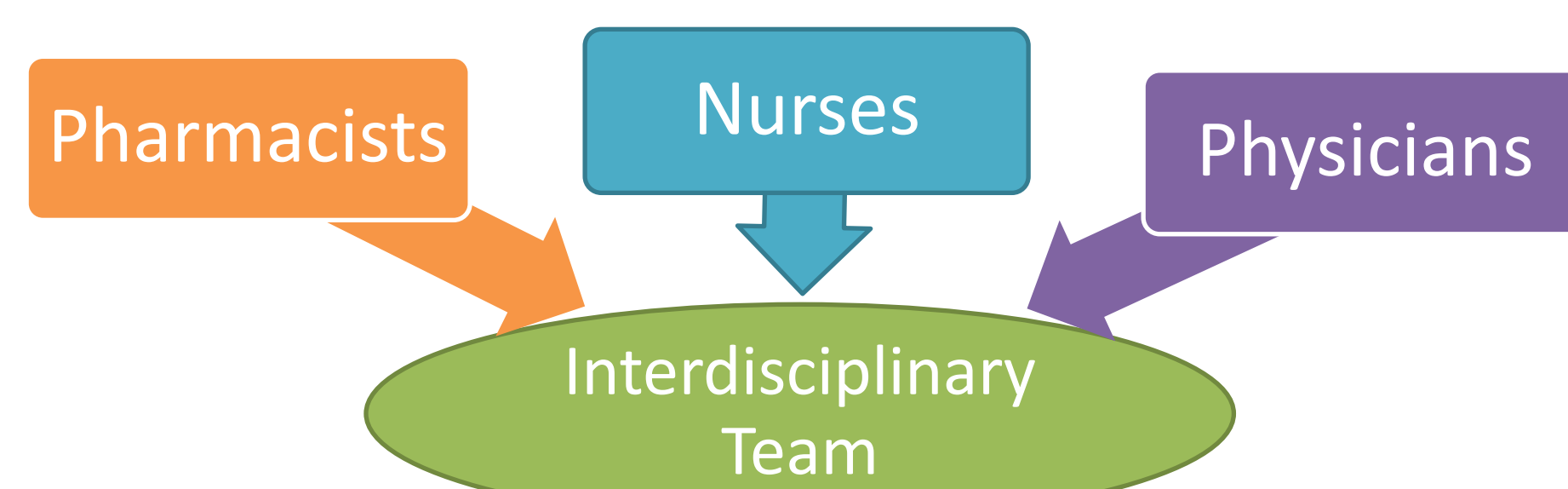


INTRODUCTION

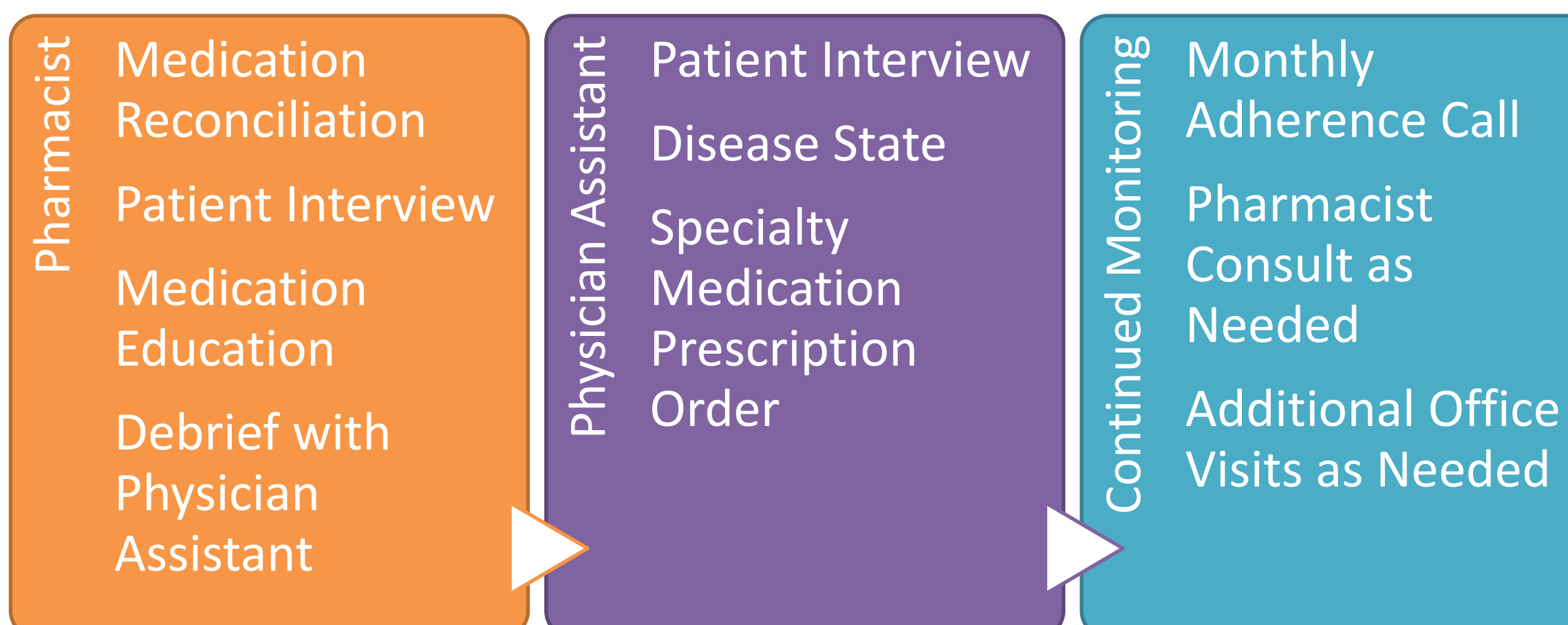
CoxHealth recently started a Specialty Medication Management Program (SMMP) in September 2015, at their Center for Health Improvement Clinic. This research study is being conducted to look at specialty pharmacy services being used as part of this new program.

