

MIKE ROSSON: I started once I got out of nursing school. I ended up the director of a dialysis unit-- the first hemodialysis unit in El Paso. And we weren't getting patients transplanted. We were dialyzing them. We had about five.

And so I contacted Parkland Hospital. At the time, they were doing the transplants in Texas. Kidney transplants was all we did back in the '70s, and the success rates were about 45%. Talked to them about how we could get some of our patients transplanted, and they said, well, you need to start an organ donor program in El Paso. So that was how I got started in this, and it's continued through the decades.

In 1973, I was involved with a 13-year-old girl who was dying of a neuroblastoma multiforme grade four, and she was probably brain dead. There was no brain death law in Texas at the time, and her family wanted to donate her kidneys. And so we went to the operating room, stopped the ventilator, let her heart stop, and recovered her kidneys.

And I flew them in a single engine plane from El Paso to Dallas, which was not that much fun back then. And both those kidneys were transplanted, and one of them into our patient. I was dazzled and impressed. We took kidneys out of a person in El Paso, packed them in ice, and flew them to Dallas. 24 hours later, they transplanted them into two other people. That was pretty slick. And I didn't really believe that was going to happen.

They let me in the operating room. And as soon as the arterial and venous clamps came off the kidneys, and the kidney became tumescent and filled with blood, and turned bright pink, and urine started coming out of the ureter-- I was pretty much sold that that was a pretty cool thing. And I still didn't really believe it would happen, and I watched it 1,000 times, and it still happens.

The success rates are much better nowadays. TOSA is one of 58 federally approved nonprofit organizations tasked with recovering organs for transplantation. All OPOs, Organ Procurement Organizations in the United States have to be non-profit. And we all have a designated service area.

The service area for TOSA includes this area clear down in the valley, Waco, and San Angelo. These boundaries were laid out years ago through a good ole' boy network. And they don't really make much sense, but that's what we're stuck with.

Our oversight comes from the Center for Medicare and Medicaid Services, United Network for Organ Sharing, and the Association of Organ Procurement Organizations. In 1974 Congress passed the law's first catastrophic disease act on the books that said if you paid a certain number of quarters of Social Security, you automatically qualified for specific type of Medicare for renal failure. And it would pay 80% of the cost of dialysis or transplantation. That was the first catastrophic disease act. And that's pretty much where a lot of our funding comes from now.

The organ acquisition fee is developed by taking all of what it costs us to recover organs. And we'll talk about the hospital bill, my humongous salary, Jody's slightly smaller salary-- I'm just joking-- the pens and pencils, everything it takes to run the organization divided by the number of organs that we recover for transplantation. And that gives us a number that's approximately \$24,000-- about the price of a mid-sized automobile for an organ.

The rest of the cost is, of course, the actual transplant procedure, transplant physicians, immunosuppressive drugs, and all that sort of thing. This fee also includes our organization pays for the donor procedure from the time the family gives consent and the patient's pronounced brain dead until the operating room is finished and the organs are recovered. So the family doesn't get a hospital bill for this. You don't donate something and then have to pay for it.

All the hospitals in San Angelo, Austin, Waco have organ donor agreements with us. And OPOs don't compete over hospitals. That would just confuse everybody. The business is hard enough to support the education in all our local hospitals without having Dallas, or Life Gift, or somebody like that coming and confusing things.

Of the 119,000 waiting for a transplant, about 11,000 of those are from Texas. I have a hard time picturing 119,000 people, so I look at Texas stadium. If it was full of transplant patients needing an organ transplant that gives me a better idea of what we're looking at. Supposedly 18 people die every day waiting for an organ that doesn't come. And the average success rate now of a single organ transplant is around 82%, so those are pretty good odds.

We have a Texas donor registry that has about 4.2 million people of our 18 million population. But more people are signing up daily. An average of just 1% of the patients in a hospital that die, die under circumstances where they could be an organ donor. Not everybody understands this.

