

## FROM PANDEMIC TO ENDEMIC

### LESSONS IN INTEGRATING COVID-19 PROGRAMMING TO STRENGTHEN HEALTH SYSTEM RESILIENCE

#### Background

As we enter the third year since the start of the Covid-19 pandemic, what started out as a race against time to buffer health service delivery against disruptions - such as health care worker shortages, surges in sick patients, supply chain disruptions, and restrictions in movement; moved to the introduction of an effective vaccine that reduces risk of morbidity and mortality; now the focus has transitioned to mass vaccination efforts which are seen as a viable route to returning to 'normality'.

For many countries, particularly in the developed world, high vaccine coverage across populations has seen a progressive return to normal with restrictions being lifted. The World Health Organisation released the [Strategy to Achieve Global Covid-19 Vaccination by Mid-2022](#) in October 2021 recommending that by mid-2022 70% of the world's population should be fully vaccinated so as to increase population immunity globally and lower risk from new variants.<sup>1</sup> However coverage has not been equitable across the globe. For example, only 22% of the African population have been partially or fully vaccinated compared with 79% of the US and Canadian population and 69% of the European population. Many African countries are still in single digits percentage coverage.

The surge in infections at the start of 2022 due to the Omicron variant and more recent uptick in cases in some countries due to the BA.4 and BA.5 sub-variants<sup>2</sup> poses a stark reminder of the ongoing threat by the evolution of the SARS-CoV-2 virus and reinforces the critical need to achieve high levels of immunisation coverage in all countries. The shift from pandemic to endemic means that the disease will always be with us but does not necessarily mean it becomes mild or that it can't cause significant mortality, especially among vulnerable populations. Similar endemic diseases such as seasonal influenza has been estimated to kill up to 650,000 people each year.<sup>3</sup>

The last three years have highlighted the pressing need to boost the resilience of health systems, particularly in low- and middle-income countries, to enable them to prepare for future outbreaks. Crown Agents has been at the forefront of the fight against Covid-19 since the beginning, initially working to ensure governments and partners gained access to much needed PPE and testing equipment. We also supported the reorganisation of health service delivery at facility and community levels, so that [essential health services did not shut down](#). We then managed the distribution of the Pfizer vaccine, followed by millions of doses of other vaccines, to over 11 countries in some of the [most remote places on the planet, such as Antarctica](#). We've also supported governments with technical support in the preparation of their National Vaccine Deployment Plans, [have undertaken catch up campaigns to increase coverage](#), acted as monitoring agents on behalf of the COVAX facility and as a [technical vaccine advisory firm](#) in Central East Asia.

This learning brief synthesises key lessons from Crown Agents global experience working across different programmes throughout the pandemic to date.

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## Learnings

### Lesson 1: Human Resource allocations need to reflect additional Covid-19 activities into workstreams

Throughout the emergency phase of Covid-19, existing staff all over the world were re-tasked and additional surge support staff were allocated to programme delivery. This was driven by the prioritisation of Covid-19 activities over other routine activities, to ensure that health systems did not collapse. A global study conducted by The Lancet looking at the impact of Covid-19 on routine immunisation in 123 countries showed that 42% of fixed post immunisation services and 58% of outreach services were disrupted in 2020 by staff illness, confinement and diversion to Covid-19 related activities.<sup>4</sup>

Crown Agents experienced the impact of these diversions first-hand, particularly through the [Health Pooled Fund Phase 3 in South Sudan](#). During the emergency it was all “hands-on-deck,” with staff focused on adapting programme operations to ensure that [essential services remained open](#). Infection prevention and control measures were key, as well as supporting health facilities to modify patient flow. When we started to roll-out the Covid-19 vaccination campaign through our facilities we were dealing with rapidly setting up vaccination sites to ensure donated vaccines didn't expire. It was clear that additional resources would be needed moving forward. Crown Agents was able to secure two additional staff funded through USAID funding and the Gavi COVAX facility to focus solely on Covid-19 vaccine work. This was critical in allowing our routine immunisation staff to focus on catching up missed vaccinations due to Covid-19 lock down.

Community Health Workers also provided vital support during the Covid-19 pandemic with a particular focus on community engagement and supporting community mobilisation around Covid-19 vaccination. With only 14% of CHWs in Africa being salaried<sup>5</sup> however, it means that they must juggle routine work with Covid-19 vaccinations for little to no extra compensation. Relying on volunteers that are already stretched is risky in the long-term for effective delivery.

The integration of Covid-19 work into routine services does not necessarily mean that current levels of staff can just absorb additional responsibilities. Efficiencies are possible as integration happens but critical to success will be intentional resource mapping, ensuring that in this post-pandemic world human resource allocations reflect the new reality. Continued financial support for staff to support the integration of Covid-19 activities will be critical for long term sustainability.

