

PARTICIPATING IN RESEARCH: ENGAGING WITH "PHARMA"

With: Tim Turnham, Karen Sachse, and Nancy Lindsey

Meet Our Presenters

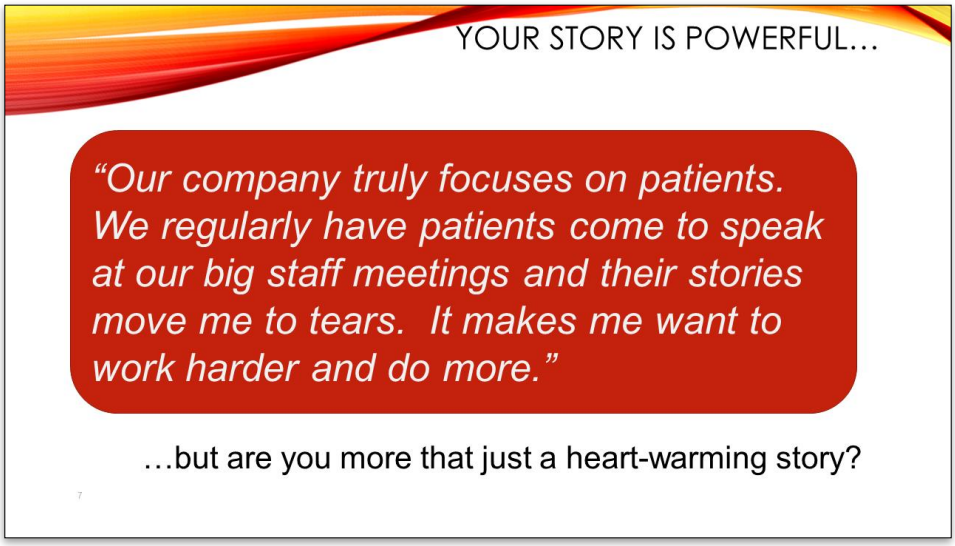
Nancy Lindsey: Nancy Lindsey, the moderator on this webinar is a bladder cancer survivor, a BCAN volunteer, and Patient Research Advocate.

Tim Turnham, PhD: Dr. Tim Turnham approaches patient engagement with the conviction that patients who are well informed and well supported live longer and better. He has a record of success in finding mutually beneficial connections between industry and patient advocacy groups to help achieve this goal. Tim has worked in pediatrics, HIV AIDS, disabilities, and oncology, maximizing the insight and value that patient advocacy groups and industry can achieve through collaboration. He has spent countless hours listening to patients and caregivers, and helping give voice to their experiences. Dr. Turnham is vice president of Voz Advisors, a company that helps pharma build mutually beneficial partnerships with influencers and groups from patient and professional communities. Now, Dr. Turnham, if you would present your information to us.

Karen Sachse: Karen Sachses has over 40 years experience as an oncology nurse, most of her time spent with pediatric patients, holding both inpatient and outpatient positions. In 2010, Karen was diagnosed with bladder cancer. She became involved with BCAN first as a walk team captain and then as a patient advocate. She participated in one of the first patient empowerment through engagement research trainings, which has led to other advocacy positions. Karen has worked with non-muscle invasive bladder cancer, patient endpoint working groups led by Doctors Steinberg and Hahn. Four years ago, Karen became the caregiver to her husband Roger, who was then diagnosed himself with bladder cancer. Given her unique perspectives as healthcare provider, patient, and caregiver, she welcomes opportunities to share her story to raise awareness for bladder cancer.

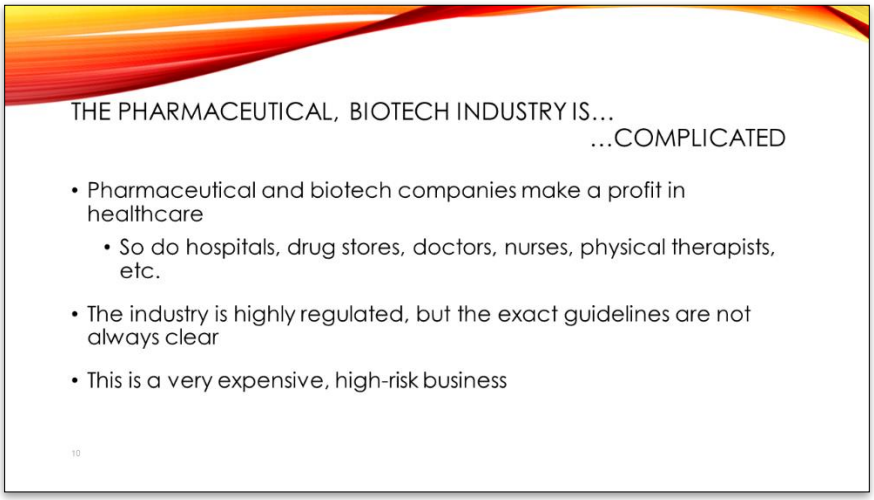
Engaging with Pharma from a Consultant's Point of View