To be a tissue donor-- corneas, skin, bone-- cardiac death takes place. We have 24 hours after cardiac death. For a patient to die under circumstances where they can donate a healthy organ is just 1% of those patients. So we need to be careful with every patient that is in those situations.

The organ recovery coordinators specialize in the procurement process. We want them to follow the hospital policies. They receive special training and are skilled in dealing with families in crisis. Trust isn't an acronym for anything. It just means that physicians need to trust us to deal with the families of their patients in a sympathetic and empathetic way and give them the information to make the decision as to whether or not they want to donate organs.

And then our organization assumes the medical management of the patient once brain death is pronounced. The attending physician doesn't get woken up all night doing donor management things until we can go to the operating room. In this situation, our organization has policies and procedures approved by the local transplant centers and signed by our medical director that are involved in the donor management.

We may do things a little different than a physician would do with a live patient. We may give potassium faster. We use drugs like thyroxine, T4, and things like that, so it's a little bit different.

Our job is to guide the process through the legal authorization, make sure we talk to the right next of kin. If the patient's on a donor registry, make sure that's handled properly. Make sure we obtain medical examiner release. We deal with the medical examiner, especially in Travis county. And they trust us-- trust again. You would think that might be a conflict of interest. We're talking to the medical examiner so he will release organs for transplant on cases of homicide, child abuse, non-accidental trauma-- all those kinds of things.

But if we did not give the medical examiner a bit of information on one case, this would come to a screeching halt. You can imagine they look at everything. So we want to make sure they get all the information to make their decision. Only one organ has been restricted in the last seven years on a patient in Travis county. So we're very proud of that and very proud of our medical examiner's office.

We want to protect hospitals and physicians from risk. We want to make sure all the T's are crossed and the I's are dotted. I get that backwards sometimes. I got it right that time. And we want to protect the anonymity of all parties. A donor family may not want to see their loved one's name in the paper the next day saying that they were an organ donor. Sometimes you'll see this. If you do, the family gave out this information-- we didn't.

The benefits of organ donation-- obviously, the knowledge that some good's come from an otherwise tragic situation-- this may be the only good thing to come out of most of these situations-- and the knowledge that their loved ones last act helped more than one people. Personally, I've reconciled the fact that if I or one of my loved ones could help another person as their last act on the planet, that would be a pretty good thing. It can assuage some of the grief and sometimes the guilt families feel.

Especially over at Dell, we have children that are potential organ donors. The family may feel responsible for the child's death-- that they didn't protect him and that was their job. And they may decline organ donation because they feel like now that's all they can do to protect their child-- that he won't be cut on. So that discussion can be long and involved. And in 80% of the cases, the family will decide that the potential for another family to be in a waiting room in some other hospital as their child dies of end organ failure, they may reconsider and have their child donate organs.

Organs distribution is as fair as possible. There's a whole committee. The government's involved, which can be good or bad. But we run the list for a heart. We enter the patient's blood type, height, weight, and location. We get a print out.

We start at the top of the print out and go down. We don't have any choices. There's no choices to make as to whether we like this patient or we know that recipient. We start at the top of the list, and go down, and make the offers. It's local recipients first, then regional, then national. The recipient that's closest to the donor hospital that's highest on the list is going to be to probably the one to get the organ. And we have a whole department, because of Family Services, that follows up with the families to make sure if they have any questions or difficulties.

Island was a donor at Round Rock Hospital-- skateboarding accident. His mother does a lot of volunteer work for us. And that's his mother, Becky, listening to his heart beat in the recipient a year and a half after she received her heart transplant.

The referral process is really simple. A Glasgow Coma Scale of five or less, a patient on a ventilator with a neurologic injury-- call us. There is no hidden responsibility by calling us. We're not going to run over and start approaching a family about organ donation.

