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Title

A comparison of diabetes care quality in VA and commercial managed care: The Triad study.

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a working group was established to review the data, identify fixable problems with the highest frequency, and propose changes to improve patient care and efficiency of hospital operations.

FINDINGS TO DATE/EVALUATION OF WEB SITE: Over one week, we identified 199 problems in 25 different categories relating to patient care. On average, each problem consumed 26 minutes of resident time. Problems resulted in 31 delayed discharges. Most complaints (72%) were associated with a minor effect on patient care; 26% were associated with a significant effect and 2% with a severe effect on patient care. Twenty-six percent of the problems arose from inefficiencies at the Ward Clerk position.

KEY LESSONS LEARNED: A short but intense resident-driven effort to comprehensively identify problems encountered on the medicine wards was very effective. Collaboration with hospital leadership and commitment of hospital staff to follow up each problem in "real-time" allowed us to determine root causes as well as potential solutions. This detailed information enabled better targeting of limited resources in an effort to create meaningful changes in the efficiency and safety of patient care.

MODALITY(IES) USED TO DEMONSTRATE INNOVATION AT MEETING:

TO STUDY PATIENT SATISFACTION WITH THE USE OF A NURSE-BASED TELEPHONE PROTOCOL FOR MANAGEMENT OF URI SYMPTOMATOLOGY. R. Chaudhry[1]; R. Stroebel[1]; H. VanHouten[1]; J. Naessens[1]; S. Scheitel[1]. [1]Mayo Clinic, Rochester, MN. *(Tracking ID #116144)*

STATEMENT OF PROBLEM/QUESTION: Acute upper respiratory infection is a common, self-limiting viral infectious illness. Patients can be treated by RN telephone protocol for patients with symptoms of viral URI or acute sinusitis. Patient satisfaction with RN telephone management has not been assessed in past.

OBJECTIVES OF PROGRAM/INTERVENTION/WEB SITE: To determine if a nurse-based telephone protocol for management of URI and acute sinusitis will result in patient satisfaction equivalent to usual care.

DESCRIPTION OF PROGRAM/INTERVENTION/WEB SITE: January 2002 to July 2002 patients calling with symptoms of cough, runny nose, sinus pain or infection were triaged to a guideline-based registered nurse (RN) telephone treatment protocol (intervention) or usual care (control). Patients of 10 physicians were enrolled in the intervention group, whereas patients of the other 21 physicians received usual care (cluster randomization). Based on protocol questions, the RN determined if the patients' symptoms were suggestive of viral infection, bacterial sinusitis, or another diagnosis requiring physician evaluation. Symptomatic measures only were suggested for presumed viral infections. Cases of presumed bacterial sinusitis were treated with first line antibiotics (amoxicillin, erythromycin, or sulfamethoxazole/ trimethoprim). Patient satisfaction was assessed by sending all patients in both groups a survey form within 30 days of their initial contact.

FINDINGS TO DATE/ EVALUATION OF WEB SITE: Forty-five out of 77 patients in nurse telephone treatment group (58.4%) and 76 out of 135 patients (56.3%) in the usual care group responded to the survey. 88.9% in telephone group rated the care to be good to excellent whereas 100% in the usual care group rated care to be good to excellent ($P = .006$). 89% in the telephone group and 96% in usual care group thought that it was somewhat to very easy to have illness evaluated ($P = .146$). 60% of patients in telephone group and 52.6% of patients in the usual group will prefer telephone care in the future, whereas only 31.1% of patients in the telephone group and 39.2% in usual group would prefer clinic visit for evaluation of their symptoms ($P = .455$).

KEY LESSONS LEARNED: Both telephonic and office-based evaluation and treatment for URI can result in high levels of satisfaction. Although use of a guideline-based nurse telephone triage protocol for evaluation and management of URI symptomatology had lower satisfaction compared to usual care ($P = .023$), a majority of patients in both groups desire telephone evaluation of their symptoms as an alternative to a visit with their physician.

MODALITY(IES) USED TO DEMONSTRATE INNOVATION AT MEETING:

SCIENTIFIC ABSTRACTS

A BEHAVIORAL STAGE-MATCHED INTERVENTION FOR IMPROVING HYPERTENSION CONTROL. S. Natarajan[1]; E. Santa Ana[2]; P. Nietert[2]; K.M. Magruder[2]. [1]VA New York Harbor Healthcare System and New York University, New York, NY; [2]Medical University of South Carolina, Charleston, SC. *(Tracking ID #117389)*

BACKGROUND: The Transtheoretical model for health behavior change is a useful framework for facilitating behavior change by tailoring interventions to a person's readiness for change. Among individuals with hypertension, this study evaluated the efficacy of a behavioral stage-matched telephone-delivered counseling intervention for: 1) increasing adherence to exercise, diet, and medications, and 2) improving blood pressure (BP) control.

METHODS: Baseline stage of change (precontemplation, contemplation, preparation, action, maintenance and termination) for exercise, diet, and medications as well as systolic and diastolic BP were assessed in 120 veterans with hypertension attending a routine health care appointment. Participants were randomized 1:1:1 to receive a stage-matched intervention (SMI), a health education intervention (HEI), or usual care (UC). Interventions were delivered by monthly telephone calls for six months to participants in the SMI and HEI groups. Stage of change (for exercise,

diet, and medication) and BP was evaluated at 6-month follow-up using multivariate analysis of covariance (MANCOVA) and logistic regression.

