Copyright

by

Alexa Nicole Garcia-Ditta

2011

# The Report committee for Alexa Nicole Garcia-Ditta Certifies that this is the approved version of the following report:

## **Doctor Without Borders:**

He's a physician who covers huge stretches of rural Texas -- and whose work provides key lessons about the fate and future of rural health care in America

	APPROVED BY
	SUPERVISING COMMITTEE:
Supervisor:	
	Tracy Dahlby
Co-Supervisor:	
	Bill Minutaglio
	Emily Ramshaw

## **Doctor Without Borders:**

He's a physician who covers huge stretches of rural Texas -- and whose work provides key lessons about the fate and future of rural health care in America

by

# Alexa Nicole Garcia-Ditta, B.A.

# Report

Presented to the Faculty of the Graduate School
of the University of Texas at Austin
in Partial Fulfillment
of the Requirements
for the Degree of

## **Master of Arts**

The University of Texas at Austin

December 2011

#### Abstract

### **Doctor Without Borders:**

He's a physician who covers huge stretches of rural Texas -- and whose work provides key lessons about the fate and future of rural health care in America

By

Alexa Nicole Garcia-Ditta, M.A.

The University of Texas at Austin, 2011

SUPERVISORS: Tracy Dahlby, Bill Minutaglio

Dr. Jim Luecke, a rural family physician in Alpine, Texas, is one of six doctors responsible for thousands of patients across a sprawling 25,000 square foot remote region of the state. He is a community doctor that travels between three towns to treat patients with various illnesses, injuries and income levels. But his type of general medicine is a dying practice in Texas, especially in rural areas. Texas, with a primary care and family physician shortage likely to get worse over the next several years, faces continued obstacles in providing access to quality healthcare in some of its most isolated areas. Luecke, while he

embodies some of the challenges that come with practicing rural medicine, is in some ways an exception to those challenges.

# **Table of Contents**

Text	
References.	

#### **Doctor Without Borders:**

He's a physician who covers huge stretches of rural Texas -- and whose work provides key lessons about the fate and future of rural health care in America

It's a cool Friday night in fall of 2011 in Fort Davis, Texas, pop. 1,050, and Dr. Jim Luecke runs slowly but purposefully across the local high school football field to help a player on the opposing team who has just popped his elbow out of its socket. The spirited crowd has gone quiet and the lanky teenager is writhing in pain as Luecke, calm and collected, kneels over him. Surrounded by a huddle of coaches and teammates, the doctor effortlessly repositions the teenager's dislocated elbow back into place. As Luecke, 53, stands and dusts off his navy scrub pants and watches the volunteer paramedics carry the boy away on a stretcher, a handful of spectators clap. "He's going to be alright," Luecke tells a bystander as he comes off the field. The crowd in this remote part of the state seems assured as well, and the game continues as the sun finally sets beneath the looming Davis Mountains.

So goes a night off for Luecke. The only doctor in Jeff Davis County, pop. 2,342, and one of just six in the sprawling 12,000 square-mile-wide Big Bend region, he routinely combines pleasure, like enjoying a high school football

game, with business. And after almost 25 years of treating everything from broken bones to diabetes or cancer, his medical practice has become his life.

"There are certain things that you do to support the community, like go to the high school football games," he said. "I think that's part of being a family doctor in a small community."

Luecke is a primary care physician in far West Texas, an isolated region of the state with just a handful of doctors. Rural areas of Texas, and other states across the country, have a chronic primary care doctor shortage that some predict will only get worse in the coming years. Communities that have full-time physicians rely on their doctors 24-7, and Luecke is no exception.

Luecke's practice takes up most of his life and time, and his many hometown fans seem eternally grateful. Even before he attended to the injured teenager, Luecke's patients, also his friends and neighbors, flocked to him. On his way toward the game, families stop him in the dimly lit parking lot. Luecke knows them well – he has delivered their babies and treated their elderly grandparents for high blood pressure or hypertension. As he watches the football contest, he can count the number of players and cheerleaders he's delivered.

"I delivered you, and you," he says to the teenagers in glittery dresses vying for homecoming queen and giggling amongst themselves as he passes. "Doc's the best guy out here," a Fort Davis High School alumna says. "He really cares for us."

Luecke is on call almost 24-7, and while he wouldn't have it any other way, his schedule is an arduous one. He starts his day in his hometown of Alpine, pop. 5,905, where he treats patients at the Big Bend Regional Medical Center, a small hospital with about 25 beds, just a few miles from his home. After an hour to eat lunch and let the dog out, he either drives 25 miles north to Fort Davis to spend the rest of the day at his own clinic there or 25 miles east to a clinic in Marathon, pop. 470, where he treats more patients at a clinic that couldn't stay open without his weekly visits. Not to mention the days when a mother is giving birth at 2 a.m. or a diabetic patient's swollen feet make him unable to visit Luecke's clinic so he makes a house call to deliver care. He's one of six doctors responsible for a population of 25,000. "I always said I wanted to find the most direct and effective way to help people, and I always thought medicine was that," he said. "It gets hard sometimes (treating so many people), but this is where I want to be."

Luecke's kind of community doctoring and focus on general medicine is a dying practice across Texas. For years the state has been grappling with a primary care physician shortage expected to grow in coming years, and recruiting doctors to practice in rural areas remains a difficult challenge. As the

state's population continues to grow and age, and more Texans lack healthcare insurance, primary care physicians – who provide basic healthcare screenings, perform routine check-ups and run tests that catch diseases early – are largely seen as the solution to keeping the population healthy, thereby saving the state millions in potential healthcare costs. But according to a legislative report released by Democratic state lawmakers early this year, Texas ranks 42nd in the nation for its number of primary care doctors available for the population.