BACKGROUND

- Specialty pharmacy focuses on high cost, high touch medication therapy for patients with complex diseases. (1)
- Additional support and resources are often provided to patients to help overcome barriers such as medication cost, coverage, and complexity.
- Specialty pharmacy and synchronized medical and pharmacy services yield cost savings and increased compliance. (2)
- Health systems are developing their own specialty pharmacy practice models to improve patient outcomes. Utilizing an interdisciplinary approach, these models have demonstrated improvements in patient compliance, accessibility, convenience, and patient confidence. (3)



- CoxHealth SMMP is an interdisciplinary clinic provides patients with additional resources in order to improve disease-related outcomes.



PURPOSE

- Determine the impact of specialized pharmacy services on patient, provider, and health system related metrics in an outpatient specialty clinic

PRIMARY OBJECTIVE

- Examine service line metrics related to pharmacy services integration:
 - Patient & Provider Satisfaction
 - Number & Type of Pharmacist Intervention
 - Patient Medication Adherence Rate

SECONDARY OBJECTIVE

- Assess disease state metrics:
 - Expanded Disability Status Scale (EDSS)
 - Quality of Life
 - Brain Atrophy Progression

METHODS

- A single center, service-based pilot project
- Inclusion criteria: Adults aged 18 years and older, participants of the CoxHealth insurance plan (CoxHealth employees and/or their dependents), receiving care at the Center for Health Improvement SMMP, Diagnosis of Multiple Sclerosis (MS)
- Exclusion criteria: Any individual who chooses not to participate in the SMMP
- Descriptive statistics were used to describe most primary and secondary outcomes.
- Adherence based on medication possession ratio (MPR)
- Adherence differences were compared using a t-test
- Western Institutional Review Board (WIRB) approval granted in November 2015

