Program Overview
Pharmacists from the University of Mississippi School of Pharmacy partner with the Diabetes Care Group in Jackson, MS in Project IMPACT: Diabetes. The doctor, pharmacist, nurse practitioner, and certified diabetes educator jointly meet with patients with diabetes in a physician’s practice at least three times per year to provide in-depth, personalized care. This health care team connects with patients to understand who they are as individuals, what their daily life is like, and uncovers challenges the patient may experience. The pharmacist evaluates each patient’s lab results and discusses results and medication management strategies with them. Once the team has this information, they share their different perspectives and recommendations and collaboratively develop a comprehensive diabetes management plan. The plan engages the patient in the appropriate education and support.

Program Partners
The University of Mississippi School of Pharmacy was established in 1908 to meet the needs of Mississippi for highly qualified pharmacists. The School strives to enhance the quality of life for patients who access the patient-centered pharmacy services of the School of Pharmacy’s pharmacy practice faculty and staff. The School of Pharmacy has earned national and international recognition for accomplishments in education; basic, translational, and clinical research; and professional and community service. The Diabetes Care Group has five locations in Mississippi and is dedicated to improving the health and quality of life for diabetes patients. A team including physicians, pharmacists, nurse educators, dieticians, and medical assistants treat and empower diabetes patients to manage their disease effectively. The Diabetes Care Group integrates medical management, patient education, and behavioral modification to improve patient self-management and clinical outcomes, while reducing the overall medical and social costs of diabetes. The University of Mississippi and the Diabetes Care Group clinic have formed a partnership through Project IMPACT: Diabetes.

Community Champions: Lauren Bloodworth, PharmD and Courtney Davis, PharmD

Patient Profile
Patients enrolled in this project are residents of Hinds County, which includes the city of Jackson and surrounding counties. Mississippi leads the nation’s obesity rates with over a third of adults considered obese. Metabolic syndrome is common among the participating patients with about 75% of patients diagnosed with a combination of obesity, diabetes, dyslipidemia, and hypertension. Some contributing factors include poor socio-economic status, a lack of insurance, genetics, misinformation, and local cuisine. Nearly 80% of patients in Mississippi are uninsured or on Medicaid, making it difficult to pay for the care they need. At least a quarter of enrolled patients are African-Americans, a group that is medically underserved in the state and predisposed to diabetes and hypertension.
Pharmacists' Role on the Collaborative Care Team
The pharmacist meets with the patient to review his/her current medications, records any changes in medications since the last visit, and evaluates the patient’s blood sugar log and other laboratory information. The pharmacist then discusses adherence and tolerance to medications and educates the patient on lifestyle modifications, such as diet and physical activity. Not only is this process effective at achieving lower A1Cs, but the patients feel cared for and appreciate the personal interaction with the pharmacist. The pharmacist engages either the physician or nurse practitioner to meet with the patient concurrently. The provider completes the physical assessment, and the health care team utilizes their individual strengths to develop a comprehensive plan to help the patient achieve their treatment goals. The pharmacist completes the visit by writing down changes for the patient, making sure he/she understands the plan, refilling any medications as needed, and addressing any further educational points, such as dosing and injection technique. This individualized time with each patient allows the pharmacist to uncover challenges and recommend individualized approaches to disease management.

Relevant Statistics – Community Level
- In 2010, Mississippi ranked the 2nd highest in the U.S. for overall diabetes prevalence with over 12% of the adult population (approximately 270,000 people) having type 2 diabetes.
- Diabetes contributed to the deaths of 926 Mississippians in 2010, and many more live with the complications of Type 2 diabetes, including lower extremity amputations, end stage renal disease, blindness, loss of protective sensation, heart disease, and premature death.

Diabetes Epidemic at the National Level

Impact of Diabetes
- 25.8 million people, which is 8.3% of the U.S. population, are estimated to have diabetes
  - 18.8 million people have been diagnosed with diabetes
  - 7 million people are undiagnosed; in other words, are unaware they have diabetes
- 1.9 million people aged 20 years and older are newly diagnosed with diabetes each year
- The prevalence of diabetes in the United States increased by 128% from 1988 to 2008
- If present trends continue, 1 in 3 adults in America will have diabetes in 2050
- 79 million adults have prediabetes, which increases their risk of developing Type 2 diabetes later in life
- Diabetes is a major cause of heart disease and stroke
- Diabetes is the leading cause of kidney failure, nontraumatic lower-limb amputations, and new cases of blindness among adults in the United States
- Diabetes contributes to the death of 231,404 Americans each year

Cost of Diabetes
- Total cost of diagnosed diabetes in the United States = $245 billion per year
  - Direct medical costs = $176 billion per year
  - Indirect costs (e.g., disability, reduced productivity) = $69 billion per year
- Health care costs for a person with diabetes are 2.3 times higher than a person without diabetes
- 1 out of every 10 health care dollars is spent treating diabetes and its complications
References