Improving patient care through better access to high-cost and complex medications

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Increasing Drug Costs

In 2021, overall **pharmaceutical expenditures in the US grew 7.7%** from 2020, for a total of **$576.9 billion**. Utilization (+4.8%), price (+1.9%) and new drugs (+1.1%) were the primary drivers of this increase.

Drug expenditures were $39.6 billion (+8.4%) and $105.0 billion (+7.7% increase) in nonfederal hospitals and in clinics, respectively. In clinics and hospitals, new products and increased utilization growth drove growth, with decreasing prices for both sectors acting as an expense restraint.

Several new drugs that are likely to influence spending are expected to be approved in 2022. **Specialty and cancer drugs will continue to drive expenditures** along with the evolution of the COVID-19 pandemic.

The increasing costs and therapeutic complexities associated with new medications directly increase the need for success.

Current processes are complicated and can delay access to these critical medications.

Adalimumab, a Specialty Medication, was the top drug in terms of overall expenditures in 2021, followed by apixaban and dulaglutide.

The lowest price for the most common version of Humira is around $6,276.92 -- 31% off the **average retail price of $9,188.13**.

https://www.humira.com/pediatric-ibd/citrate-free

Specialty Cost Management

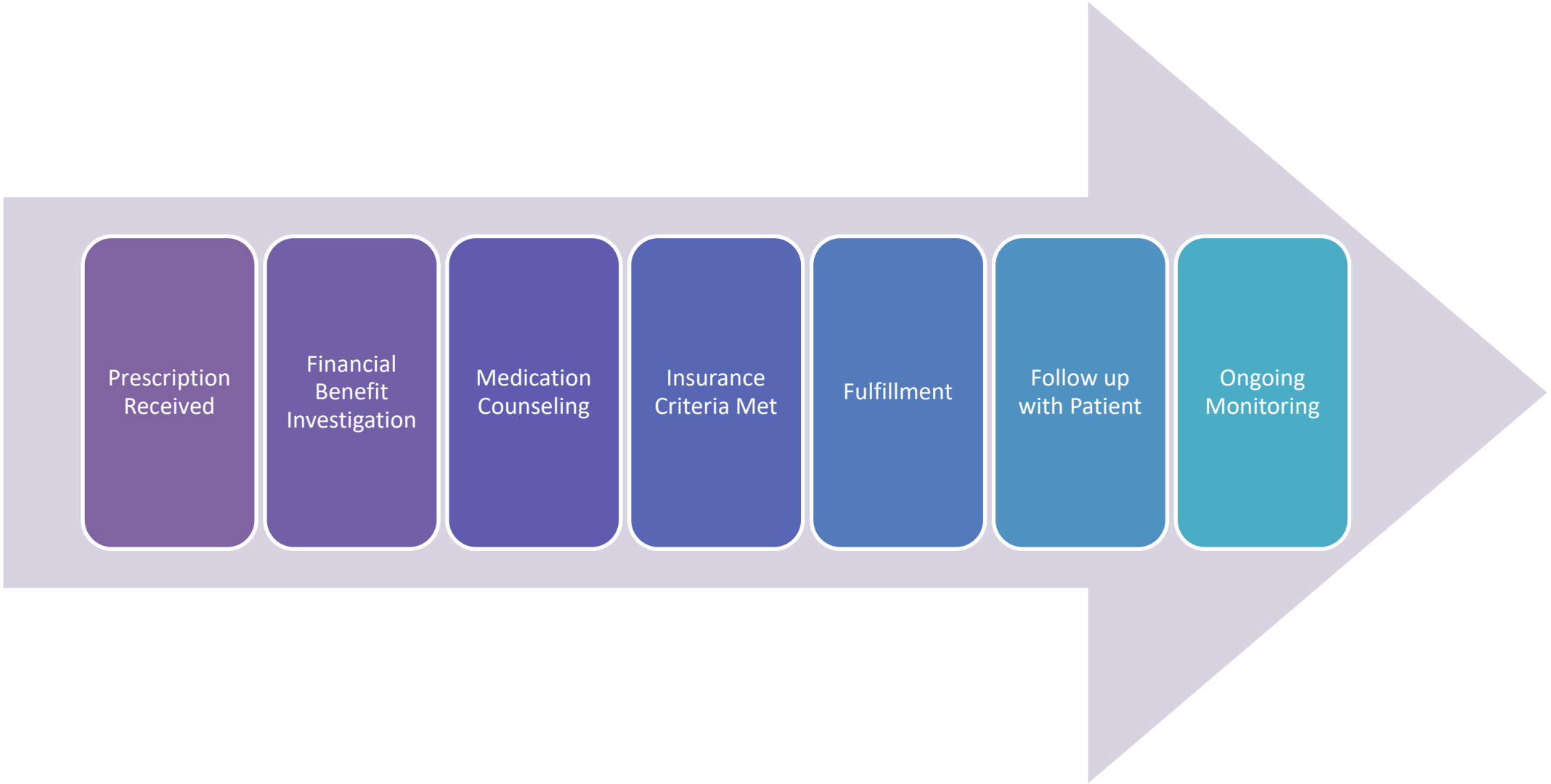
- Copay assistance
- Specialty formularies
- Specialty tier implementation
- Prior authorization
- Access through specific pharmacy/pharmacies

