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Statement: Multisectoral actions to build trust at the local and community level to promote vaccine acceptance

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ABSTRACT

On 12 September 2022, attendees of the 16th Vaccine Congress in Riva del Garda, Italy were invited to attend a roundtable session entitled *multi-sectoral actions to build trust at the local and community level to promote vaccine acceptance* to participate in a discussion aimed at defining strategies and recommendations to support efforts that build community vaccine confidence. Presenters from the Vaccine Confidence Project and the New York Vaccine Literacy Campaign shared research and data point on the current state of vaccine confidence worldwide as well as global examples of “success stories” to prompt discussion. The group’s key recommendations include prioritizing multi-sectoral responses and trust-building through policy and legislation, engaging with trusted local stakeholders, improving convenience, combating misinformation and empowering healthcare professionals to improve vaccine confidence. This report summarizes the considerations, recommendations, and suggested strategies discussed during the session, as prepared by the presenters.

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1. Background

Since 2010 The Vaccine Confidence Project™(VCP) has been collecting data on global vaccine confidence¹ and, in 2015, the VCP launched a Vaccine Confidence Index to establish a more nationally representative, globally comparable metric. Between 2020 and 2022, data collected by the VCP in the EU and Africa show a significant decrease in the number of people viewing vaccines as ‘safe,’ ‘effective’ and ‘important for children to have’². Although this varied by country, this drop in vaccine confidence could have a significant impact on vaccine acceptance rates in conjunction with other socio-

economic, logistical, and psychosocial barriers. Indeed, UNICEF estimates 25 million children missed out on one or more doses of the combined diphtheria, tetanus pertussis vaccine³ in 2021 alone [1]. While the trends pre-date the pandemic, COVID-19 control measures and the pandemic demands on health systems exacerbated the decline in uptake of routine childhood vaccination. The effect of the pandemic on vaccine uptake has been unequal, with Low- and Middle-Income countries and historically marginalized communities being disproportionately affected. Beyond the structural differences in health systems across countries, vaccine confidence was also a factor in contributing to the unequal vaccine uptake [2]. For example, the history of medical and vaccine research abuse during the colonial era in African countries, has led to a lack of trust in current vaccines [3]. There is no single solution to reverse these declining trends in vaccine confidence. Historically, a lot of attention has been given to individual-level actions, specifically around knowledge and awareness, but evidence shows a need to build confidence through community interventions [4]. Additionally, collaboration across different sectors allows for leveraging resources, expertise and reach to produce better health outcomes [5]. A multi-sectoral approach that includes community engagement, equitable access to vaccines, and multi-sectoral collaboration is necessary to increase vaccine

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¹ Vaccine confidence can be defined as the trust and willingness of individuals and communities to accept vaccines and engage in vaccination programs. It involves the belief in the safety and effectiveness of vaccines and trust in the healthcare system and government agencies that promote and deliver vaccines. (CDC, 2022), (MacDonald et al.(2015) Vaccine hesitancy: Definition, scope and determinants. Vaccine 33;4161-4164.).

² Data was collected using the Vaccine Confidence Index™, a standardized set of survey questions that the Vaccine Confidence Project developed in 2015 to measure confidence in the safety, importance, efficacy and religious compatibility of vaccines globally, over time, at national and sub-national level. These questions were fielded in surveys in: 27 European Union member states between March-April 2020 and March-April 2022. 8 countries in sub-Saharan Africa between June 2020 and January 2022.

³ Diphtheria, pertussis and tetanus.

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uptake and confidence, particularly among historically marginalized communities.

It is for these reasons that The VCP and the New York Vaccine Literacy Campaign (VLC) at the City University of New York Graduate School of Public Health & Health Policy convened a round table discussion during the 16th Vaccine Congress on 12th September 2022, to discuss the role different sectors can play in building and strengthening trust at local and community levels to promote vaccine acceptance.

