REOPENING & OPERATING SAFELY: A Testing Program Model for Future Public Health Emergencies

The COVID-19 pandemic had an unprecedented impact on the health and lives of millions of Americans. The Operation Expanded Testing (OpET) program helped schools and other sites in some of the hardest hit areas of the country reopen and operate safely. This brief outlines OpET lessons learned around planning, partnerships, contracting, and implementation.

In January 2020 the United States declared a public health emergency as COVID-19 began its rapid spread across the country. By March 2020, thousands of schools across the nation closed and transitioned to virtual learning options. Nursing homes shuttered their doors to visitors, and social distancing measures left many Americans feeling socially isolated while the government tried to stem the spread of the virus. Responding to this public health emergency required strategic thinking, agility, and innovation, especially as access to COVID-19 testing was very limited in many areas of the country. Variation in access worsened existing health disparities and deepened the pandemic's impact.

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"This has been an immeasurably helpful program. This has been such a great way that we've been able to keep our kids safe."

–School Site Staff

How did OpET aim to help?

In May 2021, the Department of Health and Human Services (HHS) in collaboration with the Department of Defense (DoD) launched OpET with the aim of bringing no-cost COVID-19 testing to areas that were underserved by existing testing services. Specifically, the goal was to close the gap in testing services to facilitate a safe reopening of schools and safe return to in-person learning in these areas. This model centered on regional hubs operated by private-sector vendors who were responsible for performing tests and contracting with labs and testing sites.

Under the guidance of Centers for Disease Control and Prevention (CDC), the program later broadened its scope to enroll congregate settings such as early care and education (ECE) programs, historically black colleges and universities (HBCUs), long-term care facilities, and prisons, as these settings were experiencing high rates of transmission. The MITRE Corporation, an operator of a Health Federally Funded Research and Development Center, conducted a formative evaluation of the OpET Program. Key lessons and findings from this evaluation are below.

Why was OpET Unique?

Partnership: A public-private partnership that leveraged the program management and scientific expertise of HHS, the contracting power of DoD, and the reach and agility of three private-sector companies

Funding model: A set of prototype models implemented under DoD's Other Transaction Authority (OTA)

Testing Model: Utilized Nucleic Acid Amplification Tests (NAAT) laboratory-based testing rather than antigen tests at sites

Local decision-making: Individual sites could decide to enroll based on their testing priorities and preferences

OpET by the Numbers

Timeline: Operated from May 2021- December 2022

Scale: A large national program operated across four regional hubs

Reach: Conducted testing at a total of 6,300 sites in 48 states, the District of Columbia and 2 territories

Testing: Administered 8.6 million tests nationwide to a total of 2.2 million individuals

Equity: More than half of all sites (3,451, or 55%) were in areas of high or medium-high social vulnerability

Success Factors

Common elements across hubs: Strategic communication, comprehensive guidance on the administration of tests, and a reliable feedback loop to provide results all contributed to program success.

Flexibility is key: Tailoring the model to sites' needs and available resources improved how well the standard progam offering worked.

Context matters: Recruitment and enrollment of sites was more successful in areas where adherence to public health guidance for masking and testing was higher.

"We recognized that we needed to open back up again but we also recognized we needed to do it as safely as possible and also offer opportunities for people to be in person if it was safe for them, but to remain home and still be engaged if that was the safest choice for them."

—School Site Staff

What did OpET achieve?

The program administered 8.6 million tests over the course of its implementation, reaching more than 2.2 million individuals at schools and other underserved sites across the country. Because OpET allowed sites to establish a protocol for regular testing, most individuals were tested multiple times over the course of their site's participation in the program. Staff at one school described OpET as a "safety blanket for parents of school-aged children," underscoring that OpET allowed operations to continue safely in congregate settings and provided a much-needed sense of certainty and normalcy during the height of the pandemic. Site staff also expressed the desire for testing to continue because the OpET Program became a trusted and valued resource within the schools and broader communities of enrolled sites. Other site staff described how OpET positively affected their community and allowed for the safe return to pre-pandemic activities like in-person learning and family visits, as illustrated by the quote on the right.