Tim Turnham: All right. The thing I want everyone to understand is that your story is powerful. This is a quote from a large pharmaceutical company. We were doing some work with them and we were asking, how do you engage with patients? One person said, "Our company truly focuses on patients. We regularly have patients come speak to us at our big staff meetings and their stories move me to tears. It makes me want to work harder and to do more." Your story is powerful. It is a motivator and it inspires people. The question that I have though is, are you more than just a heartwarming story? I think that you are, and that's part of what we're exploring in these next few minutes.



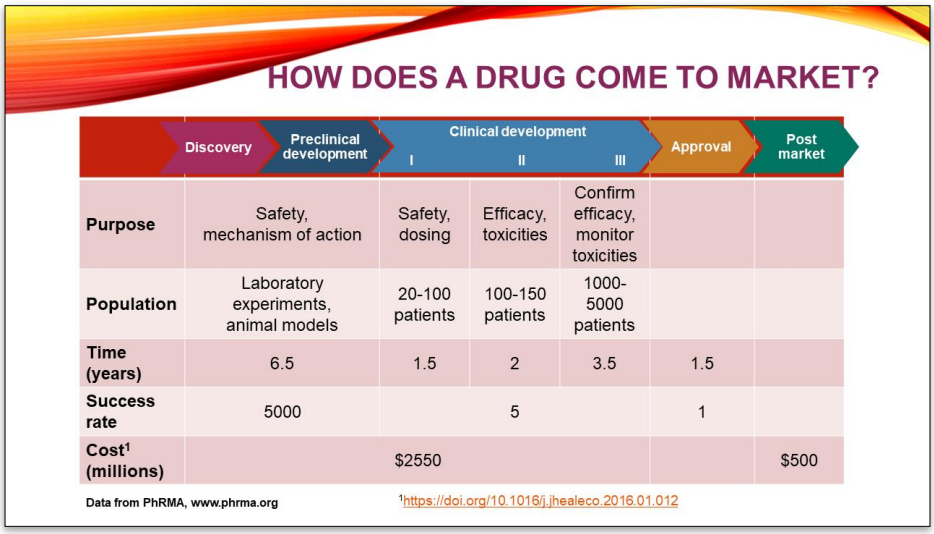
What I want to do over these next few slides and this time together is to look at the pharmaceutical research process, identify ways that patients can impact industry research, and then explore some practical tips on becoming involved. Let's look at the research process first. The pharmaceutical biotech industry is complicated and so yes, pharmaceutical and biotech companies make a profit in healthcare. They've been slammed for this. People sometimes have a jaundiced eye toward drug companies. But quite frankly, so do hospitals, and drug stores, and doctors, and nurses, and physical therapists and things like that.

The industry is highly regulated and the exact guidelines are not always clear. A lot of times, what they receive is guidance but not rules. The unintended message or maybe the intended message is, "We're not going to tell you exactly what is right to do and what is wrong to do. But if you do it wrong, you will be in big trouble." That becomes very complicated. This is a very expensive and high risk business. I'm going to show you what that means. How does a drug come to market? The little section at the top here starts with discovery on the left, preclinical development, clinical development, approval, then post market. Discovery is what happens in the lab, all the beakers and the flasks and the tissue culture cells.



Tim Turnham:

Preclinical development moves then into animal models and further testing. Then clinical development is what we call clinical trials, right? You can see the purposes of each of these stages. What I want to point out is the third row down, that how long these things take. It is not unusual to spend six and a half years in discovery and preclinical development, a year and a half in a phase one trial, two years in a phase two trial, three and a half years in a phase three trial. Sometimes it's much shorter, sometimes it's much longer. Then the approval process itself can take a year and a half.



If you look at all of this together, you can see this is not a fast process. You're looking at 12, 15 years to get a drug from when you've first identified a drug to when you actually get it approved and can start making money selling that drug. If you start with 5000 compounds in the lab, on average, one of those will end up being approved. Even if you go to clinical development and you have five drugs that are in clinical trials, which are very big and expensive to do, only one out of five ends up being approved. The cost, as you can see, is very, very large. Between two and three billion dollars.

