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Pharmacist Interventions Involving Patient Outreach: Early Findings of Patient Outcomes in Older Adults

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Pharmacist Interventions Involving Patient Outreach: Early Findings of Patient Outcomes in Older Adults

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PURPOSE AND BACKGROUND

The purpose of this study was to investigate the impact of pharmacist interventions on older adult patients in primary care.

Activities during this study were accomplished as part of the Lehigh Valley Hospital Geriatrics Workforce Enhancement Program (GWEP), a program funded through a cooperative agreement from the Health Resources and Services Administration (HRSA).

Beginning in April 2017, a pharmacist was incorporated into the GWEP program already consisting of nurse care managers, community health workers, family and internal medicine residency practices, and other community partners.

METHODS

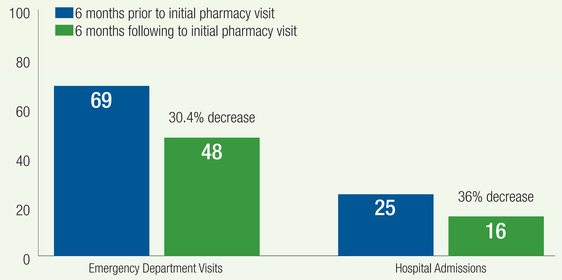
- A one-group pretest-post test design was implemented to compare health care utilization before and after initial patient outreach performed by the clinical pharmacist.
- **Primary outcomes:** Measurement of ED visits and hospital admissions in older adult patients who were engaged at least 6 months in home visit program.
  - Utilization data collected from May 2016 to May 2018.
- **Secondary outcomes:** Measurement of costs avoided by pharmacist interventions. Estimates of cost avoidance are based on previous studies[1,2] and inflation adjustments.
  - Pharmacist interventions collected from September 2017 to May 2018.

RESULTS

More than 150 home visits and 180 telephone outreaches in 51 older adult patients were performed during the study period.

PRIMARY OUTCOME

Comparison of Emergency Department Visits and Hospital Admissions following Outpatient Pharmacist Outreach



SECONDARY OUTCOME

- A total of 807 interventions were documented during the 9 month collection period.
- Total cost avoidance from pharmacist interventions is estimated to be $249,229 annually.

Clinical Pharmacist Interventions

DESCRIPTION OF INTERVENTION	NUMBER (PERCENTAGE)
Provide Information Only	228 (28%)
Other	128 (16%)
Comprehensive Medication Review	112 (14%)
Prevent or Manage an ADE	85 (11%)
Discontinue a Drug Not Indicated	72 (9%)
Adjust a Dose of Frequency	65 (8%)
Recommend Vaccination	39 (5%)
Duplication of Therapy	28 (3%)
Manage an Untreated Diagnosis	28 (3%)
Manage a Drug Interaction	16 (2%)
Therapeutic Drug Monitoring	9 (1%)
TOTAL	807

LIMITATIONS AND BARRIERS

- Authors gathered data during 12-month study period, but additional data will be collected to assess sustainability of pharmacist home visits.
- Although the results are captured based upon the time of initial pharmacist encounter, the contributions of other disciplines play a key role in the overall care of the patient.
- Recent hospital admissions or emergency department visits can be the inciting incident which prompts enrollment into the GWEP program. An admission or ED visit which triggered a GWEP referral might have impacted the results of the primary outcome.

FUTURE DIRECTIONS

- A report was created to assist in identifying patients with upcoming primary care provider (PCP) appointments with the expectation that patient could be seen by the GWEP team prior to an upcoming office visit, making the limited time with the provider more meaningful to the patient.
- A screening tool is in development to identify older adult patients at higher risk for falls by assessing incidence of previous falls, prescribed medications known to contribute to falls, and vitamin D levels.

CONCLUSION

- Clinical pharmacists can help improve outcomes of older adult patients by identifying and resolving medication-related problems, providing patient and caregiver education, and collaborating with clinicians to implement drug therapies.
- Early investigations show pharmacist home visits and interventions, in collaboration with the nurse and CHW, may reduce ED visits and hospital admissions, and increase cost avoidance.

REFERENCES

[1] Lee AJ, Boro MS, Knapp KK, Meier JL, Korman NE. Clinical and economic outcomes of pharmacist recommendations in a Veterans Affairs medical center. Am J Health Syst Pharm. 2002 Nov 1;59(21):2070-7.

[2] U.S. Bureau of Labor Statistics. "CPI Inflation Calculator." https://www.bls.gov/data/inflation_calculator.htm (accessed June 1, 2018).

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Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest of the subject matter of this presentation.

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