eClinicalWorks



THE GOLDRING CENTER FOR CULINARY MEDICINE AT TULANE UNIVERSITY

IMPROVING COMMUNITY HEALTH THROUGH SOUND NUTRITION AND A LOVE OF COOKING

improving healthcare together

eClinicalWorks

The Challenge

In 2012, Tulane University founded the Goldring Center for Culinary Medicine to advance the goals of quality nutrition education both within the academic medical community and throughout Greater New Orleans. They needed a healthcare IT partner with the flexibility and creativity necessary to work with a nontraditional approach to health.

The Solution

Goldring Center personnel have used the eClinicalWorks EHR to track the health of their patients — including blood pressure, hemoglobin A1c, cholesterol, and medications — while using Patient Engagement and Population Health tools to monitor community health progress and shape thinking about nutrition education.

The Results

Patients taking classes at the Goldring Center have lost weight, learned how better to control high blood pressure and diabetes, and have enjoyed a "food first" approach to health. Providers have begun to amass evidence that supports a broader role for nutrition education, both in medical schools and all kinds of medical practices.

The Goldring Center for Culinary Medicine at Tulane University

CASE STUDY

Teaching People How to Cook Again



Putting Nutrition Back on the Menu



Dr. Timothy S. Harlan

Doctors spend a long time in medical school and learn a great deal about health and wellness, diseases, and how to treat their patients. Yet, while nothing is more fundamental than what human beings eat and drink, nutrition education rarely receives the emphasis it deserves.

A 2015 report in Academic Medicine,

the journal of the Association of American Medical Colleges, found that, on average,¹ U.S. medical schools offer just 19.6 hours of nutrition education — *over the course of four academic years*.

¹ http://journals.lww.com/academicmedicine/Fulltext/2015/07000/Nutrition_ Education_in_an_Era_of_Global_Obesity.11.aspx



Image "Food Is Medicine," courtesy Juhan Sonin; illustrated by Sarah Kaiser. https://www.flickr.com/ photos/juhansonin/14406031184

In New Orleans, Louisiana, home to some of the nation's most interesting and varied cuisine, one institution is trying to reverse that trend by putting healthy cooking and eating at the forefront of health.

The Goldring Center for Culinary Medicine at Tulane University doesn't simply teach nutrition from books and online resources. It uses a kitchen classroom to engage patients in their own health.

"We think it's really important to teach people how to cook again and to teach people how to make really great food that just happens to be good for them," said Leah Sarris, director of operations and executive chef.

Sarris has combined farming experience and a degree in culinary nutrition from Johnson & Wales University in Providence, Rhode Island, to develop and implement a groundbreaking and hands-on nutrition education program in New Orleans.

"We started this project about seven years ago," said Dr. Timothy S. Harlan, executive director of the Goldring Center, who is also an assistant clinical professor of medicine at

The food you eat can be either the safest and most powerful form of medicine — or — the slowest form of poison.

– Ann Wigmore

Tulane University School of Medicine. "It was my dean's idea at the time, and we have slowly evolved over that seven years, and we now have this beautiful facility where we teach the community, we teach medical students, we teach residents — practicing physicians — how to cook and eat healthy, how to think about food differently."

A Recipe for Health

That difference is apparent to patients the moment they enter the Goldring Center because those on their way to a nutrition Goldring Center staff have the right mix of life experience, nutritional science, and medical expertise to conduct lifechanging work. But those assets needed a healthcare IT partner to maximize their potential. Given eClinicalWorks' existing relationship with Tulane University Medical Center, choosing them as the Electronic Health Records solution for the Goldring Center was logical. consultation appointment must first walk through the kitchen.

"Sometimes they're a little bewildered if they're in the right place, and then once I get them back into my office, we talk about how there is a kitchen here for a reason," said Kerrie Dotson, RDN, LDN, who offers nutritional counseling to several patients daily and works closely with Sarris, often recommending cooking classes for the patients she sees. "We're going to be different from your traditional dietitian you might have seen in the past, or another type of nutrition education, because we're coming from a food-first approach."

A food-first approach means exactly that: Beginning with food. It's not that staff at the Goldring Center don't know the details of calories, micronutrients, fiber, vitamins, and so forth. It's that their understanding of diet and health are more holistic. They take a broader view.

"We translate Mediterranean diet research and principles, evidencebased medicine, into the conversation that I want to have with you as a patient about food," said Dr. Harlan. "Not about mono- and saturated fats, or calories, or weight loss, but about avocados and other things that you might like to eat. Tacos. Spaghetti."

Dr. Harlan may have the perfect résumé to lead the Goldring Center. He ran a restaurant at 18, opened his own place at 22, and eventually headed to college, intending to obtain a degree in hotel and restaurant management.

Instead, after an undergraduate degree in anthropology and biology, he went to Emory University School of Medicine to become a doctor. While a student, he published his first book, "It's Heartly Fare," a food manual for patients with cardiovascular disease.

