Title: Evaluation of Data Collection Software for Medication Therapy Management in the Community Pharmacy Setting

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Grant Classification: Practice Advancement (emphasis on technology)

Objectives

1) To evaluate Medicompass® as a data collection program for its use in Medication Therapy Management
2) Analyze the following MTM outcomes via descriptive statistics for diabetes and hypertension MTM services
   - Diabetes MTM
     - Change in hemoglobin A1c
     - % of patients with hemoglobin A1c < 7% at third MTM intervention
   - Blood Pressure MTM
     - Change in systolic and diastolic blood pressure readings
     - % patients with BP < 140/90 mm Hg
     - % patients at BP goal (<130/80 mm Hg) at third MTM intervention if has diabetes
3) To evaluate the acceptance of recommendations made to physicians from MTM interventions
4) Evaluate consumer acceptance of, and willingness to pay for participating in the use of the Medicompass® application and the pharmacist MTM intervention.

Methods
**Design:**
A minimum of 10 participants with a diagnosis of diabetes or hypertension will be enrolled at each of the ten sites.

**Inclusion Criteria**
1. Male or female between the ages of 18 and 75
2. Patient on 4 or more chronic medications
3. Patient has at least one chronic medication for treatment of diabetes or hypertension
4. Total monthly cost of medication exceeds $200
5. Signed consent from the participant

**Exclusion Criteria**
1. Participants that cannot obtain transportation to the KHCC
2. Participants that can not speak and/or read English
3. Participants who are pregnant or nursing
4. End-stage renal disease or dialysis

**Methods:**
Each participant will elect to complete three MTM interventions for 30 minutes for either diabetes or hypertension. A minimum of 10 participants (5 with diabetes, 5 with hypertension) will be enrolled at each site.

**Timeline**

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Baseline</th>
<th>Week 6</th>
<th>Week 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit</td>
<td>Visit 1*</td>
<td>Visit 2</td>
<td>Visit 3*</td>
</tr>
</tbody>
</table>

* Hemoglobin A1c

**Study endpoints**
- Comparing the Medicompass group to the Control group
- Evaluating patient satisfaction of the MTM service and willingness to pay for the MTM service
- Physician acceptance rate

**Results**
- Reduction in hemoglobin A1c was greater in the Medicompass group compared to the Control group (-1.3% vs -0.98% respectively)
- Reduction in systolic blood pressure was greater in the Medicompass group compared to the Control group (-8.1mmHg vs 0.14mmHg respectively)
- Reduction in diastolic blood pressure was greater in the Medicompass group compared to the Control group (-1.4mmHg vs 0.86mmHg respectively)

**Conclusion**
- Study provided a small sample size due to enrollment issues and patient's lost to follow-up
- The Medicompass group had a larger percentage of patients meeting recommended goals (BP<140/90 and hemoglobin A1c <7%); a larger reduction in hemoglobin A1c, systolic BP, and diastolic BP; and more overall satisfaction by patients
- The Control group had a larger percentage of patients meeting recommended goals for BP <130/80 if they had diabetes, a reduction in hemoglobin A1c, and a small increase in systolic and diastolic BP
- Overall the Control group’s patient satisfaction was less compared to the Medicompass group
- In both groups, physicians were more likely to accept recommendations related to blood pressure medications but less likely to accept recommendations related to diabetes medications

For further information and/or materials on this grant, please visit www.CommunityPharmacyFoundation.org and submit your inquiry through Contact Us.