

Implementation of a Pharmacist-Led Adherence Service for a Self-Insured Health System

Ally Ehlinger^{1,2}, Arwa Al-Khatib¹, Amanda Powers², Jess Smith², Kara Nadermann², Stevie Veach^{1,2}, Matt Witry¹
¹University of Iowa, ²MercyOne Dubuque Pharmacies

KEY FINDINGS

- The average adherence score improved by 13.19 for those who fully participated (n=23), compared to a 10.14 increase for those who refused (n=19)
- Recommending an adherence tool, such as pill box or alarm, use was the most common intervention (39.13%)

BACKGROUND

- Medication monitoring programs managed by pharmacists have shown favorable financial and clinical outcomes
- Self-insured employers may implement medication management programs for employees as a cost saving measure
- These programs are more flexible than traditional Medication Therapy Monitoring programs, allowing them to be individualized to the needs of the population

OBJECTIVES

- Assess the impact of pharmacist led adherence interventions on adherence rates of employees and their dependents of a healthcare facility using a new platform
- Assess the number and type of interventions completed through the program

METHODS

- Design:** Prospective, single intervention study
- Setting:** Outpatient pharmacy in a regional self-insured health system

- Subjects:** Insured by employer, filled medications at health system, and 1 or more maintenance medications that have an adherence rate $\leq 80\%$
- Exclusion:** <18 years old, discontinued target medication over study period
- All eligible patients were called to assess and intervene on their adherence and then followed up with at 60 to 90 days from initial contact

RESULTS

Table 1. Demographics of the Patients at Baseline

Characteristic	Patients (N= 52)
Age – yr	50.35 \pm 15.03
Female– no. (%)	20 (38.46)
Employee – no. (%)	34 (65.38)
Dependent – no. (%)	21 (40.38)
Number of meds per pts	3.81 \pm 2.52
Number of meds with RDC* $<80\%$ – no. (%)	
1	28 (53.85)
2	15 (28.85)
≥ 3	12 (23.08)

*RDC – Refilled Days Covered

Table 2. Intervention Categories

Intervention	N=46 (%)
Recommend adherence tool	18 (39.13)
Medication Education	12 (26.09)
Refer to/contact physician	8 (17.39)
Fill medication(s)	4 (8.70)
No intervention	3 (6.52)
Enroll in Medication synchronization	1 (2.17)

* May complete more than 1 intervention per patient

RESULTS

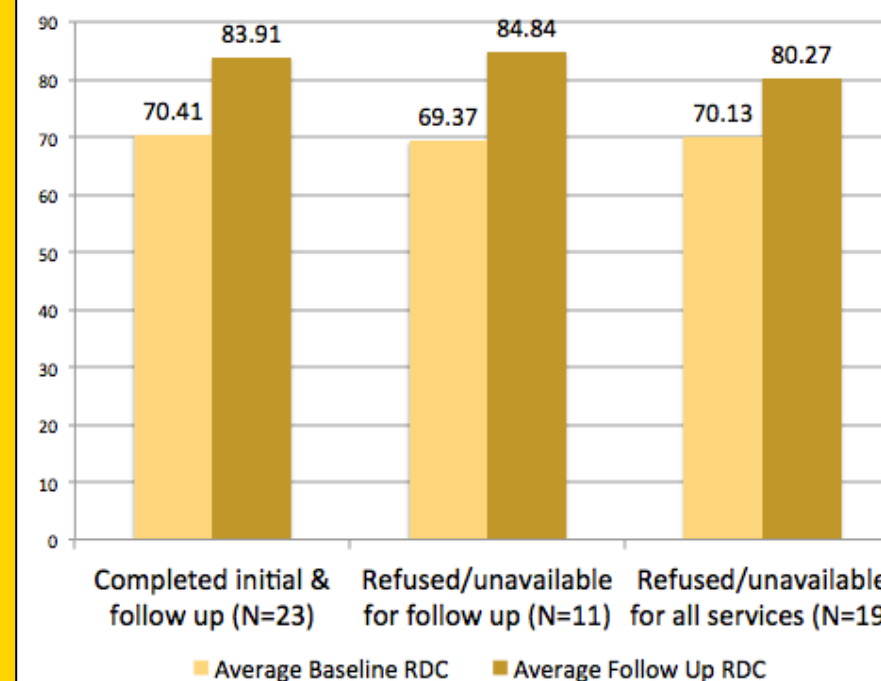
Table 3. Medication Concerns Voiced By Patients

Concern type	N=38 (%)
Forgets medication	14 (36.84)
Patient denies non-compliance	7 (18.42)
Poor understanding of medication	6 (15.79)
Taking medication differently than prescribed	4 (10.53)
Personal/lifestyle conflict with adherence	4 (10.53)
Experiencing side effects	3 (7.89)

Call Information:

- Initial call required 1.84 calls to contact the patient lasting 10.16 minutes per call on average.
- Follow up calls required 2.06 calls and 4.31 minutes on average

Figure 1. Compare RDC from Baseline to Follow Up



DISCUSSION

General Discussion

- Patients often stated appreciation for the pharmacist reaching out
- Patients in this population struggled more with remembering to take their medication due to day to day distractions
- Med sync is regularly offered to patients at this site and many patients had refused the service prior to the study

Implications

- A total of 114 medications with low adherence were able to be addressed that may not have been identified
- Self-insured employers can potentially create their own medication management system, without having to pay for a third party to manage it
- Program has the potential to expand pharmacy's ability to identify more potential claims

Limitations

- Population was working class, thus business hours were not ideal to contact patients
- Software calculating RDC had delays in data
- Sample size was too small to run t-test and assess RDC change
- Randomization was not used in this study
- Adherence data was only calculated based on medication fills at the study pharmacy