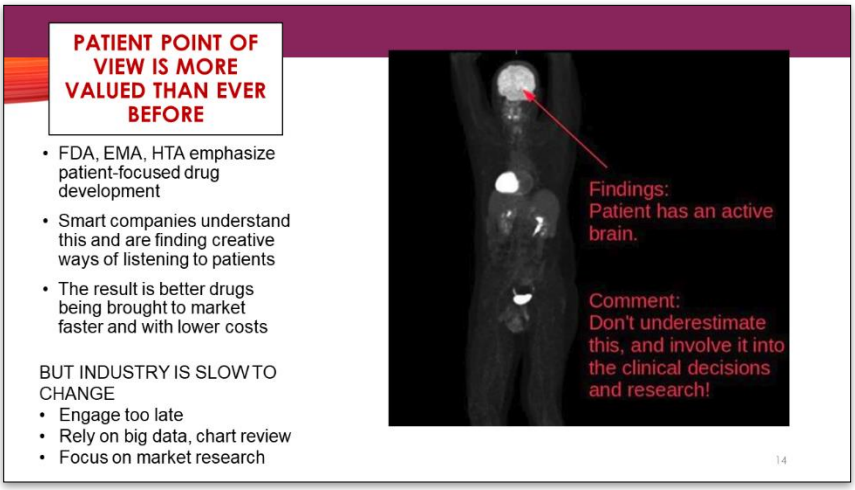
Some people argue that this cost is inflated, that it's not accurately the real cost of this. But even those who say that it's inflated, say if they cut it in half, say if the cut it to a third, it's still a huge amount of money. Because of this, there are some things that we need to remember. One is that time is money. The faster they can get people onto trials, the better. The faster they can get results, the better, because every time that they have a delay, every time that things slow down, it costs money.

Number two, compliance is king. Compliance is a word that we don't use in everyday language, but basically it means that they have to follow the rules. Because the rules are not always clear, companies are very, very cautious. They don't want to come even close to violating the rule. Sometimes things that don't even seem to make sense, companies are not allowed to do. For example, if there's a paper that is published in a major academic journal, a major medical

journal, a pharmaceutical company representative is not allowed to show that paper to a doctor in the field because they feel like it might be undue influence.

Tim Turnham:

It's not promotional, it's not bragging about the company, it's just a paper that's published, but they can't do it. Some of the rules, again, don't even make sense. These days, you'll never see even a ballpoint pen with the name of a drug on it because there's concern that if you give a physician a ballpoint pen worth 29 cents with the name of a drug on it, that somehow or another it'll change their practices about how they prescribe drugs. Because of this highly regulated environment, companies are risk averse. They don't like taking chances. They tend to be very cautious and they tend to be very slow to change.



How can patients impact industry research? This little scan, and I hope it comes through here, I thought was really clever. The findings are, the patient has an active brain. The comment on that is, don't underestimate this and involve it in the clinical decisions and research. This is the message. I mean, if you could boil it down to one thing to get across to industry, it is that patients are smart. They get it, they understand their experience and you can learn from that experience. You can learn things from patients you can't learn from anywhere else.

The government agencies are really beginning to see this. We're all familiar with the FDA here in the United States. We've heard a lot about them lately in this coronavirus pandemic. Their equivalent in Europe is the EMA. Then in any, most countries outside of the United States, you have a two stage process where a drug is approved. Then a separate body decides whether it'll actually be covered by the healthcare system. Those bodies that decide about coverage are called HTA, Health Technology Assessment. They look to see if it's worth investing in this drug for the benefit that it provides to patients.

All three of these kinds of agencies are finding ways to have patient focused drug development, to bring the patient voice. They're looking for the patient voice and they're looking for the patient perspective. Smart companies understand this and are finding creative ways of listening to patients. The result of this is that better drugs are being brought to the market faster and with lower cost. That's when it works well.

But remember, I said industry is slow to change. Far too many companies engage with patients too late. They rely on big data rather than, and chart reviews, rather than actually listening to real patients. They focus on market research rather than talking to real people who have the real experience.

I want to just give a couple of examples of this. I was asked, I was the executive director of the Melanoma Research Foundation and I received a call from a major pharmaceutical company saying, "We'd like to talk to you about some materials that we want to use to try to educate patients." I said, "Sure, I'm happy to talk about it." I went over to their offices and we sat down.

