

EVIDENCE SYNTHESIS BRIEFING NOTE

TOPIC: HEALTH SYSTEM RECOVERY PLANS FOLLOWING RESPONSES FOR COVID-19 WAVES 2 & 3

Information finalized as of April 14, 2021.^a This Briefing Note was completed by the Evidence Synthesis Unit (Research, Analysis and Evaluation Branch, Ministry of Health) in collaboration with a member of the COVID-19 Evidence Synthesis Network. Please refer to the <u>Methods</u> section for further information.

<u>Purpose</u>: To examine jurisdictions' health system recovery plans following COVID-19 wave 2 or 3 responses. **Key Findings**:

- Eight research articles (two from Canada and six from the US) highlighted that the lessons learned from the COVID-19 pandemic thus far present unprecedented opportunities for health system reform in a broad range of areas, including infrastructure, delivery, public health capacity, clinical and administrative processes, care planning, health inequities, insurance coverage, value-based payment approaches, telemedicine, professional scope of practice, medical education, and patient engagement and shared decision-making.
- Most of the identified recovery plans from Canadian, American, United Kingdom, European, and Australian jurisdictions, as well as international organizations, were not only focused on health system recovery, but also included economic and social system recovery priorities.
 - <u>Challenges to be Addressed</u>: These include: COVID-19 outbreak management (e.g., vaccination, contact tracing), public health, primary care, hospitals, surveillance systems, mental health, community and social care, integrated health systems, non-communicable diseases, infrastructure, supply chain, laboratories and diagnostics, affordable medicines and medical devices, adaptive surge capacities, backlogs, e-health systems, digital technologies, health workforce recruitment and retention, health inequities of vulnerable populations (e.g., low-income, Indigenous communities, seniors), performance measurement, health datasets, scientific research, international cooperation, and governance.
 - <u>Lessons Learned</u>: Based on research evidence and prior experiences with other crises and the ongoing COVID-19 pandemic, the following are important: surveillance systems, flexible work options, expanded scope of practices, mental wellbeing, partnerships, project management, community resilience, trust in government, and the needs of vulnerable populations. Common-sense health measures (e.g., vaccination, infection prevention and control) also generally remain in place, and inform recovery plans.
 - <u>Barriers to Success</u>: These include: ongoing fluctuations in the COVID-19 crisis, financial resources, capacity and capabilities, access to vital commodities and supplies, increased costs of living, population growth, climate change, social justice issues, other concurrent crises (e.g., wildfires, racial justice protests, cyberattacks on government systems), misinformation, and "decision fatigue" of leaders.
 - <u>Governance</u>: Recovery planning is primarily managed by cross-sector advisory groups led by government and/or external experts, using scenario-based planning and risk prioritization approaches.

<u>Ontario Analysis</u>: Ontario Health is partnering with the Ministry of Health (as of Mar 4, 2021) to renew the focus on health system modernization and plan to restore routine access to non-COVID-19-related health care services, as trends in key public health indicators improve.

Implementation Implications: Recovery planning should begin now, even though most jurisdictions are still responding to the pandemic. Recovery plans should be asset-based (people, programs, policies), rationally driven, time-bound, action-oriented, iterative, and address recovery for all with a focus on the most vulnerable.

^a This briefing note includes current available evidence as of the noted date. It is not intended to be an exhaustive analysis, and other relevant findings may have been reported since completion.





Supporting Evidence

<u>Table 1</u> lists and describes scientific evidence and jurisdictional experiences regarding health system recovery plans during the COVID-19 pandemic, particularly relating to scope, key challenges that plans intend to solve, lessons learned that informed plans, barriers to success, and governance structures. In the Appendix, <u>Table 2</u> provides detailed summaries of the recovery plans identified from Canadian and international jurisdictions. The majority of the information presented is taken directly from the identified sources.

- It was often unknown if recovery plans were specifically developed following a wave 2 or wave 3 response. Moreover, jurisdictions may have experienced waves 2 and 3 at differing times, or continued to use or updated recovery plans developed during wave 1 for waves 2 and 3. As such, although most of the recovery plans included in this Briefing Note were developed from Fall 2020 to Spring 2021, others previously developed may have also been included if relevant.
- Most of the identified recovery plans were not only focused on health system recovery, but also included economic and social system recovery priorities.

Table 1: Summary of Scientific Evidence and Jurisdictional Experiences regarding Health System Recovery Plans during the COVID-19 Pandemic

Scientific	Challenges to be Addressed
Evidence	 Eight research articles (two from Canada and six from the US) highlighted that the lessons learned from the COVID-19 pandemic thus far present unprecedented opportunities for health system reform in a broad range of areas, including infrastructure, delivery (e.g., reducing low-value care, racial and ethnic disparities), public health capacity, clinical and administrative processes, care planning, insurance coverage, value-based payment approaches (e.g., capitation), telemedicine, professional scope of practice, medical education, and patient engagement and shared decision-making.^{1,2,3,4,5,6,7,8} For example: Canada: An article (Sept 2020) observed that while progress on national physician licensure, virtual health care, and sick-at-work culture emerged as important responses to the COVID-19 pandemic, the way in which they are transformed into sustainable solutions will have a lasting impact on the post-pandemic Canadian health care system.⁹ US: A commentary (Aug 2020) recommended policy changes for medical practices in the following categories after the COVID-19 crisis has passed: 1) clinical workflows (e.g., orders, signatures, and forms); 2) medication reconciliation (e.g., may be performed by support staff); 3) measurement, monitoring, and compliance; and 4) technology (e.g., telemedicine). Six principles can guide these changes: 1) evidence-based policy and regulation; 2) avoid the assumption that a task is automatically safer when performed by the highest trained practitioner; 3) financial costs of regulatory and policy requirements are often borne by the clinician closest to the patient; 4) decrease administrative requirements to record all care provided; 5) professionalism is an intrinsic lever to drive quality and safety; and 6) appropriately assign accountability for health outcomes.¹⁰ US: A study (Nov 1, 2020) presented a model of post-epidemic recovery to advance global health security. The model foc



