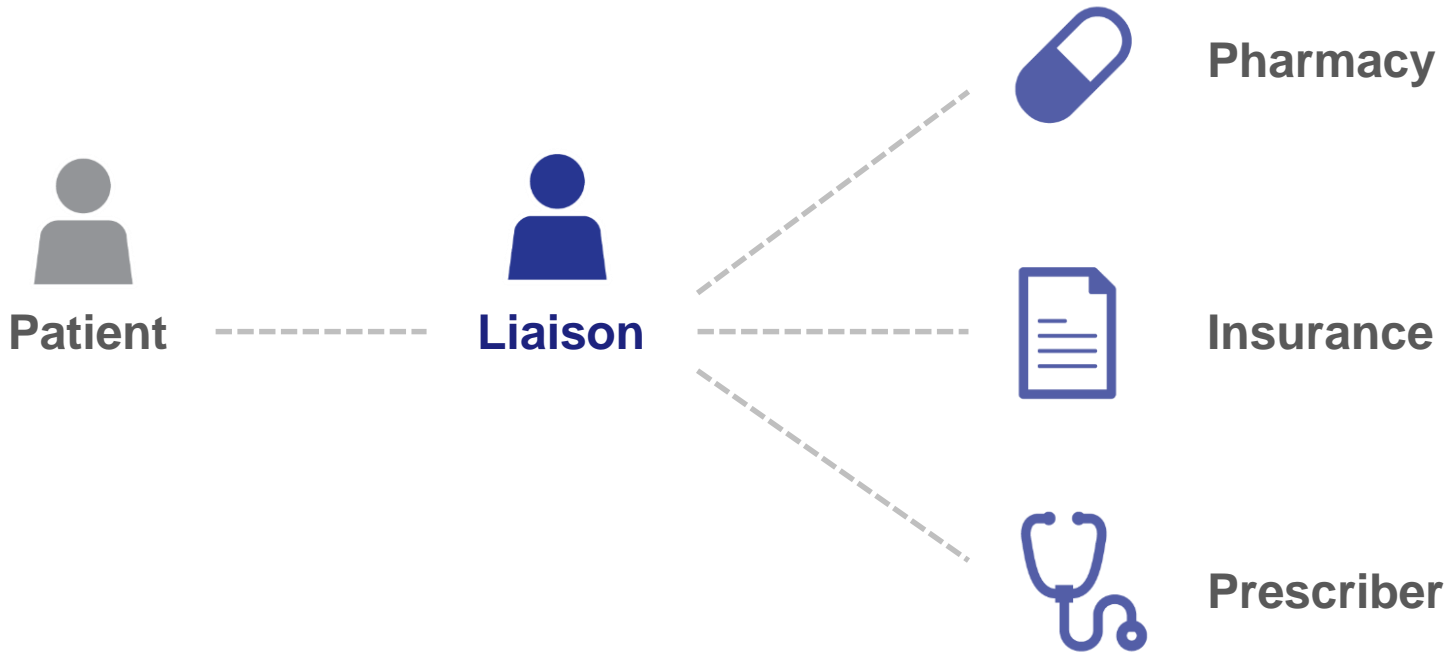
**Patient Facing
Services**



**Back Office
Support**



COORDINATING CARE THROUGH THE LIAISON



ASSESSING OUTCOMES

Patient Experience

Patient satisfaction surveys monthly

Physician Experience

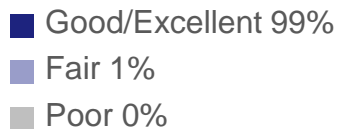
Clinician satisfaction surveys annually

Adherence Metrics

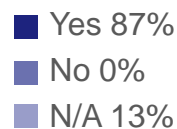
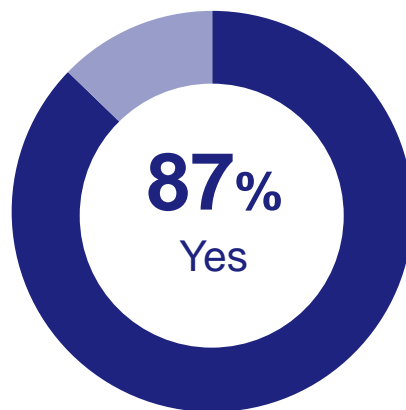
Proportion days covered (PDC) reported quarterly

