CLINICAL PHARMACISTS IN THE PATIENT CENTERED MEDICAL HOME: EVALUATION OF POTENTIAL IMPACT AMONG HYPERLIPIDEMIC AND DIABETIC PATIENTS

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BACKGROUND

- Pharmacists may augment Medical Home Port teams as independent providers.
- As per BUMEDINST 6300.19, the “Medical Home Port”, or Patient Centered Medical Home model of care was implemented in at least one primary care clinic in each Navy major medical center and Family Medicine teaching hospital by June 2010.
- As of June 2011, all primary care clinics in Navy Medicine transitioned to the Patient Centered Medical Home model.
- February 2012, Naval Hospital Camp Pendleton embedded clinical pharmacists in Family Medicine teams, and expanded pharmacist services for Internal Medicine.

OBJECTIVES

- Protocol NHCP.2013.0003 was developed to describe the impact of clinical pharmacists on health metrics, including A1C and LDL, among patients with diabetes and hyperlipidemia at Naval Hospital Camp Pendleton.

METHODS

Retrospective chart review was performed.

Inclusion criteria:
- Seen by clinical pharmacists for new or ongoing care between 1 Feb 2012 and 31 Aug 2012
- At least two encounters during six months follow-up
- Baseline and follow-up lab values documented in records

Analyses:
- LDL, triglycerides, and BMI were described for all patients; A1C was described for diabetic patients
- Statistical significance of changes in parameters was evaluated through paired t-tests

RESULTS: DIABETIC PATIENTS

46 diabetic patients met the inclusion criteria
- Average age was 61 years (range 24-77 years)
- 21 women; 25 men
- Most had complex co-morbidities
- Average time spent with pharmacist
  - 3.8 encounters (range 1-11)
  - 154 minutes (range 45-415)

RESULTS: HYPERLIPIDEMIC PATIENTS

15 patients with high cholesterol, not referred for diabetes care, met inclusion criteria
- Average age was 59 years (range 49-77 years); 3 women; 12 men
- Many had complex co-morbidities
- Average time spent with pharmacist: 2.9 encounters (range 1-8), 116 minutes (range 45-270)

SUMMARY

In the newly-referred only diabetic patient sub-group (n=16), the average A1C change was 2.4 points lower, with a range of -6.9 to +1.4.

- Results suggest that referral to a clinical pharmacist can improve management of challenging diabetes and hyperlipidemia, as evidenced by statistically significant improvements in A1C in diabetic patients and LDL in hyperlipidemic patients.
- BMI did not improve in either group. BMI changes, however, may have been better than expected in some because diabetes often includes introduction of medications associated with weight gain.
- Further analyses of data may determine whether increased time or number of encounters is associated with improved outcomes.
- Analyses of larger data sets, including other patient groups and variables of time/cost, may better determine the value of pharmacist care.

DISCUSSION

- Protocol NHCP.2013.0003 was developed to describe the impact of clinical pharmacists on health metrics, including A1C and LDL, among patients with diabetes and hyperlipidemia at Naval Hospital Camp Pendleton.

Analyses of larger data sets, including other patient groups and variables of time/cost, may better determine the value of pharmacist care.

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