

POPULATION: The OMG Business Process Management for Healthcare (BPM+Health) specification combines BPMN™ with Case Management Model and Notation (CMMN™) and Decision Model and Notations (DMN™) to “disseminate and leverage evidence-based best-practices at the point of care.” The American College of Emergency Physicians (ACEP) Board-certified Emergency Physicians modeled practice guidelines in the BPM+ modeling language during on-line meetings. Two common emergency conditions were selected for initial pilot testing: 1) evaluation and treatment of first trimester bleeding in pregnant patients, and 2) the evaluation and treatment of non-traumatic low back pain. **RESULTS/ANTICIPATED RESULTS:** The protocols were successfully modeled during four on-line meetings in less than 2 months. Process steps from initial evaluation to disposition were implemented using BPMN™. When clinicians need to evaluate the patient to collect data for decision making the inputs and outputs were modeled in CMMN™. Decision logic is represented as DMN™. The software tool linked the components for easy browsing and authoring the logic. The Physicians easily followed the displayed logic. The practice recommendations from each policy were successfully modeled, using the standard BPM+ notation to support rapid implementation in EHRs. Detailed implementation specifications will be shared. **DISCUSSION/SIGNIFICANCE OF IMPACT:** This pilot project demonstrated the feasibility of the OMG approach to solving Clinical Practice Guideline Implementation and Dissemination Barriers. Ongoing work by involved specialty societies will be necessary to demonstrate the scalability and sustainability of this approach.

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Poor provider-patient communication, lack of readiness for discharge, and perceived illness threat are associated with quality of life after survival from cardiac arrest

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OBJECTIVES/GOALS: Studies have shown that cardiac arrest survivors have poor quality of life (QoL) secondary to neurologic injury. We hypothesized that poor provider-patient communication, lack of readiness for discharge, and perceived illness threat would be associated with QoL in cardiac arrest survivors. **METHODS/STUDY POPULATION:** We distributed an online survey to the Sudden Cardiac Arrest Foundation listserv. Survivors completed the Questionnaire for the Quality of Provider-Patient Interactions (QQPPI), Readiness for Hospital Discharge Scale (RHDS), and the Brief Illness Perception Questionnaire (B-IPQ). When completing the QQPPI and RHDS, survivors were asked to think back to their hospitalization and discharge. QoL domains (physical, psychological, social) were measured via the WHO-QOL BREF. Three multiple regression models examined associations between QQPPI, RHDS, and B-IPQ scores with QoL domains, adjusted for age, sex, months since arrest, and understanding of arrest and post-arrest symptoms at discharge. **RESULTS/ANTICIPATED RESULTS:** A total of 163 survivors (mean age 50.1 years, 50.3% women) provided complete survey data. Greater perceived illness threat ($\beta: -.45, p < .001$) and lower readiness for discharge ($\beta: .22, p = .01$) were associated with worse physical QoL; greater perceived illness threat ($\beta: -.45, p < .001$) was associated with worse psychological QoL; and greater perceived illness threat ($\beta: -.3, p < .001$) and poor provider-patient communication ($\beta: .35, p < .001$) were associated with worse social QoL. Our models explained 48%, 43%, and 30% of the variance in physical, psychological, and social

QoL, respectively ($p < .001$). **DISCUSSION/SIGNIFICANCE OF IMPACT:** In-hospital interactions and perceived illness threat have important ramifications for cardiac arrest survivors attempting to return to daily life. Discussions regarding cardiac arrest sequelae, expectations, and specific treatment options during hospitalization could impact future QoL.

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Positive Deviants for Medication Therapy Management: A Mixed-Methods Comparative Case Study of Community Pharmacy Practices[†]

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OBJECTIVES/GOALS: To optimize medication use in older adults, Medication Therapy Management (MTM) was launched as part of Medicare Prescription Drug (Part D) policy. The objective of this study was to generate hypotheses for strategies that contribute to community pharmacies' ability to achieve high performance on policy relevant MTM quality measures. **METHODS/STUDY POPULATION:** This mixed-methods comparative case study design incorporated two conceptual models; the Positive Deviance model and Chronic Care Model. The study population consisted of pharmacy staff employed by a Midwestern division of a national supermarket-community pharmacy chain. Data consisted of semi-structured interviews and demographics. Qualitative and quantitative data were analyzed abductively or using descriptive statistics, respectively. Case comparisons were synthesized using the Framework Method. MTM quality measures used to evaluate participant pharmacies' MTM performance mirrored quality measures under Domain 4 (Drug Safety and Accuracy of Drug Pricing) of the 2017 Medicare Part D Plan' Star Rating measures. **RESULTS/ANTICIPATED RESULTS:** Staff at 13 of the 18 selected pharmacies (72.2%) participated in interviews. Interviewees included 11 pharmacists, 11 technicians and three student interns. Strategies hypothesized as contributing to MTM performance included: 1. Strong pharmacist-provider relationships and trust, 2. Inability to meet patients' cultural, linguistic, and socioeconomic needs (negatively contributing), 3. Technician involvement in MTM, 4. Providing comprehensive medication reviews in person vs. phone alone, 5. Placing high priority on MTM, 6. Using maximum number of clinical information systems (CISs) to identify eligible patients. 7. Technicians using CISs to collect information for pharmacists, 8. Faxing prescribers adherence medication therapy problems (MTPs) and calling on indication MTPs. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Our study resulted in eight strategies hypothesized to contribute to community pharmacy performance on MTM quality measures. To inform MTM policy recommendations, future research should engage stakeholders to assist with prioritizing hypotheses to be tested in a larger representative sample of pharmacies. **CONFLICT OF INTEREST DESCRIPTION:** This research was supported, in part, with support from the Indiana Clinical and Translational Sciences Institute funded, in part by grant number TL1TR001107 from the National Institutes of Health, National Center for Advancing Translational Sciences, Clinical and Translational Sciences Award. Dr. Adeoye-Olatunde is a part-time employee and Dr. Lake is a full-time employee at the