

## **Item S1: Survey Design**

### SURVEY SECTION 1:

- I. Parental intent to vaccinate their child with kidney disease or primary hypertension for COVID-19; vaccinate themselves, vaccinate other children (without kidney disease).
- II. Vaccine Hesitancy Scale (VHS)<sup>1</sup>: The 4-point modified VHS was adapted from the VHS instrument developed by WHO's Strategic Advisory Group of Experts on Immunization. The scale contains 8-paired questions to examine parental hesitancy towards general childhood and influenza vaccines.

### SURVEY SECTION 2:

- I. Demographic and socioeconomic factors: gender, age, race, ethnicity, insurance status, income level, educational level
- II. COVID-19 experiences: exposure, infection, impact on financial and psychological well-being, impact on child's kidney disease, and impact on access to healthcare; COVID-19 mitigation activities adopted and self-efficacy in protecting child from COVID-19; and sources of vaccine information (who and where information were obtained). Items were selected from the PhenX Toolkit, The PhenX COVID-19 library, using available measures at time of survey design in Fall of 2020.<sup>2</sup>
- III. Self-efficacy: were adapted from the Stanford Self-Efficacy for Managing Chronic Disease 6-item Scale.<sup>3</sup>

### REFERENCES

1. Kempe A, Saville AW, Albertin C, et al. Parental Hesitancy About Routine Childhood and Influenza Vaccinations: A National Survey. *Pediatrics*. Jul 2020;146(1)doi:10.1542/peds.2019-3852
2. Krzyzanowski MC, Terry I, Williams D, West P, Gridley LN, Hamilton CM. The PhenX Toolkit: Establishing Standard Measures for COVID-19 Research. *Curr Protoc. Apr* 2021;1(4):e111. doi:10.1002/cpz1.111
3. Self-management Resource Center. Original Chronic Disease Self-Efficacy. Self-Management Resource Center. Accessed June 4, 2020, <http://www.selfmanagementresource.com/resources/evaluation-tools/english-evaluation-tools>

**Table S1. Number of interview participants by response to willingness to vaccinate child with kidney disease or primary hypertension against COVID-19 and child's kidney disease classification**

Child's kidney disease classification	Willingness to Vaccinate Child against COVID-19			Total
	No	Unsure	Yes	
Transplant recipient	2	3	5	10
Renal replacement therapy		1	2	3
CKD or primary hypertension	3	4	5	9
Total	5	8	12	

Abbreviations: CKD, chronic kidney disease

**Table S2. Salient themes in interviews with parents on attitudes towards the COVID-19 vaccines for their child with kidney disease or primary hypertension with illustrative quotes**

Themes with illustrative quotes	Number of participants who expressed themes by willingness to vaccinate child against COVID-19		
	No (N = 5)	Unsure (N = 8)	Yes (N=12)
<b>Benefits versus Harm</b>			
<u>COVID-19 vaccines were rushed</u> "It's scary because you don't know what's gonna come from this vaccine. I just don't trust it. Again, cuz it feels rushed... I would feel better... if it was out longer and more people had received it and had time to live with it, and...I guess, see what symptoms come from it? If that makes sense?"	3 / 5	4 / 8	3 / 12
<u>Fear of serious side effects</u> "What if it causes a health issue that he don't have? You know, I, I've lost enough children to diseases. I've buried enough kids because of health issues. I, I'm scared."	3 / 5	2 / 8	2 / 12
<u>Long-term side effects are unknown</u> "The people haven't received the vaccine, and not enough time has lapsed for us to know any long-term stuff...that I know of, right? So, really there's no, there's nothing that you can read, because there's nothing there."	1 / 5	4 / 8	0 / 12
<u>Less vulnerable to COVID-19</u> "Her age group doesn't seem to suffer from the COVID disease that much. So I would probably say, I wouldn't give it to her, if I had the choice at this moment. And not just because of her kidney disease too, even though that is an issue. I've heard that, I've read a lot that children that get COVID with kidney disease and children that get COVID without kidney disease tolerate it the same way. So I don't think her kidney disease would be a reason to get the vaccine, from what I've read."	2 / 5	3 / 8	0 / 12
<u>Done well thus far</u> "I feel so far, you know, my decisions haven't been too, you know, too bad, so I'll stick with what I go with. My other child is hardly ever sick, and since transplant, [Real name]'s hardly been sick. So, I, I feel like we got it somewhat figured out."  "I mean, she's already been out. I mean, like I said, she does stay home from school, but I mean, she's out in the general population. She's playin' sports, she's been to the beach for spring break. I mean, she's been out in the public. I got to wonderin', is it, is it, 'do we even get her vaccinated?'"	1 / 5	1 / 8	0 / 12

