[MUSIC PLAYING]

JENNIFER WALJEE: The most frightening aspect of the epidemic to me is the impact on our communities and on our families, particularly, young people.

MICHAEL ENGLESBE: I'm a transplant surgeon and I noticed that many of the people who are donating organs are people who died of opiate overdose. You look at the patient, you look at this healthy, beautiful, young person and you can't help ponder how they got to where they are, which is essentially, brain-dead.

CHAD BRUMMETT: Certainly, any overdose is sad, but with 91 people dying per day in the United States, and when you look at the pictures, these represent every demographic of the US, but it's particularly sad seeing high school kids in our own community dying from opiate overdose. And I think this is a place where surgical care has a lot of opportunity to help fix the problem.

JENNIFER WALJEE: We know that opioids are very effective at managing pain after surgery, but there's no real answer about how many pills should be prescribed or not. And so our tendency is to over-prescribe.

MICHAEL ENGLESBE: There's a drive in health care to do things by protocol so that we do things the same, and that did not exist in perioperatives, so around the time of surgery how we manage pain and prescribe opioids.

RYAN HOWARD: We wanted to look at really the issue of leftover opioid pain medication after surgery. And to do that we picked laparoscopic cholecystectomy-- or having your gallbladder removed-- as a procedure to pilot this in.

CHAD BRUMMETT: Michigan OPEN is the Michigan Opioid Prescribing and Engagement Network. We're surgeons, anesthesiologists, psychologists, nurses, med students, payers-- all working together to address acute care prescribing.

JENNIFER WALJEE: When we think about where people start getting addicted to opioids, it's really from the leftover prescriptions that we write.

MICHAEL ENGLESBE: 6% of our patients go from being opioid-naive to chronic opioid users. That's essentially, a 6% complication rate and that's not good enough. I need to do better and drive change.

JENNIFER WALJEE: The goals of our project are to engage providers and patients to understand the best ways that we can manage patient's pain after surgery and curb the amount of over-prescribing that we're doing.

JAY LEE: The main issue is that there are no evidence-based guidelines for opioid prescribing. We use a one-size-fits-all approach.

MICHAEL ENGLESBE: We really transform the way we write for opioids in one simple procedure, which is elective laparoscopic cholecystectomy. And our initial work showed remarkable variation in how many opioids patients receive after big operations.

CHAD BRUMMETT: Medical records only tell you what was prescribed but they don't tell you how many pills a person used. So while it seems like something we should know, we really don't have a sense of what people need after surgery.

JAY LEE: The important thing was going to the patient themselves. So we would call patients and ask them, "How many pills did you take? How many do you have leftover?" And then using those two pieces of information we can really get some meaningful results about how much we're over-prescribing for those patients.

RYAN HOWARD: We found that post-op opioid prescriptions ranged anywhere, from say, 12 pills of five-milligram Norco to 120 pills of five-milligram Norco. On average we were giving about 50 pills. Most of the prescriptions were between 30 or 60 pills. We found that half of patients used six pills or less and here we were giving them on average 50. So they had a lot leftover and that discrepancy that really allowed us to develop what we thought were safe and smart prescribing guidelines.

CHAD BRUMMETT: And with that said, I think that these guidelines are intentionally conservative in that we probably still recommend more pills than the majority of people will need. But yet, are maybe reducing the amount prescribed by more than half.

RYAN HOWARD: We saw a dramatic decrease in the size of prescriptions and a lot less variability, as well. Despite this reduction of over 60% in prescription size, we have not had more patients calling for refills. If we compare the number of pills these patients would have gotten had we not introduced any guidelines to the number of pills they did get under our new prescribing guidelines, we can actually say that we've prevented about 7,000 pills from entering the community.

MICHAEL ENGLESBE: Our hope was just less exposure to opioids, better education, and just essentially changing our narrative around opioid use. We can affect that number of 6%. We're not going to get it to zero, but certainly, we can cut it in half and that is our goal.

JAY LEE: I really had no information to guide me before about how much to prescribe. It was usually just what my attending surgeon told me to prescribe.

CHAD BRUMMETT: If a physician wrote it, it must be safe. If the FDA approved it, it must be safe. That these prescriptions are actually not safe pills when you misuse and abuse them. And then this is, I think, part of our gap in understanding, especially with teens and adolescents.