PATIENT EXPERIENCE SURVEY RESULT

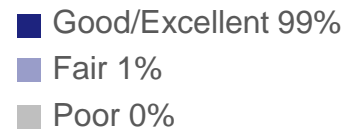
Overall Experience



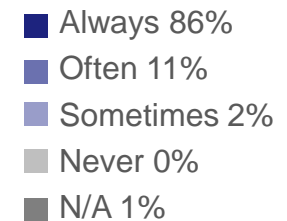
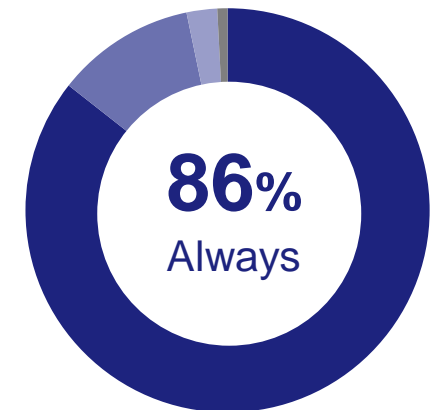
Staff Answered Questions



Education Materials Received with Prescription



Recommend to a Friend



Note: Survey 2013-2015

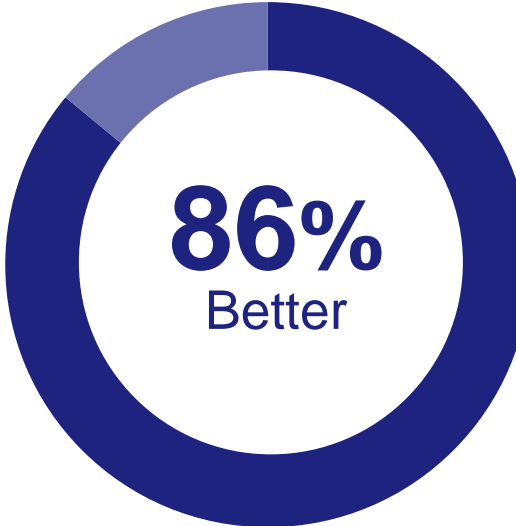
COMPARISON TO OTHER SPECIALTY PHARMACIES