According to the Texas Academy of Family Physicians, Texas averages 157 physicians for every 100,000 patients; the national average is 200. Falling Medicaid and Medicare reimbursements, rising malpractice costs and new administrative rules from federal and state healthcare policies have all contributed to fewer medical students choosing primary care over other more lucrative specialties. And they have prompted long-time physicians to retire early. While the entire state could use more of these general practice doctors, a great disparity exists between the number of physicians available in bustling urban centers like Houston, Dallas and San Antonio – all of which have medical schools and several hospitals – and rural towns that exist in isolated parts of the state with limited healthcare resources. Rural healthcare advocates have been struggling for years to recruit doctors to practice in these areas, including seeking

funding from the state to reimburse the student loans of fledgling physicians who agree to practice in remote regions.

"We're still dealing with the same issues that we were dealing with 15 years ago," said Dave Darnell, senior program administrator at the state Office of Rural Health. "I don't think this is going away any time soon."

According to data collected by the state Office of Rural Health in August 2010, 32 of Texas' 177 rural counties lacked a primary care doctor and 27 had only one. Because there are so few doctors to treat such diverse populations, primary care and family practice physicians in rural areas must take on more responsibilities and perform a wider range of procedures than some of their urban counterparts.

"The rural doctor has more variety in his or her practice, while the urban doctor is probably going to be more specialized," Darnell said. "The guy who works in a rural setting may be performing surgery one minute and then the next minute talking to a new mom about her infant's feeding formula. It's varied and unpredictable."

While some doctors may not enjoy such unpredictability, Luecke thrives on it. He says he enjoys getting to know and developing friendships with his patients – something many urban doctors don't have time to do. Throughout his career, he estimates he's delivered 3,000 babies, typically the job of a trained

obstetrician. He performs emergency and elective surgeries on everyone from children to the elderly, provides the community with yearly check-ups and vaccines and sets broken bones.

"Out here you try to do what you can, yet know your limitations and try to help people the best you can," he said one summer day, sipping tea under trees shading the courtyard behind his clinic. "You're always riding the bubble, and you get called even when you're not on call. It's kind of never-ending."

But still, Luecke's Texas roots and his passion are in rural medicine, even if that means late-night phone calls, performing out-of-the-ordinary procedures and splitting his time between towns.

"The thing that's always kept me here is that I've always felt like this is where I belong, this is where I was meant to be," he said in a contemplative voice.

There's a saying among locals in this part of Texas:

People only move to the Big Bend region for two reasons – either they're idealists or crazy.

Luecke sees himself as a little of both.

A native of the North Texas city of Wichita Falls, he made his first trip to the Davis Mountains at age 9. His family used to visit the area on vacations, and Luecke said even as a little boy he instantly fell in love with the serene beauty of the West Texas mountains.

"My mom used to tell us there were Indians hiding in those mountains," he said. "There's a real Wild West feel out here."

Years after those first family trips, Luecke moved to California to attend Stanford University in 1976. After graduating, he moved back to Texas for medical school at UT Southwestern Medical Center in Dallas. In 1984, Luecke moved to South Carolina for a three-year internship, but before he knew it, he was back out in the countryside of Alpine for a rural clinical rotation as part of his medical education that sealed his fate. "Part of it was the diversity of the practice, part was the countryside," he said. "I was hooked from that point on."

In 1988, Luecke opened a family practice clinic in Fort Davis after turning down a full-time offer from the small hospital in town. The Fort Davis Family Practice clinic was housed in a 1909 building that was originally the town's first auto mechanic shop and gas station. Now, Luecke has an administrative staff of five and one nurse practitioner to balance his demanding schedule caring for about 2,000 Fort Davis patients.

Roberta Daugherty is Luecke's clinical technician and patient manager.

She prepares him for patients awaiting appointments, keeps medical records and navigates the piles and piles of patient files awaiting his signature. She has

worked with Luecke for 10 years and says his calm demeanor, reassuring bedside manner and kind nature have kept her by his side.

"There's a strong loyalty, even if you don't always work here," she said.

"But for me, when you work for Dr. Luecke, you stay with Dr. Luecke."

Fort Davis Family Practice is a modest but comfortable clinic. The front of the building seems to be modeled to look like the front of the Alamo, and the waiting rooms walls are peppered with photos from patients, birth announcements, newspaper clippings and thank you notes sent to Luecke over the years. The four exam rooms line the thin hallway and Luecke's office is wallpapered with photos and gifts from patients.

Daugherty tends to a quaint garden in the courtyard behind the building where Luecke likes to enjoy his tea in a mug given to him by his daughters. It is his quiet time before beginning an afternoon of seeing pregnant women, babies, and the elderly who have driven dozens of miles to see him.

On one particular hot afternoon, David Kind and his one-year-old son

Tristan sat patiently waiting for Luecke in exam room 3. Kind is self-employed in

Fort Davis and said he's never trusted a doctor before meeting Luecke, who

delivered Tristan.

"I've known a lot of doctors," the young father said as Luecke stroked Tristan's milky white face and then lightly squeezed the baby's chubby hand. "He speaks in terms you can understand."

