STRATEGIC RECOMMENDATIONS FOR STRENGTHENING HEALTH SYSTEMS DURING THE COVID-19 PANDEMIC AND BEYOND

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INTRODUCTION

Health systems in low resource settings continue to be severely strained by the COVID-19 pandemic. The WHO Pulse Survey (April 2021) noted that over 40% of countries reported disruptions in primary care, rehabilitative, palliative and long-term care which affected the availability of and access to quality health services\(^1\). These systems are already fraught by a high incidence of non-communicable and infectious diseases, an inability to adequately provide high quality primary and specialty health care services, and the escalating costs associated with providing health services. The enduring economic impacts of the pandemic continue to decrease public revenues and increase debt — especially in developing economies with low COVID-19 vaccination coverage\(^2\) — affecting the public health budget, and influencing other national challenges, including civil strife. These factors continue to undermine access to equitable and quality essential health services, and place further strain on human and financial resources in the health sector.

Failing to prepare for and address strains on the health system create long-term secondary impacts that will make it harder for the system to recover and perform optimally. A pandemic, particularly one that lingers, compounds existing structural inequality, further limiting access to services in underserved and vulnerable communities. Amid the current COVID-19 pandemic, health workers, equipment, and facilities are still reallocating resources to address the influx of patients with COVID-19 due to, for example, new variant strains, low vaccination rates, limited availability and accessibility to vaccines, and lack of adherence to public health guidance. The health workforce remains threatened by nosocomial COVID-19 infection and burnout. Disruptions to the health system due to COVID-19 continue to set routine immunization programs back by more than a decade and disrupt service across priority program areas\(^3,4\). Lastly on the demand side, community fear and mistrust persists as a common factor due to disruption and underuse of essential services, some of which may be the result of certain public health measures countries imposed for COVID-19 control (e.g. restricted movement, mask mandates, poor communication of COVID-19).\(^5\)

Acknowledging the urgency to support health system resiliency, countries in coordination with various development partners are tracking their COVID-19 caseload and vaccine administration, and have developed, updated or revised normative documents to help guide health sector responses — particularly in light of recent variant strains\(^6\). Countries are also working to ensure vaccine readiness, procurement, and distribution of the COVID-19 vaccines. Still, these efforts are hindered by regulations that are slow to adapt; lack of integration of public health functions and primary care services at the subnational level; supply chain challenges; ineffective decision making processes; administrative and management challenges in hospitals; and ongoing health workforce constraints.

Sustaining and advancing positive health outcomes in USAID’s priority areas during COVID-19 requires a strategic approach and is dependent on the current capacity and commitment of the health system to respond to this novel threat while maintaining essential functions and services. Timely, context specific, and cross-cutting investments in health systems must leverage and improve existing capacities across public and private institutions.

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and community structures, while exploring and embracing opportunities to advance efforts through innovations and digital health.

**PRIORITY HSS RECOMMENDATIONS DURING COVID-19**

In order to support countries to build back better, it is necessary to invest in critical cross-cutting health systems activities before, during and after a public health emergency to improve health system performance. This document outlines a set of cross-cutting health systems strengthening (HSS) activities to improve countries’ capacities for responding to the current outbreak and both preventing and addressing large-scale health emergencies in the future. Ultimately the interventions that are addressed in any country should reflect the systems practice approach and orientation towards improving health system outcomes which are described in USAID’s Vision for Health System Strengthening 2030 (see Figure 1 for definitions pertaining to each outcome area). The priority interventions underscored by the vision support the achievement of the goals of USAID’s global health programs, while simultaneously building sustainable and resilient health systems during the ongoing COVID-19 pandemic. Most activities will integrate across more than one core function (building block) of the health system and should include an expanded group of contributors (community, civil society, private sector, etc.) resulting in a whole-of-society programming approach.