- Copay accumulators
- Copay maximizers

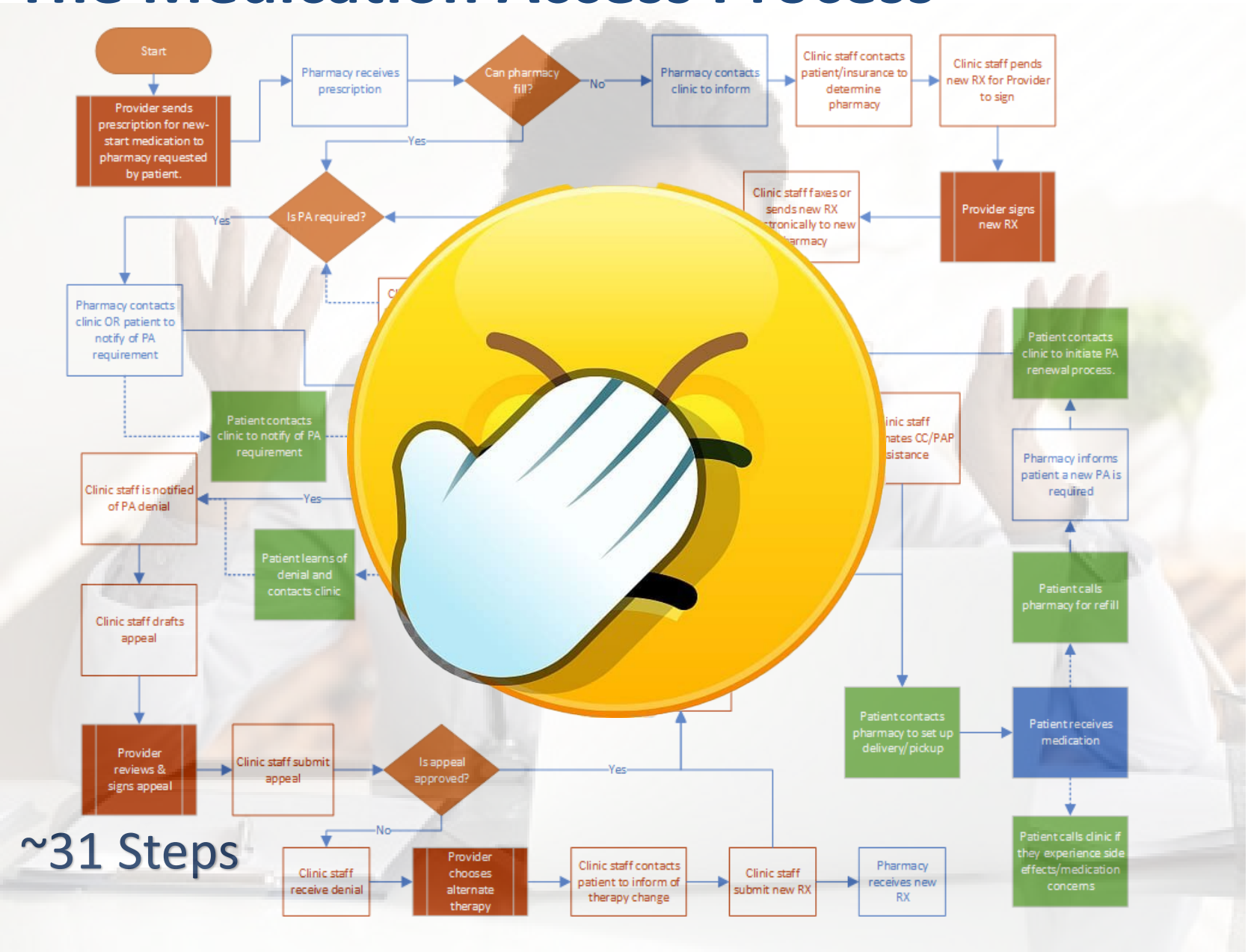
Specialty Pharmacy Differentiators

- Improved patient education and understanding
- Decreased provider and clinic burden
- Improved medication adherence
- Decreased patient out of pocket costs
- Improved patient and provider satisfaction