What we're going to do is follow this case in the background. We're going to look at the patient's chart. We're going to follow their condition for the next four or five days. If their condition improves, great, good for them. We're happy, we close the case.

If they develop poor organ function from injuries, illness, or whatever, then we're probably going to close that case once we decide that. If their neuro function deteriorates, we're going to want to talk to the attending physician and the bedside nurse and develop a plan as to what we're going to do in this situation. If the family decides to withdraw care, we're going to evaluate the patient for DCD, Donation After Cardiopulmonary Death.

Remember the 13-year-old girl that we did in 1973? We can still do that procedure. Ventilators removed, patient's pronounced cardiopulmonary death, and then the organs are recovered. Rare, but maybe 4% to 5% of the cases we do are like that.

After five days, we're going to usually close the case, and the patient's probably not going to get worse, may get better. In our region we follow about 1,000 cases. We get about 1,000 referrals. And from that, there may be 50 to 60 organ donors. So you can see there's a large ratio cases are close. And eventually we may approach and see if there's authorization or decline.

The revised Texas Uniform Anatomical Gift Act says every individual has a right to make a decision about organ donation. A driver's license, online donation registration are all considered advance directives. If a patient signs up on the Texas donor registry, the Texas Attorney General has made the ruling that the family cannot renege on that decision. If the patient's made the decision and hadn't changed that decision, then that needs to be followed by law.

So the family is notified of the consent and notified that they signed up, but their consent is no longer necessary. That's important because there are some cases where the family does not know that this was one of their wishes. Rarely-- we've run up against a couple of cases. In instances where the family objects to this, we're going to talk to the hospital administration, to the legal department, and see if we need to push this case legally. We have the right to do that.

But if this is a 69-year-old patient with marginal liver and kidney function, we may not push the issue. But if it's a 20-year-old patient, we might. So that's important. And only the OPO has access to the donor registry.

SPEAKER 1: Is there a history of what happens when surviving family-- or when there's conflict with the donor's instructions that decide to litigate or challenge you on this issue?

MIKE ROSSON: They haven't challenged in Texas yet. We had one case where we talked to the hospital, which is 50% of this decision. And we talked to the legal department. And it was a very complex case. We actually presented it at ethics committees for the different hospitals and have at Saint David's. And the ethics committees are usually about 50-50 as to whether this should have been pursued or not.

So there hadn't been a legal challenge in Texas yet, but there probably will be in other states that have donor registries. Our donor registry now has an area where once you sign up on the donor registry, you can designate some emails to go out to your loved ones or friends notifying them that you've done this. And that's an important thing. OK, I can't read left to right.

So the federal regulations say that hospitals who receive Medicare funding need to support the transplant programs. Since Medicare pays for dialysis, and transplant is overall cheaper than dialysis, then Medicare wants hospitals to participate in organ donation. So they will monitor that. And we want to help the hospitals prove to Medicare that they're doing what they're supposed to-- also with JCAHO.

The hospital should notify the OPO of all deaths and imminent deaths in a timely manner-- ideally with one hour-- and allow the OPO, obviously, to determine patient's medical suitability. Things change-- we know whether a patient is suitable as a potential organ donor or not according to what the transplant centers are looking for at the time. Or there are diseases we run into with patients that we need to make that judgment on. Or the transplant center has past experience and really has a better idea what can be used.

We want to maintain organ viability and the opportunity for donation. If the patient's condition is one in which it is a non-survivable injury, if we keep organ function maintained at a homeostatic level, there's potential for those organs to be transplanted. If we let the patient's potassium go up to 7 or their creatinine go up to 4, then there's a chance we've made that decision for that family that those organs are no longer transplantable.

We want the hospitals to team with the OPO to educate the staff as to what we need and our availability. And each hospital should have agreements with one tissue and one eye bank. We prefer-- I say, strongly prefer-- that only the OPO approach the family about donation.