<p><u>Vaccines are really only necessary for those who are more frail</u>          "I mean, if you're medically frail, do it. You know, just to add that, try to lay, add that layer of protection. But for normal, healthy people, it doesn't really.... I wouldn't be gettin' it, if I wasn't gonna be a potential donor for her."</p>	1 / 5	3 / 8	0 / 12
<p><u>Vaccines will allow us to get back to normal</u>          "It's more constricting, of course, we stay in the house more because of her condition. We don't want to bring anything to her, and we don't want to expose her to anything. So we are kinda like, we've begin to be home bodies or try to do more activities with the family inside the house instead of going out, or either, letting people in. Me and my husband have had our vaccine, so hopefully everybody, you know, will do the same, so it can get back to normal. That's the goal!"</p>	0 / 5	1 / 8	5 / 12
<p><u>Protect others and the community</u>          "Even now for the other children, I just highly recommend it. I mean, it's there for, to keep people safe, to keep the community safe, so...for me, I mean, yeah...I recommend it."</p>	1 / 5	1 / 8	4 / 12
<p><u>Getting vaccinated outweighs the risks of COVID</u>          "(referring to the second COVID-19 vaccine) It's a, you know, can be a little more symptomatic. But small price to pay compared to, you know, I had a rough COVID experience, and my wife was hospitalized."</p>	0 / 5	0 / 8	2 / 12
<p><b>What do the doctors think?</b></p>			
<p><u>Doctors are not on the same page</u>          "You see some of the doctors on goin' up against it, and you see some doctors are not goin' up against it, and your trustin' these healthcare professionals to all be on the same page, basically. And before COVID, before anybody, the vaccines, you know, you always had doctors that had different opinions. But like I said, like, I would say semi-confident, 'cause you'll hear one thing, and then you'll hear something else. So it's kinda like, 'This sounds good. It sounds right, and then this sounds right'. So which one should I believe?"</p>	2 / 5	0 / 8	0 / 12
<p><u>Conflicting information</u>          "I think that to make things easier for people like me, and there's a lot of us out there, that are scared of the shot... if we had one clear answer.... If there's one-, instead of the information that's been given out. Changin'! If it could just stay consistent, we would have more .... You know, the consistency. That's the word I'm looking for, consistent information, and it's not all over the place."</p>	2 / 5	2 / 8	0 / 12
<p><u>Doctors just push vaccines</u>          "Some physicians would just push it on him, on him, and want to keep going, which they know that some of those shots has a reaction of sleepy. You gotta sleep it off. Or legs sore, they cranky. You know, or</p>	1 / 5	1 / 8	0 / 12

<p>something like that. So, I was like, no, I know better. I'm not, I'm not doing it to him."</p> <p>"I really do trust their advice. I trust their advice, but also I know they are our physicians. I trust their advice on his medical care and I trust their advice on... you know, they know more 'bout the situation than me. But, I also know that they are our physicians. This is they job, you know. All of them is not, I'm not saying his medical team, but all the physicians is not just, you know, is not compassionate, they don't see it through my eyes. So, I trust them, but at the same time, I'm gonna trust my instincts better.... They don't understand that, hey, this is a child. We don't want to mess him up for life and, you know, he still have to, he still have to have fun. You still have to be a child and they don't, a lot of them don't see that."</p>			
<p><u>Doctors are the most knowledgeable</u></p> <p>"Well, I mean, all they do all day long is deal with transplanted children, so I just feel they're the most knowledgeable people, practically on earth, to be able to say what's safe and what's not safe. And they're gonna monitor it too in case, you know, some symptom got bad for some reason."</p>	0 / 5	0 / 8	2 / 12
<p><u>Doctors and the medical team provide a lot of information</u></p> <p>"I do read up on it, and [the doctors] are very thorough with the information about the vaccines that they are willing to give him."</p>	0 / 5	0 / 8	3 / 12
<p><u>Going along with what the doctors say</u></p> <p>"A lot of them have been caring for my child, you know, since he was diagnosed. So, this is, the team that I work with is the team that been, like I said, been working with him for the longest and I trust their opinions and their recommendations. So at this point, you know, I don't have any problems with it, so I kind of just go with what they say."</p>	0 / 5	1 / 8	6 / 12
<p><u>Doing one's own research</u></p> <p>"I'd rather do my own research and get my own perceptions of things, than ask the doctors"</p>	2 / 5	1 / 8	0 / 12
<b>Information still needed</b>			
<p><u>Information unique to us</u></p> <p>"I would wanna know if it's safe for them. Like, are they gonna make a different batch for children. What're the side-effects? How is it goin' to affect her with her disease. Is it safe for her to get with lupus, or with the kidney disease? How is it gonna affect her kidneys, lungs, you know, liver, all the things that have been affected? Can she take it with her medicine, like, is it gonna be a side-effect with the medicine that she already takes? You know, just, so many, so many what-ifs, so many. Is it accurate, is it, you know, not too potent for her? Do you go by weight, age, or you know...what, what do you go by?"</p>	2 / 5	4 / 8	6 / 12