



COMMUNITY PHARMACY FOUNDATION
COMPLETED GRANT SYNOPSIS

Who is at Risk?: Identifying Patients in Need of Medication Therapy Management

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Objectives	
1) To examine the utility of a self-administered questionnaire as an indicator of medication-related problems.	
Methods	
Design	<ul style="list-style-type: none"> • Modified and evaluated Blalock’s Drug Therapy Concerns Questionnaire • Two-phase psychometrics study: <ul style="list-style-type: none"> ○ Phase 1: Modification of Drug Therapy Concerns Questionnaire (DTC) ○ Phase 2: Estimating the utility of the Modified DTC for use as MRP predictor • Data collected in convenience and quota samples
Study endpoints	<ul style="list-style-type: none"> • Reliability and construct- and criterion-related validity estimates of modified DTC • Correlation between DTC scores and presence of MRPs • Regression model summarizing predictors of MRPs • Receiver-operator characteristic curve exhibiting potential scores on DTC to use as “screen” for MRPs in clinical practice
Results	
<ul style="list-style-type: none"> • 394 patients participated in Phase 1 • Phase 1 resulted in a one-component 9-item modified DTC for further examination • 200 patients participated in Phase 2 • Phase 2 findings: <ul style="list-style-type: none"> ○ Cronbach’s alpha: 0.823 ○ EFA resulted in one-component solution with adequate factor loadings ○ Modest but significant correlation between DTC scores and MRPs ($r= 0.24, p < 0.01$) ○ Model of MRP predictors significant and explained approximately 20% of variance ○ ROC had significant area under the curve ($0.782, p < 0.001$) 	
Conclusion	
<p>There is a potential for clinical utility of the DTC as a MRP predictor; highlighting that patient-reported data (i.e., information not routinely available in a medical chart) may offer some benefit in identifying patients’ risk for MRPs beyond MTM eligibility criteria used routinely, such as number of medications. However, the role of DTC scores might be limited and further study of the instrument is warranted. Furthermore, as some of the items on the DTC “performed” poorly more work is needed to examine the psychometric properties of this scale in other samples. In addition, more research is needed in general with regards to identifying predictors of MRPs. Individuals choosing to utilize the DTC in practice as a potential screen for MRPs could consider a score of 15 as a reasonable starting place for a definition of a “positive screen”, i.e., an individual with higher risk of MRPs. Using this score, the DTC exhibits an approximate sensitivity and specificity of identifying patients with at least one MRP of between 81-86% and 61%, respectively.</p>	

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