If you survey a group of physicians, 50% of them will say that's my job. That's my family to deal with. I need to talk to them about organ donation. And the other 50% of the physicians say, no, that's conflict of interest. I really shouldn't be involved in that. This sort of takes that out of the equation.

We can answer all the family's questions. We have the time, and timing is very important when dealing with families in crisis-- to choose the right time to talk to the family. We have time to sit there for two hours, and answer all their questions, and can answer all their questions. We're not there to convince them to donate. We're there to convince them that they have all the information to make the decision.

We advocate for the recipient-- yes, there are people out there whose lives can be saved-- and for the donor. This is a legacy that this person can give that, as you saw-- Becky listening to her son's heart in another person-- that can help assuage the grief over a long period of time. It's important that you recognize that the OPOs, Organ Procurement Organizations, and the tissue banks are HIPAA exempt. It's specifically written in there that you can give us the information on these patients, and we'll keep it confidential.

The Joint Commission, who we all know and love I can see by the expressions on your face-- we will make sure that Joint Commission gets the information on organ donation to prove to them that you have an effective organ donor program and that the hospital works with them to provide that service to the community. The national hospitals have goals as far as organ donation goes. And that is 75% of the eligible donors should become donors. And 3.75 organs are transplanted per donor.

And you can see that at Saint David's, four organs were transplanted from the one donor and a 100% consent rate. 10% of the donor cases should be recovered via donation after circulatory data. And that's where we don't do as well. We don't have enough of those cases to make a difference. Data and variances that detract from the donation process are tracked and reported quarterly at the hospital.

Process improvement teams-- if we find something that's not working right, we want to try and fix it whether it's on the OPO side or on the hospital side. Do not resuscitate orders are difficult. How restricted should the DNR be?

You've got a patient who has a non-survivable injury. First of all, we need to find out if this patient is on the donor registry. And we will find out that right away. And what's the best thing for the patient and the family. And there are arguments on both sides.

One is DNR-- let nature take its course. And the other is withdrawal. Talk to the family. Well, let's withdraw support. There's no hope of a meaningful recovery.

And the third choice is patient progresses to brain death. Brain death is pronounced. Brain death is death in all 50 states. The family has no decisions to make. We can approach for organ donation and move on from there.

All we can ask is if the patient is heading toward brain death, and this is our request to the physicians, let's support that patient blood pressure wise because they're going to spike their blood pressure, their pulse is going to slow, then they're going to drop their blood pressure. And they're going to need vasoactive support. At that time, if we can add pressors, see if the patient's brain dead, and approach for organ donation. And we want to maintain organ function by providing basic support-- pressors, fluids.

Sarah Pipken got a heart from a young teenage boy killed an accident and was jogging six weeks after the heart transplant. These things work. I mean some of the people that I, in my long history, respect the most were the people who took a 45% chance at a kidney transplant in the '60s and '70s and helped us develop surgical techniques and immunosuppressant drugs so that today this sort of thing could happen here. A lot of those people really have my respect.

In some foreign countries-- no, I'm sorry. That's Oklahoma. Miracle story-- man wakes up after pronounced dead. You don't wake up from brain death. That does not happen. If the patient was brain dead, this would not have happened. But it's not only in Oklahoma. One of these cases happened in Texas.

If we follow the guidelines of brain death, perform the ancillary test, a good apnea test, document everything-- it's brain death. It's a relatively easy diagnosis to arrive at. And then you won't have very certainly clinically dead. Very certainly-- and she woke up. Woman diagnosed brain dead walks and talks.

I mean this is the sort of thing that kills organ donation. And one bad article like this does more damage than 10 articles showing Becky listening to her son's heart. People tend to want to believe this crazy stuff. So that's a part of our job is to make sure that we cross the T's, and dot the I's, and get brain death pronounced properly.

We want to follow the hospital policy. We want to be there during brain death testing because many times, things happen quickly after that. The physician goes in, explains brain death to the family. The family says, what's next? It's best if we're standing there as opposed to somebody will be here in a couple of hours to talk to you.