What lessons does OpET offer?

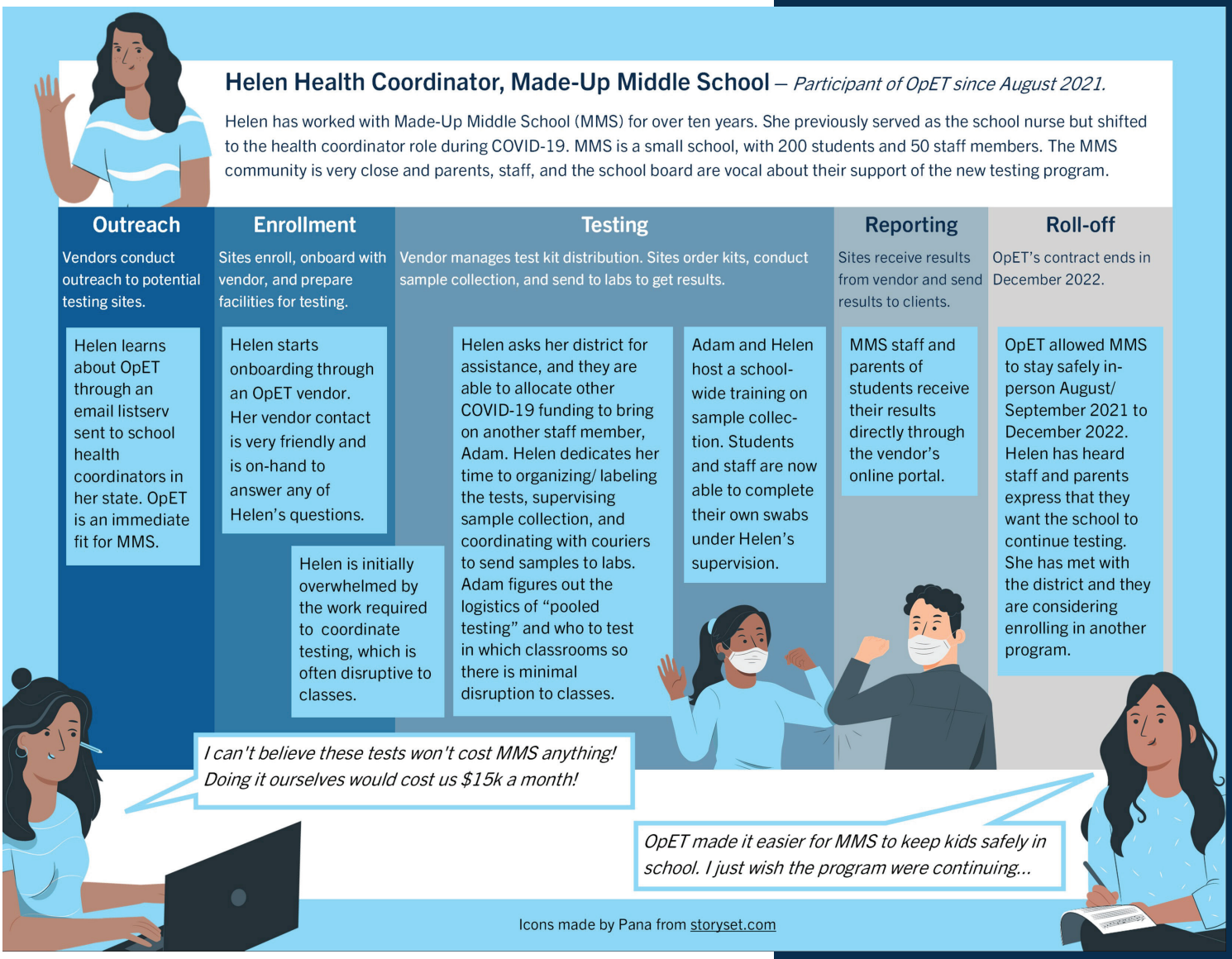
The journey maps below illustrate the elements that contributed to success and core challenges among participating OpET sites. These represent a fictional site's journey but reflect real data from the evaluation and represent the experiences of multiple sites across OpET hubs. The first map illustrates lessons learned from OpET about key facilitators of a successful testing program across the phases of implementation—from outreach and enrollment to conducting testing and reporting results through program end/roll-off.