Figure 1. Eligible Patients

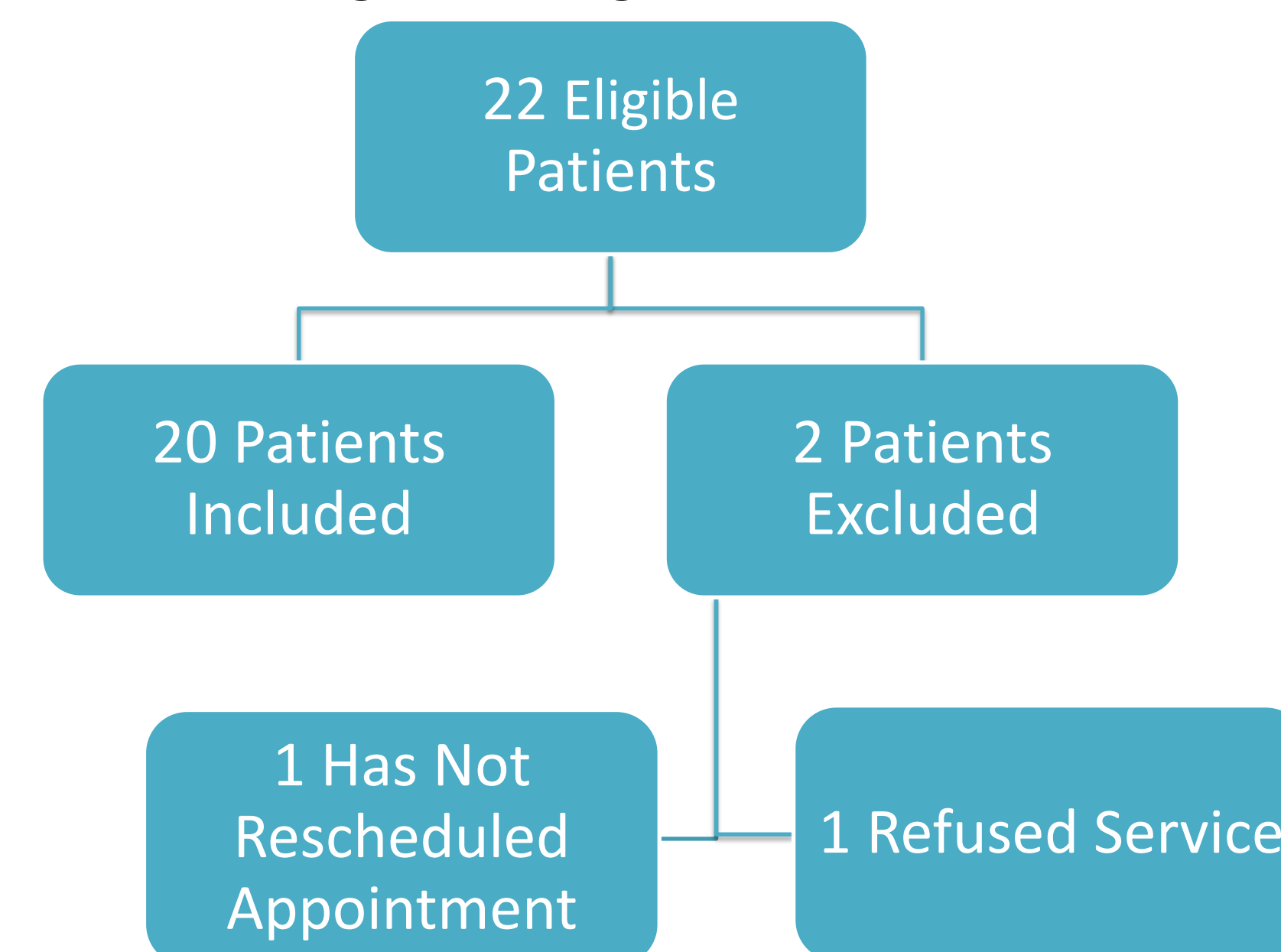


Figure 2. Patient Satisfaction Survey

CoxHealth Center for Health Improvement
MS Specialty Medication Management Patient Satisfaction Survey

Participation in this survey is voluntary; you are free to withdraw your participation from this survey at any time. Your responses will be kept completely anonymous and confidential. There are no perceived risks or direct benefits associated with your participation. Information from this survey will be used to evaluate your experience in regards to pharmacist involvement in the specialty medication management process.

INSTRUCTIONS: Please take a few moments to tell us what you think of the services at the Cox Health Center for Health Improvement (CHI). Rate how much you agree with each statement by circling the number that best fits what you think.

	AGREEMENT					
	N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel better able to care for my MS because of extra time with the CHI team.	0	1	2	3	4	5
2. In addition to my Neurologist, this visit provided beneficial information.	0	1	2	3	4	5
3. The materials provided were easy to understand.	0	1	2	3	4	5
4. a. The Physician Assistant (PA) was easy to understand.	0	1	2	3	4	5
b. The PA was enthusiastic, knowledgeable, and compassionate.	0	1	2	3	4	5
5. a. The Pharmacist was easy to understand.	0	1	2	3	4	5
b. The Pharmacist was enthusiastic, knowledgeable, and compassionate.	0	1	2	3	4	5
6. This visit has given me new ways to manage my MS.	0	1	2	3	4	5
7. The one thing I liked best about the session was:						
8. The one thing I would change about the session would be:						
9. Another important thing I want you to know is:						
Additional Comments:						

Thank you! Your feedback will make a difference.

Figure 3. Provider Satisfaction Survey

CoxHealth Center for Health Improvement
MS Specialty Medication Management Provider Satisfaction Survey

Participation in this survey is voluntary; you are free to withdraw your participation from this survey at any time. Your responses will be kept completely anonymous and confidential. There are no perceived risks or direct benefits associated with your participation. Information from this survey will be used to evaluate your experience in regards to pharmacist involvement in the specialty medication management process.

INSTRUCTIONS: Please take a few moments to tell us what you think of the pharmacy services that have been provided during integration of clinical pharmacists at the Center for Health Improvement (CHI). Evaluate the clinical pharmacists using the agreement scale below.