Brain death checklist form is in the orders. It's a clinical exam and apnea test. If supportive tests are desired, we'll talk about that confirmatory test. If you feel like maybe it's a young patient, we should do CBF-- perfectly fine. That also gives the family a visual. They can see that there's no circulation to the brain, and it makes it a confirmatory test in their mind also. And basically the date, time, brain death, and signature-- that's all that's needed to convince anyone that brain death has been pronounced.

And it's death in all 50 states. I won't regale you with the information on a basic clinical exam. Everybody knows that. Do a good clinical exam, and it will tell you a lot.

The apnea test is fairly straightforward and documented in clinical manuals that we have in the intensive care units. Normalize the CO₂, pre-oxygenate the patient. Give it passive oxygen during the test. Watch the patient for eight to 10 minutes off the ventilator, and see if they make a respiratory effort. And then do a blood gas at the end of the procedure.

If the patient becomes unstable, put them back on the ventilator. Maybe we'll think about doing a confirmatory test. And the pCO₂ should rise 20 millimeters of mercury or above 60, and they should breath. And if they don't, they're brain dead. Obviously, cerebral angiography, transcranial Doppler, brain scan-- all those things are good confirmatory tests.

Melissa meets her son Carson's liver recipient, Adelle, student at UT. That's normally-- in the majority of cases, the donor family does not meet the recipients. But occasionally, it can be arranged where they do. If both parties want to do this, we can make the arrangements for this to happen. And usually the organ procurement organization hosts this event to make sure that it goes well.

You want everybody who donated organs and everybody who received them to be wonderful people and for it all to go well. And sometimes it might not. And we have to help with that. And a couple of our staff are social workers. A lot of them have special training in dealing with families and stress. And we can make these things happen where they come off well.

The approach should be a team approach-- timing, terminology, respect, sensitivity. The medical staff has the lowest consent rate. Dr. Brown at Breckenridge did a study on 4,000 or 5,000 approaches, and the consent rate of the medical staff is about 40% to 45%. And the consent rate of the OPO staff is about 75% to 80%.

If the family does say no-- if someone other than the OPO staff approaches the family, well, what do you think about organ donation? Well, now you're leaving everything up to their knowledge of organ donation, which may be limited. It may be housed in myths and misconceptions, in urban myths, and everything else. So the approach has to be handled very carefully. Remember only 1% of the patients in the hospital die under circumstances where they could be organ donors. So the consent process-- we want to do it the best way we can.

Why did the family decline? Misinformation, answer all their questions-- was the patient on the donor registry? It's difficult if the patient's on the donor registry and someone approaches the family about organ donation. Now the family thinks they have a decision to make. They really don't. And we need to be able to approach them with the donor registry information and make sure they understand the decision has already been made.

Drawbacks-- family still in shock over the death, all you want are his organs. Sometimes families are actually approached in the emergency room, and these are the kinds of responses that we get. The patient may not meet donor guidelines. They may be on the donor registry, and we don't know it because we weren't notified yet.

The family may lack the understanding of the donation process and may actually believe that physicians in the hospital somehow benefit from the patient being an organ donor, which, of course, they don't. And the patient may never reach brain death. So then we have to renege on the early promise of possible organ donation and have to take that away from the family, which is difficult.

Saves lives-- positive. Team effort between the OPO, the hospital, the staff, and the physicians. Everybody needs to be involved, and be on board, and know the goal that we're striving for. Open communication-- and research shows that families who donate organs do better in the grieving process over the coming years to know that they've helped someone else.

Service to the community-- most of the organs that are transplanted that we recover, a large majority of them, are transplanted in the community either in Austin or San Antonio at the big transplant centers or in the valley. So it's our own neighbors who are benefiting from this.

There's minimal risk. Most all of us are protected by legislation involving organ donation. The participation is documented for Joint Commission and all those people. Medical costs are reduced.