"Over the course of the last 20 or 25 years, I have this alter ego that I call Dr. Gourmet," Dr. Harlan said. "I run a fairly popular website called drgourmet.com, as well as doing television and writing cookbooks." We translate Mediterranean diet research and principles, evidence-based medicine, into the conversation that I want to have with you as a patient about food. Not about mono- and saturated fats, or calories, or weight loss, but about avocados and other things that you might like to eat. Tacos. Spaghetti.

- Dr. Timothy S. Harlan, executive director of the Goldring Center

In short, Dr. Harlan's education, life experience, and professional responsibilities are unified around food and health — and finding new and effective ways to spread sound nutritional information and training, particularly for individuals who need specialized diets, such as those with heart disease, on Coumadin, or with gastroesophageal reflux.

Preparing the Right Tools



Kerri Dotson, RDN, LDN

Goldring Center staff have the right mix of life experience, nutritional science, and medical expertise to conduct life-changing work. But those assets needed a healthcare IT partner to maximize their potential. Given eClinicalWorks' existing relationship with Tulane University Medical Center, choosing them as the Electronic Health Records solution for the Goldring Center was logical.

"You don't necessarily expect to use an EMR within this setting, within a culinary institute, but it has made my dayto-day work so much easier," said Dotson. "I have really

been able to customize the templates I use — adding in portions, talking about patients' 24-hour recall, their daily food intake, whether they're choosing whole grains. It really makes it customizable. I can go back in between sessions and see everything we talked about with that patient, and not lose any of that important data."

That coming together of patient, provider, and technology is well illustrated by the experience of Diane Mack, a New Orleans resident who has been a patient at the Goldring Center for four months.

"I was referred by my cardiologist," Mack said. "I was trying to avoid medication, and I asked him if there was a dietary way that I could do that, and he thought about it, and said 'Well, I can send you right up the street to the culinary school. Do you like to

he isks of Poor Nutrition

WHAT CAUSES POOR NUTRITION?

Poor eating habits include under- or overeating, not having enough of the healthy foods we need each day, or consuming too many types of food and drink, which are low in fiber or high in fat, salt and/or sugar.

HOW DOES POOR NUTRITION AFFECT US?

Poor nutrition can impair our daily health and well-being and reduce our ability to lead an enjoyable and active life. In the short term, poor nutrition can contribute to stress, tiredness, and affect our capacity to work. Over time, it can contribute to the risk of developing illnesses:













BEING OVERWEIGHT OR OBESE







HIGH CHOLESTEROL HEART DISEASE AND STROKE



Patients who come to the Goldring Center for medical consultations first walk through the facility's kitchen, which sends the clear message that this variety of medicine is "food first."

cook?' I said 'I love to cook!' It was a wonderful experience. I had to actually walk through a kitchen to get to the appointment, and I got immediately excited when I saw the cooking stations, and that I would possibly be a student here."

Mack's initial meeting with Dotson covered basic health history and stats, including weight, dietary habits, and what lifestyle choices may have contributed to her high blood pressure and high cholesterol. Mack was

surprised to learn that her use of 2% milk was not sufficient. She wasn't surprised that her habit of salting her popcorn in layers was contributing to excessive sodium intake.

"It was so good!" Mack said. "But she taught me how to do better, absolutely. It was not cold turkey, it was small steps. But each small step led to another small step, and it was just making up my mind to move in that direction."

If we can get people through the door here and taking those 12 classes, we have data now that shows we can significantly change the trajectory of their use of medication, of their hemoglobin A1c, and blood pressure, and cholesterol, and overall morbidity and mortality.

Mixing With the Community

Drawing in residents like Diane Mack is key to fulfilling the mission of the Goldring Center, which is focused on making changes in the community. The classes for medical students are a bit more clinical and tied to science, but otherwise differ little from those offered to the community, Sarris said.

– Dr. Timothy S. Harlan, executive director of the Goldring Center

"They're struggling with the same

things," she said. "They don't have a lot of time, they don't have a lot of money, they don't know how to cook. If we can teach the medical students how to overcome these barriers, then they're really the best advocates for talking to the community. The medical students are actually helping us in those classes, working and teaching side by side with the community members, so they really are reiterating everything that they are learning in the kitchen." We have a pretty large installation of eClinicalWorks, both in the clinics that we own in a joint venture with our hospital, but also in the clinics that we at the medical school own. Maybe you're a dietitian and you've wondered 'Oh, should I have an EMR?' Well, that answer's yes, because you can get those referrals. You can use P2P. You can use the physician portal, which Kerrie does with our physicians in the community. Then she and I and my colleagues can exchange data through the eEHX. That flexibility to be able to get referrals and to respond to those referrals as a dietitian — or as any kind of specialist — is really critical. "I've definitely had a variety of patients," Dotson said. "Some are your rock-star patients. They are in it from day one with a lot of motivation. With others, I call them five, six, seven, eight times, but then once they come and sit down and have that first session, I've had many patients say 'You know, I didn't expect to learn as much as I did today.' And they're really excited about it. They may have had nutrition education from other dietitians or diabetes educators, but they couldn't really tell me what they learned. They leave my office feeling much more confident, with skills to better manage their disease."