### Lesson 2: Covid-19 has highlighted weaknesses in current health system delivery that need to be addressed

Covid-19 has highlighted the global interconnectedness of different parts of health service delivery, in particular how upstream impacts deeply affect downstream delivery. This was seen no more clearly than in the **supply chain of medical commodities**. Lockdowns in China meant delays in manufacturing and distributing medicines globally, and India's decision to stop distributing vaccines manufactured in its own country helped to prioritise national need. Many low-income countries were therefore at the mercy of nationalistic policy and good will of countries to donate excess doses.

Crown Agents supported countries in both procurement and distribution of Covid-19 commodities, such as PPE, vaccines and consumables, oxygen concentrators and pulse oximeters. It benefited us in that we were able to leverage existing relationships with suppliers, pool procurement for economies of scale and offer distribution solutions right to the last mile. Where possible we procured buffer stock to cover delays in resupplies and redistributed existing stock to where it was most needed. Using similar pooling mechanisms and capacity building of government supply chains would help build resilience, particularly in smaller countries.

The Covid-19 pandemic also highlighted the **inequity of access and availability of lifesaving Oxygen**. This was not created as a result of the pandemic, but instead has been a longstanding problem. Approximately 4.2 million children with severe pneumonia require medical oxygen annually and yet low-income countries only have between 5-20% of the oxygen that they require.<sup>6</sup> Many health facilities rely on liquid oxygen supplies, in some cases being transported from other countries which results in high prices and delays due to complex logistics. Before the pandemic, the upskilling of health workers in oxygen therapy was also not a priority, with under 20% of healthcare workers fully trained.<sup>7</sup> A key lesson from the Covid-19 pandemic was that health systems need to upskill staff and diversify sources of medical oxygen.

Crown Agents undertook an [oxygen systems strengthening](#) approach through a programme supported by Bayer. Across Zimbabwe, Ethiopia and Kenya we not only supplied 238 oxygen concentrators and 520 pulse oximeters but also developed clinical training on the appropriate use of oxygen therapy, pulse oximetry and use of oxygen concentrators for Covid-19 patients. The programme also provided training and support to biomedical engineers to ensure that oxygen concentrators can be maintained long-term, thus strengthening the ecosystem in those countries.

**Data for decision making and data integration** was another area of weakness that Covid-19 exacerbated. In South Sudan, where timely data visibility can be challenging under normal circumstances, there was a rapid need to develop a system to track vaccination coverage. This was not least because at the start of the vaccination campaign doses were often short-dated and needed to be frequently moved across the country to reduce risk of expiry. As a result, WHO created a parallel [data platform](#) through ODK, and Crown Agents provided technical support in training implementing partners on how to input the data.

Despite this, we learnt that inputted data was still delayed as many vaccination sites did not have network coverage. Vaccinators were thus recording vaccinations on paper and uploading manually at a later point. A key learning has been that for genuine data to lead to decision making, timely availability and accuracy is critical. This is especially true if vaccines with shorter shelf-lives need to be redistributed to areas where absorption is higher. As Covid-19 is integrated into routine service delivery, migration of data systems to a national system such as DHIS2 will be needed, but more importantly upskilling of staff at all levels of the data chain is urgently required.

### **Lesson 3: Covid-19 fatigue provides a unique opportunity for integration in routine service delivery**

Pandemic fatigue is an expected and natural response to a prolonged public health crisis such as Covid-19, especially given the severity of impact on people's routine daily lives.<sup>8</sup> Vaccine fatigue in particular has been documented as a factor that is compromising people's vaccine intention, meaning a general slowing down in the uptake of the vaccine in some parts of the world.<sup>9</sup>

As time rolls on and people become less attuned to Covid-19 and additional funding that has been made available gets diverted to other more pressing priorities, it is possible that the population uptake of the vaccine will decline. Crown Agents' global work is showing us that incorporating Covid-19 messaging as part of broader health and wellness messaging and providing opportunities for vaccination through other routine services might result in a better uptake. This will, however, look different in various countries. Key to success will be working closely with governments to understand levels of Covid-19 fatigue and intersections for integration with routine service delivery.

As an example, in Suriname Crown Agents undertook a Covid-19 rapid needs assessment during the height of the pandemic. The Ministry of Public Health (MoPH) has used this data to then lead the charge on countering

Covid-19 fatigue. Instead of continuing with siloed Covid-19 messaging which the population are not interested in listening too, they are approaching it through the lens of their national wellbeing strategy which more broadly addresses the burden of disease pre and post Covid-19 – that of noncommunicable diseases (NCDs). With support from Newmont, Crown Agents is supporting the MoPH will technical expertise in the integration of Covid-19 into NCD prevention, treatment and management activities.