JAY LEE: There was a really marked change in the way that I prescribed opioids after I got involved with this project. And I remember patients would always ask me, "Doc, is there a risk that I'm going to get hooked on this medication?" and I used to tell them very routinely "No, that risk is essentially, insignificant and you shouldn't worry about it." Now it's a very different conversation that I have with patients. I tell them that this is a medication for pain, it's a strong medication, but there are dangers to this medication.

WILLIAM PALAZZOLO: As a practicing PA in the pre-op clinic, we now specifically, address the needs-- the expectations-- of what will occur pain-wise and pain management after surgery.

BEVERLY ROBSON: Counseling the patient has changed for us, really, in the last six months pretty dramatically.

MARGARET NETTI: We used to almost always give two pain pills after a surgery and then say, just see how you feel. Maybe the first 24 hours you'll need two pain pills and then to taper down after that. Pretty much now the standard is, let's start with one and see how that goes for you. And if it isn't sufficient, you can take a second pill.

BEVERLY ROBSON: Using the least amount of narcotics is actually better for you. Instead of maybe taking two Oxycodones, take one and a Tylenol.

MARGARET NETTI: It's important that you not hold on to these medications but you get rid of them.

MICHAEL ENGLESBE: Having them in your house is a bad problem. They're probably less safe than having a loaded gun in your house.

BEVERLY ROBSON: For everyone to know where is the closest place that I can take my unused narcotics is imperative. We're, emphatically, encouraging them. If you're done with it and you don't use them all, you can discard them at these locations.

MARGARET NETTI: There is a link to it right on their discharge instructions and having that available to them, they can do the right thing. They can get them out of their house and make them less accessible to themselves or anybody who's looking for drugs.

WILLIAM PALAZZOLO: Standardizing opioid practice before surgery is important because the patient, as well as the care team, are all on the same page.

MICHAEL ENGLESBE: Physicians at the University of Michigan are writing far smaller numbers of opioids for other procedures that are somewhat similar. Things like hernias and appendectomies.

CHAD BRUMMETT: That idea that a surgeon will say I have a guideline for a surgery and this other surgical condition, for which I don't have a guideline is comparable. In other words, I believe that the post-operative pain, the incision, whatever it is, is comparable. And it's been exciting to see the change in prescribing patterns spill over to those other surgical conditions.

MICHAEL ENGLESBE: So I think it's a move in the right direction. At the same time though, we have to make sure that we're keeping the patient-centered on this and making sure that we are adequately taking care of their pain and giving them optimal care because that is absolutely important for an effective recovery.

RYAN HOWARD: For the people writing the prescriptions, they were very quick to adopt these prescribing guidelines. And probably. Just because there wasn't a lot of formal education around in the first place about here's how much we prescribe.

JAY LEE: I think that the reaction that we got from physicians about wanting to change our current practice was largely positive. And I think that was helped by the fact that we showed them information about how bad the prescribing was. A lot of them didn't realize that the opioid prescribing was so far off the mark. And so we showed them some of our initial data about how much our prescribing exceeds patient requirements and the reactions were really, I think, shock on their part, and a real desire to change that practice and improve the safety of opioid prescribing after surgery.

MICHAEL ENGLESBE: We've been trying to change practice for a long time. And it's really hard to change the way caregivers do their care. This has changed on a dime.

CHAD BRUMMETT: I'm a big fan of not doing pure, ivory-tower medicine and ivory-tower research that we really want to understand what happens in communities that represent hospitals across the country.

MICHAEL ENGLESBE: As caregivers, why we need to lead this charge as much as anyone else because we probably caused a lot of this problem, if not, we are responsible for the majority of this problem.

JENNIFER WALJEE: Using the platform of MSQC and really leveraging that engagement and the collaboration that they have, we could make a difference across the state of Michigan.

CHAD BRUMMETT: Without this platform, we would really be no different than any academic center in the United States, because we're now interfacing with other opioid efforts. This is an area where we are leading.

MICHAEL ENGLESBE: We can try to understand the problem but 99% of the work is affecting change. If we really want to help the people of Michigan with the partner with care community.

JAY LEE: If you look at all the pills that are prescribed across the state of Michigan for surgery and you think about 72% of them not being consumed, so for me, it's very valuable and very meaningful to think that we can help contribute to reducing how many excess pills are entering in the community.