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A successful partnership model for COVID-19 vaccination in Aboriginal communities in New South Wales

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In August 2021, a public health emergency was declared in Western New South Wales (NSW) following the spread of the Delta variant of COVID-19. Western NSW is a large geographic area of over 400,000 kilometres and borders three states with many regional and remote communities.^{1,2} Aboriginal and Torres Strait Islander (hereafter respectfully referred to as Aboriginal as is common practice in NSW) people comprise around 12% of the Western and Far West NSW Local Health Districts and are a priority group for COVID-19 vaccination.³⁻⁵ NSW Health sought to suppress virus transmission through public health interventions, while rapidly increasing vaccination coverage to mitigate severe illness and mortality. To complement existing vaccine providers, the Australian Defence Force (ADF) was tasked with providing mass vaccination hubs in larger towns and communities in Western NSW from late August 2021.

On request from NSW Health, the Commonwealth Government provided an Australian Medical Assistance Team (AUSMAT)⁶ – a civilian medical and public health capability, verified by the World Health Organization,⁷ and operationally managed by the National Critical Care and Trauma Response Centre (NCCTRC) in Darwin. During the COVID-19 pandemic, AUSMAT has deployed domestically and internationally. Its role in Western NSW was to assist in the roll-out of COVID-19 vaccines prioritising Aboriginal communities and those not accessing existing services. Specific goals were to provide a positive and acceptable contribution to the regional effort, maintain team safety through strict AUSMAT testing and prevention protocols, and maximise Aboriginal engagement.

In mid-August 2021, the Commonwealth (on request from NSW Health) sought the services

of an Indigenous Specialist Liaison Team (ISLT) from the Australian National University. The ISLT members were embedded in AUSMAT, providing liaison support and assisting with planning, engagement and delivery. The ISLT assisted with providing an Aboriginal-led culturally safe approach by working with local Aboriginal leaders and community organisations to meet community needs, the importance of which has been highlighted for health and wellbeing.⁸ During the deployment, the ISLT and AUSMAT developed a partnership framework that was successful in delivering vaccines in communities. This is the first time that an ISLT has been embedded in AUSMAT domestically, and outcomes of this novel approach were positive.

ISLT methodology

Pre-deployment, ISLT members engaged with response teams, including Aboriginal health organisations, to gain understandings on how best to proceed to augment efforts. During deployment, they facilitated pre-engagement and planning by coordinating communications within and between community-based Aboriginal organisations and AUSMAT, to maximise culturally-safe vaccination opportunities for community members. The team collaborated with local Aboriginal Land Councils, Aboriginal Community Controlled Health Organisations, and Commonwealth and State Government agencies. During community visits, ISLT members, as part of AUSMAT, facilitated links between the Aboriginal health workforce, community members and local organisations at pop-up clinics and door-to-door vaccinations. Effective communication was vital with the team practicing two-way communication and supporting informed decision-making.⁹ Afterwards, post-engagement and planning for future

community vaccine delivery occurred, including maintaining relationships with local contacts. Data analyses and interpretation informed community planning and reporting on outcomes of the program.

This methodology allowed local leadership and ownership over healthcare delivery which is important for informing the approach, building and maintaining trust, and delivering sustainable outcomes.^{10,11} Limitations of this approach included the ability to recruit and form teams, and embed the teams together, within the limited time available. Challenges included developing a partnership framework that achieved the desired outcomes of increasing vaccine uptake in communities.