By presenting examples of best practice across several different vaccination campaigns, the discussion largely centered on lessons learned from the COVID-19 vaccine rollout. These examples were loosely segmented to demonstrate actions initiated across sectors (i.e., government, non-governmental organizations (NGOs), private, civil society organizations (CSOs), multilateral organizations. Over the course of the discussion, it became clear that the NGOs, CSOs, multilateral organizations and the government often overlap substantially in many countries. Therefore, the roles and coordination of each sector play out differently regionally across the globe, but the integration called for here is still applicable. These lessons learned during the discussion can be applied to future COVID-19 vaccine campaigns as well as national routine immunization programs.

2. Presentation and discussion summary

The pandemic demonstrated several situations where public trust influences public health outcomes. For instance:

1. Where public trust in government and health institutions was low or nonexistent predating the pandemic, it impacted public uptake of authorized or recommended immunizations and other mitigation measures resulting in low, or completely failed adherence.
2. Even where public trust in government and health institutions was high, pandemic context and response, including communication, resource navigation, changing information, etc. – contributed to a weakening of pre-existing trust and resulted in inconsistent adherence to mitigation measures.
3. Globally, there were many cases where the promotion of misinformation to advance personal or group goals led to confusing and polarized information environments which decreased public trust in both government, immunizations, and other mitigation measures.

Looking forward, to address decreasing confidence in vaccination globally, public health and public serving systems need to better integrate local-level and community perspectives to (re)build and sustain public trust.

Hyper-local community leadership is key – local religious, civic, and political leaders are the true ‘influencers’ who can help build confidence in interventions such as the COVID-19 vaccine. People are thoughtful about the decisions they make and when communities were given conflicting advice from health authorities (for example, the approval and then rejection of the AstraZeneca vaccine in multiple settings), they turned to these local trusted voices for a discerning opinion. Local leaders should be brought on board early and be front and center of all vaccine communications, rather than as a last resort when top-down approaches are not working or go wrong. [Table 1](#) shares two examples of interventions where local leaders were effectively engaged in community dialogues about vaccination.

Ensuring that messages and advice are coordinated and repeated consistently across multiple sectors is vital. We heard multiple stories from the pandemic that illustrate how multi-

sectoral, community-led and capacity-building models of centering community perspectives, priorities, and logistics facilitated high vaccination rates [11]. We also heard examples of how the failure of global, national and local actors to speak with one voice undermined public cooperation with protective public health measures⁴. Three case studies are offered in [Table 2](#) to illustrate how multi-sectoral, community-led pandemic responses facilitated high COVID-19 vaccination rates.

Similarly, when facts change, communication campaigns need a transition strategy that incorporates and makes clear the rationale for changing the message, to avoid accusations of contradiction and inconsistency, and ensure public trust and perceptions of transparency are not compromised. Participants cited the increase in public distrust after government U-turns on COVID-19 vaccine mandate policies as an example of the importance of this. These types of panicked reversals erode confidence, while helping people understand the rationale underlying policy decisions through information, education and engagement helps to build it.

3. Multi-sectoral integration

If there is one central tenant to integrating community perspectives in multi-sectoral actions, it is consistent inclusion. This requires first asking “who isn’t at the table?” when public health policy and procedure decisions are being made. While this question will have many different answers globally, there are routinely marginalized groups, including, but not limited to: (1) ethnic minorities, including indigenous groups; (2) linguistic minorities; (3) lower income populations; (4) lower education populations; (5) the un/underemployed; (6) the unhoused; (7) Internally Displaced Persons (IDPs) or people living in conflict zones; (8) migrants, refugees and immigrants; (9) the elderly and/or disabled; and (10) incarcerated individuals. Ensuring clear pathways of collaboration and communication with representatives and stakeholders in these groups begins the important multi-sectoral integration required to build trustworthy institutions⁵.

Too often the community is consulted only to check a box – their input is relegated to the beginning phases of any work, or after implementation for evaluation purposes. Collecting community experiences is important, but there must be leadership and guidance from the community beyond the needs assessment, data gathering, and research phases. To consider true integration of multi-sectoral actions to build public trust, community stakeholders must be part of the discussion and decision-making at all points. Models of this include formal partnerships between multiple organizations (see the Lyft, Anthem, JP Morgan Chase, and United Way partnership highlighted in [Table 1](#)) and entities⁶, compensated consultancies (such as the Shots at the Shop model highlights in [Table 1](#)), and community liaisons embedded in permanent staffing structures, such as community health workers [12].