	functional again; curbing the stigmatization of people, places, and products) and transformation (e.g., addressing the social determinants of uneven epidemic impacts; integrating resilience to epidemics into long-range planning not typically tied to health outcomes; fixing faulty environments such as substandard housing and water systems). The timeframe and activities of recovery are represented in a fluid manner, with different phases and functions overlapping and building up along a temporal continuum, from the early days of the acute response to the later years of fundamental reforms. ¹¹
	 <u>Research Priorities</u> <u>Canada</u>: A research article (Aug 2020) described how the Canadian Institutes of Health Research's Institute of Health Services and Policy Research conducted a rapid-cycle priority identification process to inform Canada's research response to COVID-19. Seven COVID-19 priorities for health services and policy research that may contribute to improved health and health system outcomes were identified: 1) system adaptation and organization of care; 2) resource allocation decision-making and ethics; 3) rapid synthesis, and comparative policy analysis of the COVID-19 response and outcomes; 4) health care workforce; 5) virtual care; 6) long-term consequences of the pandemic; and 7) public and patient engagement. Three additional cross-cutting themes were identified: 1) supporting the health of Indigenous Peoples and vulnerable populations; 2) data and digital infrastructure; and 3) learning health systems and knowledge platforms.¹²
International Scan	 Organizations: Recovery frameworks were identified from the World Health Organization (Feb 24, 2021), KPMG International (Nov 2020), and X4 Health/University of Oregon (Feb 17, 2021).^b <u>Challenges to be Addressed</u>: These include: COVID-19 outbreak management, mental health, supply chains, digital technologies, surveillance systems, laboratories and diagnostics, misinformation, equity and vulnerable populations, agile health workforces, and compliance and risk management. <u>Lessons Learned</u>: Based on research evidence and past disaster recovery efforts, the following considerations are important: partnerships, project management, community resilience, and the needs of vulnerable people and economic sectors that have been most adversely impacted are important. <u>Barriers to Success</u>: These include: capacity and capabilities, financial resources, access to vital commodities and supplies, misinformation, other concurrent crises (e.g., wildfires, racial justice protests, cyberattacks on government systems), and "decision fatigue" of leaders. ^{13,14,15,16,17} Jurisdictions: Recovery frameworks were identified from California (Apr 6, 2021), Geisinger Health System (2020), England (Mar 25, 2021), Wales (Mar 2021), European Union (2021), European Commission/Organisation for Economic Co-operation and Development (2020), Italy (Jan 12, 2021). New Zealand (Dec 2020), Melbourne (Sept 2020), and Western Australia (2020-21). <u>Challenges to be Addressed</u>: These include: COVID-19 vaccination program, public health, primary care, hospitals, surveillance systems, mental health, community and social care, integrated health systems, non-communicable diseases, infrastructure, supply chain,

^b X4 Health is a purpose-driven organization passionate about using social impact design to solve problems that matter. The University of Oregon's Institute for Policy Research & Engagement transforms communities through research and action. They are both focusing on understanding the impacts of the pandemic and developing strategies that support recovery and a more resilient future (<u>Cision UC, Feb 17, 2021</u>).



	 affordable medicines and medical devices, adaptive surge capacities, backlogs, e-health systems, telemedicine, health workforce, health inequities of vulnerable populations, Indigenous communities, ageing populations, performance measurement, health datasets, scientific research, international cooperation, and governance. <u>Lessons Learned</u>: Common-sense health measures generally remain (e.g., vaccination, infection prevention and control) and inform recovery plans. Prior experiences with other crises and lessons learned from the ongoing COVID-19 pandemic also inform recovery plans relating to: value-based payment models, health spending on curative care rather than prevention, surveillance systems, flexible work options, expanded scope of practice for health workers, mental wellbeing, community-led solutions, accessibility, efficiency, resilience, timely implementation, international cooperation, and strong trust in government and compliance by populations. <u>Barriers to Success</u>: These include: ongoing fluctuations in COVID-19 crisis, capital investments for infrastructure/facilities/equipment, increased costs of living, population growth, climate change, social justice issues, and reconciliation with Indigenous groups. <u>Governance</u>: Primarily cross-sector advisory groups led by government and/or experts, using scenario based plagning and risk prioritization approaches 1819/202122324/25/26/27/28
	using scenario-based planning and risk prioritization approaches. ^{18,19,20,21,22,23,24,25,26,27,28}
Canadian Scan	 Organizations: The Conference Board of Canada's report (Mar 31, 2021) described key recommendations from a roundtable discussion of Canadian health leaders on how to turn the COVID-19 crisis into an opportunity for health system reform. <u>Challenges to be Addressed</u>: 1) prioritize value-driven investments (e.g., invest in IT infrastructure, eliminate siloed budgets); and 2) build on the strengths of the initial response to the COVID-19 crisis by accelerating integration of virtual care and digital health technologies, advancing systematic measurement and data sharing to support evidence-based decision-making, and advancing public-private partnerships. <u>Lessons Learned</u>: The momentum created by the COVID-19 crisis for rapid system adaptation should be leveraged. For example, the speedy adoption of telehealth was facilitated in each province and territory by rapid regulatory changes around licensure requirements and physician compensation. <u>Governance</u>: A new Resilient Healthcare Coalition, a group of health leaders/stakeholders across public, private, and not-for-profit sectors, is coming together to strengthen connections across the health system, showcase local leadership and homegrown successes, and identify and integrate models and solutions from around the world.²⁹ Jurisdictions: Recovery plans were found from Alberta (2021) and British Columbia (2020). <u>Challenges to be Addressed</u>: These include: infrastructure and capacity building, surveillance systems, supply and procurement, health care work recruitment and training, mental health and addiction supports, senior care, community-based care, family and social supports, and multidisciplinary team-based care.^{30,31}
Ontario	 Ontario Health will be partnering with the Ministry of Health (as of Mar 4, 2021) to renew the
Scan	 Ontario relativity of relativit





<u>Methods</u>

The COVID-19 Evidence Synthesis Network is comprised of groups specializing in evidence synthesis and knowledge translation. The group has committed to provide their expertise to provide high-quality, relevant, and timely synthesized research evidence about COVID-19 to inform decision makers as the pandemic continues. The following member of the Network provided evidence synthesis products that were used to develop this Evidence Synthesis Briefing Note:

• Ontario Health (Cancer Care Ontario). (April 7, 2021). Email Communications.

