

Specialty Pharmacy Increases Adherence and Improves Outcomes

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Introduction

The consequences of non-adherence by HIV positive patients as well as the factors that can lead to therapy failure have been well documented. Most discussions that identify and confront these issues seldom include the benefits of a pharmacy managed medication program. The objective of this study was to identify the effects of a comprehensive pharmacy care program as a means to increase adherence for patients taking HAART and assess the effect of the patient's overall health outcome.

We theorized that a pharmacist managed medication program would offer the following benefits: A team approach to treat the patient on HAART; Increased patient understanding of their therapy; Increased adherence to antiretroviral medications; On-going clinical support; Improved clinical outcomes, and a tool to identify patients at risk of virologic failure.

FACTS:

- ✓ Adherence to HAART is poor
- ✓ Risk of virologic failure increases as adherence decreases
- ✓ There is a direct association between CD4 cell counts and patients healthcare expenditures
- ✓ Adherence barriers are complex
- ✓ Current methods do not identify those at risk

The most common contributing factors to non-adherence have been well identified in previous studies. They include various patient factors such as active alcohol or drug use, as well as poor communication between the patient and the healthcare provider. In addition, there are assorted barriers to adherence such as complex regimen or length of therapy that make it difficult for a patient to maintain compliance.

Methods

HealthStat Rx set out to identify how a pharmacy managed medication program could beneficially affect adherence and outcomes for patients taking HAART. Sixty Four patients were randomly selected. Their mean age was 45.5 years. They were HAART experienced an average of 9.4 years.

The patients were being treated by 1 of 4 infectious disease specialists and they averaged 5.9 medications each (6048 doses total). Data collection began June 8, 2004 and concluded on February 22, 2008. All patients were prior customers of retail pharmacy.

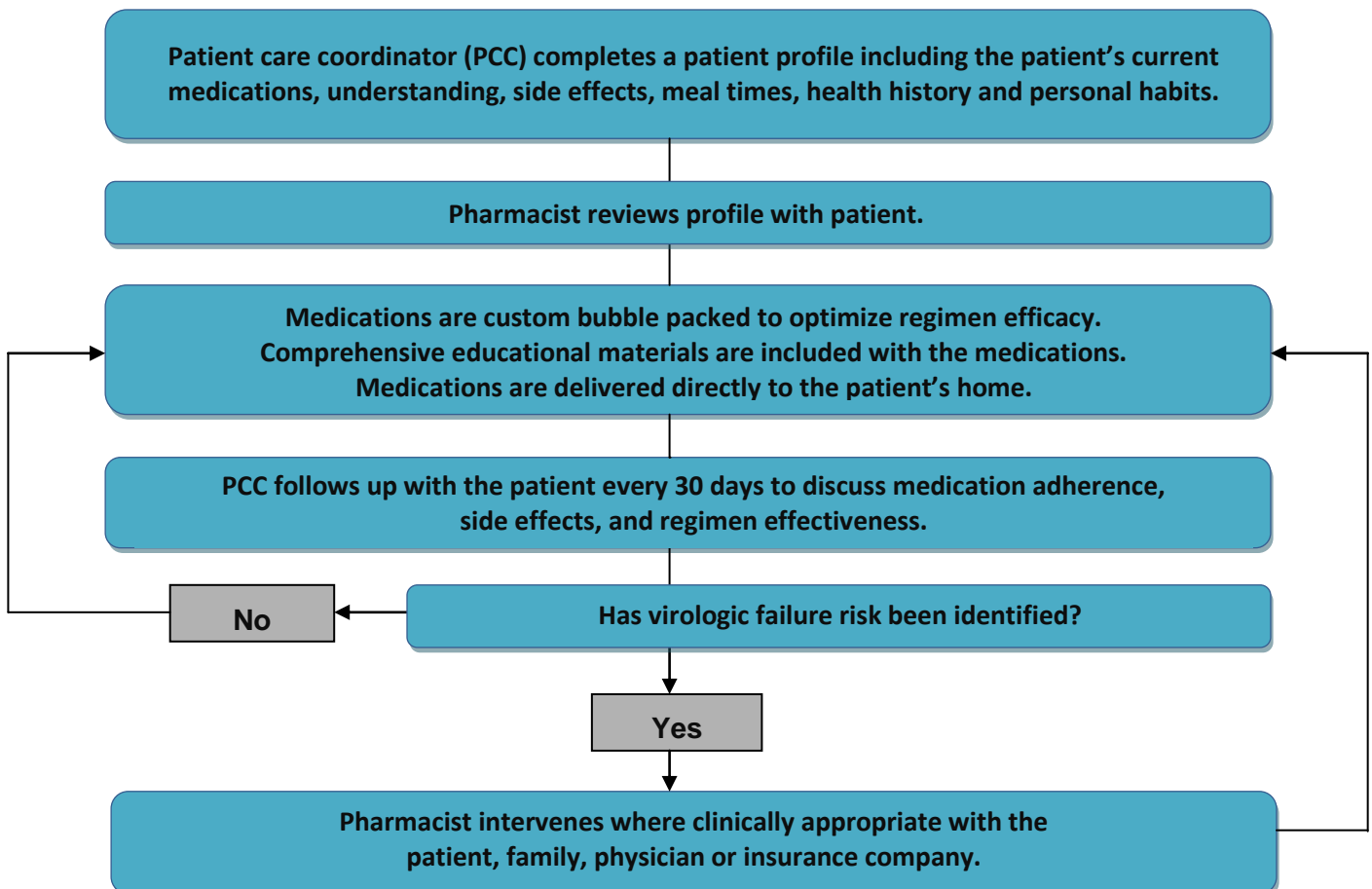
All study participants were provided the resources of a pharmacy managed medication program including:

- Education on medication side effects
- Clinical pharmacist support
- Monthly therapy review and refill reminders
- Assessment of adherence risk factor
- Custom bubble pack packaging

The clinical Pharmacists utilized the following tools to assess, counsel and manage the medications of the study participants -

- Physician chart reviews
- Refill records
- Engagement of patient
- Patient assessment form

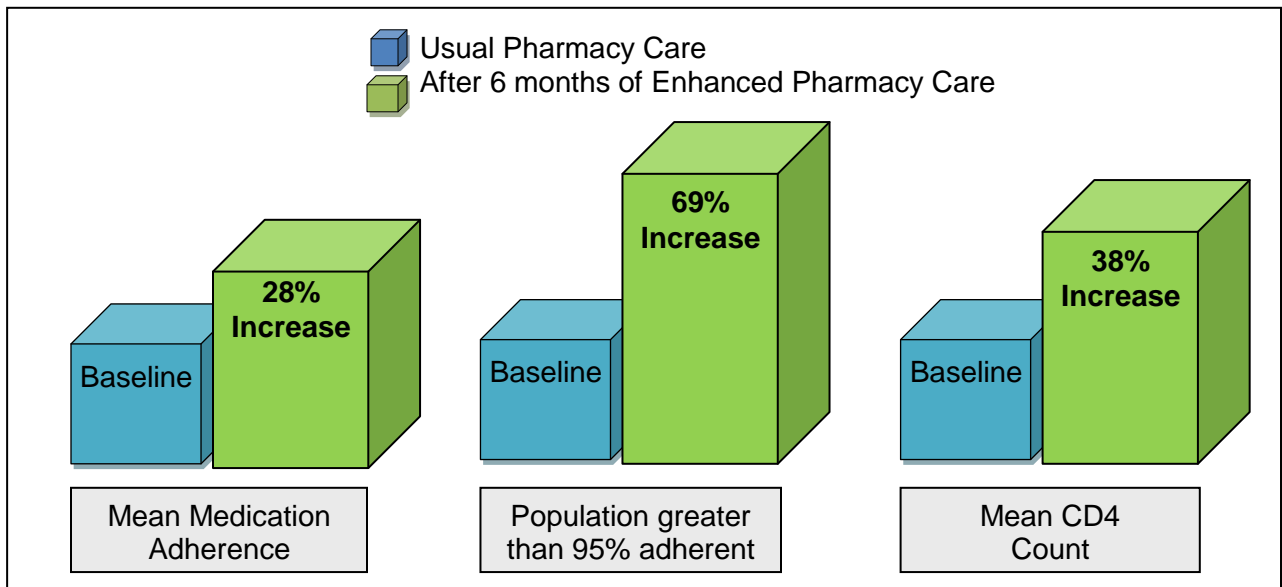
Flow of patients through the study protocol



Results

This pharmacy care model has demonstrated increased adherence, improved clinical outcomes and a greater willingness of the healthcare provider to involve the pharmacist as part of the healthcare team. Data analysis showed:

- Mean medication adherence increased 28% over baseline
- 69% increase in patients \geq 95% adherent to all medications
- 38% increase of CD4 cell count within 6 months
- \$3000 savings per member per year in overall healthcare costs



Recommendations

Any discussion of appropriate HIV therapy must take into consideration the extent of the pharmacy services being provided which can best achieve the goals of adherence and improved outcomes. Medication management strategies should address underlying causes of non-adherence, educate patients about their drug therapy, provide personal follow up and offer convenient reminder packaging.

- Clinicians can improve patient adherence and drug resistance barriers by utilizing a pharmacy care program at no extra cost to the patient.
- Healthcare providers should utilize a pharmacist as an essential member of the healthcare team for HIV medication management.
- PBMs are urged to remove financial barriers that may prevent patients from obtaining HAART medication and the services of specially trained pharmacists.

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