⁴ For example, during the COVID-19 pandemic, the WHO advised that the virus was not transmitted asymptotically, when the distinction between asymptotically and pre-symptomatically was not one the general public understood. This undermined the rationale for masking considerably.

⁵ As highlighted by Prof Heidi. J Larson – founder and director of the VCP – and Prof. Scott Ratzan of CUNY SPH – when they launched CONVINCe – an effort to advance dialogue for action to address vaccination with global and community multi-sectoral engagement – at the UN High-Level Political Forum in 2020.

⁶ The Association of State and Territorial Health Officials partnered with community action agencies (CAAs) in five locations across the United States. CAAs are embedded in local direct social and health service networks and are trusted messengers in the communities they serve. These partnerships expanded the capacity of CAAs to engage in COVID-19 vaccine outreach and drive acceptance. Geetika Nadkarni. Partnering with Community Action Agencies Can Improve Trust in Vaccines. ASTHO; 2022, October 6. <<https://www.astho.org/communications/blog/partnering-with-community-action-agencies-can-improve-trust-in-vaccines/>>.

Table 1

Engaging local leaders.

Shots at the Shop - making interventions culturally relevant

Building on the rich and powerful history of barbers and beauticians as trusted entrepreneurs providing essential services to the African American community, the 'Shot at the shop' campaign engaged initially 1,000 black owned barbershops and hair salons to act as health advocates during the COVID-19 pandemic. Medical and public health research has proven that barbershops and beauty salons can be mobilized as venues for the delivery of health promotion and disease prevention services designed to eliminate health disparities and advance health equity. The campaign sought to leverage this community trust and reach by training participants to assist their clients in making informed COVID-related decisions, dispelling misinformation and hosting COVID-19 vaccination clinics in their shops. It was made possible by a partnership between the University of Maryland's Maryland Center for Health Equity, the Black Coalition Against COVID, the National Association of County and City Health Officials (NACCHO), and the beauty and personal care brand SheaMoisture, which provided barber shop owners with a \$1,000 grant for participating in the initiative [6].

Mosaica/WHO Regional Office for Europe - working with religious leaders to promote inclusive communication

Religious leaders and faith-based organizations can play a crucial role in engaging and communicating with the communities they serve. During the COVID-19 pandemic, the WHO sought to strengthen collaboration between its regional offices, national governments, and religious leaders. As part of this effort, the WHO Regional Office for Europe provided financial and technical support to Mosaica – a CSO dedicated to conflict resolution, dialogue and consensus building via engagement and trust-building with local Muslim, Jewish and Christian religious leaders. It is this network of contacts and relationships of trust that laid the basis for its work during the pandemic.

The support provided by the WHO allowed Mosaica to dedicate time and resources to developing proactive COVID-19 prevention campaigns with religious leaders ahead of the three biggest holy festivals of the year: Easter (with Christian leaders), Passover (with Jewish leaders) and Ramadan (with Muslim leaders). Mosaica also produced a short film featuring three religious leaders – one Jewish, one Muslim and one Christian – who explain how they have engaged with their communities and with each other to protect lives during the pandemic. Mosaica and the religious leaders they work with drafted a 'Declaration of Religious Leaders from the Holy Land in response to COVID-19.' This was endorsed at an inter-religious zoom meeting held together with representatives of the Regional Office [7].

Table 2

Multi-sectoral case studies.

El Paso - a community-based fight to tackle vaccine hesitancy

In El Paso, Texas, the public health department contacted individual health professionals and practices, local schools and colleges and community organizations with advice on vaccine messaging. These efforts ensured that the same message was being pushed from the top down to the bottom up and helped El Paso achieve a 75% vaccination rate by 09/2021; becoming the first city in Texas to achieve such a milestone [8].

Private and Philanthropic Partnership to Increase Convenience

Making vaccination as convenient as possible is an important enabler to support vaccine adoption. Especially given that access to reliable transportation is a barrier to receiving health care for millions, particularly senior citizens and people in low-income communities. During the Covid-19 pandemic, JP Morgan Chase & Co., Lyft, Anthem and United Way lead the charge on improving equitable vaccine access by providing 60 million free rides to vaccination locations [9].