Tim Turnham:

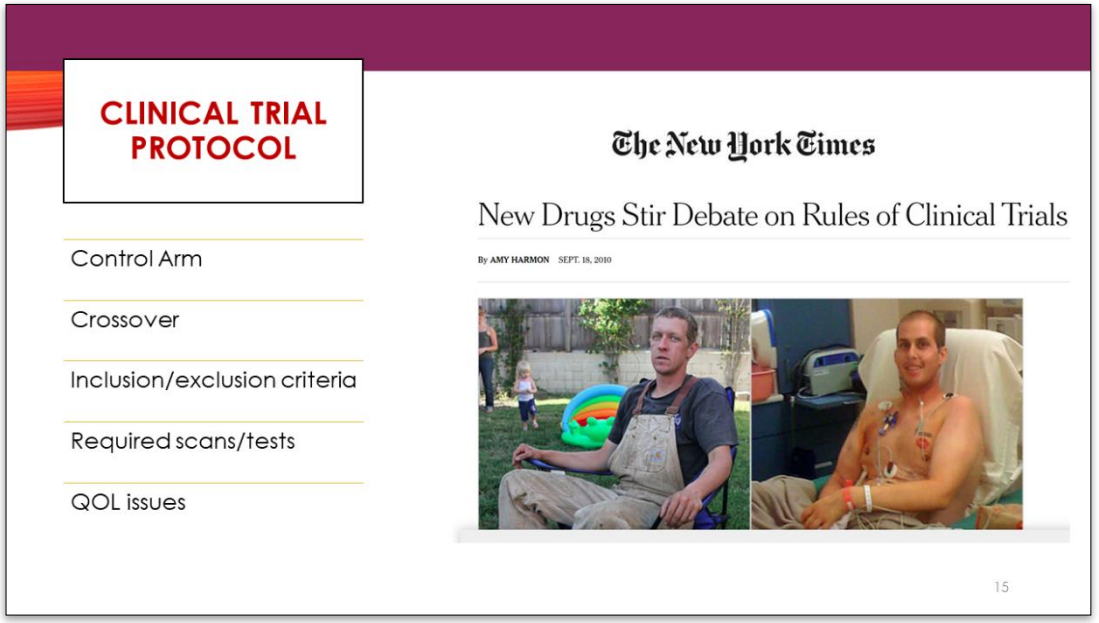
They went through this kind of presentation and the materials were okay, but not really great. There were some language things that would be real barriers to people understanding it. Some of it was too complex, some of it was just not quite right. I started saying, "I think if you changed the language to this or if you do this and do that." Everybody started looking really uncomfortable. They stopped and they said, "Well, we actually have already approved all of this and we're ready to go to press. We just wanted to let you know about it."

I thought, oh, this is a complete waste of my time because you engaged me too late to have an impact on what you've done. I can't rubber stamp what you've done if I don't have an opportunity to talk about how it was developed and what's there. Industry is slow to change, and this is part of that slowness that sometimes comes through. How can patients actually get involved? One key area is developing clinical trials.

The protocol is basically, and many of you will know this, but the protocol is basically the design of the trial. Who can enter the trial and who cannot enter the trial? What ages are allowed? What ages are not allowed? What preexisting conditions are allowed? Can you enter the trial if you've had three different therapies already, or maybe it's just two different therapies? All of these different aspects. Patients can have real input on the protocols if companies will listen to them. I've seen companies who have done this and done it really well.

They'll come up with a design and before they finalize it, they'll say to patients, "Does this make sense?" Sometimes the patients will say, "You know what? It's just not practical for me to have to have blood taken three times a week. That means I have to miss work three days a week and go have blood taken. Can you make it once a week, or can you make it once every other week?" All of those kinds of things play into it.

One area I do want to focus on though is this area of crossover. This is part of the design of a clinical trial where you have generally a study arm and a control arm. The control arm is where patients receive standard of care. They get the drugs that are being used for patients in this therapeutic area all the time. In cancer, you virtually never have a placebo as the control arm. You're always going to give treatment to a cancer patient.

