Overview

The Mississippi Delta is an 18-county area known for persistent poverty and high burden of chronic diseases and related risk factors. MDHC—an initiative of the Mississippi State Department of Health—provides leadership and guidance in the Mississippi Delta region to improve the cardiovascular health of the population through the promotion of the ABCS: appropriate Aspirin use, A1c (hemoglobin control), Blood pressure control, Cholesterol management, and Smoking cessation. MDHC works to achieve these goals through environmental and systems changes, community-clinical linkages, and collaboration with a diverse group of partners.

The Pharmacy Cardiovascular Risk Reduction Project (“Pharmacy Project”) integrates pharmacists from the University of Mississippi School of Pharmacy into healthcare teams in four federally qualified health centers (FQHCs). Through a collaborative practice agreement, pharmacists provide medication therapy management services to help patients address chronic disease conditions two to three days per week in the FQHCs. While visiting with the pharmacist, patients may review medications and resolve drug therapy problems at no additional cost.

Program Elements

Patients may be referred to the Pharmacy Project by clinic staff or by an MDHC community health worker. They may also enroll without a referral. After consent and enrollment, the clinical pharmacist makes arrangements to see the patient during their next clinic visit. Before the face-to-face encounter, the pharmacist reviews the patient’s records to determine what supports are needed to help the patient achieve their desired health goals. During the 60-minute visit, the pharmacist may:

- Conduct a comprehensive review of a patient’s medication regimen to avoid potential issues, such as duplications, drug interactions, or dosage errors.
- Develop a medication action plan, which may include changes to the patient’s medication regimen.
- Educate patient on chronic disease self-management practices.
- Provide patient with a medication reminder device.
- Initiate laboratory monitoring.
- Communicate drug therapy recommendations to patient’s provider.

The pharmacist then documents the encounter in the patient’s electronic health record, which helps ensure that members of the FQHC’s clinical team are fully aware of the patient’s action plan as well as the type, frequency, and dosage of all drugs taken by the patient.
Field Notes (cont.)

Goals and Objectives
The primary goal of the Pharmacy Project is to increase patient adherence to medication for the treatment of conditions such as uncontrolled hypertension, high cholesterol, diabetes, and tobacco use by integrating clinical pharmacists into healthcare center teams. Participating clinical pharmacists use evidence-based guidelines established for the treatment of conditions such as uncontrolled hypertension, high cholesterol, diabetes, and tobacco use.

Intended Participants
The intended audience is adults aged 18 years or older, residing in the 18-county Delta region, who use tobacco or have been diagnosed with elevated cholesterol levels, uncontrolled hypertension, or diabetes.

Progress toward Implementation
Pharmacists have been integrated into the FQHCs located in four of 18 Delta counties. Additional implementation efforts will include working with pharmacists located within and in close proximity to additional FQHCs as well as rural and community health clinics. Additionally, pharmacists are receiving certification in medication therapy management through the University of Mississippi School of Pharmacy.

Community Involvement
Through the Pharmacy Project, Delta residents are presented with another health resource within the community that is easily accessible during medical office visits. In partnership with the FQHCs, the Pharmacy Project is promoted at local health fairs. In addition, members of the Pharmacy Project promote the project while participating in knowledge-sharing sessions on affordable care throughout the Delta. During these sessions they inform community members of the project’s linkage to providers within the FQHC setting.

Reach and Impact
Nearly 90% of all patients seen at the participating FQHCs reside in a Delta county. As of March 2015, more than 600 patients have been seen by a clinical pharmacist. There have been nearly 1,950 encounters between the pharmacists and patients. Approximately 4,800 drug therapy problems have been identified and resolved. Specifically, 46% of patients were in need of additional drug therapy and 26% of the patients had a dosage that was too low.

The following statistically significant improvements have been observed in patients with elevated clinical values.

<table>
<thead>
<tr>
<th>Health Outcome</th>
<th>N</th>
<th>First Recorded Value* (Mean)</th>
<th>Most Recent Recorded Value* (Mean)</th>
<th>Relative Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin A1c &gt; 9%</td>
<td>302</td>
<td>11.1</td>
<td>9.5</td>
<td>14.4%</td>
</tr>
<tr>
<td>Systolic Blood Pressure &gt; 130 mmHg</td>
<td>243</td>
<td>148.1</td>
<td>140.2</td>
<td>5.3%</td>
</tr>
<tr>
<td>Diastolic Blood Pressure &gt; 80 mmHg</td>
<td>233</td>
<td>88.8</td>
<td>82.1</td>
<td>7.5%</td>
</tr>
<tr>
<td>Total Cholesterol</td>
<td>117</td>
<td>247.0</td>
<td>213.0</td>
<td>13.8%</td>
</tr>
<tr>
<td>Low Density Lipoprotein &gt; 100 mg/dL</td>
<td>161</td>
<td>141.8</td>
<td>118.3</td>
<td>16.6%</td>
</tr>
<tr>
<td>Triglycerides &gt; 150mg/dL</td>
<td>101</td>
<td>339.5</td>
<td>235.9</td>
<td>30.5%</td>
</tr>
</tbody>
</table>

*The average number of days between the first and last observation was 514 days.

Preliminary reports suggest that pharmacist-provider relationships are being strengthened.

Pharmacists work with patients to correct drug therapy problems, such as inadequate dosage, unnecessary drug therapy, adverse drug reaction, noncompliance, or ineffective drug(s).

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