Ugandan Ministry of Health - improving eligibility, access and community engagement

The Ugandan Ministry of Health together with the USAID Regional Health Integration to Enhance Services in East Central Uganda (RHITES-EC) worked to increase vaccine uptake in 12 districts in Uganda.

At the start of the vaccine rollout in April, all but one district had less than a 20% uptake of their vaccine allocations among eligible persons. The vaccine expiration date of early July 2021 accelerated the need to increase uptake quickly to avert vaccine wastage.

RHITES-EC acted immediately to implement a multi-pronged approach to increase vaccine uptake. They worked with the MOH to expand eligibility to those over 50 years of age, other essential social workers, and individuals with co-morbidities. Access to vaccination was also expanded: in collaboration with the MOH, the RHITES-EC team successfully scaled up vaccine sites from only five sites per district at major health facilities to include many lower-level health facilities.

This was combined with integrated outreach activities in hard-to-reach areas. Dialogues with local health workers were used to develop risk communication materials and local community leaders received extensive training on how to deploy them, as well as wider risk communication best practice.

Sub-county chiefs were enlisted to mobilize rural communities, and local political leaders and district health officers (DHOs) were also engaged to help foster local government accountability for poor vaccine uptake performance. DHOs mobilized teachers and other eligible groups, analyzed data, and proactively promoted vaccine uptake by poor performing districts. They also engaged village health teams to interface directly with communities to bring residents in for their shots [10].

Community leaders reported a positive change in attitudes towards vaccination following the extensive social behavior change campaign, and after only one month of interventions, vaccine uptake in all 12 districts increased dramatically. From 32% to 94% in Bugiri District, from 19% to 93% in Buyende District, and from 17% to 80% in Namayingo District. By June, nine of the 12 districts had used all available doses and all 12 districts achieved full usage before the vaccine expiration date.

COVID-19 vaccination campaign in Bhutan

Bhutan's successful vaccination rollout serves as an example of effective multi-sectoral collaboration. The country was able to vaccinate 95% of its population in two vaccination rounds, thanks to strong national leadership, a well-coordinated national preparedness plan, and effective mass communication and social engagement. In addition, Bhutan sought support from other countries to provide vaccines, due to the shortage of vaccine supply, which further contributed to the success of the vaccination campaign.

To achieve this success, Bhutan started planning its national vaccination campaign soon after the pandemic hit. This led to the development of the Bhutan Vaccine System, a digital platform that was used to select the number of vaccination posts, locations, and automatic generation of vaccine certificates for recipients. Elderly and hard-to-reach populations were targeted through home-based vaccinations. To tackle the geographical challenges in the country, vaccination services were facilitated by the Royal Bhutan Airlines and Bhutan Helicopter Services Limited.

Bhutan's strong coordination with the Central Monk Body of Bhutan and other monastic organizations led by spiritual masters was critical to the success of the campaign. The time and dates of vaccination were organized based on astrological beliefs, and a large group of volunteers was organized to facilitate the vaccination rounds.

Through effective multi-sectoral collaboration that involved national leadership, healthcare providers, volunteers, and religious leaders, Bhutan was able to achieve high vaccination rates and effectively control the spread of COVID-19. This case study demonstrates the importance of community engagement, coordinated planning, and partnership across different sectors to achieve successful vaccination outcomes [11].

Part of understanding successful multi-sectoral engagement and intersection is acknowledging engrained power dynamics. This takes a commitment, especially from those with more power, to yield this influence in the best interests of the community partners. Assessing the funding, resources, and political influence each sec-

tor (including NGOs) has access to is important to avoid any skew among the engaged parties. One of the key topics that was highlighted constantly throughout the discussion was the differences across national, regional/provincial, and local levels and the pressing need for vertical collaboration and effective communication.