Luecke starts each morning with a run around his neighborhood or swim in his above-ground pool in his backyard before heading to the Big Bend Regional Medical Center in Alpine to make morning rounds or perform scheduled surgeries. He spends Tuesday, Wednesday and Friday mornings there before driving the 25 miles to Fort Davis. On Monday and Thursday mornings, he sees patients in Marathon, about 26 miles east of Alpine. Between driving between Fort Davis, Alpine and Marathon and also making house calls, Luecke covers 200 to 300 miles per week easily.

Luecke's not the only one on the road; his patients sometimes drive hundreds of miles to see him in Fort Davis or Alpine. Patients from Terlingua, close to the Texas-Mexico border and the Rio Grande, make the nearly 110 mile trip, and those with limited healthcare options in the tiny towns of Presidio, Pecos and Balmorhea sometimes drive two hours round trip to get to his clinic. While most of them come because he's the only medical provider they can reach, for some patients like James Jenkins of Alpine Luecke has become something more than just a proficient physician. "Luecke's a hero," the 70-year-old said.

"He's done so much for me, I wish I could build him a big clinic. He makes this community complete."

While Luecke is always on call, he's connected to his patients beyond his blue flip cell phone. As a rural physician in a small community, he and his counterparts throughout Texas are seen as more than healers. They are friends, neighbors and members of the local Rotary Club. They attend church with their patients. For Luecke, being in the area for almost 25 years has allowed him to see Alpine and Fort Davis grow up.

"It's part of your job in a small town to help people get through things and live with them at the same time," he said. "Sometimes after being here for (so long), you start forgetting what happened – did I deliver this person 22 years ago? But that's just part of the deal. You lose anonymity."

At restaurants, the grocery store, the gas station, he can't go anywhere without getting a hug, handshake or "Hey, Doc!" from people he's treated.

Luecke greets them with a hello, tight hug and kiss on the forehead.

Recognizing his black Nissan Xterra driving down one of a handful of roads in Alpine, patients even try and flag him down. Luecke may be one of the few doctors in the area, but he's also the one everyone wants to see. He said he's gotten used to being everyone's go-to physician, but he wants a break occasionally too.

"Sometimes you want to hide out," he said. "I don't want anybody to ask me any medical questions – I'll just want to go home, go hiking, biking or running."

But, he has been known to make house calls for patients who can't get to him and apparently never turns down someone who can't pay. Over his career, he has accepted eccentric methods of payment – he has traded a C-section for a lifetime of free haircuts, and an appendectomy for a new truck engine.

Texas state Rep. Pete Gallego, D-Alpine, said Luecke has been his family's doctor for more than 10 years. "He's incredibly accessible and helpful," Gallego said, adding he has knocked on Luecke's home door on Saturdays for medical advice or just a friendly visit. "It is not unusual for people to call him at all hours. It must make it very hard for him because he does get so many calls from so many people, people drop by his house, visit with him after hours."

Luecke also volunteers his time with the Alpine Cowboys minor league baseball team. Sometimes he'll go to batting practices and talk to the players about any injuries they've had and then write them prescriptions for sports-related sprains. Sometimes, Luecke saunters out on to Kokernot Field dressed in a scrub top and basketball shorts – a baseball glove in one hand and pen in the other. The team stops practicing for a moment and each member shakes his

hand. Before long he's throwing around baseballs or practicing his swing with them.

"He's my workout buddy, he hits with me and everything," said David Lawrence, the team's first baseman. "I've known a couple guys on the team who have had injuries, and he's helped them out a great deal. It's really valuable to have a doctor out here, especially an in-shape doctor."

Luecke doesn't just treat the town athletes – he is one himself. As a baseball fan, Luecke turns to the sport as a way to decompress from his hectic schedule. Luecke, a member of an old timer's baseball team called the Alpine A's, plays first base, second base or center field with the team of middle-aged men from town. "One thing about baseball is that it reminds you of when you were a boy," he said. "The smell of the grass, the glove. It's a way to leave other things behind. There's nothing like throwing a baseball."

Luecke lives on a 22-acre plot of land on the southeast side of Alpine and has created his own baseball sanctuary on his property. Dubbed the Field of Dreams, Luecke and his old-timer teammates practice on a dirt field located right outside the front door of his log-cabin style home overlooking the mountains.

One set of rickety bleachers sits along the edge of the field just in case spectators happen to drop by – they don't – and an old beat up mattress serves as the pad behind home plate.

One Wednesday night, Luecke doesn't seem to mind that none of his Alpine A's teammates have shown up to play. In fact, he's prepared for that. He heads to the shed and hauls out an old pitching machine to feed him a few rounds of balls.

"If you can play on the Field of Dreams, you can play anywhere," Luecke said. He seems at peace on his baseball field, whacking balls out into the open space.

After about 30 minutes of practice, Luecke heads inside for a water break. The shrill sound of his cell phone breaks the silence. A hospital nurse on the other end of the line alerts him that Andrea Monclava, a young patient from Alpine, is ready to deliver her baby. Luecke calmly hangs up his phone, rinses his hands and grabs his keys. Before he heads out the door, he grabs his Alpine A's baseball cap. Luecke and Monclava's father play on the Alpine A's baseball team together.

It's always good to catch a grandbaby," he said as he slips out the door.