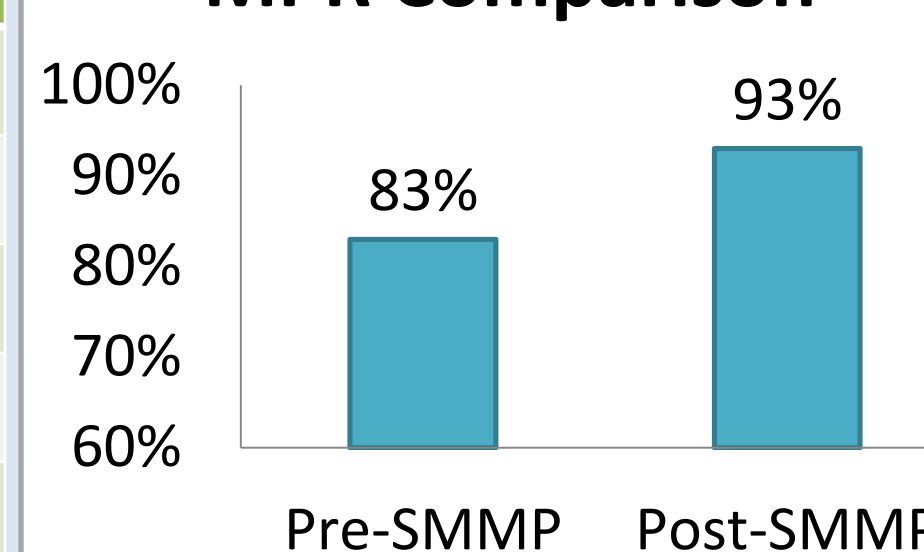
	AGREEMENT					
	N/A	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Interpersonal Skills with Patients	0	1	2	3	4	5
Interpersonal Skills with Provider(s)	0	1	2	3	4	5
Communication Skills	0	1	2	3	4	5
Professionalism	0	1	2	3	4	5
Additional Comments						

Thank you for your time and participation in this survey!

RESULTS

Baseline Patient Demographics (n=20)		Patient Satisfaction (n=2)	Average Score
Age (years)	47.1 ± 10.6	I feel better able to care for my MS because of extra time with the CHI team.	4
Gender	60% Female	In addition to my Neurologist, the visit provided beneficial information.	4.5
Types of MS		The materials provided were easy to understand.	5
Relapsing Remitting	19 Patients	The Physician Assistant (PA) was easy to understand.	5
Secondary Progressive	1 Patient	The PA was enthusiastic, knowledgeable, and compassionate.	5
Average MS Disease State Metrics for Patients		The Pharmacist was easy to understand.	5
Number of Relapses in the Past Year	0.58 Relapses	The Pharmacist was enthusiastic, knowledgeable, and compassionate.	5
25-Foot Walking Time	5.46 ± 1.98 Seconds	This visit has given me new ways to manage my MS.	4.5
MS Disease Steps Scale	1.39 ± 1.04	Provider Satisfaction (n=1)	Average Score
MSIS-29	33.01 ± 23.88/35.42 ± 24.29	Interpersonal Skills with Patients	5
FSS	4.35 ± 1.56	Interpersonal Skills with Provider(s)	5
EDMUS	3 ± 2	Communication Skills	5
Abbreviations: EDMUS: European Database for Multiple Sclerosis; FSS: Fatigue Severity Scale; MSIS-29: Multiple Sclerosis Impact Scale		Professionalism	5

RESULTS

Pharmacist Intervention Type	Number	MPR Comparison	
Medication Reconciliation	20		
Medication Recommendation	4		
Lab Recommendation	2		
Drug Administration Education	2		
Side Effect Discussion	1		

Patient Specific Medication Possession Ratio (%)																	
Patient	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Pre-SMMP	100	100	76	22	100	83	97	100	67	41	59	95	100	89	85	100	100
Post-SMMP	97	100	94	51	100	100	100	86	100	75	88	99	100	93	100	100	100

DISCUSSION

- High patient and provider satisfaction in regards to pharmacy services
- A clinical, but not statistical difference was seen in MPR following the SMMP visits
- Secondary outcomes pertaining to disease state metrics not assessed at this time as follow-up visits have not been conducted yet

FUTURE DIRECTION

Continuous monitoring of current patients to ensure proper follow-up and education to overcome identified barriers.

Quality improvements in service based on service line metrics and disease state metrics data analyzed by this research project.

Expansion of the Specialty Medication Management Program with the addition of other specialty disease states.

Ongoing data analysis to examine correlations between specialty pharmacy services and improved disease state management.

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