RESULTS: There were no significant baseline differences between groups. At 6-month follow-up, a significantly greater proportion of participants in SMI were in later (action or maintenance) stages of change for exercise (63.9%) and diet (72.7%) adherence compared to participants in HEI (exercise: 25%, diet: 15.2%) or UC (exercise: 11.1%, diet: 12.1%). At 6 months SMI was a significant independent predictor for being in the later stages of change (action/maintenance) for exercise ($P < .0001$) and diet adherence ($P < .0001$). All but 3 participants (96.6%) reported being fully medication adherent. At 6-month follow-up, MANCOVA adjusting for baseline BP indicated that systolic BP was significantly lower in SMI (129 mm Hg, standard deviation [SD] = 13.9) than HEI (139.2 mm Hg, SD = 18.2, $P = .032$) and UC (140.2 mm Hg, SD = 19.5, $P = .015$). Diastolic BP was significantly lower in SMI (74.7 mm Hg, SD = 8.9) than UC (81.3 mm Hg, SD = 14, $P = .017$), but not HEI (79 mm Hg, SD = 9.1, $P = .098$).

CONCLUSION: In this randomized study, a Transtheoretical stage of change-matched intervention led to improved adherence for exercise, diet, and taking medications, and lowered BP among veterans with hypertension. This study provides preliminary evidence that stage-matched interventions hold promise for improving hypertension control among veterans.

A COMPARISON OF DIABETES CARE QUALITY IN VA AND COMMERCIAL MANAGED CARE: THE TRIAD STUDY. E.A. Kerr[1]; R. Gerzoff[2]; S.L. Krein[1]; J.V. Selby[3]; J.D. Piette[1]; J. Curb[4]; W.H. Herman[5]; D.G. Marrero[6]; V. Narayan[2]; M. Safford[7]; C.M. Mangione[8]. [1]VA Ann Arbor Healthcare System and University of Michigan, Ann Arbor, MI; [2]Centers for Disease Control and Prevention (CDC), Atlanta, GA; [3]Kaiser Permanente Division of Research, Oakland, CA; [4]Pacific Health Research Institute, Honolulu, HI; [5]University of Michigan, Ann Arbor, MI; [6]Indiana University Purdue University Indianapolis, Indianapolis, IN; [7]University of Medicine and Dentistry of New Jersey, Newark, NJ; [8]University of California, Los Angeles, Los Angeles, CA. *(Tracking ID #116059)*

BACKGROUND: Studies have shown improved quality of care in the Department of Veterans Affairs (VA) relative to Medicare. No studies, however, have compared care in VA to that delivered in commercial managed care (CMC) organizations, nor have they focused in depth on chronic, outpatient conditions. We sought to compare the quality of diabetes care between patients in VA and those enrolled in CMC organizations using equivalent and pre-specified sampling and measurement methods.

METHODS: We enrolled patients with diabetes from 5 VA medical centers (N = 1285) and 8 CMC organizations (N = 6920) in 5 matched geographic regions. We compared scores on 10 identically specified quality measures (e.g., annual hemoglobin A1c [A1c], annual low density lipoprotein cholesterol [LDL]) and 4 satisfaction measures (e.g., satisfaction with quality of diabetes care), adjusted for patient demographic and health characteristics.

RESULTS: VA patients had better scores than CMC patients on all process measures, ranging from a 10 percentage point difference on performance of an annual A1c (93% versus 83%; $P = .006$) to a 25 percentage point difference on aspirin use counseling (74% vs. 49%; $P < .001$). There was no difference in blood pressure control between VA and CMC patients, but VA patients had better control of LDL and A1c (86% vs. 72% for LDL < 130 mg/dl, $P = .002$; 92% vs. 80% for A1c < 9.5%, $P = .006$). Satisfaction was similar between the two cohorts.

CONCLUSION: We found that diabetes processes of care and 2 of 3 intermediate outcomes were substantially better for VA study patients than for CMC patients. Commercial plans may benefit from a better understanding of VA quality improvement programs, especially regarding enhancing LDL and A1c control. However, there was room for improvement in blood pressure control in both VA and CMC.

A COMPARISON OF THE QUALITY OF MEDICAL CARE MEASURED BY INTERVIEW AND MEDICAL RECORD. J.T. Chang[1]; C.H. MacLean[2]; C.P. Roth[2]; N.S. Wenger[1]. [1]University of California, Los Angeles, Los Angeles, CA; [2]RAND, Santa Monica, CA. *(Tracking ID #117145)*

BACKGROUND: Chart-based measurement has been considered the gold standard for many measures used to estimate quality of care. However, patients can report on many aspects of their care, including some that may be poorly documented in the medical record, and interview can be a cost-effective data collection method. Using a set of process measures developed for vulnerable older adults, we compared performance scores obtained using data from patient interviews and medical records.

METHODS: The Assessing Care of Vulnerable Elders (ACOVE) quality indicators (QIs), a set of 236 explicit process measures covering 22 conditions, were used to assess care in a random sample of vulnerable older adults from two senior managed care plans. Data were available from both interview and medical records for 245 patients. 60 QIs were measured with data available from both sources. We performed a priori classification of the "gold standard" data source for the 60 QIs as follows: patient interview would be the better source for information for QIs measuring communication and nonprescription medications (16 QIs); the medical record would be a better source for QIs measuring routine medical procedures (14 QIs); the remaining 30 QIs had no preferred data source. Performance scores were computed as the percentage of indicated care processes that patients received.

RESULTS: Performance assessed by the 30 quality indicators without a preferred data source scored the same by interview 66% (95% CI, 64% to 68%) and medical record 65% (95% CI, 64% to 67%). Quality of care measurement by the 16 QIs for which interview was the a priori preference had a much higher mean quality score by interview 66% (95% CI, 63% to 68%) than medical record 30% (95% CI, 27% to