### Community Pharmacy Foundation

**COMPLETED GRANT SYNOPSIS**

**Preparing Pharmacists to Provide Medication Therapy Management Services: Evaluating Agreement between a Novice Pharmacist Guided Interview and Experienced Clinical Pharmacist Judgment in Identifying Drug Therapy Problems**

John P. Rovers, PharmD, BCPS, FAPhA  
Michael J. Miller, RPh, DrPH  
Carrie Koenigsfeld, PharmD  
Sally Haack, PharmD, BCPS  
Karly Hegge, PharmD, BCPS  
Erin M. McCleeary

Drake University, Des Moines, IA  
University of Oklahoma, Tulsa, OK  
South Dakota State University, Sioux Falls, SD

| Objectives | 1) To determine agreement between student pharmacists using a guided interview tool and experienced clinical pharmacists using usual clinical judgment to identify drug therapy problems (DTPs) in community-dwelling elderly patients  
2) To evaluate students’ and patients’ perceptions of the interview. |
|---|---|
| Methods | Design  
• Patients participated in live medication therapy management reviews independently performed by a fourth professional year student pharmacist and an experienced clinical pharmacist during a single office visit.  
• Students interviewed patients using a guided interview tool. Clinical pharmacist interviews followed their usual practices.  
• Student-pharmacist agreement concerning the DTPs identified was evaluated using the kappa statistic (k) with 95% confidence interval (CI).  
• Four statements with a five-point Likert-type agreement scale were used to assess student pharmacist perceptions about the tool’s usefulness, practicality and recommendations for use. Similarly, four statements were used to assess patient satisfaction with the interview process.  

| Study endpoints | Agreement between student pharmacists and experienced pharmacists.  
• Students’ and patients’ perceptions of interview. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>Fair to moderate agreement was observed on four DTPs. Actual agreement was significantly higher than chance for three DTPs [adverse drug reaction (k=0.342, 95% CI: 0.051 – 0.632), dosage too high (k=0.417, 95% CI: 0.143 – 0.691), needs additional drug therapy (k=0.310, 95% CI: 0.072 – 0.547)] and not statistically significant on the fourth [unnecessary drug therapy (k=0.214, 95% CI: -0.004 – 0.431)].</td>
</tr>
</tbody>
</table>

For further information and/or materials on this grant, please visit [www.CommunityPharmacyFoundation.org](http://www.CommunityPharmacyFoundation.org) and submit your inquiry through Contact Us.
• Students reported the interview tool was easy to use (3.73/5) and useful in the practice environment (3.43/5), but were less enthusiastic with respect to its practicality (3.07/5) and recommendation for use in community pharmacies (3.10/5).
• Patients strongly agreed the pharmacist’s efforts will help improve or maintain their health (4.78/5), assure that their medications do what they are supposed to do (4.80/5), manage their medications (4.77/5), and solve problems with their medications (4.82/5).

**Conclusion**
• The guided interview tool may be useful for assisting inexperienced practitioners in identifying complex DTPs. Although students did not find the guided interview tool practical for routine use, patients were satisfied with the level of care received throughout the interview process.