Target Specialty Workflow



The Medication Access Process



~31 Steps

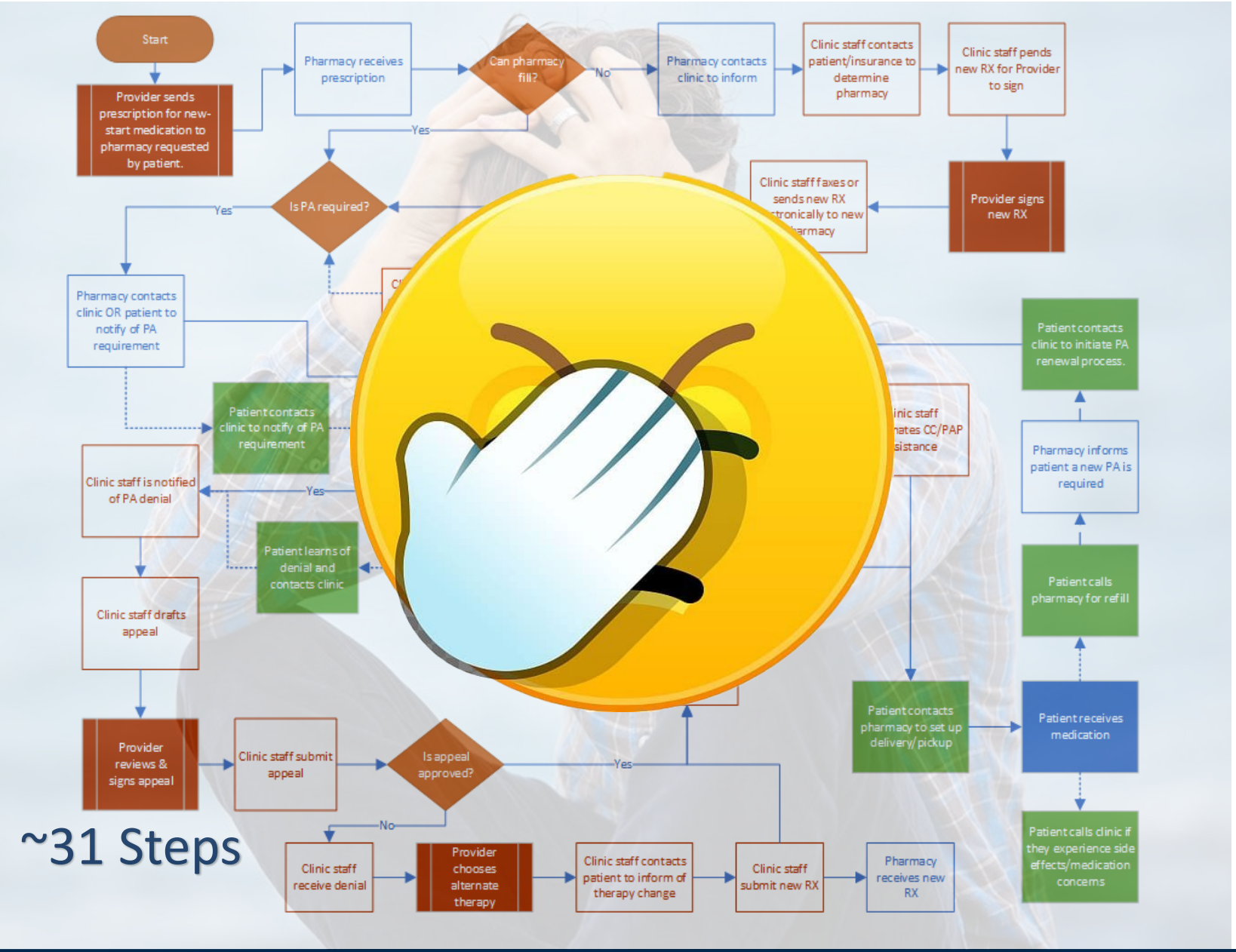
Provider Experience

- Time intensive
- Little involvement
- No line of sight on status
- Infrequent and inconsistent updates
- Concern patients “fall through the cracks”
- Increased wait times for therapy initiation
- Increased risk of patient hospitalization

…Frustrating!

h https://www.istockphoto.com/photo/angry-female-doctor-have-problems-working-on-computer-gm1330046034-413589592

The Medication Access Process



~31 Steps

Patient Experience

- Time intensive
- Little involvement
- Lack of knowledge or understanding about the process
- No line of sight on status
- Infrequent and inconsistent updates
- Concern they will “fall through the cracks”
- **Lower rate of medication adherence**
- Increased chance of ‘financial toxicity’

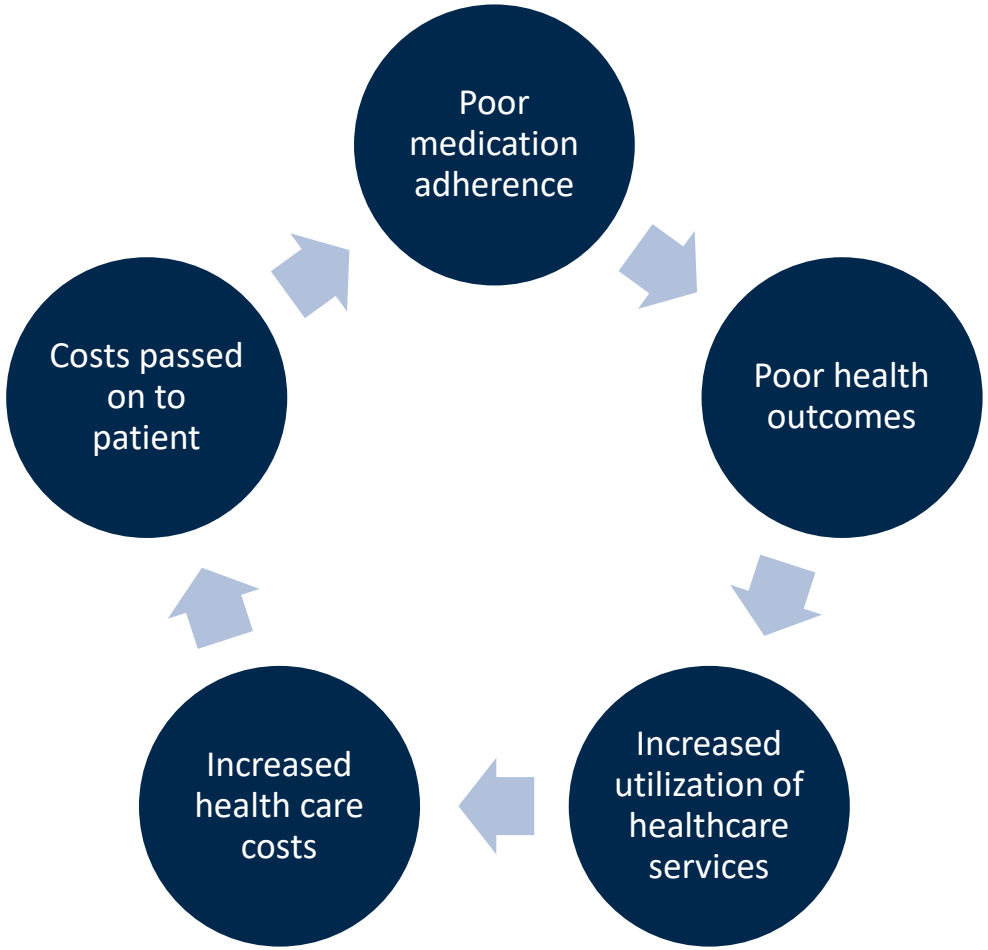
…Frustrating!

https://www.pexels.com/photo/man-in-blue-and-brown-plaid-dress-shirt-touching-his-hair-897817/

High-Cost Impact on Patient Care: Non-Adherence

In 2013, the estimated cost of non-adherence was **$337 billion**[1]. **Poor compliance** is linked to increased mortality and **hospitalization**[2].

The most common reasons for non-adherence: **out of pocket costs**, fear of **adverse events**, lack of **healthcare literacy**, taking **many different medications**, **difficulty obtaining medication**, **mistrust**, and experiencing **instant relief or ineffectiveness** of therapy.[3]



1. The Express Scripts 2015 Drug Trend Report. http://lab.express-scripts.com/lab/drug-trend-report. Accessed May June 2, 2016
2. CMS. Medication Adherence. https://www.cdc.gov/primarycare/materials/medication/docs/medication-adherence-01ccd.pdf. Accessed June 2, 2016
3. AMA. 8 Reasons Patients Don't Take Their Medications. https://www.ama-assn.org/delivering-care/patient-support-advocacy/8-reasons-patients-dont-take-their-medications. Accessed March 4, 2022.

