So Walter has some connections with Banner. We have a not-for-profit arm called the Walter Hive, and one of our board members is a medical director at Banner. Additionally, we've offered up through Walter Productions one of our facilities as a possible overflow area, and so we've made some connections at Banner through both of those processes.

Pretty much just however you guys can help. Right now, you're manufacturing face shields. You fabricated them in a facility that's usually used for what?

So where we are right now is a place that we call the Walter Dome, and it's currently the home of the Walter Hive. We do programming around science, and technology, and arts for kids and adults. It's also been a spot where we've had a maker community that has worked in here for the last decade, and so it's really a perfect facility for us to be able to contribute to the face mask production.

The conversation originally started with-- over at the assembly facility over at the Walter Warehouse, correct?

The Walter Warehouse was our first connection to Banner, but then we met up with the group that was trying to coordinate a community-sourced effort to build these face shields. And so a large number of 3D printers out in the community have started to coordinate their efforts, centralize all of the headband supplies, and then create completed units so that we can deliver them to the health care workers.

So you have a 3D printer behind you that is working its tail off six hours-- that looks like the amount for headband, creating headbands here, and then this is one facility.

Yeah.

And you're also making the actual plastic face shields. And then the other headbands are also coming from a company that makes teeth, and it makes cookie cutters.

So the coalition that is formed to help create these 3D-printed components of the face shields are from a broad variety of backgrounds. Some of them are makers through an organization called Heatsink. Some of the printers are members of that group. We have them from the Arizona Science Center. An amazing story of a guy who has a printer farm that generally made cookie cutters, and now he's converted that over to be able to help create these headbands. Another is a dental office whose machines now have been converted over to help us with this process.

What does it mean-- you're a medical doctor by training and was by practice up until a couple of years ago, and you decided to kind of go-- pivot full-time into this and this venture. What goes through your mind when you see kind of this community effort behind trying to get those frontline health workers protection?

It's really heartwarming to see the response and the amazing sort of contributions of a broad range of folks that are in the community, and it's not just around face shields. It's happening around gowns and other protective equipment, and it's really an amazing thing to see people step up and try to do whatever they can to help the front line.

You know the importance of PPE from your background. How important are the face shields to the other components that are-- the face shields as far as being droplet protection as well as mask protection for the N-95s that are so valuable right now.

So PPP--

PPE.

Yeah, I almost said PPP.

[LAUGHTER]

[INAUDIBLE] partnership.

So PPE is incredibly important during the pandemic and always with infection control, but this is unprecedented. We haven't seen this demand, and we've seen it happen all over the world, shortages. And we're using so much more, and so the PPE is really a system of different components.

And the face shield, particularly with coronavirus, can be helpful, and it helps to protect the very limited supply of masks so that they don't get wet. It also has some protection for the eyes as well. And as you're doing testing, you certainly elicit coughs, sneezes, and that certainly puts folks at higher risk on the front line.

Yeah, the nose and the eyes are really critical components to kind of watch in addition to the mouth.

Right.

## [INAUDIBLE]

Right. The virus enters predominantly through our mucous membranes in our head, and so anything we can do to limit that exposure is going to be helpful.

Kirk, anything else I should know as I go around and I shoot some other video over at your assembly facility? What are some things that folks should know as far as what-- how many-- what's it taking as far as--

And do a lot of fabrication. And just like the broader maker community that we have been coordinating with, we're converting those skills into anything that we can do to really help the frontline health care workers.

This is a whole pivot for the whole organization.

So what happened with the advent of the pandemic is all of the large group activities that Walter is commonly involved in, we've stopped all of that and sort of pivoted our organization to be able to use our maker capabilities and also our ability to work with the community in order to get a coalition going, really, in order to be able to provide this PPE to the health care workers.

Thank you so much, sir. Thank you. Talk to us a little bit about this partnership in why this equipment would be so great for Banner.

Yeah, so our number one goal is to save as many lives as possible, and we can do that by protecting our health care workers while they're providing excellent care for our patient population. So the companies like what we're working with here today are producing face shields for us, and those face shields will protect the eyes, nose, and mouth of our health care workers from any sort of airborne particles entering their bodies.

Do you know how many face shields that they will be producing or have produced so far?

Yeah, we're looking to produce about 1,000 a week right now. Hoping to ramp up materials as supply is available out there.

How is PPE supply right now at Banner hospitals for nurses?

Right now, we are comfortable with our PPE supply to take care of our health care workers. These are preventative measures should we get to a low or no supply situation in the future.

How important is something so simple as a square of plastic and a headband to every-day workers?

Yeah, it's incredibly important. We have to keep our health care workers safe. With the amount [AUDIO OUT] patients, not to mention any other illness that is going on in the hospitals and clinics right now, keeping our health care workers safe so that they can provide great care is of utmost important to us because if they are sick at home with this illness, they can't provide care to all the patients that need us right now. So we have to keep them safe with face shields, and masks, and gowns.

How much does a standard face shield cost Banner? How much monetary work is the 1,000 a week?

That, I don't know.

OK.

Sorry.

No worries.

Was this something that you guys had ever anticipated facing? I mean, this just seems like a-- just talk about just the broader situation and just kind of what this is like just as a health care worker.

Yeah, we are in absolute unprecedented times right now, not just Banner Health, but every health care system across the country, and so we are all taking proactive, preventative measures as much as we possibly can, whether it's ordering more supply from the existing manufacturers or trying to produce extra quantities and alternative sources of supply, like what we're doing here today.

It must be interesting to have Banner, the rock that is Banner, and the art collective and so much more that is Walter Production now helping you out. It seems like an interesting relationship coming together of community.

Yeah, I think a lot of these community partnerships that we're forming right now will be lifelong partnerships. The community has really risen to a whole new level of support for our health care workers as have the employees of Banner, trying to support the health care workers on the front lines, and we're all in this together. That's really important for everybody to remember. And the community's outpour of support, volunteerism, businesses like Walter really coming together to do things that none of us would normally be doing is the only way that we're going to get through this right now together and keep everybody as safe as possible.

What went into the design of this face shield? Sorry to ask a question. What went into the design of these face shields as far as making sure that they kind of meet health care needs and also as far as protecting that mask that is such a valuable asset right now to keep as long as possible?

Yeah, so the shields are made of a couple of different components, so the headband portion of it is the 3D-printed portion. And then the actual clear shield portion that protects the entire face is from a PETG material. That's actually what we're producing here, and then we're also working with one of Walter's other facilities to assemble those locally here in town. We're getting the 3D printed headbands from a whole other facility, so this is an entire community outpour of support here to not only make these materials, but put them together, and then get them into our supply chain and into the health care workers' hands when that timing is appropriate and when they need these extra supplies from us.

And kind of piggybacking off that, the shield, is that -- that material-- why is that material itself important?

So the material protects their eyes, nose, and mouth, and underneath that, they're still required to wear what we would call a procedural mask, or if they're in an aerosol-producing room, and N-95 mask. Those are both critical to protect airborne particles from going into the health care worker's nose and mouth. The shield also adds that protection of eyes and then an extra layer of protection over the nose and mouth, so all of that protection right now is what's going to keep them as healthy as possible.

I'm good.

You're good. Thank you.