By contrast, the second journey map below shows core challenges that some sites faced, which made continued enrollment and testing difficult and put the sustainability of the testing program at risk.

These maps highlight the importance of flexibility in implementation to allow each site to tailor the model to their specific needs rather than assuming a one-size-fits-all model will work equally well across all types and locations of sites. Below are key elements that future emergency response programs may include and consider when rapidly rolling out and scaling up infectious disease testing for schools and other congregate settings.

"I just had a teacher say yesterday she has a new grandbaby in her life, and she looked at me and said 'I am so thankful that we are still doing this. This makes me feel a little bit better about seeing my grandbaby,' who obviously is not eligible to have a vaccine yet. She said, 'You know, I'm obviously wearing a mask when I'm around her, but it just gives me a little bit of peace of mind knowing that that I can PCR test and also at home rapid test and know in those six hours, or whatever it is, I am not bringing COVID to my grandbaby.'"

-School Staff



Why are these lessons important?

Evaluation of the OpET program concluded that it was an effective model for quickly implementing robust testing capabilities to help prevent the spread of COVID-19. However, the program enrolled more sites and administered more tests in jurisdictions where adoption of public health guidance was higher. Implementing testing at sites was easier when the sites themselves had adequate staffing support and access to user-friendly program resources (e.g., the onboarding platform and having an accessible point of contact with their regional hub vendor). The quality and completeness of the demographic data collected at sites varied, making it difficult to confirm which populations the program reached. Some sites that required additional staff or materials to support the testing process were able to find supplemental funding to hire additional staff or to purchase other necessary supplies such as masks, gloves, and sanitizing products.

"Nothing could actually match that, to have peace of mind going home to your loved ones. And ultimately that's our main objective to make sure that our staff can go home safely to their loved ones and not spreading it, and vice versa here. Before they come back from international travel or any travel, we encourage them to test as well so they cannot spread it to our custodies [people who are detained or incarcerated] and to our coworkers, to our brothers and sisters here."

-Correctional Facility Site Staff

Sarah School Nurse, Fictional Fine Arts – *Participant of OpET since January 2022.*

Sarah has been the school nurse for Fictional Fine Arts (FFA) for six months. She was hired on during the pandemic and is feeling burnt out. FFA is a large K-8 school with 800 students and 50 fulltime staff. FFA is in a community with high levels of vaccine hesitancy and misinformation.

Outreach

Vendors conduct outreach to potential testing sites.

Sarah's superintendent announces that all schools would be enrolling in OpET to keep kids in school. Sarah is responsible for enrolling FFA as a testing site.

Enrollment

Sites enroll, onboard with vendor, and prepare facilities for testing.

Sarah's schedule prevented her from attending any live onboarding sessions. She watches asynchronous webinars provided by the vendor, but the information was not always relevant to FFA. She frequently emails back and forth with the vendor to get her questions answered.

Testing

Vendor manages test kit distribution. Sites order kits, conduct sample collection, and send to labs to get results.

Sarah has to gather parental consents before testing begins. Many of the parents are frustrated that the testing program has been implemented. One parent tells her, "This is the government's way of collecting data on our kids." To avoid this conflict with parents, Sarah stops recording demographic details with each sample.

Sarah has a difficult time testing younger kids in her K-8 school. She comes up with unique ways to engage the kids so they stay still for their "nose tickle", but it is time consuming. She is thankful that the older kids and the staff can swab their own noses.

Reporting

Sites receive results from vendor and send results to clients.