Specialty Pharmacy in Hospitals and Health Systems

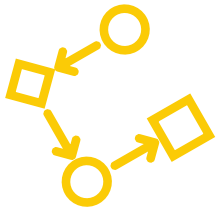
Delivers the promise of Specialty Pharmacy

- Access to electronic health record
  - Up to date treatment plan
  - Monitoring needs and expectations
- Direct communication with prescribing provider
- Higher adherence
- Better clinical outcomes
- Positive financial outcomes

Michigan Medicine Specialty Services

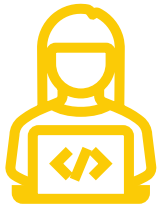
Our Objectives

Incorporate clinical pharmacist into clinic process, allowing for patient contact at the point of prescribing.



Simplify the medication access workflow and shift the process from clinic staff to dedicated pharmacy staff.

Decrease wait times for patient financial assistance, thereby reducing the time between prescribing and therapy start.



Utilize EMR system to communicate with patient and their medical team in real-time.

Ongoing monitoring of adherence and refill reminders to prevent gaps in therapy.

Our Services

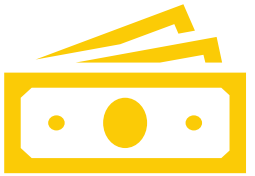
24/7 access to a Pharmacist

Complimentary prescription delivery

Proactive refill reminders

UM-caliber clinical support and education

Personalized assistance with treatment plans through comprehensive medical record reviews

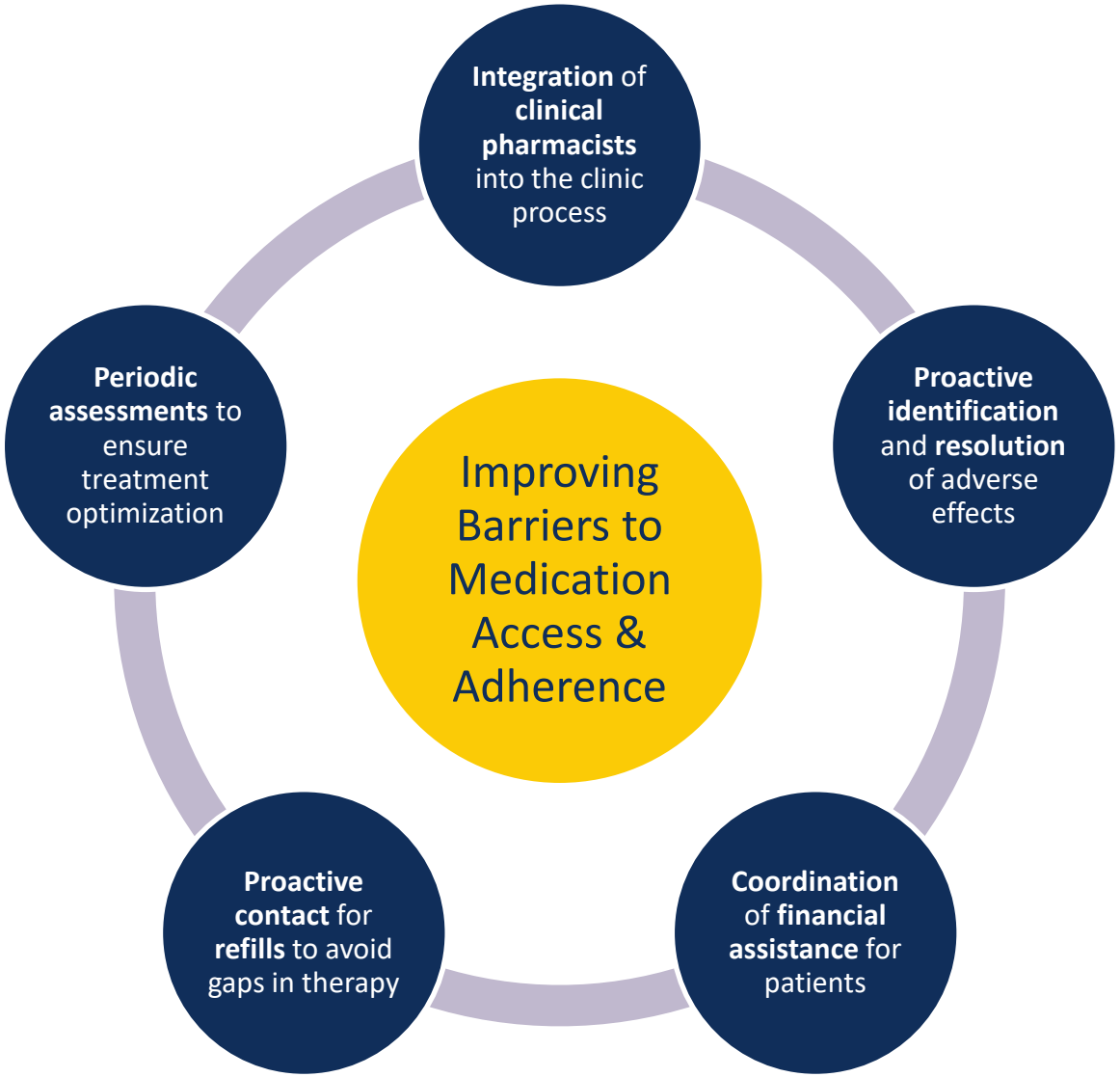


Proactive financial counseling to ensure equitable access to medications with a focus on minimizing out-of-pocket costs

A Focus on Improving Patient Outcomes

Higher rates of medication adherence and lower out-of-pocket costs are found in patients receiving care through an **integrated health system specialty pharmacy**[1], such as **MM Specialty Pharmacy**.

By developing & maintaining a **standardized**, **coordinated**, and **reportable** patient medication experience, we are working to make the process less cumbersome, less stressful, and more efficient for everyone involved.

