Development and Implementation of an Adherence Pharmacy Model in Community Practice

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**Objective**

to describe the various components of an Adherence Pharmacy (AP) and its implementation in a community setting.

**Background**

- Nearly three-fourths of Americans have one or more chronic conditions that require prescription medications.
- On average, Americans are prescribed 5-122 medications per person per year (however, the ratio of four Americans do not take their medications as directed).
- There are a number of barriers to medication adherence including multiple medications, patient education and lack of time, long dispensing, and access.
- The barriers can be broken down into three key areas: complexity of regimen, lack of knowledge, and inaccessibility.

- Pharmacists can overcome these barriers by simplifying the regimen, educating patients, and making medications accessible.

- Adherence packaging systems help simplify the medication regimen and ensure that patients are taking the correct medication at the correct time each day.

- Medication Therapy Management (MFM) using the Appointment-Based Model (ABM) allows the pharmacist to schedule an appointment with the patient and educate the patient about their medications and therapy, identify and resolve problems, and make recommendations to the physician.

- Refill synchronization is the synchronization of medication refills into one converted day-by-day, improving patient access to their medications. This can eliminate non-adherence due to refill limitations that may be picked up multiple days.

- Evidence suggests a positive impact of these services, but they are often provided individually rather than collectively and only improve adherence to a point. The adherence pharmacy (AP) serves to combine these issues, providing a greater impact on medication adherence.

**Development**

- The community-based AP was established in 2011 to evaluate the medication non-adherence problem in Toledo (OH) area practices.

- This new concept of a community-based AP uses a combination of adherence packaging, refill synchronization and pharmacist-labeled MFM service to improve medication adherence.

- Development of the AP took approximately one year with acquisition and remodeling of the facility, installation of a packaging machine and hiring staff.

- Pharmacist-labeled MFM services include a comprehensive medication review, personal medication record, creating a medication action plan, identifying and addressing potential issues and asking problems, referrals to suitable providers, documentation, and follow-up.

- Medication adherence training is provided and filled in adherence packages in 28, 30, 56, or 90-day phases. These are delivered or picked up.

- Implementation strategies focused on marketing campaigns, educating providers and care navigators, setting up pharmacy operations, assessing equipment needs, etc.

**Implementation**

**Operational Cycle**

- First Appointment:
  - PMR & MAP created
  - CMR conducted
  - PMR & MAP created
  - Referral

- Follow-ups:
  - Prep for PMP
  - Monthly/quarterly calls assessing changes to the plan
  - Follow-up MFM
  - (PRN or per physician)

- Medication is delivered or picked up at the pharmacy.

- If hospitalized or change in therapy:
  - Sik patient visits doctor
  - Hospital discharged
  - Concerned caregiver

- Call pharmacy:
  - Speaks to pharmacist
  - Describes the problem
  - Schedule 1st appointment

- Referral to caregiver or a pharmacist.

**Benefits of Successful Implementation**

- 90% improvement in adherence from baseline,
- 93% of patients reported that the adherence packages reduced adherence issues and improved their quality of life.
- All agreed the AP had played a role in improving their health status and helped reduce ED visits and hospitalizations.

Next Steps:

- STOMP Medication Non-Adherence Quantitative study using RCT design to compare the Adherence Pharmacy model to current practice models.
- Environment began in August 2014 and is ongoing.

**Development and Implementation**

**Adherence Pharmacy**

**Operational Cycle**

**Implementation**

**Patient Feedback**

- **Simplicity**
  - “It’s great to take my medications in one bottle instead of having to take them all at once.”
  - “I fill it up, take it, and if I have to, I fill it again.”

- **Ease**
  - “The pharmacist explains the medication, the conditions, the reasons why I need to take them, and how to take them… very informative… helped me out a lot.”
  - “My pharmacist explained the medication well. I was taking it the wrong way… wondering why it was getting bad… what to do with the adherence pharmacy program and the pharmacist was able to better inform me.”

- **Accessibility**
  - “Facts and drug information give me more discipline to taking my medication.”
  - “I feel more comfortable taking the medication.”

**References**

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