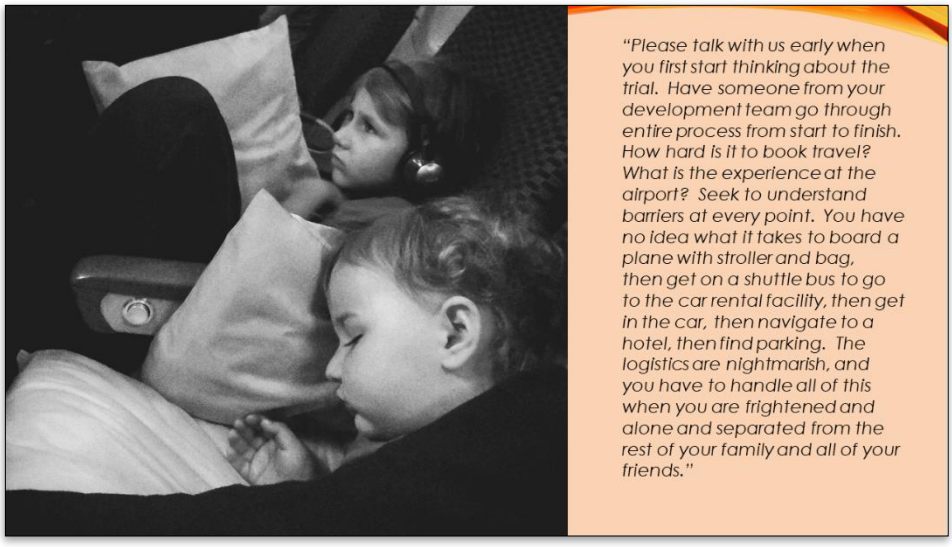


The study arm is the new drug that they're testing out and trying, right? The issue is, if a patient doesn't do well on whichever arm they're on, are they allowed to switch over to the other arm? That's part of the clinical trial protocol. This came very much to the forefront about 10 years ago. Because of these two patients that you see on this slide, they look kind of like they're the same person. They're

actually cousins and they both were diagnosed with metastatic stage four melanoma within just a couple of months of each other. They both went into the same clinical trial for a therapeutic drug. As it turns out, one of them was randomized to the study arm and the other one was randomized to the control arm.

Tim Turnham:

The cousin who was on the study arm had all of his tumors go away and was back at work. The cousin who was on the control arm had no effect from the control standard of care and died of melanoma. This was front page article in The New York Times talking about this, and is it ethical to treat patients this way? Here's an opportunity to weigh in on this, that patient voice could be included in determining these kinds of things.



Okay, and I love this little quote. This is from a patient who I was talking to just a couple of weeks ago who said, "Please talk to us early when you first start thinking about the trial. Have someone from your development team go through the entire process from start to finish. How hard is it to book travel? What is the experience at the airport? Seek to understand barriers at every point. You have no idea what it takes to board a plane with a stroller and a bag, and get on a shuttle bus to go to the car rental facility. Then get in the car, then navigate to a hotel, then find parking. The logistics are nightmarish, and you have to handle all of this when you are frightened and alone and separated from the rest of your family and all of your friends."

Such a compelling story. This was a parent of a child with a rare disease. The only way they could go into a clinical trial was to travel by air several hundred miles away. Yet there was no consideration taken into what that would entail.

Another way that patients can have a voice is around patient reported outcomes. These are called PROs. Basically, it's where patients have an opportunity to give feedback on how they're doing. They're standardized surveys and tests and things that are scientifically validated where patients can

say, "Here's what I'm experiencing on this study. Here's what I'm experiencing and here's how the drug is changing what I'm experiencing."

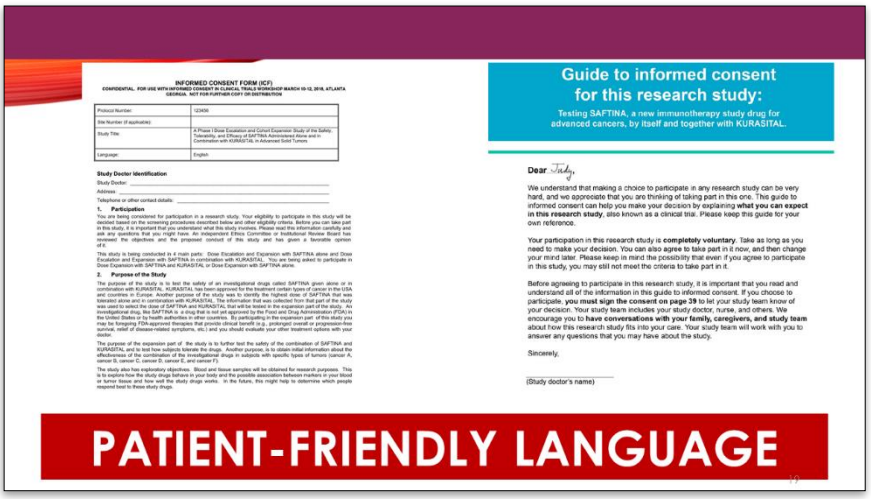
Tim Turnham:

One of the issues that we find here is that not all of these PROs really capture the things that are important to patients. This little gray box on the left, or brownish box on the left, is a promo for an initiative called Global Research on the Impact of Dermatological Diseases. A whole bunch of people who are involved in dermatology diseases said, "You know what? None of the PROs really capture what's important to patients with dermatological issues. People face stigma, shame, and other psychosocial challenges. These PROs did not really capture it."

