The 2022 mpox outbreak highlighted a need for better diagnostic options for future outbreaks and epidemics. This is not just a technical challenge. Designing and implementing an effective and equitable strategy for mpox diagnostics requires technical expertise, low-barrier production pathways from lab to access points, community participation in design and use of the product, education of populations, trust in science, collaborative data collection, review, and application, and more.

On July 18, 2023, the NYC Pandemic Response Institute and amfAR, the Foundation for AIDS Research, convened more than sixty multisectoral stakeholders for the National Conference to Advance Equity in Mpox Diagnostics. Civil Society, Government, Academic, and Business leaders with diagnostic expertise, and people with lived experience with mpox engaged in discussion to identify and rank recommendations for strengthening diagnostics at local and national levels with a commitment to enhancing equitable access to these critical tools. (For more info and list of attending organizations, see Appendices C/D)

This summary is provided to support timely policy action. A detailed report based on findings from the conference discussions will be shared with all key stakeholders for feedback and to inform strategies and actions to improve diagnostics development going forward. Targeted outreach will also be conducted with key stakeholders that did not have the opportunity to participate in the discussion to obtain their perspectives on conference findings and refine priority actions as appropriate.

Overall Priority Actions

A total of 24 proposed actions were identified based on rapid analysis of each discussion round (see Appendix A). Participants ranked proposed actions by casting votes for the recommendations they felt were high priority. Each participant was able to cast a total of 6 votes. Collectively, 229 votes were cast: 34% representing government, 29% representing civil society, 19% representing academia, and 18% representing business. Figure 1 shows the count of votes by sector for the top five priority actions, based on attendees’ self-identified sector during conference registration.

The following priority actions were identified based on the ranking exercise at the end of the conference.

A1. **Focus on multiplex testing for mpox with multiple assays and testing sites** (e.g. self/home test, clinic-based test, etc.) ensuring equitable access and acceptability. (30 votes)

A2. **Conduct a multisector after-action assessment** (i.e., with civil society, business, academia, government) of the mpox response, including diagnostics, to identify successes and gaps, promote accountability, and improve equity moving forward. (21 votes)

A3. **Center community at all phases of diagnostics** through strategies including voice of customer models, community-led monitoring and accountability mechanisms, strengthening infrastructure for leveraging trusted messengers and informal social networks, and provision of resources to impacted communities and those already working within them. (19 votes)

A4. **Move towards direct provision of community funding, and non-categorical funding streams or funding streams that facilitate integration of services** specific to local communities’ needs to promote greater involvement of communities within response, including diagnostics. (18 votes)

A5. **Enable local health departments to implement a syndemic approach to responses** through flexible braided funding streams (e.g., for mental health, sexually transmitted infections, etc.) that break down silos between public health focus areas. (17 votes)
When tallying votes by sector, the multiplex testing recommendation is ranked top 2 by community, business, government, and academia. It is the only priority action to make the top 5 for every sector. With regard to this recommendation, participants noted current impediments to achieving it due to reimbursement constraints and complex/unclear regulatory approval requirements.

Process Recommendations

The National Conference to Advance Equity in Mpxo Diagnostics brought together multisector stakeholders for meaningful action-oriented discussion, demonstrating the successful application of this approach for future convenings. Importantly, it also fostered connections and promised ongoing conversations among attendees across sectors moving forward. Based on participant feedback and thematic analysis of discussion, the following are process recommendations:

P1. The federal government should ask a neutral organization to convene an ongoing public health emergency diagnostics advisory group that includes multisectoral representatives. Continued discussions will be essential for making progress towards the identified priority actions and ensuring that future work builds on the discussions. Mechanisms for measuring and tracking progress towards priorities identified in this document will also be important.

P2. The federal government should ask the group named in P1 to convene a similar conference or conferences at the outset of future public health emergencies. Facilitating the ability to collaboratively identify emerging needs, challenges, and lessons learned in real time can enable the recalibration of response priorities as needed and enable greater equity in the response.

P3. All levels of government should embrace a multisectoral approach with full community engagement in response to future public health emergencies as demonstrated during the mpxo response. Through the multisector after-action assessment (#2, above), look for specific ways to implement this approach in other emergency contexts.

Impact-Timeline Matrix

Figure 2 depicts PRI’s estimated level of impact and relative timeframe required to implement each of the eight priority recommendations above (A1-5, P1-3). All are varying degrees of high impact based on the multisectoral perspectives we convened. Recommendations that participants felt deserved less focus are ranked in Appendix A.

Conclusion

The recommendations resulting from the convening broadly fall into three categories: 1) community and multisector engagement (A2 & A3, P1, P2, P3), 2) multiplex testing (A1), and 3) legislative/operational changes across public health (A4 & A5).

As stakeholders and interested parties consider next steps, integrating community voices and multisector perspectives (A2 & A3, P1, P2, P3) is both actionable and impactful to response processes in the short term.

Achieving valid and reliable multiplex testing (A1) as well as creating more operational flexibility for community groups and public health agencies (A4, A5) will be more challenging and time-consuming. However, these too can lead to very high impact results based on systemic change in the long term.

Implementation of the full suite of recommendations will significantly improve equity within diagnostic development and distribution for mpxo and future outbreaks and epidemics.