Luecke, driving quicker than usual, arrives at the hospital, clad in his baseball shorts, scrub top and faded Asics sneakers, in less than five minutes. Monclava and her boyfriend are already in the delivery room, and their entourage of high school friends is lined up in the hallway outside. Monclava's family sees Luecke arrive through the glass windows of the waiting room and their faces light up.

He stops in to kiss each of her family members and friends – some of whom have been his patients and some of whom he delivered himself.

"I know that head," he tells almost every high school teenager anxiously waiting for their friend to give birth. "I delivered you, and you," he said as he continues down the line. Soon Luecke has disappeared into the delivery room with a nurse, and Monclava's family and friends have nothing else to do but wait. Soon, Monclava's family starts reminiscing about Luecke and their children's deliveries.

"He delivered all my kids," one of Monclava's sisters said, shifting her baby from one arm to the other. "He's very calm and keeps you calm through your delivery."

After about an hour, Luecke emerges from the delivery room. The high school students lining the hallways peel themselves off the floor, giggling and clapping. Monclava's family bursts through the waiting room doors and each embrace the doctor. Monclava's mother and sister rush into the room, and Luecke pats each teenager on the head one last time before quietly slinking away, letting the new mother's family and friends have their moment of joy alone. He briskly walked through the quiet hospital hallways like he'd done this thousands of times.

"When a baby is born, it's always a little miracle," he said. "That part doesn't change."

Luecke's long tenure in the Big Bend region is a rarity in Texas medicine. Healthcare experts, advocates and lawmakers say recruiting doctors to stay and practice in such isolated and traditionally lower-income areas is the greatest obstacle they face in improving access.

"Recruitment and retention is a huge challenge," said Linda Jones, director of the state Office of Rural Health. "Unless you have someone who has grown up in the area, it's foreign to them. It takes time to grow people, see them through their education and incentivize them to go to rural communities."

Nationally, and especially in Texas, fewer medical students are choosing to practice primary care and family medicine like Luecke does, let alone move to rural communities. Instead, most medical students decide to go into the higher paying specialty practices in densely populated cities. Doctors who specialize in fields like radiology, cardiology or neurology make upwards of \$300,000 annually on average, while primary care doctors make less than \$200,000.

"Typically there's a pendulum that swings back and forth – sometimes we'll have more people that graduate with specialties, and then we'll have more that go into family practice fields. It rarely evens out," said Becky Conditt,

director of the advocacy organization Texas Rural Health Association and the Capital Area Health Education Center. "We have a huge primary care shortage in this country right now – some of that has to do with the aging population and people are getting out of healthcare because they don't want to deal with policy (changes), or people are retiring earlier. The landscape is changing."

As Texans get poorer, older and lose healthcare coverage, more are relying on entitlement programs like Medicare – the health insurance provider for the elderly – and Medicaid – the safety net for the disabled and very poor – to help cover their medical costs. However, budget cuts have forced both the federal and state government to reduce reimbursement rates for primary care physicians, forcing many of them to stop accepting patients covered by the entitlement programs. According to a 2008 Texas Medical Association Survey, the number of Texas doctors accepting Medicaid patients dropped from 67 to 42 percent in the last 10 years. The percentage that accepted new Medicare patients also fell from 78 to 64 percent. However, enrollment in both programs continue to grow – "This trend underscores the need for an adequate supply of provider participating in (entitlement programs) to ensure access to health care services and continuity of care for enrollees," according to a report by Craig Conway, a health lawyer and research professor at the University of Houston.

About half of Luecke's patients are covered by either Medicaid or Medicare, and though many urban doctors have started dropping out of the programs, he said he's never considered turning down new needy patients.

Rural doctors "have always lived on a shoestring," he said. "We just do what we can for people because it's our job to serve them."

Even if medical students choose to practice primary care or family medicine, encouraging them to move to isolated towns like Fort Davis and others across the state poses an equally difficult challenge for rural medical communities. Alpine, Presidio and other towns in the Big Bend region are sometimes 100 miles from a Wal-Mart, shopping mall or airport. The landscape is expansive and long stretches of highway and mountains separate newcomers from the type of city life they're used to. But the doctors aren't the only ones that feel the stress of the isolation. If a doctor has a spouse and family, the remoteness can be equally taxing on them and is exacerbated by the demanding schedule. Luecke, the father of two daughters, got a divorce from his wife in 1998 when their daughters were 7 and 8 years old. They have since moved to Abilene, about five hours from Alpine, with their mother and typically see their father once a month – they either drive to Alpine, Luecke drives to Abilene or they all meet halfway between the two towns Abilene is really a city more than a town. Luecke

makes special effort to see his girls as much as he can while still trying to manage his demanding schedule.

"One of the hard things earlier in my career was that it was so busy and there were so few doctors that that made it hard on my family life, hard to be a good husband and father," he said. "More and more now (his daughters) become the focus."

Sarah, who is now 19, was born with cerebral palsy – she can't speak and has limited mobility and needs constant assistance from others. Luecke makes sure to talk to Sarah at least once a day through a videophone he has in his office and sing to her over the phone before she goes to bed every night.

"When you have a handicapped child that has to the focus on your life in a lot of ways because of the work and support you have to give," he said.

"Having a handicapped child makes you be able to sympathize with parents and tell them that (the child) brings such joy to your life."

While medical students at various stages in school choose to travel to Alpine to study under Luecke for a few weeks at a time, rarely do any return to practice in the area after they graduate.

