

Table 1: Key findings and illustrative quotations

Key findings	Sub-Components	Participant Quotations
Perceived benefits of the BACK program	Benefit for students with asthma	<i>"I felt more comfortable letting my daughter go other places without me being around because she was confident and has the skills to be able to do her inhaler without me being there. She knew when to speak up and say I need my inhaler before things got too bad. And then she was also able to give it to herself and not have to rely on me to do if I'm not around." Urban Caregiver</i>
	Benefit for caregivers	<i>"I'm new to the asthma that my son has, so when she reached out to me, it was a blessing. Somebody that could help him during school. Somebody that could give him more than, that knew more than I know. The program was actually really awesome because he learned how to do it more on his own versus me always having to tell him. And he's even taught me stuff." Rural Caregiver</i>
	Benefit for school nurses	<i>"[BACK] has definitely helped with time management and havin' someone else who will come and do the education piece with kids [...] with [navigator] coming in and doing the full education around the inhaler, it's helping me with time." Rural School Nurse</i>
Challenge 1: Limited school nurse engagement and communication influences misunderstandings of BACK	Limited knowledge and experience with the program	<i>"[The BACK program] was presented to the district well, and the district said yes, and then, top-town, we're being told that we have to add more to our plate [...] we don't actually have to do a lot of extra work, but it's like it wasn't presented to the school nursing team in a very effective manner for the individual school nurses to want to help and really be eager to participate." Urban School Nurse</i>
	Communication and responsiveness	<i>"At the very beginning, there were some schools that didn't answer my emails at all. They just were ghosts. That was a little frustrating. There's nothing that we can do if they just don't answer." Asthma Navigator</i>
	Misunderstandings about BACK	<i>"When we first heard about [BACK] and heard that we were going to be doing it, it was kind of irritating because it was implying that we weren't doing enough on our own. Then when I stopped having my feelings hurt by that and did not take it personally and remembered that there's lots of people out there that don't do the job that I do, it sounded intriguing that there would be somebody else to do all those follow-up things that take us forever" Semi-urban School Nurse</i>
Challenge 2: Difficulty identifying, documenting, and enrolling students with asthma at the	Beginning of school year hectic and overwhelming for school nurses	<i>"One of our directors said, it's like drinking out of a fire hose and I'm like, "That is exactly, exactly how the beginning of the school year feels" Semi-urban School Nurse</i>
	Unclear program relationship with	<i>"As far as communication is, just parents not getting back. I don't blame them. I'm calling on my cell phone. I'm a</i>

beginning of the school year	schools leads to caregiver mistrust	<i>person that they have not heard of before talking about their child and the school that their child goes to.” Asthma Navigator</i>
Challenge 3: Program scope misalignment with school context	Program scope misalignment with school nurse expectations	<i>“I figured it’d be a bigger thing with the asthma navigator, the families and myself. I guess I thought maybe it was on a bigger scale because like I said, the four kiddos were the only ones that qualified from my two schools, so I don’t know, I just thought it was just gonna be a grander scale of kiddos with the education and whatnot.” Rural School Nurse</i>
	Limited program knowledge and engagement from broader school staff	<i>“It would be nice if we could do some kind of just overall training for staff at the beginning of the school year because there’s a lot of things that maybe look like asthma that’s not [...] I just think it’s letting staff and teachers know that this is what it could look like. Not everybody’s the same, and so that’s why we really look at all those things” Rural School Nurse</i>