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Sprinkling in Some Technical Ingredients

As the Goldring Center achieves progress with its patients, there remains a need to quantify that progress and produce usable, persuasive data.

"We have a pretty large installation of eClinicalWorks, both in the clinics that we own in a joint venture with our hospital, but also in the clinics that we at the medical school own," Dr. Harlan said. "Maybe you're a dietitian and you've wondered 'Oh, should I have an EMR?' Well, that answer's yes, because you can get those referrals. You can use P2P. You can use the physician portal, which Kerrie does with our physicians in the community. Then she and I and my colleagues can exchange data through the eEHX. That flexibility to be able to get referrals and to respond to those referrals as a dietitian — or as any kind of specialist — is really critical."

Alan Noll, a fourth-year medical student at Tulane University School of Medicine who intends to pursue a career in gastroenterology,



Leah Sarris, Program Director, Goldring Center

agrees that the value of the EHR is magnified because it lies at the intersection between academic/clinical study and practical, community applications.

"In medicine very frequently we become very focused on what we can control, particularly in clinics and in hospital settings, but a center like this really helps doctors, and medical students about to become doctors, get a sense of what people are doing outside of those more controlled settings," he said. "It becomes a lot more challenging when you need to

track some pretty specific health measures in a non-clinical setting. So if you can start inputting EMRs into ancillary services in the health field, it's really a wonderful opportunity to have a more one-on-one personalized interaction with that patient."

Dotson said that because the Goldring Center is not a traditional clinic, she appreciates having tools that allow her to create customized templates, and then track her patients and their outcomes.

"That is very, very helpful," she said, "not only for me, but for referring physicians so that we can stay in touch. I also really love that we can send messages through eClinicalWorks. I try

Leah Sarris loves to show program participants how small changes can improve the quality of the food they eat and improve their health.



to get all my outside referring physicians onto eClinicalWorks, both to make it easier for me and for them, as well."

Cooking Up New Habits

Staff at the Goldring Center know that their efforts will

take time to yield results, but are content to take small steps for now.

"I love teaching people how to take things they're already eating and make small changes to them," Sarris said. "The first class actually starts with spaghetti, and we show people how to make small changes to make the spaghetti more flavorful, but much better for them as well. So, less calories, more fiber, less saturated fat. And it's going to be cheaper and not take any longer to make. Our goal is to overcome those barriers that people associate with healthy eating."



Dotson agreed that the challenge is ultimately about helping patients better understand the fundamental connection between the food they eat and the health they enjoy.

"We need to talk about it in a more practical way," she said, "meet our patients where they're at, and talk to them about the food that they're eating, what they're putting in their mouths every day that's affecting them."

Getting patients into the Goldring Center for just 12 cooking classes has shown providers can significantly change their use of medications, and better control cholesterol, blood pressure, and hemoglobin A1c.

Sometimes, staff learn remarkable and surprising things.

"It was very early days here," Dr. Harlan said, "and I came to a class and said to this woman, who is a secretary at one of the universities here in town, 'What have you gotten out of this? Why are you here?' And she said 'Well, I'm going to go home this weekend and cook breakfast for my husband for the first time ever.' I mean, they've been married for 35 years, and she had never cooked breakfast, and I just don't see how you can be healthy if you don't know how to cook breakfast!"

That patient not only began cooking breakfast but stayed with the dietary program and lost 18 pounds in the first four months.

Getting Results, Spreading the Word

Many such individual successes eventually create broader changes that resonate throughout communities. A year-long effort to control blood pressure and hypertension among Goldring Center patients managed to increase the percentage of patients defined as "controlled" for those conditions from 53% to 78%, a result that Dr. Harlan attributes directly to the analytical tools provided by eClinicalWorks.

Noll agrees that having the right tools will be essential in replicating past successes and making a bigger difference, both in New Orleans and across the nation.

Dotson agreed that the challenge is ultimately about helping patients better understand the fundamental connection between the food they eat and the health they enjoy.

"I think it's very easy to give patients advice on how to eat healthier, and how to live healthier lifestyles," he said. "I think it's a lot more difficult to track what kinds of meaningful differences those good changes are making in their lives. An EMR that can actually track all that is a major help to both the patient and doctor, to keep really close tabs on what positive effects are happening from those good choices."

"We're out of our infancy in many ways, and moving into toddlerhood, if you will," Dr. Harlan said. "Still, we have a long way to go before you show up at your doctor's office

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and there is an end-to-end discussion about nutrition and health, from the time that you check in at the front desk to the time that you are in the examination room and leave. My hope is that tools like eClinicalWorks and apps like healow will create that necessary interactivity between the patient and the physician. Because we're moving in the direction of healthcare teams, a world in which physicians are a kind of lead member of that team, but clearly not the only partner. We are all going to have to solve this together."

At the Goldring Center for Culinary Medicine at Tulane University, good nutrition and good health don't begin with counting calories, but sound principles and a shared love of cooking. What may seem at first to be a very nontraditional approach to medicine may turn out to be the most traditional approach of all.



The Goldring Center for Culinary Medicine

TULANE UNIVERSITY

Goldring Center for Culinary Medicine

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