That is, until four years ago. Adrian Billings, then 36, moved to Alpine specifically to practice family medicine after traveling to Alpine for a school-

sponsored rotation with Luecke. Originally from the border city of Del Rio,
Billings grew up in the same environment that Luecke's patients have – seeing
one doctor throughout childhood, adolescence and even into adulthood.

"I really knew that I wanted to become a family physician from the very beginning," he said. "I was delivered by a family physician and he took care of me all through college, and I really wanted to emulate him."

As a student at UT Southwestern Medical Center in Dallas, Billings learned that a doctor with a practice in Fort Davis was accepting medical students to study with him. Without knowing Luecke, Billings decided to take a chance and spend a few weeks in Alpine after his first year in school. Luecke quickly became Billings' professional mentor. The young med student returned to Alpine a few times for more weeks-long rotations during school, and, under Luecke's watchful eye, delivered his first baby, treated his first patients in the Alpine emergency room and traveled to Mexico for medical mission trips.

"I saw really how vital and important he was really to the public health of this area," Billings said. "I said that's what I want to do, he's who I want to be."

After finishing his residency program – which included one month in Alpine – Billings graduated from medical school, and, inspired by his mentor, he moved his wife and son to the Big Bend region. Billings began practicing at Pearce Clinic in Alpine and, like Luecke, split his time between his patients at the

clinic and hospital. He said the variety and broad scope of practice drew him to family medicine, and it keeps him there four years later.

"I know I could have a better lifestyle in a suburban area – work less and make more money," he said. "But I went to medical school to make as much of a difference as I could."

His professional relationship with Luecke developed into a friendship as well and solidified Billings' decision to move to the area. He has come to rely on his mentor for advice, help in surgery and during late nights on call.

"I wouldn't have come if it weren't for Dr. Luecke," he said. "He's someone I can trust and he's someone I can call at 2 in the morning and won't give me grief. I came because of him and I've stayed really because I've become part of the community."

Billings moved to Alpine knowing the demand and need that waited for him, and throughout his young career he's worked to maintain a healthy balance between work and family. His wife and three sons enjoy the small town lifestyle and are ingrained in their community, something that doesn't always happen for families that relocate to rural areas.

"You know, you realize there's no Wal-Mart, no shopping mall, but that stuff's really not that important," Billings said. "What's important is the family

time and the bonds and relationships you have with the community members, because you can always travel to Wal-Mart or wherever."

Luecke said he's learned a lot about balance from his former student and now colleague. When he first moved to Alpine, Luecke dove headfirst into work, sometimes sacrificing time with his wife and two young daughters.

"When I was coming out of medical student, I was all gung-ho," Luecke said. "I was going to save the world."

The time, the work, no doubt took its toll on his family relationships. For the last seven years, Luecke has been dating Barbara Miller, 50, and their relationship has helped him reprioritize and balance work and family. Miller, originally from a border community called Redford and now an Alpine resident working for the state General Land Office, is also previously divorced. The two spend as much time together as possible but Miller said the hardest part is dealing with the constant late-night phone calls.

"The reality of it is his lifestyle certainly makes it hard to have time with him," she said. "As the years had gone by it went from us doing anything and everything all the time, now it's sneaking in time together."

But even when the two first started dating, Luecke's job still sometimes got in the way. On the night of Miller's 44th birthday, Luecke had a young patient preparing to deliver a baby. Still, he planned a special evening to

celebrate Miller's birthday – the two hiked up Sul Ross Mountain in Alpine and Luecke surprised his then girlfriend of three months with a mountaintop dinner. He had lugged a card table, folding chairs and a three-course dinner up the mountain himself earlier in the afternoon. As Luecke and Miller enjoyed their cool, winter evening together, Miller noticed the doctor was preoccupied.

"Most of the time he lives his life thinking about being a doctor," she said.

"He tried to stay focused on me and yet still had this patient who was going to deliver a baby within the next two hours, and I just admired him so much for that."

After they watched the sun set over their hometown, they made their way down the mountain, Miller going home for the night and Luecke speeding off to the hospital to deliver a baby. While Miller said she sometimes feels like she wants Luecke to herself and for them to have a normal relationship, she ultimately makes the sacrifice for him. She appreciates his tenderness with his patients and his perpetual love of caring for them. "Sometimes it's hard to feel like you're in a relationship when the other person is pulled in so many different directions, but when you look at the big picture, he's phenomenal at what he does."

Luecke said having a solid relationship with Miller and being around younger doctors like Billings has helped him to better juggle time with family and patients. He visits his daughters often, makes an effort to take short trips with Miller now that a few more doctors practice in Alpine, and does some form of exercise daily before seeing patients.

"I need to balance my home and family with the work, and if I'm going to save the world I'm going to save it a little bit at a time," he said. "If you don't have that balance, you don't have the stable foundation to keep going. Dr. Billings has an excellent way of protecting his family life, and I think newer doctors are now really aware of that. I'm trying to learn that in my old age."

Another young doctor recently relocated from urban Texas to fulfill her calling to practice rural family medicine. Dr. Yussein Aguirre, 32, moved to Alpine on Labor Day to work in the Pearce Clinic with Billings after studying with him during her second year of medical school at UT Southwestern Medical Center in Dallas. But unlike Luecke and Billings, and most other rural doctors, Aguirre grew up in the concrete jungle of Houston. While initially weary of the isolation, it didn't deter Aguirre from eventually spending a few weeks with Billings in 2009.

