Although teen pregnancy rates have declined in recent years, certain populations remain particularly vulnerable to unintended pregnancy and early fatherhood due to lifestyles that promote risky behavior (Ventura et al., 2014). Becoming a teen parent is associated with fewer years of schooling and a lower likelihood of attaining a high school diploma (Fletcher and Wolfe, 2012). Teen parents are also more likely to have a lower income and not be married or cohabitating with their partners, and for teen fathers, less than half live with their children at the time of birth (Scott et al., 2012). In addition to the negative impacts for teen parents themselves, children of incarcerated fathers also experience a host of negative impacts. A recent study found that children whose fathers were incarcerated before that child was five years old were more likely to be suspended or expelled from elementary school; this finding remained even when compared to children whose fathers were absent from their home, but not incarcerated (Wade, 2019). Despite these negative impacts, few teen pregnancy prevention programs target young men, and fewer target youthful offenders.

One reason for the lack of sexual health education within juvenile justice facilities is that implementing sexual health education programs can be challenging. There are costs for providing workshops or bringing in expert facilitators. Facilities may be in rural areas, making travel for treatment providers difficult. Bringing outside facilitators into a closed custody facility also requires additional background checks and security procedures. Finally, sexual health curriculum must appeal to youths and actively engage them in the content.

These and other gaps in programming inspired a partnership of three organizations. These included WestEd, a nonpartisan nonprofit research, development, and service agency focused on strengthening the capacity of institutions throughout the community to support children, youth, and families; the Oregon Youth Authority (OYA), Oregon’s state-level, juvenile justice agency known for its rehabilitation model in juvenile justice; and Efficacy, a health education company with a history of building media, games, and technology for underserved and high-need populations. The Office of Population Affairs, which is within the U.S. Department of Health and Human Services’ Office of the Assistant Secretary for Health, funded this partnership (contract TPA2AH000029-01-01) to develop and assess the impact of a tablet-based teen pregnancy prevention app, developed in collaboration with and targeting young men, ages 14 to 19, who are currently in OYA’s care.¹

The tablet-based intervention developed and tested in this project is Healthy U, a three- to four-hour evidence-informed, self-directed sexual health program on a virtual campus designed specifically for male youths at OYA, ages 14 to 19. Healthy U is aligned to the
CDC’s National Health Education Standards and permits flexible implementation. Healthy U includes dramatic videos, interactive games, and learning challenges to cover pregnancy, birth control, puberty, STDs, HIV, condom negotiation, and healthy relationships.²

**Secrets to Successful Partnerships**

There have been a number of positive findings and lessons learned so far in developing the crossagency partnership, including obtaining youth and staff feedback in the development of the app, and successfully implementing a multisite cluster-randomized control trial (findings forthcoming) to examine the impact of Healthy U on decreasing unplanned teen fatherhood and increasing healthy relationships. To successfully develop Healthy U and implement the study, the project partners took steps to gain buy-in from youths and staff throughout OYA.

**In-person communication.** Building relationships between partners early on through face-to-face meetings at each step of the project was paramount to successful implementation. For example, during the first months of the project, the partnership hosted an in-person meeting for the team to get to know each other, to begin learning communication styles, and to build trust. The relationships formed during this meeting proved foundational for open communication and collaboration throughout the project period. During that kickoff meeting, the team codeveloped a project timeline. Next, OYA hosted the partnership at its largest facility (serving approximately 270 youths). The team participated in a youth-led tour and spent the day with a group of young residents discussing sexual health and healthy relationships. Efficacy collected youth feedback on videos and activities that would eventually become part of Healthy U. Working with Efficacy, youths developed a storyboard based on their own experi-
ences, which was later turned into one of the dramatic videos on the app. During this visit, the team also met with OYA facility staff who provided contextual information about how to best implement the app and the corresponding research study. It was during this time that staff also expressed concerns about implementing an additional program on top of their other duties and how they would personally be able to engage youths in Healthy U.

Simultaneously, the WestEd team met with several OYA central office departments to develop relationships and talk through the implementation of a rigorous study. WestEd met with Information Services to discuss internet access at the facilities and how to upload data from the tablets to the server. WestEd also met with the Business Integration team to discuss OYA data that would be transferred to WestEd (e.g., contact information for youth once they left a facility). Meetings with Accounting were held to develop a protocol for processing stipends given to youths in exchange for their participation in the research study. WestEd also met with Facility Services to discuss how to protect time in the day for the implementation of Healthy U. OYA’s Community Services helped to develop a protocol for contacting youth to complete a follow-up survey after the individual had been released from close-custody facilities and was back in the community.

Scheduled, regular communication. The team (WestEd, OYA, Efficacy) set up methods for regular check-ins and adjusted the regular communication schedule as necessary. The WestEd team also met annually in person with OYA leadership to give progress updates and findings. The scheduled communication opportunities provided a time and place to discuss challenges and address them as they arose. They also served as opportunities to celebrate wins together. In short, the communications helped to grow trust, problem-solve challenges, and build further mutual commitment to the project.

