Retrospective Financial Analysis of Patients Enrolled in a Medication Adherence Program at an Independent Community Pharmacy

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Background: Medication nonadherence is the number one avoidable healthcare cost in the United States, a problem estimated at $105 billion annually. The North Carolina Community Pharmacy Enhanced Services Network (CPESN) is a network of high-performing community pharmacies dedicated to managing patient medications, aiming to ensure patients receive high quality healthcare while reducing total cost of care. North Carolina CPESN pharmacies are referred complex Medicare or Medicaid and patients are attributed if at least one chronic medication and >80% of medications are filled at a CPESN pharmacy.

Objective: The primary objective of this study was to determine the financial value of attributed patients enrolled in a medication adherence program at a CPESN pharmacy.

Methods: This was a retrospective analysis conducted at five independent community pharmacies in rural North Carolina. Patients were included in the financial analysis if they were a CPESN patient attributed to a study location, enrolled in the Moose Medication Adherence Program (MooseMAP) for >12 months between June 2014 and December 2016. Patients were excluded if they were <18 years of age or had <12 months of prescription fill data. Reviewed data included patient age, gender, race, chronic and acute medications (number and gross profit), immunizations, MooseMAP type, number of chronic medication prescribers, chronic medication class, and payer. CareTRIAGE™ scores, which are health risk indicators, were collected for each patient. A 12-month gross profit was determined for each attributed patient. Independent Samples T-Test and Pearson’s Correlation were utilized to compare independent variables and financial profit.

Results: Of 501 eligible patients, 63.1% (n=341) were included in the analysis. Study participants were a mean of 62.4 years old, received an average of 10 chronic medications monthly that spanned an average of 3 therapeutic classes. Medications were dispensed in bottles (53.1%, n=181) or adherence packaging (46.9%, n=160). Prescription pick-up occurred on-site (44.6%, n=152) or via delivery (55.4%, n=189). Analyses revealed the mean prescription count per patient per 12 months was 128.3. Gross profit per prescription per 12 months was $10.35 for combined chronic, acute and immunization prescriptions, $10.57 for chronic prescriptions, $26.95 for acute prescriptions, and $27.69 for immunizations. Patients receiving prescriptions in adherence packaging generated a mean gross profit of $1,561.82/year compared to $1,208.01/year with bottles (p=0.021). A positive correlation exists between gross profit and the following variables: number of prescriptions filled during the 12-month period (r=0.56; p<0.001); number of medication classes (r=0.27; p<0.001); higher-risk patients defined by CareTRIAGE™ scores (r=0.21; p<0.001). Immunization administration was significantly higher (p=0.004) in non-delivery patients (16.0%, n=55) than in delivery patients (3.0%, n=10).

Conclusion: Enrollment in a medication adherence program may increase gross profit for attributed patients as the number of prescriptions filled increases. Community pharmacies, particularly CPESN pharmacies, can increase number of chronic medication fills and gross profit by managing complex patients in an adherence program by utilizing adherence packaging. Increasing the provision of enhanced services, such as immunizations, increases profit for community pharmacies.