Overall Experience with UMSP



- Good/Excellent 97%
- Fair 3%
- Poor 0%

Comparison to Other Pharmacies



- Better 86%
- Same 14%
- Worse 0%

MEDICATION ADHERENCE AND PATIENT OUTCOMES

Disease State

Outcomes Associated with High Medication Adherence

HIV

Viral suppression, high CD4 count, less resistance¹⁻³

Solid Organ Transplant

Less rejection, improved graft survival^{4,5}

Chronic Myeloid Leukemia

Complete molecular response to therapy⁶

Hepatitis C

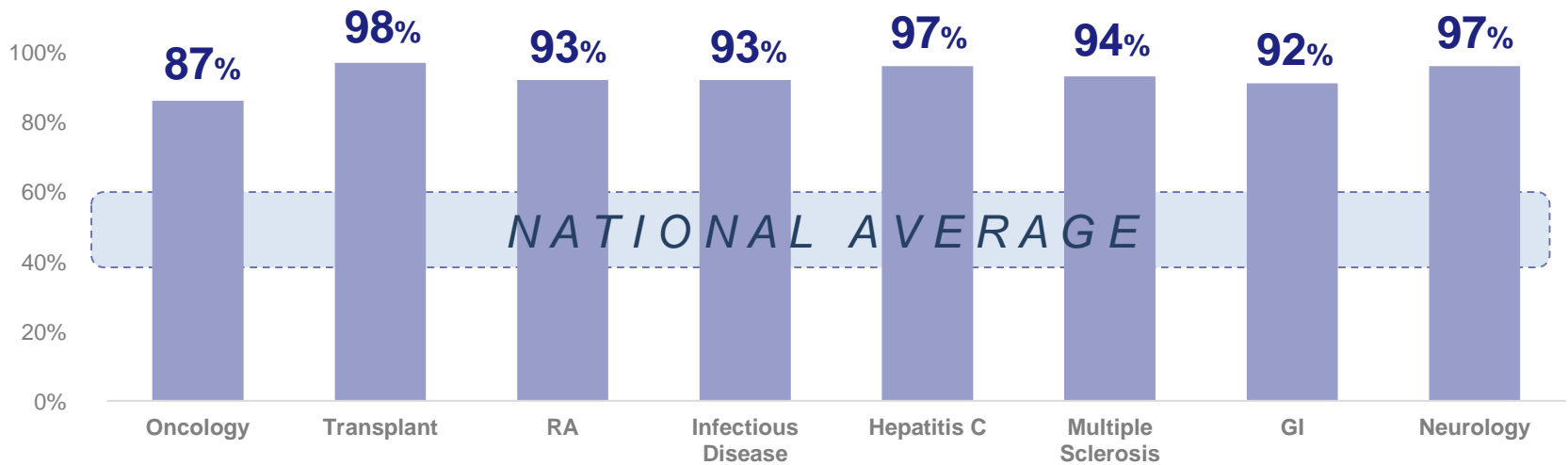
Sustained virologic response⁷

1. Ann Intern Med 2000; 133:21-30.
2. Clin Infect Dis 2002; 34:1115-21.
3. Aids 2001; 15:1701-6.
4. Transplantation 2009;87:839-847.

5. Transpl Int 2005;18:1121-1133.
6. J Clin Oncol 2010; 28:2381-2388.
7. Aliment Pharmacol Ther 2013; 38:16-27.

MEDICATION ADHERENCE: 2015 OUTCOMES

PDC by Specialty



Note: Jan-Dec 2015, Average Adjusted PDC.

GROWTH

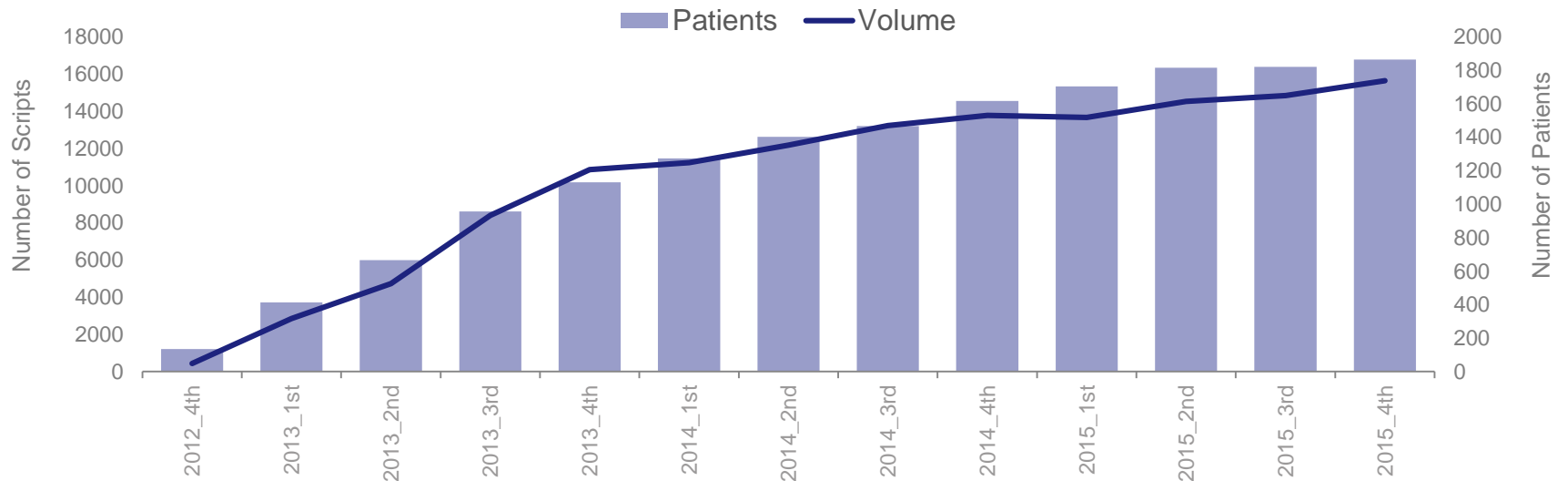
Excellent patient and clinician satisfaction