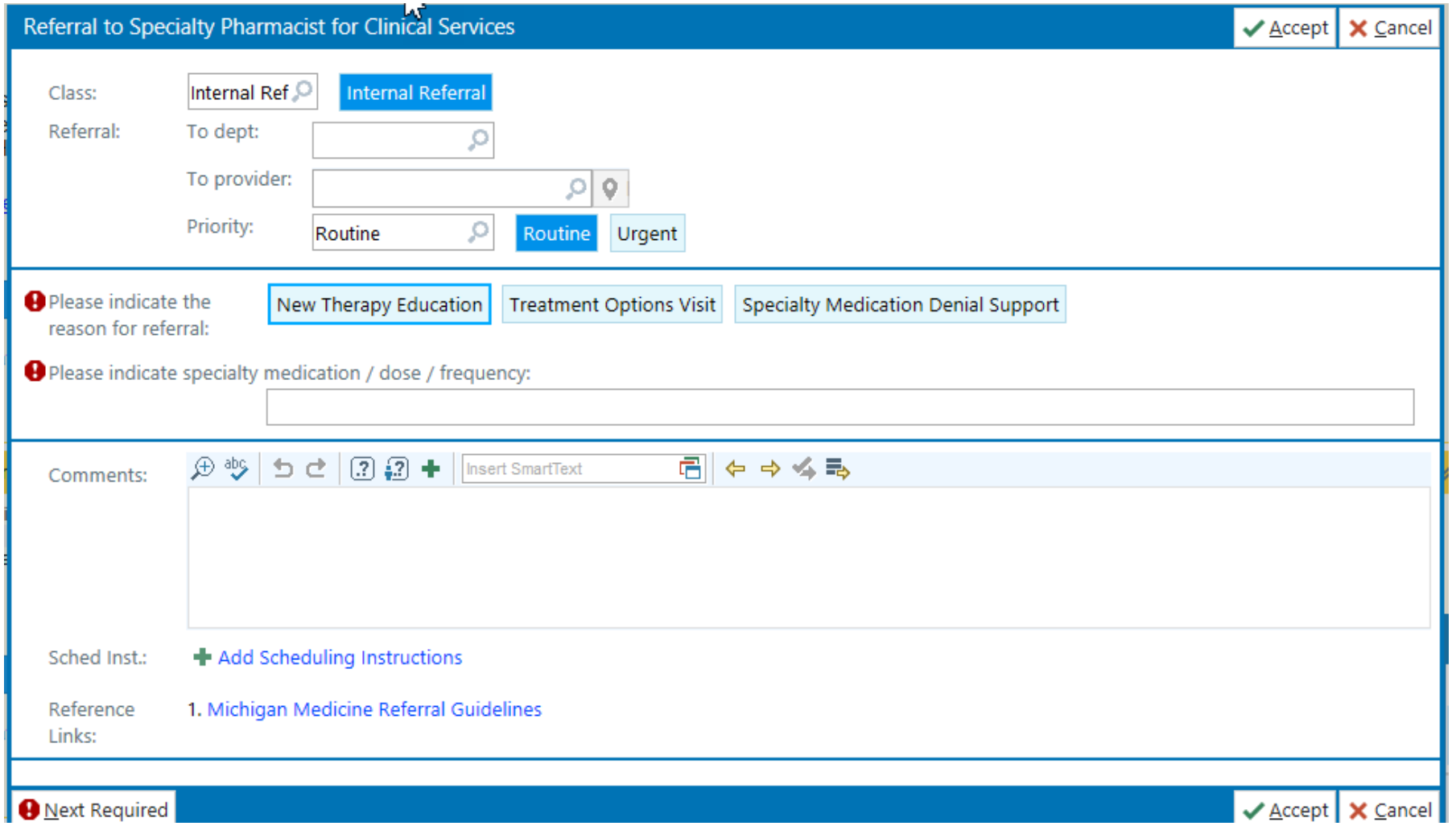


1. Berger, Nate & Peter, Megan & DeClercq, Josh & Choi, Leena & Zuckerman, Autumn. (2020). Rheumatoid Arthritis Medication Adherence in a Health System Specialty Pharmacy. The American journal of managed care. 26. e380-e387. 10.37765/ajmc.2020.88544.

New Therapy Workflow

Simplifying our workflow **reduces strain on clinic staff** (physicians, nurses, MAs, etc.) and eliminates the instances of prescriptions being sent to pharmacies that cannot fill, thereby **reducing gaps in therapy starts.**

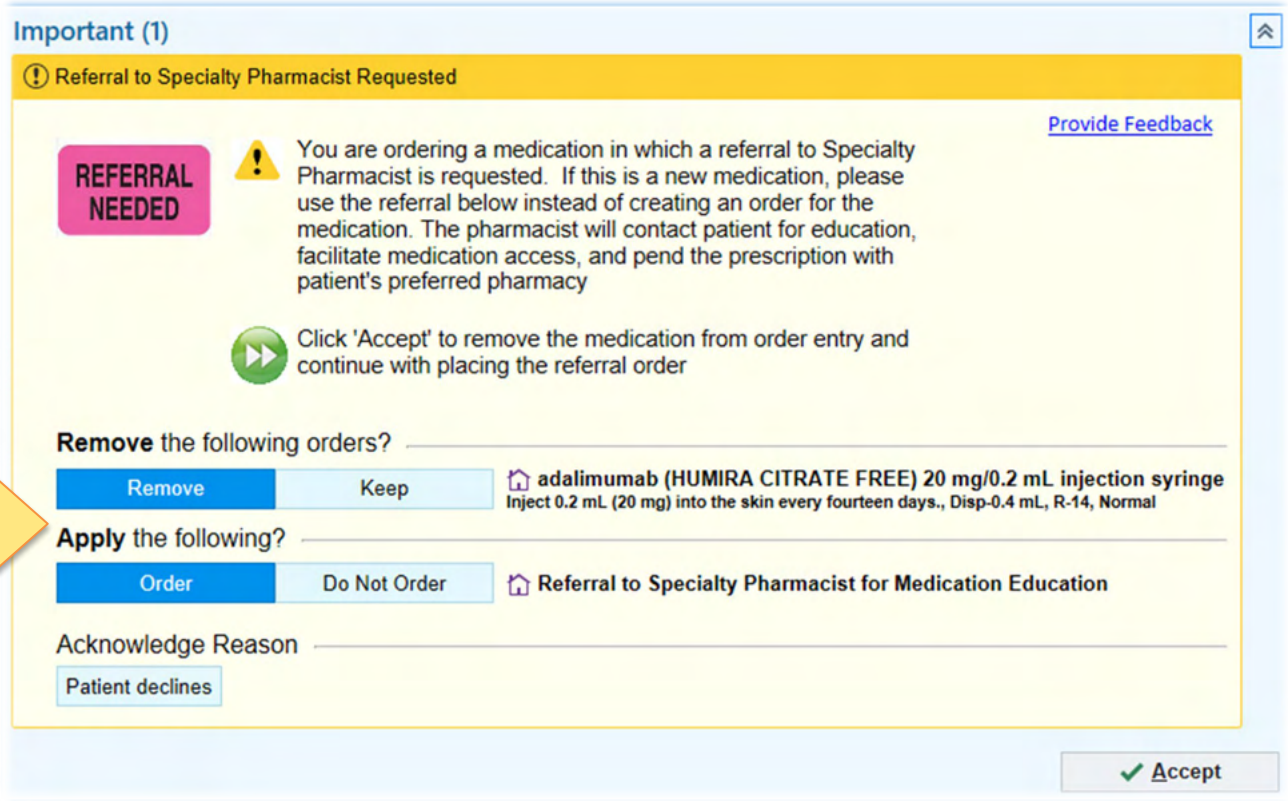
Referral to Specialty Pharmacist for Clinical Services