"I'm not from a rural area, but my vision of the way that I wanted to practice medicine has always been family practice, so that's what I went into

medical school thinking that's what I wanted to do," she said. "On a whim I decided to go out to west Texas."

Before her first stint in Alpine, Aguirre had never been to rural Texas. The first time she pulled off Interstate 10 to head south on Highway 67 toward Alpine, Aguirre was enthralled by the mountains spanning the horizon. She spent several weeks studying with Billings at his clinic and alongside Luecke at the hospital. She was able to explore the new area – visiting Big Bend National Park and spending time doing some personal writing. She said she appreciated the escape from highly stressful city life.

"Growing up in a city, there's a certain lifestyle that you're used to, and coming out here, there was a cultural shock," she said. "But it wasn't a bad one for me."

While her classmates in Dallas had their eyes on specialty practices in big cities, Aguirre said it took some reflection during her last years of medical school to decide to move to Alpine.

"The way medicine is practiced out here is the way I've always envisioned, you're completely available to your patients...(they) really become your own in every aspect."

The variety of her practice and peaceful surroundings may have drawn her in, but Aguirre solidified her decision to practice in Alpine when she met her current boyfriend in the area.

"It's one thing to enjoy the professional aspect of it, but it's a whole completely other thing to think about life, a routine, family and relationship stuff that comes with this kind of move," she said. "I happened to find someone who's from the area, we started a relationship, and if that hadn't come across this wouldn't have been a possibility. For me I'm taking things as they come and see how they develop. I feel like now that I've made the move I'm in the right place."

One of the main reasons medical students are drawn to the specialty positions in larger cities is the money – after four years of medical school, most leave with a mountain of debt that can take years to pay off. Rather than work nonstop in a rural community for less pay, they choose to begin their careers in higher paying positions to help pay back their loans. Medical students finish school with an average of more than \$160,000 of debt, according to the American Academy of Family Physicians.

To help alleviate that financial burden and provide an incentive to practice in rural regions, there are federal and state programs that promise to forgive almost all of a young doctor's school debt if he or she practices in an

underserved community, including rural areas like West Texas. But not everyone says those incentives work out very well: "I think most of the physician loan repayment programs have been mediocre at best," said Don McBeath, advocacy director for the Texas Organization of Rural and Community Hospitals. "They were well meaning efforts but to be a good program, you need to go a long ways toward retiring medical school debt."

In 2009, the state government invested even more money in physician loan repayment programs, only to virtually wipe out all of one of them this past legislative session because of a budget shortfall. McBeath called the move "a real injustice to rural Texas."

"There was money left to cover doctors that started with the program, but this is the biggest setback we've ever had," McBeath. "It was a huge mistake."

Loan repayment programs are one of the major incentives medical students have to practice in an under-served area. It sealed Billings' decision to move back to West Texas. Billings was a National Health Service Corps scholar and finished his obligation of performing four years of practice this past August. However, he said he has no plans on leaving any time soon – but he does plan to expand his practice. He recently sold the Pearce Clinic to a federally qualified health center, which receives extra funds from the federal government to treat

uninsured and low-income patients. The money he got from selling the clinic helped bring in Aguirre as his new partner.

Billings also visits Sanderson, a border town near Del Rio, once a month to treat patients. Right now, the town does not have a full time doctor. He, like Luecke, sees his job as a calling. "We're not here because it's easy, because it's not, we're not here because we're making tons of money, because we're not," he said. "We're here because we feel a calling to be here."

While the state physician loan repayment programs were slashed by the state legislature earlier this year, lawmakers did pass a new law that rural healthcare communities hope will help attract young doctors to their areas. Now, rural hospitals can legally hire doctors as part of their staff. McBeath worked to get the law passed this session and said the ability to hire physicians and guarantee them a salary will help rural hospitals recruit.

"Medical students aren't interested in running their own business and practice, they want to be an employee," he said. The original law banning the hiring of physicians "was drawn up to maintain total independence for doctors. They didn't want anybody controlling doctors. Now, in modern times, that law is not necessary. It was a barrier to recruitment."

Still, while financial incentives like loan repayment and a guaranteed salary may be attractive to some, new doctors still have to be open to the

isolation and challenges that wait for them in rural communities. Aguirre said the National Health Service Corps helped get her to Alpine, but she also had to be open to the area. During her 2009 visit during medical school, "Dr. Luecke said to me, 'you know, people come through here a lot. But you either get it out here, or you don't.' That was eye opening. I feel like there's a certain pull out here."

On top of predictions that the physician shortage will get worse because of Texas' changing demographics, the healthcare community in Texas is bracing for what President Barack Obama's Patient Protection and Affordable Care Act, or federal healthcare reform, may do to patient loads and access. The American Academy of Family Physicians predicts a national shortfall of 40,000 primary care physicians by 2020 and healthcare experts fear too few doctors won't be able to fulfill the need of the newly insured patients.

The new healthcare law expands Medicaid coverage to include low-income all Americans that make up to 133 percent of the federal poverty level – before only pregnant women, children and adults and children with certain disabilities were covered. According to predictions, an additional 32 million people nationwide will receive healthcare coverage under Medicaid by 2019.

A recent study published by the Milbank Quarterly, a health policy research journal, predicts that with the expansion in coverage visits to a primary

care physician will increase to between 15.07 million and 24.26 million per year.

"Since primary care physicians serve as the point of entry into the healthcare delivery system, an adequate supply of them is critical to meeting the anticipated increase in demand for medical care," the study states.