High rates of medication adherence



Sustained and continued growth



MEDICATION ADHERENCE: NEXT STEPS



**Predictive
Analytics**



**Patient
Dashboards**

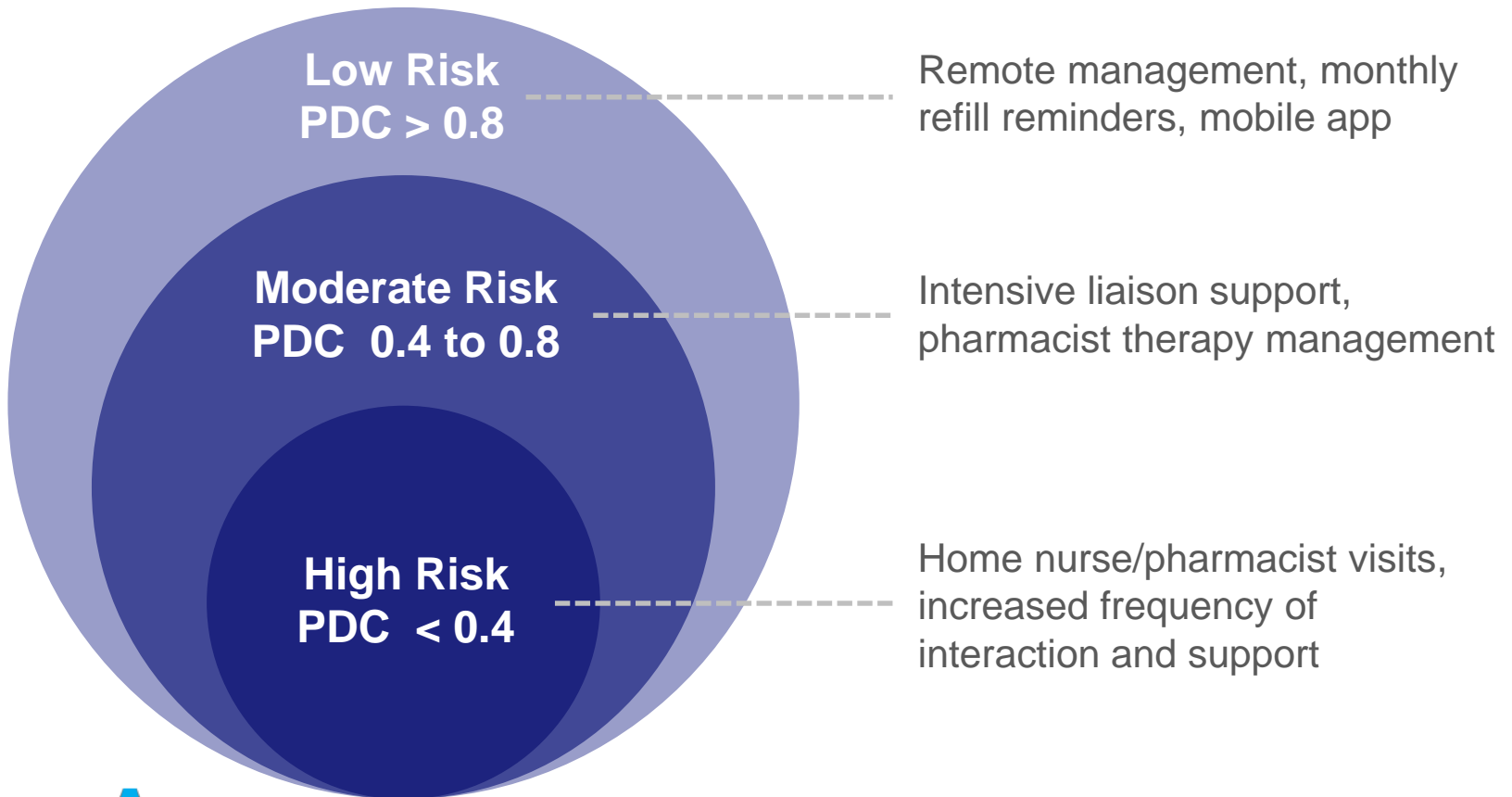


**Expanding Use
of Mobile App**



**Care
Navigators**

CARE MANAGEMENT 2.0



MOBILE ENGAGEMENT

Providing support to patients and caregivers at home is critical

Daily Guidance

Objective Tracking

Social Support



TAKEAWAYS



Specialty pharmacy
is **growing fast**



New models of
treating patients outside
the hospital exist



Specialty provides a
great foundation
for building an ACO