Sarah is responsible for reporting results to staff and parents of students as well as contact tracing and letting people know if they've potentially been exposed. She is overwhelmed and opts to only tell those who test positive. She then has to field calls from parents and staff asking about the status of test results.

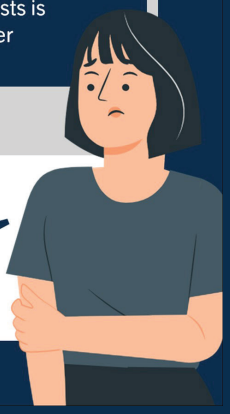
Roll-off

OpET's contract ends in December 2022.

When OpET ends, FFA opts to not enroll in another COVID-19 testing program because it is so expensive. However, the district is still requiring weekly testing for staff and asks that they submit at-home rapid tests. Sarah is disheartened – buying her own at-home tests is out of her budget.

I don't have the time to do testing and my job—this is exhausting!

I can't go through another year like this. It's too much for one person to handle.



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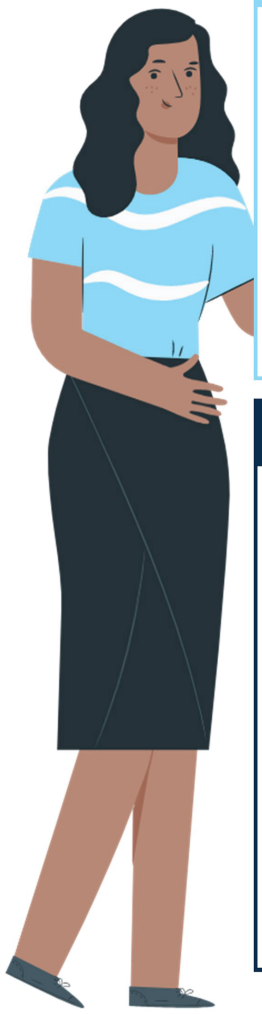
OpET contributed to schools, ECE programs, and other congregate settings in communities with unmet testing needs being able to restart and sustain operations safely. The lessons learned from evaluation of this program will help public health agencies and staff be better prepared to expand testing to underserved areas in future public health emergencies.

Lessons Learned



TO CONTINUE IN FUTURE PROGRAMS:

- Offer no-cost and accessible testing
- Engage knowledgeable site staff with an understanding of and commitment to public health
- Leverage trusted messengers (e.g., trade/member organizations, public health professionals) to reach sites
- Coordinate funding and resources to meet site needs (e.g., allocating funds for additional staffing)
- Provide user-friendly interface for participants, parents, and/or site staff to view test results

TO CONSIDER FOR FUTURE PROGRAMS:

- Develop training protocols for sites based on:
  - ◊ Unique populations (e.g., toddlers who can't swab themselves)
  - ◊ Site size (e.g., pooled testing vs. individual testing)
  - ◊ Health literacy (e.g., confronting misinformation)
- Disseminate best practices for staff retention and strategies to prevent burnout at enrolled sites
- Use longer periods of performance (e.g., 6 or 12 months) that align with site schedules and needs
- Plan for site sustainability or "roll-off" to ensure continuity of testing
- Establish minimum standards for collection of key demographic data with each test administered (i.e., gender, age, race, ethnicity, etc.)

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BRIEF WAS WRITTEN BY:
JENNIFER MCCLEARY-SILLS (PRINCIPAL INVESTIGATOR), ASHLEY MORSELL, TORI MUDD AND MEGAN MCFARLANE (CO-INVESTIGATOR) OF THE MITRE CORPORATION.

THE CONTENT IN THIS BRIEF REFLECTS WORK BY THE FULL MITRE OPET EVALUATION TEAM:
DAVID DENTON (CO-INVESTIGATOR), ANTONIA ASHER, STACYE DAISE, MELODY FUNG, SIMONE GREENBERG, DIANE HANF, SANA NAG, ETTA WAUGH, ERIC WHITEBAY, AND BETH YOST.

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