For more information, please contact the Research, Analysis and Evaluation Branch (Ministry of Health).





<u>Appendix</u>

Table 2: Summary of Health System Recovery Plans during COVID-19 across Jurisdictions

Jurisdiction	Description of Recovery Plan
Canada	
The Conference Board of Canada – A Call to Build on Health System Strengths and Value-Driven Investments (Mar 31, 2021)	 Scope: Recognizing the need to build a more resilient health system, a group of Canadian health leaders joined a roundtable discussion on how to turn the COVID-19 crisis into an opportunity for health system reform. Challenges to be Addressed: The roundtable yielded two key recommendations for immediate action: Prioritizing value-driven investments in health systems (e.g., invest in information technology infrastructure, eliminate siloed budgets). Building on the strengths of the initial response to the COVID-19 crisis by:
	 Coalition, a group of cross-sector health leaders and stakeholders, is coming together. Its goal is to strengthen connections across the system, showcase local leadership and homegrown successes, and identify and integrate models and solutions from around the world. Barriers to Success: No information identified.³³
Ontario Health (OH) – Health System Recovery	 Scope: OH will be partnering with the Ministry of Health for renewing the focus on health system modernization and planning to restore routine access to non-COVID-19 related health care services for all Ontarians, as trends in key public health indicators improve. Challenges to be Addressed:
(Mar 4, 2021)	 Ensure confidence in the safety and accessibility of health services in the province, supporting the system's workforce, and minimizing the downstream effects of COVID-19 on the health of Ontarians. Impact of deferred preventive screening, diagnostic, surgical and non-surgical services. Enhanced access to mental health and addictions services through the Mental Health and Addictions Centre of Excellence. Health equity and enhanced supports for the most vulnerable populations. Lessons Learned that Informed Plans: To be successful, recovery will be coordinated and build on what the Ontario health system has learned throughout the pandemic across all sectors. This includes progress on system-wide regional planning structures, the provincial lab network, virtual care, supply chain operations, as well as Ontario Health Teams. Governance: OH will partner with the Ministry of Health. Barriers to Success: Forward-looking planning will be challenging as it will happen concurrently with ongoing pandemic response and the commitment to public health measures.³⁴





British Columbia – StrongerBC Economy Recovery Plan	• Scope: The plan supports people and jobs, focusing on making health care stronger, getting people back to work, supporting businesses, and helping communities. ³⁵ The pandemic exposed pre-existing gaps in the province's ability to track cases, procure necessary protective equipment, and recruit frontline health workers. ³⁶
	Challenges to be Addressed: In regards to the health care system, the following investments are being made:
(2020)	 Hiring 1,300 new contact tracers; Creating 7,000 new health care worker jobs (e.g., hospitality workers, health care assistants) and providing them with free training; Increasing mental health supports and suicide prevention initiatives, particularly for youth and post-secondary students; Launching a new "Hospital at Home" program to reduce the chance of transmission in hospitals and give people quality care from the comfort of their home; Building critical health infrastructure like new urgent and primary care centres, a new cancer centre in Surrey and an expanded Richmond acute care tower to give people better access to the services they need; Adding 450,000 influenza vaccine doses for a total of two million doses to keep more people safe and healthy and reduce the strain on the health care system; Launching an extensive surgical renewal plan that includes adding new capacity and hiring and training staff (as of November 2020, 90% of surgeries that were postponed due to the pandemic have been completed);
	 Announced 22 and opened 20 new clinics all over the province that are open evenings, weekends, and holidays to help take pressure off hospital emergency rooms; Replacing, expanding, and building new hospitals all over the province; Enhancing senior's care (e.g., limiting workers to one facility) by investing in primary care, home health, long-term care, assisted living, and respite services; Launched 39 primary care networks throughout the province where doctors, nurses, specialists, and counsellors all work together to give quality, patient-centered care; and Adding new MRI and PET/CT scanners and increasing the hours of existing scanners.³⁷ Lessons Learned that Informed Plans: No information identified. Governance: No information identified. Barriers to Success: No information identified.
Alberta – Recovery	• Scope: The COVID-19 pandemic, combined with the collapse in global oil prices, has resulted in severe contraction of economic activity and jobs.
Plan	The public health response continues to focus on prevention, curbing the spread, and ensuring hospitals have capacity for worst-case scenario
(2021)	 outbreaks. Challenges to be Addressed: The plan outlines funding for: Health care (CAD \$500 million); Mental health (CAD \$53 million); Community and social services, such as homeless and women's shelters and community organizations (CAD \$170 million); Continuing care supports, such as protecting vulnerable seniors, health care aide wage increase, and staffing (CAD \$261 million); Public mask program (CAD \$20 million); and Family supports, such as school nutrition, caregivers, and food banks (CAD \$21 million).³⁸ Lessons Learned that Informed Plans: No information identified. Governance: No information identified. Barriers to Success: No information identified.