Best Practice Advisory (BPA)

If a provider attempts to enter an order for a specialty medication without placing a referral, a **Best Practice Advisory (BPA)** has been implemented to interrupt that process and request a referral be placed instead.

The BPA is defaulted to automatically **remove the medication order** from order entry and to **add the referral order**



Case Study: Value of Connection through EMR

Patient was on Humira for an extended period of time.

Outside pharmacy shipped 3-month supply to patient to arrive prior to current supply being exhausted.

Before patient finished current supply, their physician changed their therapy at a follow up visit.

Patient was left with 3 months of unusable Humira, and the health plan with thousands of dollars wasted, as medications cannot be returned.

Being able to communicate **in real time** with patients and providers allows our clinical pharmacists to quickly and efficiently **coordinate medication access needs**, **address side effects**, **facilitate therapy changes**, and **assess treatment optimization** seamlessly.

Having a **direct connection** with the **patient & the provider** through our **EMR system** gives us more opportunity to catch situations such as this to **reduce costs to the patient, the health plan, and the pharmacy,** as well as **reduce waste.**

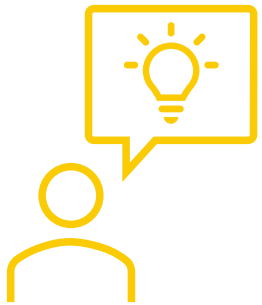
Case Studies: Improving Appropriate Medication Use

1

MD reached out to pharmacist for follow up on a patient on Stelara → Patient was supposed to be injecting every 4 weeks → [Outside Pharmacy] was only allowing a refill every 6 weeks → Patient was experiencing severe UC symptoms as a result → Pharmacist helped patient obtain a copay card & enrolled in MM pharmacy services → Patient received their medication the next day.

2

Pharmacist contacted patient for a 2 week follow up after receiving first Stelara fill → Patient thought they were supposed to inject every 6 weeks. → Prescription was written for injection every 8 weeks. → Pharmacist was able to educate patient on their medication → Patient had a better understanding and proper adherence going forward.



The current MPR at MM Specialty Pharmacy is 92%

Proactively checking for **side effects** & **providing education** on **administration** helps to reduce or eliminate non-adherence and administration issues **before** they potentially result in adverse events.

Case Study: Avoiding Hospitalization

Patient with Crohn's Disease has a history of hospitalization when Humira dose not received.

Patient was stable on a weekly dose of Humira.

Patient's PA was denied on renewal, so GI specialist contacted clinical pharmacist for assistance.

PharmD called the insurance company daily during the week and submitted documents to obtain approval.

PharmD communicated with patient daily to keep them updated on the status.

Due to this intervention, the patient was able to receive their medication

The PharmD advocating for the patient likely prevented another costly hospitalization.

Having a clinical pharmacist dedicated to a service line allows them to take the burden of **appeals & peer-to-peer reviews** from the provider, decreasing turn around times and explaining the **why** behind a patient's individual needs.

Provider Feedback

"When starting new medication, the addition of a pharmacist to the team has added **significant value to the patient experience**. The pharmacist not only **educates the patient** but remains a contact for them if questions arise"

"As a provider, I greatly value the Pharmacy specialists and their willingness to work with us. I find they can streamline the process and improve work-flow. This leads to **fewer delays in medication access**, and **improved education for patients**, culminating in **improved patient care**. I know my patients would much, much, much rather work with UofM for pharmacy services than their insurance company or the specialty pharmacies they contract with. This has the net effect of **improved patient satisfaction** as well."

"Overall, the system works really well, and I am very pleased with the **rapid and high-quality services** being provided to my patients. Several patients have also commented on its positive benefits as well."

https://www.pexels.com/photo/crop-doctor-in-medical-uniform-with-stethoscope-standing-in-clinic-corridor-4173251/

Patient Feedback

"Thank you so much for all the time that you [the pharmacist] have spent advocating for me. Since I've been in the US you are the first health professional that has invested so much time on my behalf and I want you to know that is very much appreciated. "

"The Pharmacist that contacted me was very thorough and incredible. Just wanted to let you know my thoughts on her."

"The appeal did FINALLY get approved, and I now have the Humira I need. Thanks very much to you, your team and [the pharmacist] in the U of M Pharmacy for wrestling with [the insurance company] on my behalf. As usual you guys went **way and above the call of duty** to help me. I do sincerely appreciate the effort you all put into this for me."

"It's like Christmas for me! I am doing a happy dance! Thank you so very much for all your help and dedication! I do have a few questions and I will call you later on today!"