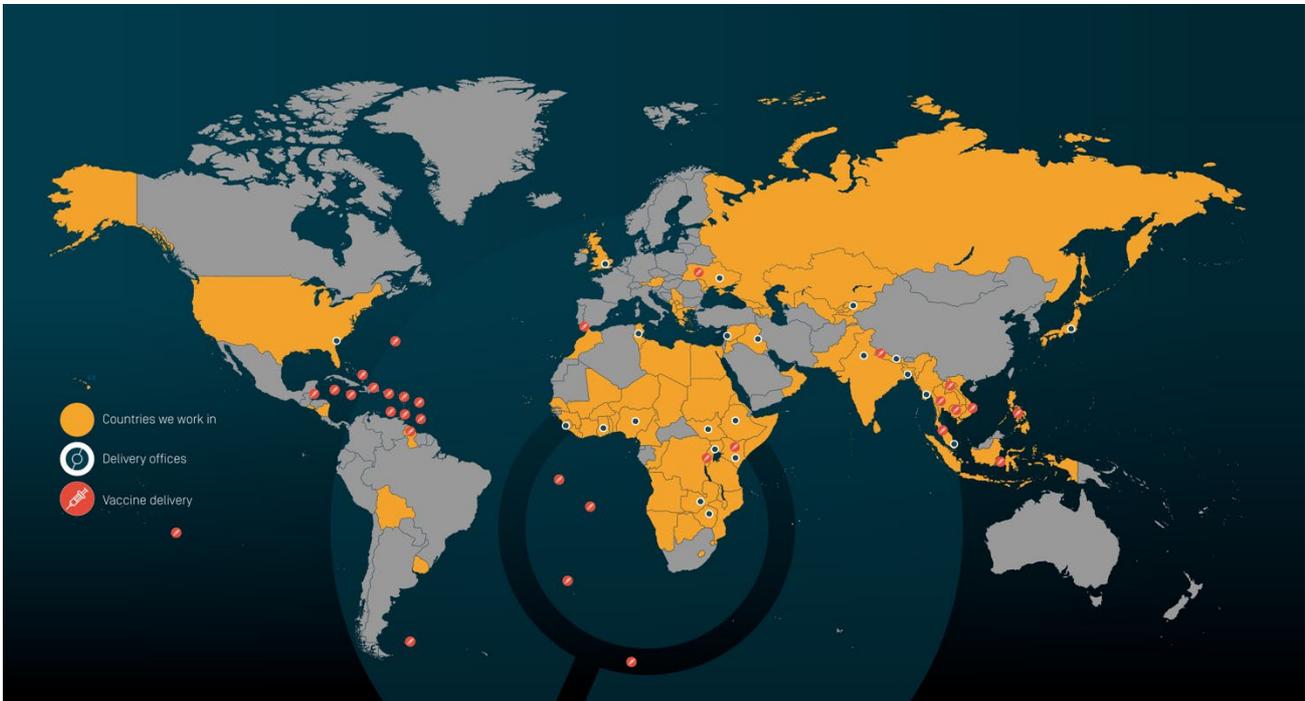
In South Sudan where Crown Agents manages the Health Pooled Fund Phase three programme, uptake of Covid-19 vaccine is particularly low - having only just surpassed the ten percent mark. Here, Crown Agents is supporting the Ministry of Health (MoH) on the integration of Covid-19 vaccination within routine immunisation service delivery. We have established technical guidance to support the MoH in integration and are supporting in establishing Standard Operating Procedures SOPs with a particular focus on strengthening community outreach. We are helping to expand routine immunisation campaigns such as measles and polio to include Covid-19 as part of a drive to try to mass vaccinate population groups. This includes supporting the planning and execution and mop up activities. By tackling the ongoing Covid-19 vaccination effort on two fronts, Crown Agents is responding to the current need but also building system resilience for the future.

### **Conclusion**

The fundamental shift of the SARS-CoV-2 virus from pandemic to endemic has meant that health systems need to consider the long game and how to integrate Covid-19 prevention, treatment and enduring management (for long Covid-19) into routine health service delivery.

There are three critical areas that will need to be addressed if governments do not want to be overwhelmed with an influx of sick patients in the future should a more contagious variant emerge. First, ensure that there are enough staff to manage the additional work that Covid-19 is placing on the health system so that routine services are not impacted. Second, fragilities in the health system that Covid-19 has highlighted, such as the oxygen ecosystem systems, need to be addressed both to solve potential future spikes in oxygen requirements as a result of Covid-19 but also to reduce mortality from pneumonia - one of the largest killers of children under five years of age. Finally, in the long term Covid-19 fatigue and funding availability will require governments to shift thinking and approaches to find the right intersections where it can be integrated with routine service delivery.

Crown Agents works in over 101 countries, with delivery offices in 22 countries. In 2021 we have reached over 108 million people through our global programmes.



## References

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