United States (US)		
California – COVID-19	• Scope: As 20 million vaccines have been administered and COVID-19 case rates and hospitalizations have stabilized, California is looking to move	
Pandemic Recovery	beyond the Blueprint for a Safer Economy to fully reopening the economy. ³⁹	
(moving beyond the	• Challenges to be Addressed: On June 15, 2021, all industries across the state can return to usual operations with common-sense risk reduction	
Blueprint for a Safer	measures such as masking and vaccinations if two criteria are met:	
Economy)	 Equitable vaccine availability: If vaccine supply is sufficient for Californians 16 years or older who wish to be inoculated; and 	
	o Consistently low burden of disease: Hospitalizations are stable and low, and specifically, hospitalizations among fully vaccinated individuals are	
(Apr 6, 2021)	low.	
	 California will also need to maintain the public health and medical infrastructure in these five priority areas: 	
	Continue to provide vaccinations and be prepared for the vaccination of Californians under 16 years old. It is critical that vaccines remain	
	effective against circulating strains.	
	 Conduct equity-focused monitoring and surveillance by maintaining adequate testing capacity and strategies for the early detection of cases 	
	including variants via genomic sequencing.	
	 Contain disease spread through timely investigation of cases, contacts, and outbreaks. 	
	 Maintain a statewide plan to scale up resources for isolation or guarantine. 	
	Monitor hospital admissions and maintain adequate personal protective equipment (PPE) and health care surge capacity that can be easily	
	mobilized. ⁴⁰	
	Lessons Learned that Informed Plans:	
	 Common-sense health measures such as masking will remain across the state. Testing or vaccination verification requirements will remain in 	
	relevant settings. The state will monitor hospitalization rates, vaccine access, and vaccine efficacy against variants with the option to revisit the	
	June 15 date if needed.	
	 On March 4, the state had set aside 40% of vaccine doses for the hardest-hit communities and established an equity metric to increase 	
	vaccinations in those communities. Doing so recognizes that the pandemic did not affect California communities equally. 40% of COVID cases	
	and deaths have occurred in the lowest quartile of the Healthy Places Index, which provides overall scores and data that predict life expectancy	
	and compares community conditions that shape health across the state. California continues to plan for the vaccination of Californians under 16	
	years of age, protection against new variants, and continued tracking and containment of spread. ⁴¹	
	Governance: No information identified.	
	Barriers to Success: No information identified.	
X4 Health and	• Scope: Community ROCKit is a free COVID-19 recovery planning Blueprint framework and related implementation white paper that consolidate the	
University of Oregon	best COVID-19 recovery planning work from around the US into one health and economic recovery guide. ⁴² The framework prioritizes community	
Institute for Policy	recovery efforts that build partnerships, community resilience, and focus on the needs of vulnerable people and economic sectors that have been	
Research &	most adversely impacted by COVID-19.	
Engagement ^c –	 An environmental scan and literature review of recovery plans found that: 	
Community Resource	 Substantial diversity across plans exists; 	
Organizer for COVID	 Domains are highly interrelated (in predictable and complex ways); 	
Kit (ROCKit):	Some plans placed a greater emphasis than others on vulnerable people and economic sectors disproportionately impacted by COVID; and	

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Developing COVID-19 Community Recovery	 Gaps were identified, such as the role of general health/primary care, public safety efforts, education (including higher education), and more.⁴³
Plans	Challenges to be Addressed:
(Feb 17, 2021)	 The ROCKit Blueprint is divided into eight domains – health, government, infrastructure, housing and food, childcare, education, public safety, and economy. Leaders can use the Blueprint to identify a starter set of objectives and tactics that are important in the first six months of recovery planning, and then revisit those objectives and the larger Blueprint every six months for new ideas, thinking, and next steps.⁴⁴ For example. critical components of recovery plans include: school-based education, preparing for additional waves, and public safety. In terms of health care provision and coordination:
	 Primary care can be used to preserve hospital capacity, conduct testing, distribute vaccines, prevent and treat acute and chronic conditions, and connect patients to other services such as behavioural health.
	 Public health is a vital resource in preserving and maintaining health at a community level, both during the pandemic and other initiatives such as clean water, smoking cessation, pollution, and more.
	 Physical and mental health of the population, with particular focus on essential workers and health care workers, is essential to maintaining a stable workforce able to fully participate in the labour market, drive consumer spending, and more.
	 Low-income families in particular are at risk because the economic downturn affects basic needs such as food access, housing stability, and employment - these three factors are known drivers of health status. Further, in order to participate in the labour force, families need childcare and schools, which have been greatly impacted by the pandemic.
	 The Blueprint will be piloted in early 2021 and stakeholders are invited to share their own insights and experiences.⁴⁵
	Lessons Learned that Informed Plans: Evidence from research and past disaster recovery efforts indicates:
	 Communities with a robust interconnected social fabric can facilitate faster and more effective recoveries. State and local leaders with cross- sector convening power are recommended to catalyze a collaborative, human-connected, relationship-based process that yields an inventory of assets (people, resources, programs, policies, tools, and relationships), aligned to the key objectives of their customized Blueprint. Engaging combinations of individuals with diverse experiences, backgrounds and viewpoints to consider this question can then spark innovative thinking and breakthrough solutions-finding.
	 Communities with a high degree of resilience recover faster, and this relies on local planning and relationship building efforts. This can shorten the length of the recovery period and increase the tools and social capital that communities have to respond. Clear, decisive leadership is required.
	 I he Blueprint assumes that state and local leaders will continue aggressive response initiatives designed to bring and keep the virus under control, such as robust testing strategies and well-functioning contact tracing. Such initiatives should be interwoven into the recovery plan.
	 Six core principles for recovery planning are: 1) asset-based mindset; 2) recovery for all, with a focus on the most vulnerable; 3) relationally driven; 4) time bound; 5) action oriented; and 6) iterative.⁴⁶
	Governance: No information identified.
	• Barriers to Success: Since March 2020, community surges have required diligent attention and significant resources to continue stemming
	community spread. Few communities have therefore had the capacity to devote substantial resources to planning recovery efforts, even though those recovery efforts will be intertwined with response efforts for the foreseeable future.
	 Complicating community response efforts in some parts of the US are additional crises, such as wildfires, hurricane season, racial justice protests, riots and civil unrest, cyberattacks on government systems, flooding, and more.
	 In interviews conducted in October and November 2020, community and state leaders described "running from one crisis to the next," with limited or no capacity to step back and develop thoughtful plans for recovering from the disastrous health and economic impacts of COVID-19. They also described suffering from "decision fatigue," as they combat a wave of "new abnormal" changes in society brought on by the pandemic. Some