Physician consultants-- once a patient's pronounced brain dead, we're going to need bronchs and echoes, and A-lines, and all sorts of things that physicians bill us directly. And we pay those charges directly. And the hospital charges are paid from consent to post-recovery.

More hospitals are expanding services, and they may keep critical patients that in the past they'd transfer. Five, six years ago, Breckenridge was doing 27 donors a year. Saint Davis was doing eight to 10 donors per year. Now, Breckenridge is doing nine to 10 donors a year. Seton Williamson county's doing four or five donors a year. Saint David's is doing three or four. A lot of the smaller hospitals that are trying to become trauma II units or whatever are holding on to those patients.

So we're seeing a lot of donors at a lot of different hospitals. So we have to educate all those hospitals. There are fewer available indigent dollars. Many times what the hospital gets from the organ recovery procedure may be all the revenue they're going to see from that patient. And they're going to eat the rest of the charges.

And the donor registry numbers are going to keep increasing. There are going to be more people who sign up and want to be donors. And more people know someone who needs a transplant or who has been transplanted.

JR Box threw out the ball at the Round Rock game five weeks after his heart transplant. Looks pretty good-- can't tell he's had a heart transplant. In the 1970s and '80s-- and I know none of you were in medicine back then, or maybe one or two-- a patient who had had a transplant had moon face from the steroids. You could pick him out of a crowd with no problem and say, that's probably a transplant recipient. That's not the case anymore.

It's important what we do. And it helps people. Unfortunately, patients that we take care of that don't survive is a feeling of loss for the physicians, for the nursing staff, that we couldn't save this particular patient. But in these circumstances, we may be able to help other patients. And with those kinds of success rates and people in our community needing transplants, to me, it's something we should do, something we should participate in.

Questions?

SPEAKER 2: Do you know what the referral process is? Usually it's physicians who are coming in-- the referrals come directly from us to call you guys. How do you typically say, this is how it should go or this is how to make you involved early? This is the best process. How do you [INAUDIBLE]?

MIKE ROSSON: The question is the referral process.

SPEAKER 2: The referral process-- so from what I know as a neurology consultant diagnosing brain death, I'm not going to say, hey, this person's brain dead and I'm going to call the organ [INAUDIBLE]. Or I was told not to do that actually. The referral process-- how is the best way that you see it happening in the care plan and the care team?

MIKE ROSSON: The best way the referral process happens is when the patient's admitted, if they meet the referral criteria, then the unit secretary or the bedside nurse-- whoever-- can call the OPO and notify them. There's this patient. We may be doing therapeutic hypothermia on this patient. We're going to do all the things to save this patient's life. He may get burr holes, and may have a decompressive craniectomy, whatever.

If we're notified early and the patient meets criteria, we'll follow in the background. The staff doesn't need to do anything. We may call once or twice a day. We're going to make site visits and monitor the patient's care.

As that patient deteriorates, what we would like is if the patient's condition changes, if the nurses can call us. Then we may be to the point where we want to talk to the attending physician, say, OK, you know, looks like we're headed in the wrong direction here as far as this patient recovery, and then get a plan. And if that is patient appears brain dead tonight, I'm going to give the family until in the morning to kind of come to grips with this. Then I'm going to come in, and we're going to do brain death testing. That's the kind of plan we're looking for.

And then we can be there, and help out, and make sure that all the documentation's right. Physician feels comfortable with this, goes in, talks to the family, and we may go in right after or with a suitable period of time for them to absorb this information. But many times the physicians have been dealing with the family, and they know this is a critical injury and this patient may not get well. So oftentimes this is not a surprise to the family.

SPEAKER 2: [INAUDIBLE] family have the right [INAUDIBLE] next of kin to make that decision for them, or is there mother, father-- is there [INAUDIBLE].

MIKE ROSSON: Right, there is a hierarchy, yes.