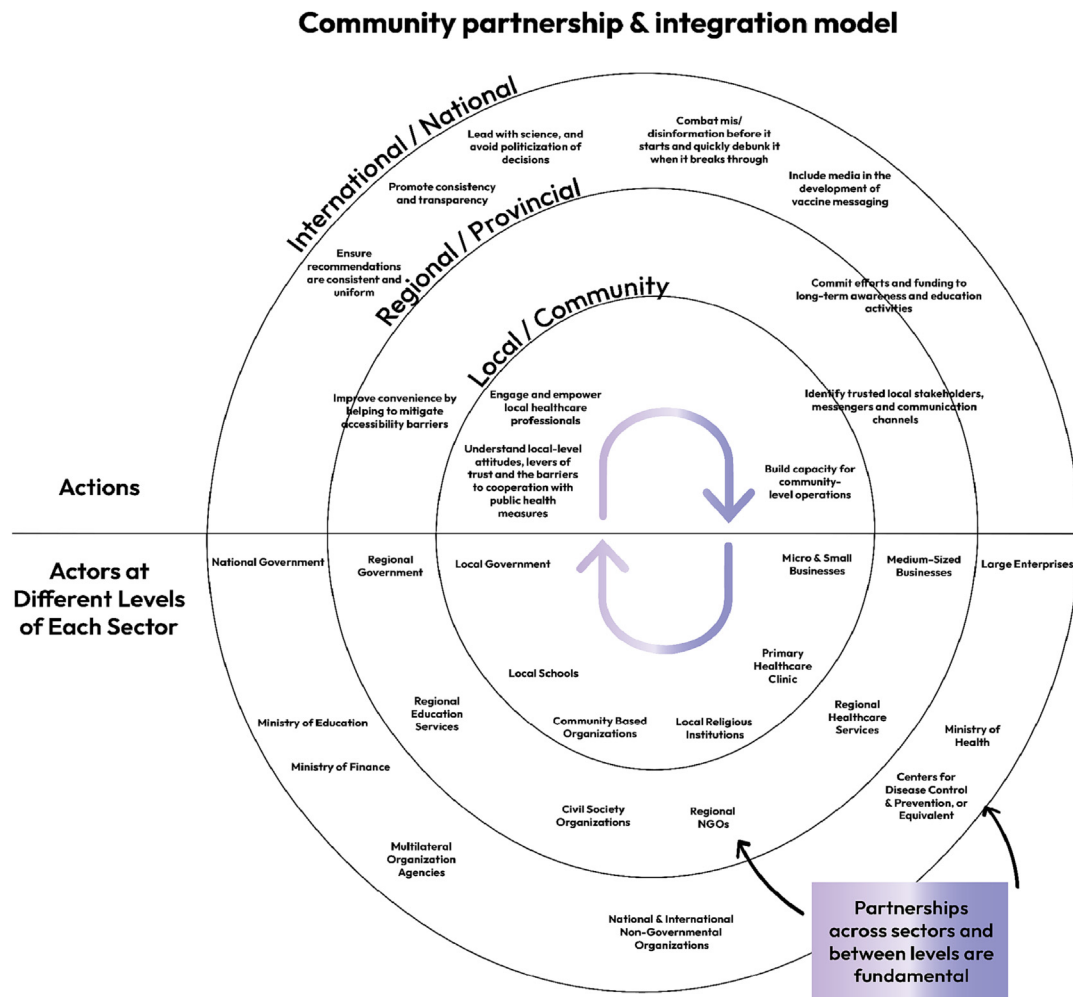


Fig. 1. Community partnership & integration model. This model demonstrates the actions that can be taken across sectors, at different levels of the vaccination program ecosystem. The arrows indicate the continuum of bottom-up and top-down approaches. While some actions sit neatly within a level, others cut across national, regional and local tiers of implementation.

Additionally, the importance of partnerships across sectors - and between actors at different levels of sectors - was highlighted. We have sought to illustrate this in the community, partnership, and integration model (Fig. 1), which builds on the socioecological model, and outlines the key actors in each sector across different levels, and the key actions they can take. We recognize that the division of levels and responsibilities of each sector will vary depending on the setting. For example, in many countries, NGOs, CSOs and multilateral organizations play a key role in immunization, while in other contexts this responsibility falls mainly on the Ministry of Health.