	leaders also expressed trepidation at the prospect of convening stakeholders in a cultural environment in which there is a high level of divisiveness and polarization. ⁴⁷
Geisinger Health System ^d – Post-Crisis Planning	• Scope: The organization realized that post-crisis planning should be viewed and executed as a strategic and operational innovation initiative, not as a damage-mitigation exercise or with the focus solely on restoring revenues. They focused on four stages: 1) return of non-urgent work, 2) start of the "new normal," 3) post-crisis activity, expanding the "new normal," and responding to potential second wave of COVID-19, and 4) operational and economic recovery in a transformed system. ⁴⁸
(2020)	 Challenges to be Addressed: There are 11 core areas of business (including the clinical enterprise, a health insurance company, HR, finance, IT, pharmacy, and five other broad areas).⁴⁹ Health-related initiatives, for example, include: revamping their clinical footprint (e.g., closing underused clinics), restructuring primary care to include supportive specialty services, workforce flexibility (e.g., permanent floater positions), and digital transformation.⁵⁰ Lessons Learned that Informed Plans: Based on initiatives implemented pre-pandemic and lessons learned from the first stages of the COVID-19 pandemic, Geisinger realized the importance of: contact tracing, mail-order pharmacy to delivery prescriptions to patients (in place before COVID-19 started), work-from-home, surveillance systems, reassigning employees to different work, and prior experience with value-based payment approaches. Governance: The Geisinger Health System formally initiated post-crisis planning just days into the pandemic, convening a steering group comprised of leaders from all parts of the organization. The steering group defined the core areas of business and created workgroups across each of these tasked with defining our approaches. Each workgroup includes leaders from outside of the workgroup's focus; this is particularly important since stopping certain activities is essential to transformation but may be resisted by those closest to them. Outsiders can bring a dispassionate perspective to the discussion. The groups were asked to examine four stages in the transformation: members were instructed that they must carefully consider the impacts at each stage on patients and front-line employees, focusing on their needs, what has changed for them (and will change), and what will make them feel truly safe. Each group was also tasked with categorizing the activities in a risk prioritization matrix (e.g., high-impact, low effort).⁵¹
	Barriers to Success: No information identified.
United Kingdom (UK) ar	
NHS England – 2021/22 Priorities and	• Scope: Recovery is focused on restoring services, meeting new care demands, reducing care back logs, and addressing health inequalities that are a direct consequence of the pandemic. ⁵²
Operational Planning	Challenges to be Addressed: Priorities for 2021/22 include:
Guidance and Implementation	 Supporting the health and wellbeing of staff and taking action on recruitment and retention; Delivering the NUS COVID vession and continuing to meet the needs of activity COVID 10;
Guidance	 Delivering the NHS COVID vaccination program and continuing to meet the needs of patients with COVID-19; Building on what was learned during the pandemic to transform the delivery of services, accelerate the restoration of elective and cancer care,
Oundance	 Building on what was learned during the pandemic to transform the delivery of services, accelerate the restoration of elective and cancer care, and manage the increasing demand on mental health services;
(Mar 25, 2021)	 Expanding primary care capacity to improve access, local health outcomes, and address health inequalities;
(Transforming community and urgent and emergency care to prevent inappropriate attendance at emergency departments, improve timely admission to hospital for ED patients, and reduce length of stay; and
	 Working collaboratively across systems to deliver on these priorities.

^d Geisinger Health System is a regional health care provider to central, south-central, and northeastern Pennsylvania and southern New Jersey. Geisinger services over three million patients in 45 counties.





	 Further steps to develop population health management approaches that address inequalities in access, experience and outcomes, working with local partners across health, social care, and beyond. To support this, NHS has set out five priority areas for tackling health inequalities that systems are asked to give particular focus to in the first half of 2021/22: 1) restore NHS services inclusively; 2) mitigate against digital exclusion; 3) ensure datasets are complete and timely; 4) accelerate preventative programs that proactively engage those at greatest risk of poor health outcomes; and 5) strengthen leadership and accountability). Tackling inequalities in outcomes is also central to the investments they will make this year to improve outcomes on cancer, cardiovascular disease, mental health, and maternity services, as well as to expand smoking cessation and weight management services.^{53,54} Lessons Learned that Informed Plans: No information identified. Governance: Integrated Care Systems (ICSs) across England and their constituent organizations will develop and agree on operational plans. Plans should summarize how, as systems, the priorities set out in 2021/22 priorities and operational planning guidance will be delivered, with a focus on the six months to the end of September 2021 for most areas. There are a number of governance principles underlying this initiative, for example: There will be one statutory ICS NHS body and one statutory ICS health and care partnership per ICS from April 2022. The development of primary and community services and implementation of population health management will be led at place level, with Primary Care Networks as the building blocks of local health care integration. Every acute (non-specialist) and mental health NHS trust and FT will be part of at least one provider collaborative, allowing them to integrate services appropriately with local partners at place and to strengthen the resilience.⁵
Wales – COVID-19:	• Scope: This document describes the impact on health and social care, some of the lessons learnt, and priorities as Wales moves towards recovery.
Looking Forward	Challenges to be Addressed:
(Mar 2021)	 Responsive primary and community care (e.g., management of COVID-19, delivering essential services, development of integrated community care services, improved access to primary care). Supportive mental health services (e.g., workforce wellbeing and resilience, improve transitions from childhood to adulthood services). Effective and efficient hospital services (e.g., implement a contact/phone first model for emergency care and urgent primary care centre pathfinder services). Seamless social care services (e.g., manage impact of Long COVID, recognize social care workers through pay and conditions). A supported, engaged and motivated workforce (e.g., improved workforce data to monitor ongoing impact of COVID-19 response). Effective digital support (e.g., maintaining COVID-19 digital services such as contact tracing and vaccine platforms, patient access to health records).
	 Lessons Learned that Informed Plans: The Test, Trace and Protect (TTP) program will continue to play an important role in managing transmission of the virus. Testing as well as supporting diagnosis and treatment continues to be an important means, alongside primary infection prevention and control measures, of safeguarding those who are vulnerable. It will help to reduce the risk of infection being brought into places such as hospitals and care homes. The vaccination program is key to overcoming the virus and to restrictions on freedoms beginning to be relaxed. Continue research to understand what the risk factors are for vulnerable people (e.g., ethnic minorities, those with obesity or multiple health conditions, homeless) and how best these can be reduced, whether by vaccination, treatment, or wellbeing interventions. Mental health has the greatest potential contribution to long-term prosperity and wellbeing, which is why mental health services were designated as "essential". Greater use of technology (e.g., virtual appointments), adopted rapidly during the pandemic, can support new ways of delivering health and social care for the future. Connection between health, social care, and wider economy.