SPEAKER 3: The Uniform Anatomical Gift Act.

MIKE ROSSON: Right.

SPEAKER 3: But if that patient's on the registry, there is no right [INAUDIBLE]

MIKE ROSSON: Yes-- next of kin, there is a hierarchy that wife, and the husband, and mother-- and we've got the whole legal hierarchy to set that up. And the medical examiner also monitors consent. The medical examiner on many of these cases is going to be involved and is going to look at the brain death pronouncement.

So we want to make sure that's all done right. Organs may go out to other transplant centers across the United States, or they may come for the organ recovery. So as long as everything's documented, it's fine. The patient's either brain dead or they're not.

If they're not, we're not going to fudge. If they have one reflex-- if they have a primitive gag reflex and that's it, they're not brain dead. And we're not going to treat them like they are. We're going to make sure it goes right and help you all make sure it goes right also.

SPEAKER 2: I have one other question [INAUDIBLE]. I just have one other question. How did Steve Jobs [INAUDIBLE]?

MIKE ROSSON: Well, if you look at the history of movie stars and prominent people, a lot of them did get transplants early. It seems early. But if you look at the total list of the 24,000 transplants done every year, lot of those people got transplants early too. I don't know about Steve Jobs. He was on two or three lists.

SPEAKER 3: Anyone in the United States can apply at any transplant center in the country as long as you can get there, and pay for it, and get support, and be there for three-- however much time they need to follow up with you. Who can afford to do that? Technically, he followed the same guidelines as everyone else. He just has the financial ability to be able to travel. We could all do the same if we could afford it.

SPEAKER 4: [INAUDIBLE].

MIKE ROSSON: Yes, the family can designate a kidney to go to a relative, a heart to go to a relative or someone they know. If they have a name and that person is on a transplant list, they can designate that the organ go to them. And provided that patient is compatible with the organ blood type, whatever, we talk to the transplant center where that patient is listed. Then that transplant surgeon has the option of saying, yes, we'll transplant that patient. We'll take that organ.

SPEAKER 3: And that's what happened with Melissa and Adelle. Adelle was a requested organ transplant for liver. The husband sent out an email saying, Carson isn't going to survive. We're going to have him be an organ donor. Does anyone know anyone in their friends and family who needs an organ?

And someone knew Adelle. And she just happened to match him. And she wouldn't have gotten the directed donation. They had no idea how bad her liver was. She said when it was taken out, she would of had less than three weeks to live. But she was lower on the list because no one knew how bad she was. That directed donation saved her life for sure.

MIKE ROSSON: So Mickey Mantle got a liver transplant really quick because his batting average was very high. That's why he got the liver transplant, which of course is not true. The president of the Texas Medical Association also got a liver transplant. And I was involved in his liver transplant. The liver came from a patient in Port Arthur and everything was on the up and up.

With Mickey Mantle, Mickey Mantle was a fairly good size dude-- 6 foot 2 or so, 200 and some odd pounds. He had liver cancer at the time that they accepted the liver for him. And it was determined to be within the area where if he got a liver transplant, he could recover from the liver cancer.

Once they got the liver from a big guy and got into the operating room, they found out that he was shot through with tumors in his liver, and they were too big. And the cancer had already spread. OK, now we've got a liver and we've got Mickey. And what do we do? There's nobody else we can put this big liver in that's close enough to accept it.

So they transplanted him. And he died shortly thereafter because the cancer spread. Sweetness-- what was his name for the Chicago Bears? Walter Payton-- didn't get a liver transplant. He was too sick, too sick. And you know there's people in the United States who would have lined up to donate direct liver transplant for him. And it didn't happen, and he died. Sir?

SPEAKER 4: Is the life expectancy of a transplanted patient comparable to a healthy--

MIKE ROSSON: I see-- the question is is the life expectancy of a transplant recipient much the same as a person who is healthy but has not had a transplant. It can depend on the organ. One of the recipients that works for us that's had a heart transplant is 13, 14 years out-- goes to the gym every day.