**Figure 1: Health System Outcomes as defined in USAID’s Vision for Health System Strengthening 2030**

By focusing on those areas of health system strengthening that are likely to be threatened by a pandemic, yet remain critical to the overall performance of the system, this guidance will assist USAID in prioritizing efforts to minimize the consequences of disruptions to the health system and build systems that support current efforts while ensuring better preparation for the next pandemic. Support to partner countries needs to build capacity for (i) expanded access to affordable and quality primary health care services; (ii) improved adaptive capacity to ensure continuity of essential and pandemic-related services; (iii) strengthened routine vaccination inclusive of COVID-19 to ensure equitable access to the COVID-19 vaccine and other vaccines; (iv) increased ability to make institutional necessary organizational and management changes; and (v) improved enabling environment and partnerships necessary to prevent system collapse.

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7 See Annex 2 of USAID’s Vision for Health System Strengthening 2030 for more information

8 See Health Systems Continuum document for more details on cross-cutting health systems in the downloads section of the site page.
HOW TO USE THE INFORMATION

This guide provides a resource for planning and implementing support to host country health system responses. The identified recommendations serve as a starting point, meant to be tailored to the local country context and changing circumstances based on the intersection of the COVID-19 trends, disruption to essential services, and level of vaccinated population. It is important to acknowledge that within a country, different regions and localities may vary in system capacities, have different potential private sector and community partners, and face different COVID-19 case and vaccination trends. Depending on the subnational health system context, specific facilities or areas may require implementing additional activities that are outside the strategic areas and accompanying illustrative activities laid out in this document. The Office of Health Systems is available to support Missions as they consider various options within their country’s context. Please also refer to the Global Health Blueprint for Resilience for additional information and lessons learned in supporting partner countries to build more resilient health systems.

Recommended areas for action in light of the COVID-19 pandemic are:

- Enable institutions to effectively respond to increased strain on the health system to ensure continuity of essential services.
- Explore innovative approaches to expand, maintain and improve the functioning of facilities and provision of quality services.
- Strengthen and integrate information and surveillance systems across public and private sectors to improve data collection, routine health information sharing, and use for decision-making.
- Ensure safety and optimize use of available health workers, and strengthen health worker capacity to effectively respond and continue provision of essential services when health systems are overwhelmed.
- Identify and implement approaches to improve the availability, accessibility, quality and appropriate use of essential medicines, devices, and supplies.
- Advance sustainable health financing and public financial management efforts to improve accessibility and affordability of high-quality essential services and commodities.

Activities proposed under each recommended area are organized around three capacities that aim to build system resilience to advance progress towards health system outcomes that ensure population health and wellbeing. Absorptive capacity relates to the ability of a health system to take intentional protective action and to maintain stability in order to prevent or limit negative impacts. Under this definition, country health systems should implement actions to effectively manage COVID-19 cases to avoid preventable deaths in addition to preparing for recurring waves — protecting the current state of their health system while ensuring population health and safety.

Adaptive capacity is the capacity of the health system to make incremental and flexible adjustments to better manage a changing situation/environment while improving overall system performance. While interventions within this category aim to boost system performance in the short-term, ideally, they will also contribute towards building long-term resilience. Adapting to emergent challenges thus requires countries to implement activities that enable flexible organizational and management adjustments across the system.

When challenges are greater and persist, they may require the system to transform into an entirely new state through significant functional and structural changes. Thus, **transformative capacity** is the ability of the health system to make fundamental changes that address underlying challenges and contextual dynamics which impact system performance and progress towards health outcomes. Typically, this means creating or implementing policies, processes, or structures that did not exist prior to enact change.

**Figure 2: Core resilience capacities and associated factors to consider**

When responding to shocks and stressors in the system, one must consider: (i) the relative intensity and cost of the shock/stressor; and (ii) the required and appropriate response including the transactional costs to implement and sustain the response. Ultimately the trade-offs between these dynamics will shape the short- and long-term outcomes on the system.