	 Need for sustainable services that can respond to increases in demand for care and referrals (e.g., hospital capacity). Governance: Recovery plans will be built on collaboration between the NHS and social services, working with partners. Barriers to Success: Recovery solutions are likely to require significant capital investment for infrastructure, facilities, and equipment. Understanding the scale of the capital requirement and then securing the necessary funding is a key challenge. Setting a firm timescale for recovery in the face of the continued pandemic and the current uncertainties is not possible; accordingly, the document sets out an approach rather than a definitive plan. The immediate future is uncertain. Wales is moving into the next phase of the pandemic response and it will be some time before the impacts of COVID-19 on health services recede.⁵⁶
European Union (EU) – Recovery Plan for Europe (2021)	 Scope: To help repair the economic and social damage caused by the coronavirus pandemic, the European Commission, the European Parliament, and EU leaders have agreed on a recovery plan that will lead the way out of the crisis and lay the foundations for a modern and more sustainable Europe. The EU's long-term budget, coupled with NextCenerationEU, the temporary instrument designed to boost the recovery, will be the largest stimulus package ever financed through the EU budget.³⁷ Challenges to be Addressed: More than 50% of the €1.8 trillion to help rebuild a post-COVID-19 Europe will support modernization, for example: Research and innovation, via Horizon Europe. Fair climate and digital transitions, via the Just Transition Fund and the Digital Europe Program. Preparedness, recovery and resilience, via the Recovery and Resilience Facility, rescUL, and a new health program, EU4Health. The Recovery and Resilience Facility: Loans and grants will be available to support reforms and investments undertaken by EU countries. The aim is to mittgate the economic and social impact of the coronavirus pandemic and make European economies and sociales more sustainable, resilient, and better prepared for the challenges and opportunities of the green and digital transitions. Member States are working on their recovery and resilience plans to access the funds under the Recovery and Resilience Facility.⁵⁸ RescEU: Part of the EU Cuil Protection Mechanism, it will continue to provide rapid reaction and focus on direct crisis response capacities. The program Will also support efforts to digitalize health care, action linked to e-health, and the creation of a European health data space to promote the exchange and access to different types of health data.⁵⁹ EU4Health: The program for 201-727 imis to strengthen Europe's health systems to better respond to future major international crises such as the COVID-19 pandemic, making a





	 Governance: While national governments are primarily responsible for health policy, the EU can complement and support national measures and adopt legislation in specific sectors. Parliament is calling for a <u>European Health Union</u> with stronger tools to deal with future health emergencies.⁶² Barriers to Success: No information identified.
Italy – Recovery and Resilience Plan	 Scope: The plan defines actions and interventions to overcome the economic and social impact of the pandemic, acting on the country's structural nodes and successfully facing the environmental, technological, and social challenges of our time. There are six macro-areas of reforms and investments: Digitalization, Green Revolution, Infrastructures, Education, Inclusion, and Health.
(Jan 12, 2021)	 Challenges to be Addressed: Strengthen the hospital system and, in particular, the territorial assistance network, in order to ensure homogeneity in the ability to provide integrated responses (health and social health issues), as well as equal access to care. Strengthen the resilience and timeliness of the health system's response to emerging infectious diseases characterized by high morbidity and mortality, as well as other health emergencies. Boost digital health care, design digital solutions for multidisciplinary and multi-professional care and assistance processes, as well as for proximity and communication with people. Promote and strengthen the field of scientific research, increasing resources for biomedical and health research, including via the promotion of equity funds and developing skills that can facilitate technology transfer. Provide safe, technologically advanced, digital and sustainable hospitals, also by revamping existing facilities with particular reference to high-tech equipment and digitisation. Strengthen the country's capacity, effectiveness, resilience and equity in the face of current and future health impacts associated with environmental and climate risks. Enhance the technical-professional, digital, and managerial skills of professionals in the National Health Service (NHS) and resolve shortages within the ranks of specialists and general practitioners. Lessons Learned that Informed Plans: No information identified.⁶³ Governance: The plan will have a political guide, chaired by Prime Minister Giuseppe Conte, Economy Minister Roberto Gualtieri and Economic Development Minister Stefano Patuanelli. For each mission there will be a manager and a cabinet of experts on the various sectors.⁶⁴
OECD and European Commission – Europe 2020: State of Health in the EU Cycle (2020)	 Scope: This report is the first step in the State of Health in the EU cycle, an initiative launched by the European Commission in 2016 to assist EU Member States in improving the health of their citizens and the performance of their health systems. Challenges to be Addressed: The first 10 months of the pandemic offer emerging insights on how health systems can become more resilient to the ongoing pandemic and future crises, grouped in five priority areas: If countries are prepared and are able to act quickly, they may be able to avoid costly containment and mitigation measures (e.g., rapid scale up testing capacities, digital contact tracing, PPE supplies). Adaptive surge capacity can help treat COVID-19 patients in an effective manner, but countries will also need to invest more in their health workforce (e.g., mobilizing additional staff to respond to demand surges). Strong primary health care and mental health services are needed for COVID-19 patients and to maintain high quality care for non-COVID-19 patients (e.g., telehealth, increasing scope of practice for nurses). Vulnerable populations need much more support in the health system and beyond (e.g., joint procurement, research and development). Lessons Learned that Informed Plans: COVID-19 has exposed latent health system fragilities that existed before the outbreak. Despite much talk of health spending overwhelmingly goes on