There aren't a lot of statistics. Some of the oldest patients that have been transplanted have died recently. One of them was struck by a car who had gotten a kidney transplant over 30 years ago. And I think one of the twins who was involved in one of the first transplants lived for 25 years after his kidney transplant.

So if they don't have comorbidities, there's a really good chance that their lifespan will be approximately the same. We haven't been doing it long enough to find out on a lot of the patients. But if the patient gets a pancreas transplant for type 2 diabetes, there's a chance they're going to have a long life. But there's also a chance that it will be shortened somewhat by comorbidities from that disease that they had before. But it can be a cure.

SPEAKER 5: Like the anti-rejection drug effect? Pardon me, I was just asking about the anti-rejection drugs [INAUDIBLE].

MIKE ROSSON: The anti-rejection drugs are much more specific than they were back in the '70s. In Galveston we did thoracic duct lymph depletion. There were total body radiation to wipe out the bone marrow so that they couldn't reject an organ. We had patients dying of all sorts of terrible diseases with organs that were functioning perfectly that were not rejecting. We were giving them [INAUDIBLE], and all sorts of things because they had no immunoresponse to diseases.

So now the immunosuppressant drugs are so selective to the T cells and to those cells that are going to reject the organs that there are not a lot of side effects from that. But still, most every patient is going to have a rejection episode. It just depends on the severity and when it comes. But many of the patients can live a long full life from their transplant.

SPEAKER 5: So when I want to have my driver's license renewed, I check the box. So is it on my driver's license and in some computer now? And is that information readily available if I come in.

SPEAKER 3: In theory.

SPEAKER 5: Is it scannable off my license?

MIKE ROSSON: No, we have a Texas computer registry that we can dial into. If you got into the Texas registry, we could find you. If you sign up on the donor registry yourself, you can go in and change that and manipulate it. You could also go in and sign up on Texas Donate Life and see if you are on the registry.

SPEAKER 3: They used to send cards. We don't anymore because the reason to have the card is so we know. Well, we can just look you up online because we run the state registry. In theory, the DMV is supposed to transfer your information onto there. But all you're saying is yes or no.

And there's so many more questions you can answer online about research, and you can choose all the organs individually. You say yes to organ tissue and eye on your registry, which is fine for 99% of the people. However, some people will do everything but their corneas-- don't ask me why. And this gives them the ability to still be that specific online and plus say yes to research or other things that you just can't do through the DMV. And we don't see licenses. We never see a license.

MIKE ROSSON: Most all of the personal effects in the emergency room go with family and go home. We don't see their driver's license. But we do encourage all these people that sign up at the baseball games or sign up at the DMV or whatever, let your family know this is what you want to do. That is a decision they do not have to make.

One of the top four reasons for families declining donation is they didn't know what this person wanted to do and didn't want to make a decision to do organ donation when they weren't sure what their loved one wanted to do. So if we take that dilemma away from most family members-- oh, he's an organ donor. Plus, we have a lot of patients, a lot of families, who initiate the donation conversation. They'll approach the attending physician or the nurse and say, is there a chance he could be an organ donor?

So the system works. It's going to get better when we get more than 4 million people out of the 18 million people who could be organ donors in Texas. Probably, of the referrals that we get every month-- maybe 600 or 700 referrals-- probably 20 will be patients that we find on the donor registry. They may not be donors. They may not ever reach donation. They may get well and go home. But they were referred to us. We've checked the donor registry and they're on there. So probably 20 hits a month.

And there are states that have donor registries with almost 90% to 95% of the people in the state on the donor registry. Of course we're talking about Iowa, and there's only about 10 people in Iowa. I say that every time-- that irritates her, being from Iowa. But eight out of 10 people in Iowa are on the donor registry. Any other questions? Thanks very much-- really appreciate it.