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RECOMMENDED ACTIVITIES FOR ACTION

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<tr>
<th>Enable institutions to effectively respond to increased strain on the health system to ensure continuity of essential services and avoid preventable deaths.</th>
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<tbody>
<tr>
<td>Anticipated Impacts: Countries must adapt their health systems to respond to the novel and evolving nature of COVID-19. As the pandemic evolves, countries that have not prepared for further and unexpected disruptions are at a higher risk of health system collapse and further backsliding on key health outcomes. As caseloads increase, countries continue to divert resources from routine essential services and refocus them towards COVID-19 case management. Response to COVID-19 may require re-allocation of funding away from budgeted health programs, urgent data collection requests for tracking COVID-19 cases and deaths, increased attention to critical COVID-19 patients reducing ability of health workers to provide quality care and attention to other patients and reduced production and distribution of some essential medicines, products and devices.</td>
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<td>For countries to effectively adjust to the new realities of COVID-19, all partners need to continually revise emergency preparedness plans and health policies to reflect lessons learned and ensure risk mitigation and optimization of new and existing resources to respond effectively and ensure continuity of essential services.</td>
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<td>Example: USAID supports tools like the Open Smart Register Platform (OpenSRP) to provide more efficient exchange of health data between health workers and health facilities at local and national levels. For example, in Madagascar, the tool enables health facility staff, supply warehouses, and drivers to track the status of vaccination supplies (i.e. refrigerators, needles, and syringes). These tools ensure faster flows of information, which saves health staff time and allows more people to receive the quality care they need, when they need it.</td>
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Absorptive Capacity
- Update HIS strategic plans that include pandemic preparedness and response scenarios.
- Ensure that quality improvement teams are functional within health facilities and data are used to continuously assess gaps in service provision.
- Support existing subnational and PHC referral systems to ensure appropriate case management is functioning during the crisis.
- Reiterate the need for respectful care to ensure patient safety and improve trust and perceived quality of care.

Adaptive Capacity
- Adjust reimbursement and reporting requirements across facilities and/or sectors/ 
- Adjust regulations and policy barriers that limit immediate access to affordable essential health care services during the COVID-19 crisis 
- Consider and test alternative service delivery models, such as telemedicine to improve accessibility of essential health services, and ensure patient and health worker safety in light of broader public health measures (e.g. social distancing, mask mandates). 
- Support country institution’s efforts to ensure vaccine uptake and access among eligible populations, address hesitancy, and combat misinformation.

Transformative Capacity
- Enable decentralized decision-making for key resources to facilitate locally-led coordination, planning and implementation.
• Integrate community-led platforms into national level health dialogues to increase local engagement and advocacy, especially for unrepresented and marginalized populations to reduce vulnerability.
• Support countries to institutionalize transparent and explicit priority setting processes to facilitate appropriate distribution of health sector resources.

**Explore innovative approaches to expand, maintain and support the functioning of facilities and provision of quality services.**

**Anticipated Impacts:** The COVID-19 pandemic has shed light on the structural and organizational inefficiencies within several country health systems, not only in their response but ability to maintain current health functions in parallel. These inefficiencies result in increased mortality, morbidity, and backsliding of progress made towards key health outcomes, and bring forth additional challenges related to ensuring quality, access, and reliability of services and public health functions.

Investments may consider identifying and experimenting with innovative solutions to maintain health system functions, such as through leveraging digital health technologies and encouraging private sector engagement.

**Example:** USAID’s investments in the Guinea health system allowed for more adaptable health services during the COVID-19 pandemic. USAID collaborated with regional health authorities to organize supportive supervision of health facilities in multiple regions. Two hundred and twenty-one USAID-supported health facilities benefited from telephone follow-up calls on components of the integrated package to ensure the continuity of services during COVID-19. Supervision activities kept health care providers up to date on COVID-19 including monitoring compliance of infection, prevention, and control (IPC) measures, facility attendance, utilization of essential services, and health commodity stock availability.

**Adaptive Capacity**

• Consider and test alternative service delivery models, such as telemedicine to improve accessibility of essential health services, and ensure patient and health worker safety in light of broader public health mitigation measures (e.g. social distancing, masks).
• Support use of digital technologies, such as mobile contact tracing and digital financial services for health.
• Explore and facilitate new partnerships with private sector technology and financial institutions to address health system challenges.
• Leverage and expand the role of community health workers to support local and national level emergency response and mitigation efforts.
• Establish public and private vaccination centers with a heightened focus on under-resourced and underserved communities to ensure equitable access.

**Transformative Capacity**

• Support countries to develop or revise a National Digital Health Strategy to advance digital transformation of the health sector, improving multi-level data-driven decision-making, responsiveness, predictive and early warning capabilities.
• Integration of predictive and early warning capabilities to improve health system responsiveness at the national and subnational level.
• Institute flexible management strategies and continuous improvement processes across health facilities and all health system functions (e.g. governance, financing, information systems).
Develop the capacity to continually update and support implementation of preparedness and adaptive management plans/strategies.