The statement paper calls for the reimagining of trustworthy public health systems to drive routine and novel vaccine acceptance globally through the integration of community and local-level stakeholders across sectors and institutions in the planning, development, implementation and funding of vaccination communication and delivery campaigns. These recommendations outline actions to build a supportive and consistent infrastructure in advance of major health emergencies. The positive impact of trustworthy health systems will be seen in more successful vaccination campaigns and across all public health interventions.

We call on actors across the government, public and private sectors to:

1. Put multi-sectoral responses and trust building at the top of the social and political agenda by enshrining commitments in policy and legislation. WHO, UNICEF and other key agencies and partners could also commit to undertaking regional and country-level policy advocacy together to position multi-sectoral community-based approaches up on the agenda. This could help ensure that dialogue and political will within key agencies are as consistent and strong at sub-national and local level as they are at global level.
2. Identify trusted local stakeholders, messengers, and communication channels; and include and integrate them consistently across vaccine uptake campaign development and delivery.
3. Promote consistency and transparency across levels of government, ministries, and within sectors by ensuring alignment in policy and procedure implementation.
4. Conduct listening efforts to engage with and understand local-level attitudes, levers of trust and the barriers to cooperation with public health measures; and conduct these efforts periodically for routine evaluation and adjustments, and not only in response to public health emergencies.
5. Improve convenience by helping to mitigate accessibility barriers such as financial impediments and lost wages due to time away from work; language and translation

availability; logistics and locations. This includes bringing the site of vaccination to places in which local communities feel safe and familiar to improve convenience, and to embed routine vaccination in community life.

6. Build capacity for community-level operations through sustainable funding streams and training to help local-level vaccine influencers – such as healthcare providers, teachers, community and religious leaders and employers – to promote vaccine literacy and address concerns, rumors, and misconceptions.
7. Combat mis/disinformation before it starts and quickly debunk mis/disinformation when it breaks through with coordinated, cooperative, and proactive initiatives. Regulatory policy from the government in combination with preventative action from the private sector can play a huge role in mitigating the advent and proliferation of mis/disinformation in the traditional media, on social media, and other online platforms.
8. Ensure recommendations and messaging are consistent and uniform where possible and provide scientifically backed explanations where they are not. Coordinate and obtain scientific consensus of national scientific vaccine-related advisory bodies to avoid scientific debates in the public space, undermining public trust.
9. Lead by science, while taking into consideration the practical realities of local populations and aiming to avoid politicization of decisions. In some instances it might be recommended to avoid politically affiliated messengers altogether.
10. Include media in the development of vaccine messaging and the coordination of communications delivery to ensure that reporting helps, rather than hinders trust-building efforts. Ensure the media has access to a trusted and skilled spokesperson to avoid driving news sources to polarizing opinion leaders.
11. Engage and empower local healthcare professionals, including community health workers, as key players in effective vaccine communication. Review tertiary health science curricula to strengthen public health and communication education of healthcare professionals, as they are the public's most trusted source of vaccination information and advice.
12. Significant financial investments can build capacity, address challenges, and enhance vaccine confidence. The COVAX initiative shows innovative financing mechanisms for equitable vaccine distribution [13]. Strengthening investment in the risk communication and community engagement pillar (RCCE) of the International Health Regulations can address health threats. Member states can extend RCCE activities beyond emergency response phases and include specific financial mobilization obligations. Investing in long-term awareness and education activities at the community-level can sustain vaccine demand and build faith in the health system's competence to provide adequate vaccine supply and access. This includes funding projects that promote the benefits of vaccines, dispel myths and misinformation, and address the concerns of vaccine-hesitant individuals through partnerships with community leaders, health workers, and social media influencers. These combined approaches can influence public vaccine confidence [14].

Data Statement

No data was collected or reported on for the preparation of this manuscript.

Credit Author Statement

AB, IG, and LR equally contributed to the preparation of the roundtable discussion materials; the preparation of the manuscript and organization of versions and editing. SR reviewed draft materials and provided editing. All authors below (Appendix A) attended the roundtable discussion, contributed orally, reviewed the draft manuscript, provided edits, and then reviewed the final manuscript.

Data availability

No data was used for the research described in the article.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Building vaccine trust roundtable discussion group

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(continued on next page)

Appendix A (continued)

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