	 curative care, not prevention. The pandemic has highlighted the need to consider the resilience of health systems as an equally important dimension of health system performance alongside accessibility, quality of care, and efficiency. Providing an overall assessment of country responses to COVID-19 is difficult at this time, given that the pandemic is still very active across the world. European countries struggled to varying degrees to respond to the first wave of the pandemic in Spring 2020 and to the second wave in Autumn 2020. Many countries struggled during the initial months of the crisis to increase the availability of masks and other personal protective equipment. Most countries also struggled to scale-up their testing capacity, which limited the effectiveness of testing, tracking and tracing efforts. Outside of Europe, Korea and New Zealand are good examples of countries that have managed to control the COVID-19 outbreak through quick, effective, and targeted measures, thereby avoiding full lockdowns. In Europe, up until October 2020, a few countries like Finland, Norway, and Estonia were better able to contain the spread of the virus and mitigate the economic consequences, in part because of geographic factors (lower population density) but also because of timely implementation of targeted containment measures, and strong trust and compliance by populations.⁶⁵ Governance: No information identified. Barriers to Success: No information identified.
Australasia	
New Zealand – COVID- 19 Psychological and Mental Wellbeing Plan (Dec 2020)	 Scope: The Plan provides a framework to guide collective efforts to support mental wellbeing across national, regional, and local levels over the next 12-18 months as the country adapts to the new environment created by COVID-19. It is a living document and sits within the longer-term work to transform New Zealand's approach to mental health and addiction. Challenges to be Addressed: Focus areas for short-term (i.e., people have strong mental wellbeing and adapt and thrive during the response to and recovery from COVID-19) and long-term (i.e., equitable and thriving environment in which mental wellbeing is promoted and protected) goals
	 include: Strengthen specialist services; Expand primary mental health and addiction support in communities; Equip individuals to look after their mental wellbeing; Foster community-led solutions; and Build the social, cultural, and economic foundations for mental wellbeing. Lessons Learned that Informed Plans: During higher COVID-19 Alert Levels, the country has seen increases in self-reported symptoms such as anxiety, depression, loneliness, and stress about leaving the house. These are understandable and normal responses to crisis events. They have also seen these reported symptoms ease off in the general population as the Alert Levels drop. Most people, communities can recover and adapt in challenging times with appropriate support. Based on the experience of the COVID-19 outbreak so far, and knowledge from other significant events, the government expects to see mental wellbeing diffected: As a direct result of COVID-19, including distress, grief, and stigma for people who have been unwell and the staff who work with them; fear of becoming infected; and fear of resurgence. By the secondary stressors of COVID-19, related to economic, social, and cultural changes people are experiencing. This may include financial hardship, unemployment, disengagement from education, homelessness, a lack of hope, and other factors. The economic repercussions of COVID-19 in particular have the potential to affect wellbeing. Governance: Central and local government agencies, District Health Boards, educational institutions, Māori and community organizations, and businesses all have important leaderships roles in responding to COVID-19 and supporting mental wellbeing. After the transition out of Alert Level 4, a Caring for Communities Group was established to respond to cross-agency system issues and support regional social sector responses regionally.





	 The Ministry of Health will support sector leaders through networks such as Whāriki and the District Health Board psychosocial coordinators. The Ministry has established a dedicated COVID-19 Health System Response directorate, including an Incident Management Team that manages periods of resurgence.
	 Barriers to Success: While the mental wellbeing framework primarily focuses on recovery, it is recognised that the path may include further fluctuations in COVID-19 Alert Levels. This could affect regions or populations differently depending on the nature and location of COVID-19 clusters, and would require focused actions and tailored responses.⁶⁶
Melbourne, Australia – COVID-19 Reactivation and Recovery Plan	• Scope: In addition to reactivation and recovery initiatives, this plan also puts forward priority projects that represent significant opportunities to advance Melbourne's future and inject critical stimulus in the city's, the state's and the country's economy over the next three months, 12 months, and four years. For example, the initiatives aspire to make Melbourne healthy and safe, lead in technology, digital, and data provision, stimulate collective action on climate change, and involve the community as it recovers and evolves. The plan is aligned to the United Nations Sustainable
(Sept 2020)	 Development Goals to ensure the future built is prosperous and sustainable for all. Challenges to be Addressed: Seven initiatives represent the city's plan for reactivation and recovery following the COVID-19 pandemic. Together, they connect our immediate response to the crisis with our city's longer-term regeneration.
	 Prioritize public health and wellbeing (e.g., continue provide safe accommodation for people experiencing homelessness, adjust civic spaces to make physical distancing easier); Reactivate the city (e.g., expand dining opportunities); Build economic resilience; Expand equitable opportunity and access;
	 Transform spaces and buildings; Strengthen community participation and align with others; and Evaluate, measure, and progress.
	 Lessons Learned that Informed Plans: No information identified. Governance: The plan was delivered by the City of the Future Taskforce. During the project a broad cross-section of community and experts participated in a variety of activities to generate an evidence base and to identify the aspirations, opportunities, and issues when considering possible futures for a post COVID-19 Melbourne.
	 Barriers to Success: A number of existing stresses were facing Melbourne before the pandemic and will influence capacity to recover: Climate change; Reconciliation with Aboriginals; Social insulation (a graning hemplacenese);
	 Social justice issues (e.g., racism, homelessness); Impacts of gentrification, rents, and increased costs of living; Global trends in retail moving to digital environments; and Significant population growth.⁶⁷
Western Australia – Western Australia Recovery	 Scope: The plan has 21 priority streams, each underpinned by direct commitments, including investment, resourcing and programs of work. The scope is comprehensive, ranging from new technologies, local manufacturing and training to tourism, patient care, and the environment.⁶⁸ This plan also consolidates the commitments in the priority streams for those areas and people most impacted by the pandemic – regional WA, Aboriginal communities, women, and youth.⁶⁹
(July 2020; Jan 31, 2021)	 Challenges to be Addressed: Of the 21 priority streams, the health-related priority streams are: Supporting the most vulnerable (e.g., victims of family and domestic violence, homelessness, carers' support); Putting patients first (e.g., clearing waitlists, research and innovation, mental health); Investing in remote Aboriginal communities (e.g., regional health services, accommodation); and





