

Adrian Billings, M.D.

Where are we today?

0:06

We are in Presidio, Texas. We're at the edge of the Big Bend Ranch State Park, right before you cross into Ojinaga, Chihuahua in Mexico so we're at the southern terminus of US Highway 67 very isolated community of about 5000 to 6000 residents with very limited access to health care services. And from Presidio they're 90 miles away to the nearest emergency room in the United States are two miles to the Mexican health care system, which has a lot more to offer than current what we have here in Presidio.

...continued

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We're at the end of the road, yea "el fin de la carretera".

What is your role here?

0:52

I've spent my career practicing medicine out here in the Big Bend and I came out here as a medical student several times during my training and again in residency, and I went to medical school on a National Health Service Corps Scholarship. The Federal taxpayer paid for my medical school and repayment for me practicing in a medically underserved area and I owed four years and I'm currently in my 17th year so I hope it's been a good return on investment. But I currently serve as the Chief Medical Officer of a federally qualified health center, preventative care health services, and there are three locations that include Alpine, Marfa and Presidio. But I also serve as the Associate Academic Dean of Rural and Community Engagement for Texas Tech University Health Sciences Center in the Permian Basin, where we're really trying to leverage more healthcare resources out to our rural communities like Presidio.

What are we doing here today?

1:57

Today, we're really pioneering we are physically on the frontier, Presidio County is labeled as a frontier county by the federal government. And we're really pioneering this new drone technology to attempt to leverage drone technology to improve access to care for these very remote patients that live out here on the Texas Mexico border. And so we're doing some test flights today from Alpine to Presidio, the first ever drone flights that Texas Tech has been collaborating on out in this area, to really see if we can operationalize drone delivery of things such as prescriptions, durable medical equipment, anti venom vaccinations that are needed for the area, and potentially to also use it for urgent and emergent search and rescue missions looking for lost immigrants or lost hikers that unfortunately happen fairly regularly out in this remote, arid area.

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What are the current solutions in place?

3:05

So we have no clinicians that live in Presidio, a community of 6000, that economically should be able to support about three or four family physicians full time. And in the almost 20 years that I've been here, there has never been a physician living in Presidio. So the consequences of that is that there's no health care, essentially after hours, and very limited health care, on the weekend. So eight to five, Monday through Friday, we're able to staff this clinic, with bringing our clinicians from Marfa and Alpine where they live. But it's really the after hours care that is so limited. And because there are so few clinicians here, the wait times to get in to see a clinician, you know, can be too long. And there are consequences to that when it comes to healthcare outcomes. And so, you know, really this drone technology is trying to how can we support these remote rural clinics? How can Texas Tech and our partners with Matador and Swoop Aero How can we support and improve access to care by bringing in this this new technology.

What kind of dangers does the current system pose?

4:19

Having a rural zip code is a risk factor for one's life. We know from the data that rural residents live less long, they also live less of a quality of life because of the pain and suffering that that happens as a consequence when there's not an access to care and the all cause mortality between our urban and rural patients. That gap or that disparity has just been increasing since 2000. Although the all cause mortality is decreasing the gap the difference between our rural and urban populations that is actually widening and that's a consequence of not having a robust rural health care system in our rural communities, and that is something that I'm very proud of Texas Tech, as a mission and as setting our priority for rural health care access. And this is just today's drone flights are just a demonstration of that commitment of TTUHSC to rural health care and improving access to health care.

What would you say to someone who suggests these patients should just move to a more urban area?

5:30

Patients here deserve more than you deserve to have an equal length of life, as well as equal quality of life as our urban patients. These patients deserve more, they need more, these rural patients, these rural citizens, they produce the food, the fiber, and the fuel that our economy, our state's economy, our nation's economy, and even the global economy depends upon. So these are the people that are doing the daily, hard work to make the food, the fiber and the fuel that that our world needs. And they shouldn't have to suffer the consequences of living, you know, less length of life, and less quality of life by not having access to robust health care when and where they need it somewhere close to home, where they can get affordable health care, available health care, accessible healthcare, and affable healthcare.

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What keeps you motivated to continue serving in this area?

6:38

So I'm a product of the Texas Mexico border, I was born and raised in Del Rio. And I chose to come out to this area, because I came out here as a medical student, several times and again, as a resident. And I had no idea that that was the beginning of my recruitment, that that was the beginning of the calling. And I went to medical school knowing that I wanted to become a rural family physician on the Texas Mexico border, I thought that was back home in Del Rio. But because of my rotations here and beginning to, to really make roots and really know, and build relationships, know people and build relationships here, while I was a medical student, that was the beginning of my recruitment, and really enabled the calling that I felt that, if not me, to be here, then then who to serve. And so it really comes from, I think, from my faith and a sense of purpose, a sense of mission and a sense of a calling. And again, that sense of well, if not made, and who is going to be here, if not me to be the cheerleader for this population up at Texas Tech Health Sciences Center, then who and so I think it comes from this sense of purpose and calling and feeling like this is where I was meant to make an impact, and or meant to attempt to make an impact and try and make a difference to improve the lives of our residents out here.

How many miles does the commute put on your vehicle every year?

8:07

Oh too many I don't, I can't count that high. But, you know, driving all of our providers down here in a single day that drive from Alpine, that's 180 mile round trip, just to come and work a full, you know, eight hour shift seeing, you know, 20 to 25 patients in a day. And then there's the trip from Alpine to Marfa to the clinic there. And you know, with my trip now, up to Odessa several times a week, I'm still a resident of Alpine because I'm a rural physician, and I'm a rural resident, and this is where my family has been raised, my kids have been raised. This is where my kids have graduated high school and gone on to college to also chase their dream of becoming a rural physician as well. But this is home. And so my driving, my commuting up to Odessa, that's 160 miles one way. Tomorrow, I'll make that drive there and back. It'll be a burn in return trip of 320 Miles tomorrow. But it's worth it to be able to go up to an academic health center like Texas Tech and to work on big picture problems of rural healthcare disparities and to really cheerlead for these clinicians that are here full time and to think of the patients that I'm representing, while I'm up in Odessa at the Permian Basin campus, and elsewhere in the state and in the world.

Anything else to add?

9:32

There's a quote from Dr. Paul Farmer who was one of my mentors that I really, really like and use a lot and I think it is really appropriate for today of that demonstrates this beautiful public private partnership between TTUHSC Swoop Aero and the matador Consortium. The quote from Dr. Paul Farmer is that "our most significant accomplishments in life will be done in partnership as a team," and that's really what this consortium today is that has enabled this drone technology. As a physician, I recognize very humbly that I did not have all the knowledge,

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I do not have all the knowledge, I do not have all the resources that these rural residents, these rural patients deserve that these rural clinicians that do this day in and day out that they deserve. But collaboration and working with an academic health center, like TTUHSC, working with private entities like Swoop Aero and the Matador Consortium, that's how we collaborate together to have much more of a significant impact than we could have had in our own silo in our own in our own, you know, area. And so it's all about collaboration with holding the patient at the center of that collaboration, and always thinking what is best for that patient and what can we do better to make the life of that patient better and longer.