### Strengthen and integrate information and surveillance systems across public and private sectors to improve data collection, routine health information sharing, and use for decision-making.

**Anticipated Impacts:** The pandemic has revealed that some information systems lack the capacity to effectively carry-out cross-cutting functions and meet parallel data demands related to the response. Systems and processes are still not in place to capture important information to both inform COVID-19 response, and also ensure optimal health system performance and resource use. Additionally, governance, transparency, and data sharing and data use issues still remain. Without stronger oversight and management of key information systems, countries are unable to rapidly respond when the situation evolves. Disruption in quality data collection and entry into routine health information systems limits availability and reliability of data for critical decision points.

A strong information system puts reliable, timely information into the hands of decision makers for coordinated action. Efforts should be focused on strengthening existing systems and ensuring measures are in place to integrate existing and new data sources where possible to prevent duplication and parallel systems.

**Example:** USAID supported investments in Indonesia’s health workforce information systems, including enhancing its core platform to make health workforce data more accessible and improving data analytics, are enabling a strategic response to the COVID-19 pandemic, while maintaining essential services across many levels of the health system. Facilities are relying on the health workforce data from the national health workforce information system to effectively deploy health workers. The Ministry of Health has deployed approximately 300 additional health workers from various cadres to care for COVID-19 patients. The HRH data is used to calculate the number of health workers in health facilities, personal protective equipment (PPE) needs, and incentives.

### Absorptive Capacity

- Support timely, quality data collection, management and analysis for use at the national and subnational level.
- Build on existing efforts to support the capacity of partners to collate and package data for decision-making. This includes identifying the most relevant and important information/questions for decision-makers.
- Conduct facility mapping exercises of health facilities with detailed and up-to-date accounts of available capacity and resources for COVID-19 and essential services.
- Utilize existing digital tools and resources to improve virtual information sharing across all partners.

### Adaptive Capacity

- Leverage existing data sources, including routine health information systems to develop rapid, targeted actions at national, regional, and local levels for COVID-19 response and continuity of essential services.
- Facilitate adoption of digital technologies that improve data collection and reduce entry errors, where relevant, feasible and not competing with existing information system technology.

### Transformative Capacity
- Establish processes and mechanisms that facilitate data sharing among central, regional, and local levels, and between the public and private sector.
- Support development of HIS strategic plans that include pandemic preparedness and response scenarios.
- Enhance integration and functionality of the existing information systems in order to improve transparency and promote wider use of data across the health systems across all health actors for timely and actionable decision-making.
- Support local governments to become the stewards of the supply chain, including integrating data for the planning, policy development, norms and standards setting, financing, and oversight of public and private sector agreements to ensure appropriate transparency and distribution of COVID-19 treatments, diagnostics and vaccinations (as well as other commodities).

**Ensure safety, and optimize use of available health workers, and strengthen health worker capacity to effectively respond and continue provision of essential services when health systems are overwhelmed across public and private sectors.**

Anticipated Impacts: Many countries face existing health workforce challenges, including shortages, maldistribution, and misalignment between population health needs and health worker competencies, which limits access to quality care. Additionally, COVID-19 may create stigma, fear, and sub-optimal workload and safety conditions may also lead to increased health worker absenteeism and mental health challenges. Health workers must have appropriate training, supervision, and safety protocols in place. Limited data available and shared across public and private sectors should be made available to enable optimal use of current workforce.

An adequate supply of health workers that have the appropriate skills and are in the right place are needed to ensure continuity of essential health services and adequate treatment of COVID-19 cases. Assuring health worker safety and well-being is also critical to the COVID-19 response.

**Example:** USAID supported the creation of the Philippines DOH Academy e-learning portal, a learning platform that enables public and private sector health workers to flexibly access free-of-charge, practical skills-building courses with continuing education accreditation. With the COVID-19 crisis, DOH with WHO, UNICEF, and USAID partners used the platform to quickly reach and train health workers across the country to stem the pandemic. At least 27,000 health workers and other government staff and community response team members have been trained through the modules on Infection Prevention and Control, Orientation to COVID-19 testing and treatment.