They launched an initiative in conjunction with two universities to develop their own unique PRO. We're seeing things like registries. You'll see a little icon here for a lung cancer registry. A registry is where you gather data about people and you get big groups of data to try to understand the real experience for patients. These are the ways that patients are having an input and an impact on the research. The smart companies are looking at these kinds of things, looking at registries, looking at PROs, and using that as part of their drug development process.

Another area are endpoints. About four years ago, the FDA approved a controversial drug for Duchenne muscular dystrophy. The data was not entirely clear. It frankly did not meet its endpoints but what the parents said is, "Look, we know that this drug didn't meet the endpoints according to the way you described them. But what we can tell you is that our sons are better. Our sons are better and you may not be able to measure that with your clinical measures that you have, but we can tell you living with them day after day, it has made a difference." That was compelling and they did ultimately approve the drug.

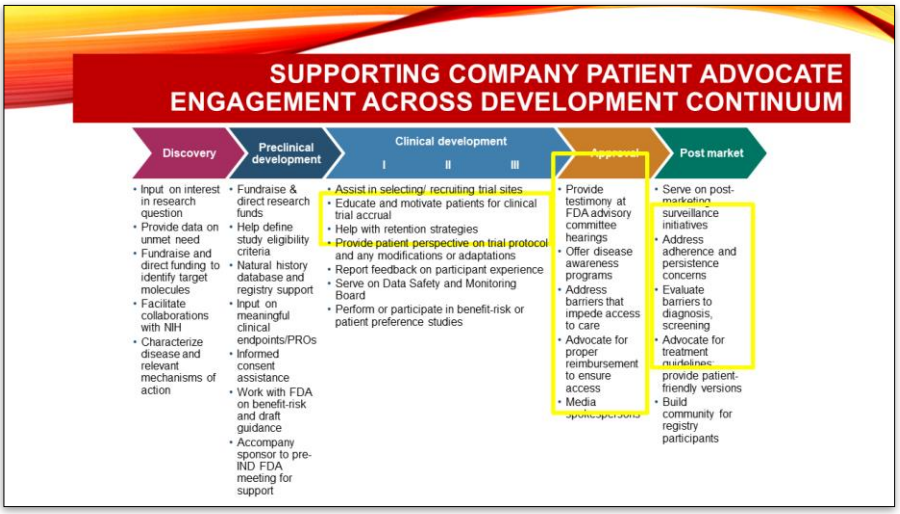
Tim Turnham:



Patient-friendly language, you can see this paper on the left, it just makes your eyes cross even trying to read it. This is like all those things that when you buy new software for your computer or go into a new website and you say, "Yeah, I agree to this." You don't even look at it because it's just so complicated. But when you're going into a clinical trial, you really need to understand what you're signing up for. Part of the way patients can help is by making sure that the language around the clinical trial actually make sense.

The document to the right basically covers a lot of the same material, but in a way that makes sense. The patient's name is actually put there. It looks like a letter to somebody who you'd know. That can make a difference in whether people read it, understand it, and take it to heart. If you look at, how do you work across the development continuum? Discovery, preclinical, clinical development, all of these things. Where can patients really get involved?

All of these are ways that patients can get involved, but I would like to highlight just a few. One is around clinical trial approval, and if you have a good trial and a trial that really matters, it helps patients want to go into that study. But the key is having a trial that makes sense to patients. You'll get more patients who will go into the study, and you're more likely that those patients will finish up the study.