Rural healthcare experts in Texas are hesitant to speculate what those numbers mean for doctors who practice in rural communities, but some fear it will likely make the existing shortage worse.

"All of a sudden we're going to have more people that have insurance, it's going to exacerbate the shortage," Conditt said. Doctors "need more money to (treat) on the front end."

Federal healthcare reform does include a slight increase in Medicaid reimbursement rates for primary care physicians, but Conditt says it is too early in the process to notice if that will help rural doctors. The Milbank Quarterly study says that by 2019, Texas will need between 566 and 923 more physicians to treat the newly insured patients that can then visit the doctor confusing.

According to 2008 state data, 17,332 primary care doctors were practicing in the state.

"If federal health reform really works, there will be a huge demand for doctors because more people will have coverage and will presumably go to the doctor more often," McBeath said. "I personally think the 566 to 923 number is

low. You couple increased demand because of expanded coverage in with the explosive growth of people in Texas and is going to be a major demand for doctors."

According to the National Residency Matching Program, which places medical students in residency programs across the country, the percentage of students choosing primary care over a specialty practice has actually increased for the second year in row, and while that may be a glimmer of hope, experts still see the shortage getting worse as federal healthcare reform takes effect.

Over the years, the Big Bend region has had the opportunity to hire a few more doctors, so Luecke said he's not worried about what the new law will do to his practice. He is already in high demand and sees uninsured patients, those on the entitlement programs and some with private insurance, so he doesn't anticipate too big of a spike in patient load.

"I think with all the health reform and financial mindset of young doctors, people are looking for somebody to employ them and take care of all the paperwork, something that will provide more stability done the road," he said. "It's always going to be hard to recruit folks to an area where you're not going to get paid as well as in the bigger cities. I think what's probably going to happen is there will be more mid-level practitioners to go through the higher patient volume."

Despite his growing patient load and demanding schedule, Luecke felt called three years ago to treat another group of patients – the uninsured and often illegal residents living in the isolated border community of Candelaria. Luecke sees his monthly trips to this small town on the Rio Grande of 75 residents as medical mission work.

"It seemed like there was never continuity (of healthcare along the border)

- you could go down and do some stuff and say 'have a good life' and you'd

probably never see them again," he said. "If you're just an hour and a half from

the border, why not start a mission project where if somebody needed you,

you're there."

Candelaria is an unincorporated community in Presidio County, located 54 miles north of the town of Presidio along the Texas-Mexico border. Residents live in trailer homes, without running water or proper sewage systems and barely have enough money to stay alive. The town has no school – the children are bused to Presidio for their education – and the church serves as the one gathering place in the community. The families that live there have no access to quality healthcare, especially after the United States Border Patrol removed a small foot bridge that linked the town to its Mexican sister city of San Antonio del Bravo on the opposite side of the river. Before, Candelaria families would

visit the health clinic run by the Mexican government in the neighboring town.

Along with health needs, they relied on that bridge to get groceries, visit relatives and send their children to school.

Now, they are one hour away from a legal international border crossing and health clinic, and often don't have a way to get there. Even still, since so many residents are undocumented, they wouldn't be allowed to reenter into the United States if they made it to the international bridge at all. For most of them, Luecke's volunteer visit is the only chance to get medical attention.

"In the age of wanting to maximize reimbursements and we're taught that we have to increase the numbers, that medicine is going down so you have to see more and more (patients) and think about money more and more, I wanted to do something where you don't think about money," he said. "You just say I'm going to show up and treat as many folks as possible, and if people never had any money at all, they could show up at Candelaria once a month and know they can have some kind of healthcare."

Luecke and Miller started making the monthly trips to the border alone in 2008, when just the two of them would spend hours doing check-ups and screenings in a small room in the white stucco church. Now they have help from Daugherty, Luecke's clinical technician. Family members and medical students studying with Luecke also join them for the trips.

Every first Saturday of the month, the team packs up Luecke's truck with donated goods and leftover medical supplies from his private clinic, over-the-counter medications purchased with their own earnings and medication samples and begin the nearly two hour drive to Candelaria. They endure long stretches of highway and slowly navigate their SUV along the unpaved, cratered and winding road through Pinto Canyon, finally getting to town around noon. As Luecke and Miller approach, Candelaria's children burst out of their dilapidated homes when they see his familiar black Nissan Xterra arrive. They sprint down the road after him and are waiting at the church's entrance when he parks. They gather around him, squealing with joy, tugging at his scrub top and vying for his tender hugs.

After all the warm greetings, the children help Luecke and his team unload their supplies. They have created a makeshift exam room in the sacristy of the church, located just to the left of the modest altar. An old table and plastic foldout table are the only two things in the tiny space when they arrive. Luecke and his little helpers unload boxes of patient files, plastic drawers of Band Aids, medicines, stethoscopes, blood pressure cuff and other supplies – and within 20 minutes the room is transformed into a mini clinical exam room. By the time Luecke arrives, residents have already created a sign-in sheet for those needing to see him that day. Women – both the elders and young mothers – and children

are already waiting in the church's 16 pews for their few minutes with the doctor.

"I'm very proud that Dr. Luecke is here helping people when they get sick and doing whatever he can do for us," said Rosa Madrid, a 60-year-old resident of Candelaria. She recently visited Luecke for daily vitamins and medication to control her high cholesterol. She said the now-destroyed footbridge to San Antonio del Bravo was essential for getting routine medical treatment. "We really miss (the bridge) because we don't have Medicaid or Medicare, and we're so far from the doctor. Now every month we wait for Dr. Luecke."