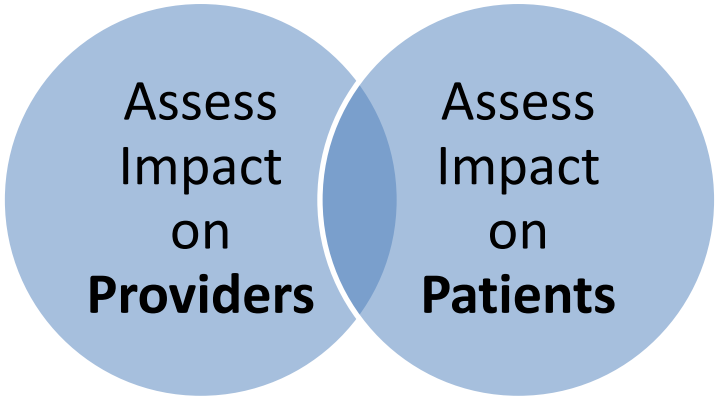
https://www.pexels.com/photo/photo-of-men-and-women-holding-blank-signboards-3228812/

A COLLABORATION OF

MICHIGAN MEDICINE + INSTITUTE FOR HEALTHCARE POLICY & INNOVATION

Specialty Pharmacy Evaluation Concepts & Metrics

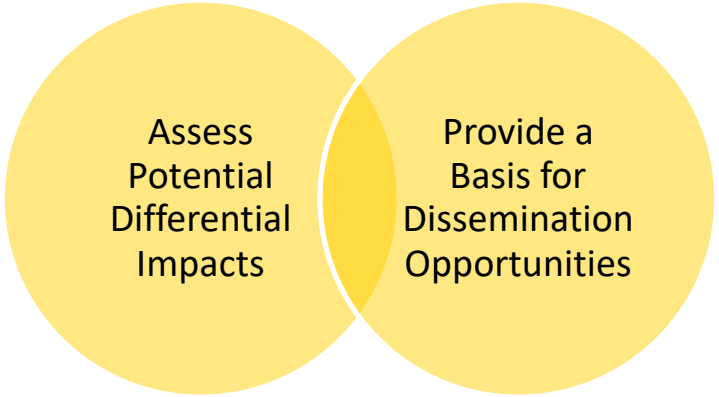
Primary Goals



Research Questions

- Is medication adherence and use improved?
- Is the efficiency of the Rx fill process improved?
- Are patient outcomes improved?
- Do patients have a better experience?
- Does clinical involvement in med care/decisions improve the experience of the prescribing provider? *...is provider adding value*
- What is the experience of pharmacists?

Secondary Goals



- Do evaluation findings suggest different levels of impact based on specialty area, medication, or patient characteristics?
- How can we best spread the pilot model to other settings/systems?
- Assisting with academic products (e.g., presentations & publishing findings)

Data Sources & Methods

A variety of data sources & methods are being used to evaluate this intervention & address the research questions.

MM Internal & Pharmacy Analytics data	
MVC Data: Statewide claims Rx data for BCBSM & BCN patients	**Qualitative Interviews**
Patient Portal messages & communication	**Chart Review**

Use of Michigan Value Collaborative Data

MPrOVE & the Michigan Medicine Specialty Pharmacy Team are collaborating with MVC to make the evaluation more robust:

Many patients receive care at Michigan Medicine
but obtain their specialty medications at other pharmacies.

- ✓ As part of this initiative, these patients still receive support from the Michigan Medicine Specialty Pharmacy, but their Rx fill data cannot be tracked. For evaluation purposes, it is still useful to measure Rx fill data for these cases

By collaborating with MVC, a larger proportion of all target specialty medication Rx fill data can be tracked, extending the evaluation's reach

Thank you

Appendix:

Improving patient care through better access to high-cost and complex medications

Comparing Community & Specialty Pharmacy

Community (Retail)

- Primarily face-to-face
- Handle wide variety of medications and illnesses, particularly common or chronic
- Counsel about medications to avoid side effects and interactions
- Participate in programs to improve health & wellness
- Accessible and trusted

Specialty

- Primarily mailed
- Complex and costly medications requiring higher level of care
- Provide extensive medication education and techniques
- Financial benefit investigation & support
- Accredited
- High-level care

The U.S. Pharmacy Distribution and Reimbursement System for Patient-Administered, Outpatient Prescription Drugs