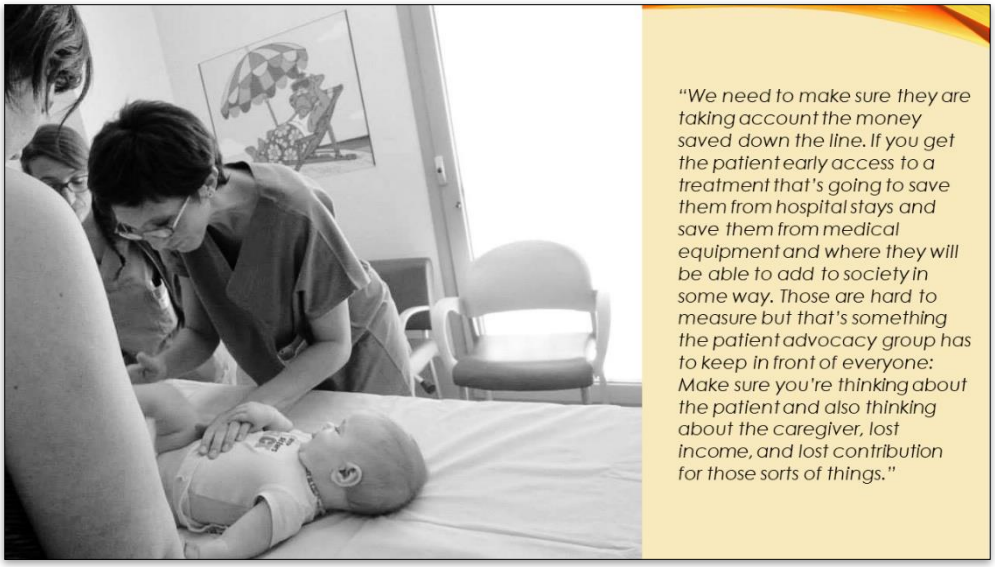


Another area, it's in this area around approval. Talking to the FDA about your experience with your disease and helping them understand what you're looking for in terms of an improvement. Thinking about disease awareness programs, dealing with barriers that help, that address barriers that keep people from having access to the drug. All of these are kinds of feedback that are useful to companies.

Okay, and then post market, looking at other issues that may come up after the drug is actually on the market. There are some estimates that say as many as 50% of prescriptions that are written every year in the United States never go filled. We know that even cancer patients are not always good about taking all the medicine they're supposed to take. In fact, one study showed that people are much more likely to ensure that their pet gets all of their pet's medicine if there's an illness for their pet than they are for themselves, even if they have a life threatening illness.

Tim Turnham:

There are ways that patients can help each other make sure that they're paying attention and taking the medicines that they need. All of these things are of benefit to companies. There's an issue here, there's a lot of conversation about the cost of drugs and things like that. An interesting quote from another patient who said, "We need to make sure that everybody is looking at the money that's saved down the line. If you get a patient early access to a treatment that's going to save them from hospital stays and save them from medical equipment and all of these kinds of things, there are financial benefits to all of that." This is where the patient perspective can really weigh in.

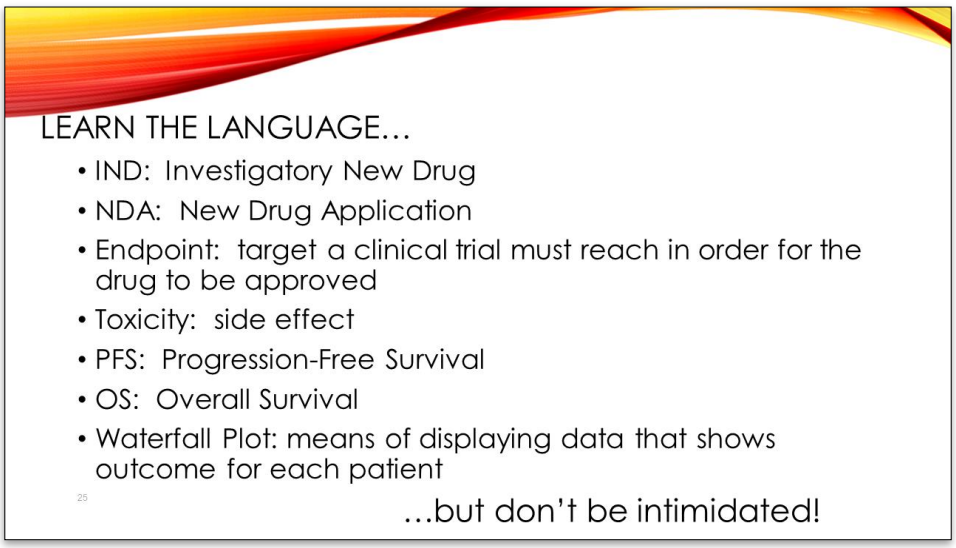


Key lessons here. Patient engagement varies widely. Input from patients can have a significant impact and we need to push for earlier engagement. Government agency want more focus on patients. How do you go about getting involved? Be honest, but respectful. There was a really kind of fun Geico ad a few years ago where Mary Todd Lincoln is wearing this black dress. She turns around and looks at President Lincoln and says, "Does this dress make me look fat?" Honest Abe struggles with how honest to be.