Research design. The grant required that a rigorously designed study be used to test the innovation developed. During the first several months of the project, the WestEd team brainstormed research design options with OYA staff including the Research Unit, the Facility Management teams, and other OYA central office departments (e.g., Information Services). It was determined that living units within facilities provided natural clusters and the opportunity to employ a cluster-randomized design. Additionally, because there were multiple facilities in varying geographic locations serving different youth populations, the team decided to implement a block-randomized design to reduce any potential imbalance in the types of living units in the treatment and control groups. Finally, to reduce the burden on the OYA Research Unit and the other central office departments, the team decided to implement the study in “waves” (i.e., only one facility participated in the study at a time). Each facility served as its own block and the living units within the facility were the clusters. One facility would implement the study for a three-month period and then take a three-month break. Implementation would return to the facility after this three-month period.

The development of the wave-cohort design eased implementation and allowed each facility to make some slight variations to implementation. For example, some facilities preferred to provide Healthy U to youths in the treatment condition every Sunday for a few hours. Other facilities preferred to provide Healthy U to one or two youths at a time. The flexibility in implementation was key in gaining buy-in from facility staff. At one facility, implementation was difficult due to lack of engagement from staff. When this issue was identified, the OYA Research Unit and WestEd team met with the staff at this facility to discuss the reasons for their resistance in an attempt to increase their engagement. When staff overload was identified as the critical reason, the OYA Research Unit and WestEd team adapted implementation so that the OYA Research Unit and members of the WestEd team would be onsite to implement Healthy U and nearly eliminate burden on local facility staff.

Piloting. Prior to full-scale implementation, we conducted a two-month pilot. The purpose of the pilot was to test a preliminary version of Healthy U, the research design implementation, and obtain relevant youth and staff feedback. This provided an opportunity to learn what the challenges were going to be. For example, Healthy U was originally designed to be utilized with Wi-Fi so that youths’ progress was uploaded to an external server; this would allow multiple youths to use the same tablet. However, Wi-Fi access is significantly restricted in OYA facilities to limit the youths’ access to the internet. To access Wi-Fi, the youths needed to be relocated to a building with such access, resulting in major disruptions in daily schedules. To address this challenge, Efficacy changed Healthy U so that youth progress was stored on the tablet device rather than automatically uploaded via Wi-Fi. This meant, however, that each youth needed an individual tablet. The OYA Information Services team set up a secure, staff-only Wi-Fi specifically for Healthy U within each living unit. At the end of each Healthy U session, unit staff would use this Wi-Fi to upload youth progress to the external server. Although there was an increase in costs associated with providing a tablet for each youth, this was mitigated by the wave design, which allowed for the tablets to be rotated from one facility to another.

The pilot also provided the opportunity to hear youths’ reactions to using Healthy U. Youths shared their experiences with their unit staff, WestEd, and Efficacy directly and through anonymous surveys. The feedback was incorporated into the app’s final version. Youths also provided feedback on the incentive amount that would secure their participation and the appropriateness of pre- and post-test survey questions.
Training. Before each study wave, Efficacy, WestEd, and the OYA Research Unit visited each facility for two days to meet staff, provide a demonstration of Healthy U, train unit staff on implementing the app, and assist with identifying and enrolling eligible participants. Prior to each in-person training, WestEd held a phone call with facility staff to discuss the training agenda and logistics. These meetings provided an opportunity to hear any concerns prior to training and to adjust schedules if necessary. During the training, Efficacy facilitated an immersive training of the tablets and Healthy U. Staff were able to interact with the program and pose questions directly to the developer. Staff were also given an implementation manual with easy-to-understand, step-by-step instructions. One of the biggest sources of buy-in was seeing Healthy U in action. Staff identified a need for a curriculum like Healthy U and liked the experience of the tech-based approach. The second day was spent assisting unit staff with enrolling youths. During this process, staff were able to see how engaged youths were in Healthy U, further enhancing staff buy-in. Additional trainings (on site or via phone calls) occurred at the beginning of each wave.

Conclusions
Although complex field trials in juvenile correctional facilities are not easy to implement, the partnership and strategies we undertook facilitated a successful implementation of a randomized controlled trial involving more than 300 OYA youths. Good communication helped secure the support of nearly all staff. During the three-month breaks in study waves, staff members and youths equally expressed their excitement to see Healthy U return to their facility. This was because Healthy U engaged youths. The young men who participated were largely focused, asked good questions, and were genuinely stunned about some of their misconceptions regarding sexual health. In conclusion, through open and frequent communication that built trust among all project partners, youth engagement, and flexible implementation, we successfully implemented a multisite cluster-randomized control trial within a juvenile justice setting.

References

1 Disclaimer: The views expressed in written training materials, publications, or presentations by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. government.
2 https://www.healthyucampus.org/