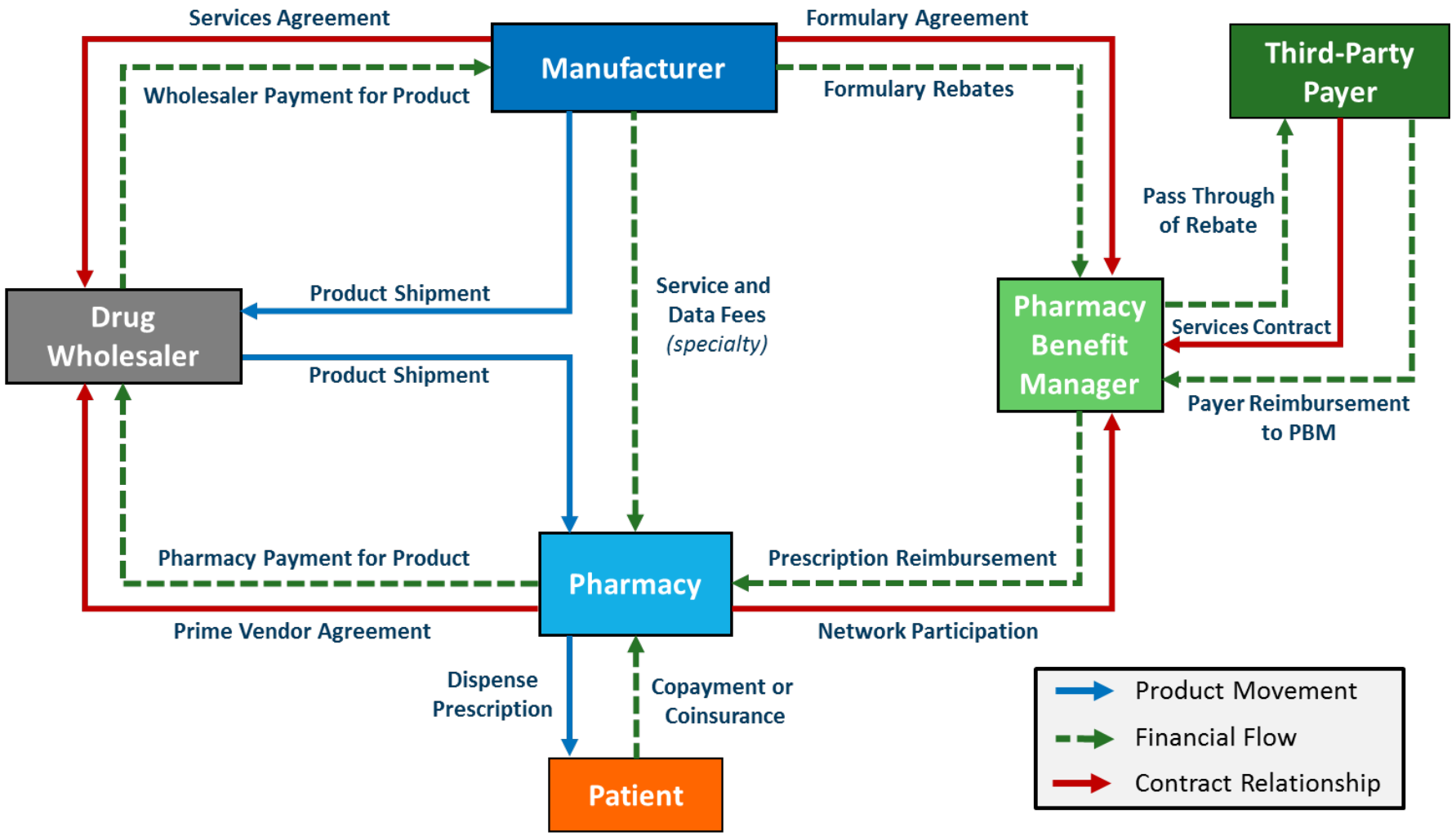


Chart illustrates flows for patient-administered, outpatient drugs. Please note that this chart is illustrative. It is not intended to be a complete representation of every type of financial, product flow, or contractual relationship in the marketplace.

Source: Fein, Adam. J., *The 2016 Economic Report on Retail, Mail and Specialty Pharmacies*, Drug Channels Institute, January 2016. (Available at http://drugchannelsinstitute.com/products/industry_report/pharmacy/)

Evaluation Summary: Specialty Pharmacy Initiative

INTERVENTION

MEASUREMENT

Improve access & efficiency of Rx fill

Process

- Reach – How many & what types of patients are impacted?
- Adoption – What fraction of providers are using this process?
- Maintenance – Are providers using this as frequently in months 7-12 as in months 1-6?

Improve care coordination

Patient Experience

- Analysis of messages exchanged between patients & providers

Provider Experience

- Analysis of messages exchanged between providers & patients
- Qualitative interviews with prescribing physicians

Expedited Access & Better Adherence

Adherence*

- Time from Rx to Delivery
- Proportion of Days Covered (PDC) and Medication Possession Ratio (MPR)

Better Quality & Safety Outcomes

Patient Outcomes

- ED Visits and Hospitalizations

Differential Outcomes for Patients

Evaluation Concept	Specific Measures	Estimated Timeline
Reach	• # patients impacted • # unique referrals, rate of referrals to program • Types of patients: by age, gender, insurer, race, ethnicity	• October 2022 – patients & referrals to-date • ~February 2023 – updated data regarding reach, referrals, and types of patients
Rx Efficiency & Adherence	• Time to Rx fill (from initial Rx written to Rx filled/delivered) • PDC (proportion of days covered; need to verify reliability of data) • MPR (medication possession ratio; need to verify reliability of data)	• October 2022 – Potentially have very initial look at Time to Rx fill* • ~February 2023 – PDC & MPR data verified & gathered • ~March 2023 – PDC & MPR data analyzed • ~April 2023 – full analysis of Time to Rx fill** **working on this; will confirm if it can be shared by Wednesday, 10/12*
Patient Experience	• # of messages exchanged with providers • Emotional content of these messages related to Rx	• ~March 2023 – # of messages • TBD – emotional content of messages
Patient Outcomes	• Rate of ED visits within 180 days of Rx written* • Rate of hospitalizations within 180 days of Rx written* • Small scale/sample measures of disease burden • For neurology headache clinic cases, # of headache days/mo & headache severity gathered via chart review **will only measure if improvements in efficiency & adherence are observed*	• ~December 2023 – small scale measures of disease burden • ~April or May 2023 – analysis of rate of ED visits, rate of hospitalizations** ***For any clinic/service/drug expansion after March 2022, timing of final analyses may be delayed to allow for a full 12 months of data collection post-implementation.*

Provider Adoption & Experience

Evaluation Concept	Specific Measures	Estimated Timeline
Adoption & Maintenance	• # providers who have made a referral • Fraction of eligible clinical providers who are using the process • Fraction of eligible clinical providers using the process in months 7-12 after implementation compared to months 1-6	• October 2022 – very initial information regarding adoption • ~March 2023 –analysis, findings, conclusions** ***For any clinic/service/drug expansion after March 2022, timing of final analyses may be delayed to allow for a full 12 months of data collection post-implementation.*
Provider Experience	• Qualitative interviews with clinical providers • # of messages exchanged with patients • Emotional content of these messages related to Rx • # of Rx prescribed before an authorized is prescribed	• October 2022 – very early information • ~February – qualitative findings available • ~March 2023 – # of messages • TBD – emotional content of messages

Evaluation Concepts & Timeline

	Q4 2022			Q1 2023			Q2 2023		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Patient Measures									
Reach					X				
Efficiency & Adherence					X	X	X		
Patient Experience						X			
Patient Outcomes							X	X	
Provider Measures									
Adoption & Maintenance						X	X	X	X
Provider Experience					X	X			

Initial Reach Data

2,930
unique referrals

2,435
patients referred

173
providers who made at least 1 referral

https://www.pexels.com/photo/a-doctor-talking-the-patient-7579831/