	 Social connectedness and mental health.⁷⁰
	Lessons Learned that Informed Plans: No information identified.
	• Governance: The plan has been developed in consultation with the State Recovery Advisory Group, which includes representatives from business,
	industry, not-for-profit organizations, UnionsWA, the public sector, local government, and the community. ⁷¹
	Barriers to Success: No information identified.
International Organization	
World Health Organization (WHO) –	 Scope: The plan is aimed at guiding the coordinated action that must take place at national, regional, and global levels to overcome the ongoing challenges in the response to COVID-19, address inequities, and plot a course out of the pandemic.
COVID-19 Strategic	 Challenges to be Addressed: There are six strategic public health objectives: suppress transmission, reduce exposure, counter misinformation,
Preparedness and	protect the vulnerable, reduce mortality and morbidity from all causes, and accelerate equitable access to new COVID-19 tools (e.g., vaccines). All of
Response Plan	these interventions and capacities must be underpinned and facilitated by pillars in a multidisciplinary national and/or subnational response structure:
/= · · · · · · · ·	 Coordination, planning, financing, and monitoring.
(Feb 24, 2021)	 Risk communication, community engagement, and infodemic management.
	 Surveillance, epidemiological investigation, contact tracing, and adjustment of public health and social measures.
	 Points of entry, international travel and transport, and mass gatherings.
	 Laboratories and diagnostics.
	 Infection prevention and control, and protection of the health workforce.
	 Case management, clinical operations, and therapeutics. Operational support and logistics, and supply chains.
	 Operational support and logistics, and supply chains. Maintaining essential health services and systems.
	 Vaccination.
	Lessons Learned that Informed Plans and Barriers to Success:
	 Epidemiology is dynamic and uneven, in some contexts uncertain due to a lack of data, driven by variable public health responses and further
	complicated by variants of concern; however, many countries continue to suppress transmission using available tools.
	 Health care systems and workers have saved countless lives but are under extreme pressure in many countries in terms of capacity and
	capabilities, financial resources, and access to vital commodities and supplies.
	 Surveillance systems are finding it hard to cope with high force of infection in some countries.
	 Communities have experienced an erosion of social cohesion, limited access to education, and reduced income and security.
	 Public health and social measures to control COVID-19 can have considerable social and economic costs, and must be risk-based, regularly
	reviewed on the basis of robust and timely public health intelligence, effectively communicated, and enabled by targeted measures to ameliorate
	the socioeconomic costs of participation.
	 Global, regional, and national supply chains and market mechanisms have been disrupted and unable to meet demand, with implications for the implementation of supply chains and market mechanisms have been disrupted and unable to meet demand, with implications for the
	implementation of surveillance, infection prevention and control, case management, and the maintenance of essential health services
	 The infodemic of misinformation and disinformation, and a lack of access to credible information continue to shape perceptions and undermine the application of an avidence based reasons and individual rick reducing behaviours.
	the application of an evidence-based response and individual risk-reducing behaviours.
	 Comprehensive preparedness and emergency response systems to protect populations from disease outbreaks, natural and human-made disasters, armed conflict, and other hazards, remain fundamentally underinvested in many countries
	 Science has delivered answers, evidence-based guidance and solutions including vaccines, new diagnostics, and therapeutics. Production of
	these tools is being scaled up, and strong mechanisms exist for equitable delivery. However, in some cases demand and utilization is suboptimal,
	and equity is under threat.





	Governance: No information identified. ⁷²
KPMG International –	Scope: Global insights, practical advice, and tools to help health care leaders build and sustain a resilient new reality.
COVID-19: Recovery	Challenges to be Addressed:
and Resilience in Health Care (Nov 2020)	 <u>Managing the outbreak</u>: Diagnosis and contact tracing, creating extra capacity, expanding digital channels, program/project management, governance, modelling impacts to supply chain/demand, managing cash flow, remote work approaches, workforce augmentation, and compliance and risk management. <u>Exiting confinement</u>: Testing and surveillance, population-based approaches, contact tracing, and partnerships and collaboration. <u>Finding the resilient new reality</u>: Developing new care models to restart regular care within confinement restrictions, manage care backlogs, and assess preparedness plan effectiveness for future waves. Also, digital delivery, resilient operations, workforce agility, and financial governance. Lessons Learned that Informed Plans: KPMG health care specialists work in more than 45 countries and territories and have been deeply involved
	in the pandemic response. The following key client themes have emerged:
	 Digital front door is now the normal front door (remote consultations, online health records).
	 Separation of clean and dirty sites (increasing capacity to care through strict rules governing regular testing of staff and patients and their movement between clean and dirty sites (i.e., touching clean body sites/surfaces before touching heavily contaminated areas); dedicated facilities and equipment with increased virtual staff communications). Hot (i.e., reliant on the presence of critical care) and cold (does not require critical care) sites (new patient flows to protect ongoing elective care and diagnostics services including transfer to cold sites and use of other care settings including private facilities). Scaled up primary care and centralized specialty services (field hospitals, centralized primary care hubs). Aged care services (best practices to protect care home residents and staff). Supply chain resilience and back office scale (digital supply networks using analytics and modelling).
	 Command centres (real-time data across national, regional, and nospital systems). Agile workforce (remote working and flexible regulation). Institutional and health system governance (cooperation and resource sharing through regional planning). Project management (need for more management and accelerated delivery capacity). Governance: No information identified.
	 Barriers to Success: Health care organizations face continued uncertainty over a period of years until a global vaccination campaign is fully underway. After the initial shock comes a difficult period of managing the impact, with continued adaptation of services to scale-up and scale-down the acute response while seeking to resume other services and reduce the backlog.^{73,74}





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