Along with fulfilling a calling, Luecke uses the trip to give medical students hands-on experience treating indigent patients and working with limited resources. Aguirre, just four weeks into her professional career in Alpine, joined Luecke in Candelaria this past October and spent most of the day examining women's thyroid glands, performing Pap smears and talking to parents about keeping their children healthy.

The trip "reminded me a lot of mission trips that I took in medical school," Aguirre said. "The population that he takes care of really has no resources, and it's a good reminder to not take stuff we have in Alpine for granted, even if it's not the resources we have in Houston."

Luecke, Miller and their volunteers work for however long it takes to see the Candelaria patients – sometimes they see up to 50 people in one trip. They see anything from simple ailments like a cold or sore joints to blood sugar screenings or a young woman's first Pap smear.

While Luecke sees patients of all ages, the children who cling to him are near to his heart. Especially 10-year-old Vicky Carrezeles. The young girl, who likes to put on her special hoop earrings and favorite outfit for Luecke's visit, wants to be a doctor when she grows up. Throughout the day, Carrezeles follows Luecke, asking to try his stethoscope and playing doctor with her friends while they wait for appointments.

"He's teaching me what to do for when I'm going to be a doctor," she says, clutching her role model's hand. "He's so sweet to me, and I love him."

Miller said the monthly trips to Candelaria brought her closer to Luecke. She acts as his right hand woman and general team leader on their visits, communicating with patients and translating the more difficult Spanish. She was essential in getting the trips off the ground.

"With Jim, I just kind of wanted to be his partner and help him, I could tell in his eyes that this was something that he had been thinking about for a while and had really wanted to do," she said. "Through time we have created such a

bond with these people (in Candelaria). They know their health is important to us."

Over the last three years, word of Luecke's Candelaria clinic spread through Alpine. Now, members of his church send donated food and toys with his team, and local pharmacies will sometimes donate over-the-counter medication and supplies.

"We don't worry anymore if things are going to get paid for," Miller said.

"It's very generous of people, and they know that (Candelaria residents) are
basically secluded and they don't have just the privilege of going to the doctor in
the morning if their kid has been up all night with a fever."

Luecke's day at the Candelaria church typically ends at 4 or 5 in the late afternoon, though his work isn't quite over yet. On his way out of town, he makes house calls to patients who can't leave their homes to see him in the church. He takes particular care to visit 26-year-old Martha Oriala Guillen, who, like his oldest daughter, has cerebral palsy and almost no functionality. When he visits, Luecke tenderly strokes her hair and grasps her hand while she twists around in her bed and grinds her teeth.

"She's special because of my Sarah," Luecke says between talking to his patient. Though she needs special resources and more medical attention than he can give her, he listens to her heartbeat and takes her blood pressure to make

sure she's stable for the moment. He quietly kisses her forehead before getting in his car to make the drive home.

#### References

Aguirre, Yussein. Personal interview. 30 September, 1 October 2011.

Billings, Adrian. Personal interview. 30 September 2011.

Carrezeles, Vicky. Personal interview. 1 October 2011.

Conditt, Becky. Telephone interview. 7 September 2011.

Conway, Craig. "The Physician Shortage Problem in Texas." 2010.

http://www.law.uh.edu/healthlaw/perspectives/2010/(CC)%20Shortage.pdf

Darnell, Dave. Telephone interview. 29 August 2011.

Daughtery, Roberta. Personal interview. 15 June 2010.

Gallego, Pete. Telephone interview. 29 August 2011.

Hofer, Adam, Abraham, Jean Marie, Moscovice, Ira. "Expansion of

Coverage Under the Patient Protection and Affordable Care Act and Primary

Care Utilization." The Milbank Quarterly 89.1 (2011): 69-89.

Jenkins, James. Personal interview. 16 June 2010.

Jones, Linda. Telephone interview. 29 August 2011.

Kaiser Family Foundation: Kaiser EDU Health Policy Explained. "Primary

Care Shortage" <a href="http://www.kaiseredu.org/Issue-Modules/Primary-Care-">http://www.kaiseredu.org/Issue-Modules/Primary-Care-</a>

Shortage/Background-Brief.aspx.

Kind, David. Personal interview. 16 June 2010.

Lawrence, David. Personal interview. 15 June 2010.

Luecke, Dr. Jim. Personal interview. 15, 16, 17 June 2010, 14 September 2011, 1 October 2011.

Madrid, Rosa. Personal interview. 1 October 2011.

Miller, Barbara. Personal interview. 14 September 2011, 1-2 October 2011.

McBeath, Don. Personal interview. 14 September 2011.

McCann, Kate. "Texas Family Physician: A Matter of Supply and Demand." 2008. http://www.tafp.org/news/TFP/08No3/cover.asp

National Residency Match Program data and tables. 2011.

http://www.nrmp.org/data/index.html

Office of Rural Health, Texas. Maps and data. 2011.

http://www.tdra.state.tx.us/txdra/programs/sorh.aspx

Texas Department of State Health Services. "Physicians Accepting Medicaid in Texas," November 2008.

Texas on the Brink. 2011. <a href="http://texaslsg.org/texasonthebrink/?p=1">http://texaslsg.org/texasonthebrink/?p=1</a>
U.S. Census Bureau, 2010 data.