



# PROJECTIMPACT

IMPROVING AMERICA'S COMMUNITIES TOGETHER

## Jefferson County Department of Health (JCDH)

Jefferson County, AL

For B. DeeAnn Dugan, PharmD, Project IMPACT: Diabetes Community Champion at the Jefferson County, AL, Department of Health (JCDH) and Associate Professor at Samford University McWhorter School of Pharmacy, helping an underserved population and teaching student pharmacists are two sides of the same coin.

"I don't think I could be an effective teacher if I didn't have the practice site that I have with the population I have," Dugan told *Pharmacy Today*. "And I don't think that I would be as good with my patients without the teaching."

Alabama has the second highest prevalence of diabetes in the United States, according to CDC, and the patients with diabetes Dugan works with rely on her help. JCDH serves a largely uninsured and unemployed patient population; a significant majority are African American women between 40 years and 65 years old, Dugan said. They also face significant challenges with health literacy, transportation, and other barriers. Dugan and her colleagues collaborate with physicians to provide care to these at-risk patients at three outpatient clinics throughout Jefferson County.

### Providing Essential Care

Dugan and her colleagues provide patient care in two main ways. At each of the JCDH clinics, the pharmacists provide diabetes education classes, starting with a general overview of the disease and how it is treated, proceeding through four more specialized sessions, and continuing with follow-up to ensure that patients reach their treatment goals. The pharmacists also work one-on-one with JCDH physicians on the floor of each clinic to provide medication reconciliation and other pharmacy services.

Through Project IMPACT, JCDH was able to expand a third location and increase the number of patients served. Dugan said the county was also able to offer incentives to patients, including free test strips and discounted medications at county hospitals. "Test strips are incredibly expensive," Dugan noted. "For patients who are making 25% of the poverty level, [they're] nearly impossible to afford."

Patients respond well to the pharmacists' interventions, Dugan said. "We can show that there's absolutely a direct correlation between coming to see the pharmacist and their A1C [glycosylated hemoglobin] going down," she noted. "The more visits [they] come to, the more it trends down." Dugan added that she hopes to have a poster describing this data accepted at the 2013 APhA Annual Meeting in March.

The education and direct intervention on the clinic floors are helpful, Dugan said, but perhaps the most essential part of diabetes care is the follow-up. "A day or two later, we call [patients], we follow up and ask how everything is going," she explained. "It's those follow-up contacts that I really think the patients respond most to. When they talk about the services, those are the things that they would tell you make a difference."

### Helping Patients; Teaching Students

Working with an at-risk population isn't always easy, Dugan said, but it's a challenge that she loves. "Those moments when you finally have that breakthrough with the patient ... those are magical, and I really love conveying that to my students, letting them see the passion that drives me and the need that exists," she told *Today*. "I want them to see that they can make a difference; every single one of them can make a difference."



One of those moments that took place recently involved a JCDH patient with type 1 diabetes. Her health literacy was low, Dugan said, and she was having difficulty understanding when she should use Humalog (insulin lispro—Eli Lilly) and when she should use Lantus (insulin glargine—Sanofi). “She was having a lot of hypoglycemia,” Dugan explained, “so we did a lot of counseling and interventions to get all that straightened out. But we were still calling to check on her, because we were concerned about her.”

One day, Katy Fisher, a JCDH resident called the patient to see how she was doing and found her agitated, confused, and crying. Dugan, Fisher, and Roger Lander, PharmD, decided to send both JCDH residents to check on the patient. “When they got there, the patient didn’t even remember talking to her,” Dugan said. The residents found that the patient had a blood glucose level of only 40 mg/dL and immediately started feeding her high sugar/carbohydrate foods and retesting her glucose.

Finally, after three cycles of eating and retesting, “all of a sudden she was fine,” Dugan said. She remembered talking to the resident and explained that she had skipped a meal, leading to her hypoglycemia. Today, the patient has a better understanding of her condition and is much healthier, Dugan said. “I think we prevented a hospitalization—at the very least—that day.”

### **Planning For the Future**

These success stories and the overall effectiveness of JCDH’s interventions have convinced the county to continue with the clinics even after Project IMPACT comes to an end, Dugan said. “I think the next step from all that we’ve learned is that we need to address transportation barriers,” she noted. “That seems to be one of the biggest issues for patients.”

One possible way to address this challenge is telephonic interventions, Dugan told **Today**. “We’re going to ... see whether or not we can have the same impact [on patients] talking to them on the phone,” she explained. “Can we get them to come in once every 3 months, but do the telephone interventions more often?”

“It has been an honor to be one of the 25 communities involved in [Project IMPACT],” Dugan concluded. “Every step we take towards helping one person—just one—get a handle on [diabetes] is worth the effort.”

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