I think the point I want to make here is that your independence is critical. You are an independent voice. Being antagonistic doesn't help, but being constructive, having constructive criticism is vitally important. You should never hesitate to push back in a way that's respectful and honest.

Tim Turnham:

Honesty is really, really critical. Learn the language. There's a lot of Archean language that's around the drug development stuff. IND, NDA, endpoint, toxicity, PFS, OS, waterfall plot. All this stuff is things we don't talk about this stuff in the real world, right? But it's part of the everyday vernacular for people in the industry.



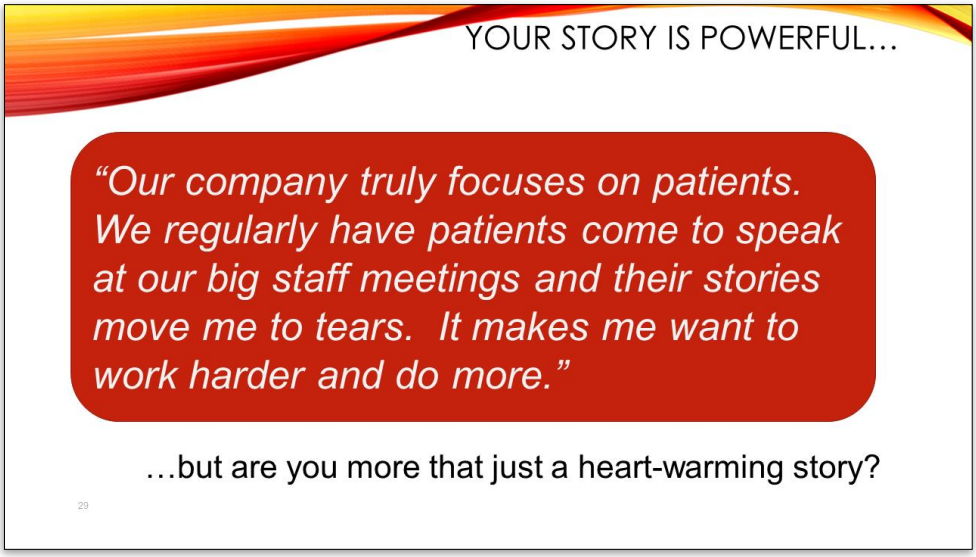
It's not bad to learn these things. But if you ever don't understand what they're talking about, like what is PFS? I don't know, ask the question. It doesn't mean that you're dumb, it doesn't mean they'll respect you less. It just helps you know what the language is that they're speaking. Don't be intimidated.

Then how do you go about connecting with a company? BCAN can help, I can tell you from personal experience that companies reach out to BCAN and ask them, "Do you have patients that can weigh in on some things?" We hope it'll happen more and more. You can always tell BCAN, make sure BCAN is aware that you're interested in being involved. Call the companies if you know of a company that has a drug on the market and say, "Look, I'd like to provide feedback." Talk to your doctor and tell the doctor the same thing. These are some ways that you can begin to get connected to industry.

Ways to engage. One area, we call it patient experience mapping, which is basically laying out what your experience is as a patient from the moment you have the first suspicion something is wrong all the way through your disease journey. What is it like to have that first doctor's appointment? What is it like to be told for the first time, "It's cancer?" What is it like to have a cystoscopy done? That's feedback that people need to hear some real honesty about. Then advisory boards, it's not uncommon for companies to pull a group of people together to say, "We need some advice on... we have a program that's designed to help people who need to pay for their drug. We need some advice on how to make that happen." Or some companies are developing what they're calling patient centricity committees. They're standing committees of patients that help them look at everything that they do to make sure the patient voice is incorporated.

Tim Turnham:

Then there's some people who have ongoing steering committees in specific areas. I know someone right now who is developing a steering committee in lung cancer, for example. They're looking for lung cancer patients to help them as they develop that. The key lessons here, don't be intimidated. Be an honest, trusted partner. Time commitment doesn't have to be huge, and recognize that not everything you suggest can be implemented. Remember we started at the beginning, your story is powerful.



We had this quote from this patient. The question was, are you more than just a heartwarming story? I would suggest to you that you are. You have real insight, real opinions that can and should inform the drug development process that can help ensure that the trials that are done are trials that are meaningful to patients, that they are put together in a way that makes them accessible to patients and really makes a difference. Thank you for your attention and your time.

Thank you to PCORI for funding this program so that we could really help to engage and develop BCAN research advocates.