**Absorptive Capacity**
- Optimize existing health workforce through task shifting and task sharing as appropriate.
- Strengthen supportive supervision mechanisms to ensure quality of care; ensure supportive supervision and wellness checks for health workers.
- Strengthen capacity for infection prevention control (IPC) and risk management to improve safety for health workers and patients including availability of personal protective equipment (PPE) and alcohol-based hand rub.
- Ensure the workforce is protected by prioritizing health workers and other frontline workers for vaccination; ensure compliance with infection prevention and control (IPC) and safety standards; and establish wellness support and security if necessary, that includes safeguarding from discrimination and harassment.
Adaptive Capacity

- Facilitate contracting arrangements and planning for surge capacity to optimize response across public and private sectors, including estimating health workforce needs and equipment.
- Consider strategies to incentivize and rotate health workers to support higher COVID-19 caseload facilities or hard to reach areas to prevent absenteeism.
- Leverage digital solutions, such as web-based training and clinical decision support/consultation (e.g., telemedicine), where relevant and feasible.

Transformative Capacity

- Institute triggers and thresholds that activate a phased reallocation of routine comprehensive service capacity towards essential services as the pandemic profile changes
- Introduce alternative pathways for accelerated training and early certification of medical personnel in the event of a public health emergency.
- Establish formal systems to temporarily mobilize and deploy private sector health workforce to the public sector where relevant during a shock.
- Revise policies related to salaries, benefits and incentives of public sector and community health workers to support health workers.

Identify and implement approaches to improve the availability, accessibility, quality and appropriate use of essential medicines, devices, and supplies.

Anticipated Impacts: Unforeseen increase in demand for medicines, PPE, vaccines, oxygen and other commodities result in severe strains on supply chains and reduce the relative effectiveness of the health system. Logistic and supply information systems may not be optimized to forecast needs leading to stockouts of essential commodities and their misuse impacting the ability to provide quality services. Additionally, as stockpiles of essential medicines decline in supply, the production and the circulation of substandard and falsified medical products is soaring and disproportionately impacts poor and vulnerable populations and increasing antimicrobial resistance. Current structures may be limited in their ability to assure quality medicines due to weak protocols and/or enforcement; lack of accountability measures; and weak information systems.

Effective services and treatments can only be administered if there are appropriate medical supplies, adequate quality improvement protocols implemented, and medical professionals and patients are safe. Investment should prioritize support to enable country systems to procure and deliver essential supplies, minimize gaps in the market to ensure that quality, safe medicines are available and accessible for all, and strengthen processes for future events. Additionally, a robust and ready immunization system is vital to global health security as well as a well functioning and resilient health system. Efforts should also focus on bolstering and expanding existing capacity and systems to implement ongoing vaccination services to the whole target population as most country immunization systems are not set up to deliver vaccinations to adult populations. The roll-out of COVID-19 vaccinations, therefore, offers an opportunity to build a more comprehensive immunization platform for future vaccination efforts.

Example: Health care must be accessible and available when and where people need it. In Ghana, USAID supports establishing basic critical care hubs with appropriate supplies in each regional hospital around the country to combat COVID-19. Many hospitals did not have the capacity to manage critical care, and this support will help Ghana’s health
system care for more patients recovering life threatening conditions, saving lives and allowing the system to be more responsive to shocks, like COVID-19.

**Absorptive Capacity**
- Strengthen pharmacovigilance systems to monitor and promote the safe and effective use of experimental, newly-approved, and existing medical products, including vaccines as appropriate.
- Strengthen national and subnational level capacity in tracking and forecasting.
- Create and update a list of quality assured and registered manufacturers and vendors accessible to public and private sector providers.
- Increase market (pre and post) surveillance.
- Strengthen host country drug regulatory authorities to improve drug quality testing and drug safety monitoring, and disseminate results for public consumption.
- Strengthen cross-sectoral and global coordination efforts to enforce quality standards of medical products, such as through supporting information sharing agreements between host country and medicine quality regulators.
- Adding vaccination to services performed by community health workers where appropriate to distribute and administer vaccinations with clear and effective communication.