Partnership framework

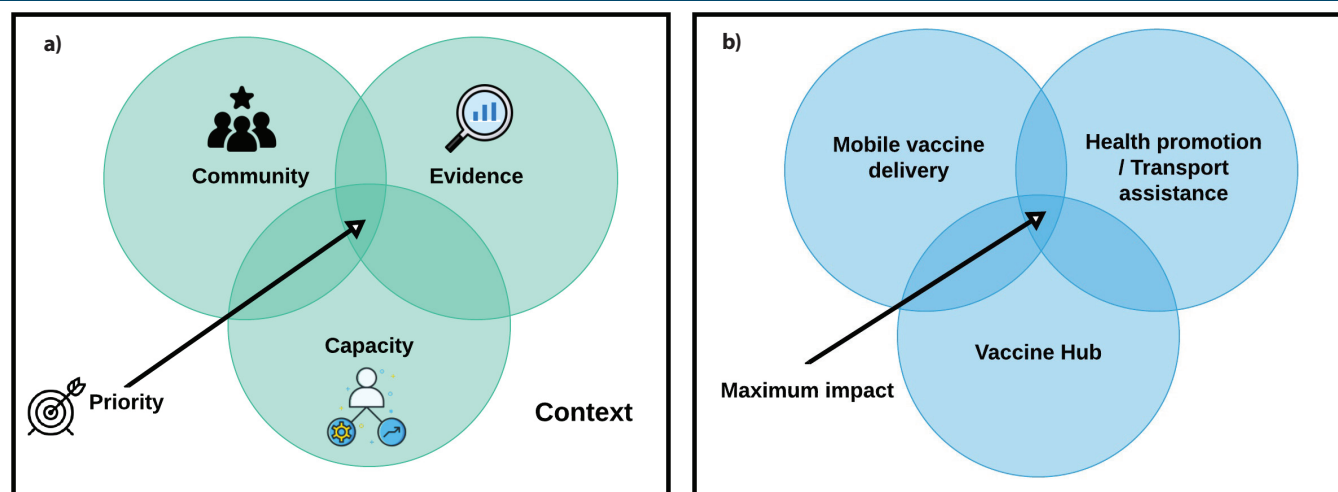
A partnership framework was developed by the ISLT and AUSMAT to enhance access to COVID-19 vaccinations with the active participation of local Aboriginal leaders and partners. Due to the nature of the response, the development of the framework and learnings were iterative and we adapted the partnership framework along the way. As a part of this framework and to maximise vaccine delivery and impact, we developed and implemented the below models to achieve high impact engagement and vaccine uptake in communities. The components of the models were based on community feedback and learnings of successful approaches to increasing vaccine uptake in communities. These models can be adapted to local contexts. We learnt that operating in a dynamic, flexible and responsible way to community needs complemented localised efforts, and this was critical to achieving outcomes and maximising workforce capacity.

In the high-impact **engagement** model (Figure 1a), 'context' includes political, social, economic, historical, relational and environmental factors. 'Evidence' includes needs analyses, data analyses and interpretation for pre- and post-planning (utilising geography, population characteristics, health care access and vaccine coverage information). 'Community' involves understanding local priorities, local leadership and local engagement. 'Capacity' includes an assessment of workforce capacity, resources and expertise, including logistic and technical expertise in high-risk settings.

The authors have stated they have no conflicts of interest.

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Figure 1: a) High impact engagement model and b) High impact vaccine delivery model.



The high-impact **vaccine delivery** model (Figure 1b) included a central vaccine hub delivering high-volume vaccination (existing or pop-up including drive-through or walk-in options), health promotion and transportation (to increase awareness, improve access to the central hub and identify those needing a mobile visit) and mobile vaccine outreach (assisted by Aboriginal local experts identifying priority areas and clients).

The ISLT arrived in week two of AUSMAT's deployment. Overall, 1,927 vaccines were delivered: 855 in week one (some 90% in partnership with the ADF through mass vaccination hubs); and 104 in week two. At this point, a collaborative ISLT and AUSMAT review identified key areas for improving community engagement and the models were adapted. In week three, the delivery model was optimised and the success of the partnership models was clearly visible, with 968 vaccines delivered in four days in Lower Far West NSW across four geographic areas.

These models proved successful in increasing delivery of vaccines and were positively received by local contacts with high engagement in communities. The success of these foundational efforts were demonstrated in high levels of engagement in a follow-up AUSMAT deployment soon after in the Far West, further boosting Aboriginal community vaccination coverage.

Conclusion

The ISLT and AUSMAT partnership was a highly effective framework for optimising COVID-19 vaccination coverage in Aboriginal communities and this partnership approach should be considered for future deployments.

The ISLT capacity embedded in AUSMAT deployments in Australia can aid in local engagement, delivery of services and ensure centrality of Aboriginal leadership. This framework utilised the local workforce for high impact and flexible vaccine delivery to achieve health outcomes and address community priorities. This partnership framework and learnings may be relevant to addressing low vaccination coverage in Aboriginal communities across Australia.

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