**Adaptive Capacity**
- Support rapid analysis of routine data and use of information systems to strategically plan for reallocation of supplies to areas of greatest need.
- Facilitate local production of prioritized quality-assured supplies.
- Support development of targeted actions at national, regional, and local levels to reorganize, prioritize, and maintain access to high-quality essential commodities, medicines, devices, and supplies.
- Facilitate virtual community participation in identifying falsified or substandard medicines and communicating their dangers (e.g., hotline for fraudulent activity and unlawful sales).
- Facilitate joint registration of new COVID-19 related products to harmonize technical requirements.
- Accelerate the supply of vaccines and consumables and expand fill-finish capacity (e.g. address supply chain bottlenecks, fast tracking approval processes).

**Transformative Capacity**
- Develop a safety stock policy that keeps safety stock at a set level which can help reduce the number of shortages and reduce costs in the long-run.
- Institute processes for resource tracking and audit efforts, including emergency and reprioritized resources in order to reduce potential waste, fraud and misuse; embed capacity building programs to support implementation.
- Integrate and apply quality improvement methods across health system processes and structures to ensure delivery of quality essential health services.
- Explore possibilities to sustainably expand local manufacturing of vaccines through regional hubs.
- Support a harmonized approach for COVID-19 vaccine integration into routine vaccine systems in the event COVID-19 vaccines become routine.
- Support country national regulatory authorities, in collaboration with regional harmonization/collaboration efforts, to increase capacity for vaccine regulatory oversight to ensure quality, safety, and efficacy, including accelerated registration/importation, safety monitoring, and quality assurance testing.
Advance sustainable health financing and public financial management efforts to improve accessibility and affordability of high-quality essential services and commodities.

Anticipated Impacts: As financial resources shift or fluctuate in response to the pandemic, efforts to ensure financial protection, such as increasing financial sustainability of risk-sharing schemes could be delayed, decreased, or derailed completely in priority for decision makers. In systems where rates of financial protection are already low, delays could further exacerbate inequities in access to essential services, which could contribute to rising mortality and morbidity from non-COVID-19 related health issues. Additionally, public financial management systems could be strained by efforts to release funds quickly to decentralized levels. This could lead to increased fraud and misuse of limited resources, as well as general waste and inefficiency — impacting overall system performance and reduced quality service provision.

Efforts should support maintaining or regaining momentum to increase financial protection and optimizing use of financial resources. Investments should also support arrangements conducive to improving and, when necessary, increasing the flow of financial resources for maintaining essential service provision that promote their access according to need and accounting for changes to funding and other contextual factors.

Example: USAID is supporting the MOH to explore potential strategies for finding efficiencies (savings) and generating evidence to make a case for investment in public health that is consistent with Vietnam’s national priorities. Support includes (i) examining recent public expenditure in Vietnam’s health sector to identify efficiencies and potential savings that can be used to reallocate funds and increase spending on prevention and other cost-effective health activities which may lead to further savings downstream and; (ii) document and analyze possible gaps in the budgetary process that hinder effective, equitable, and adequate budget allocation for health in Vietnam at both national and sub-national levels.

Absorptive Capacity
- Advocate for preserving adequate, stable and sustained financing for essential health system functions.
- Support resource tracking and audit efforts for emergency and reprioritized resources.

Adaptive Capacity
- Explore alternative financing and funding arrangements to increase the financial viability of risk-sharing schemes.
- Ensure that new capacities supported during COVID response efforts (such as the availability of oxygen) are integrated into budgets and financing mechanisms as appropriate.
- Support efforts aimed at immediately increasing available funding including general budget reprioritization, while still maintaining the integrity of larger health sector priorities.
- Facilitate alternative contracting and resource sharing arrangements with the private sector.
- Expand equitable access to, domestic financing for, and timely delivery of vaccines.

Transformative Capacity
- Leverage lessons learned to advocate for needed policy reforms to support UHC financing efforts, and for improvements to the PFM system.
- Integrate options to remove financial barriers to access (eg., eliminating user fees, reducing insurance contribution requirements).
- Introduce more permanent flexibility to existing policies, processes, and agreements.