COVID-19

Accelerating the path to health system integration

Next steps in a post-COVID-19 world
The path to health system integration: Four key shifts

Last year, Deloitte's Centre for Health Solutions released an article that set out a vision for the future of health care in 2040.

Following in the path of other industries, we know that the health sector is on the verge of a step-change where technology will reshape what we consider to be the normal way of operating.

Today, we are even more firmly in the midst of the fourth Industrial Revolution, and while it’s to be expected that 20 years from now the health care system we know today will look completely different, COVID-19 has accelerated the pace of this change considerably.

Our collective experience responding to this global pandemic has allowed us to change how health services are delivered. This has required innovation, agility, and the convergence of new capabilities—learnings that help accelerate the way towards a more integrated health system.

Our health system’s response to COVID-19 will continue over many months and our success in this response will be informed by our ability to maintain progress to suppress the virus in our communities and institutions, reinvigorate our pandemic response preparedness, and sustain the progress we have made to enhance the way we manage and deliver health care.

The future of health is here—what can providers do to sustain advancements after COVID-19?
COVID-19 has accelerated the journey to health system integration

The future of health is upon us. The response to the global pandemic has disrupted all aspects of service delivery and clinical planning for health system leaders.

We have identified the following shifts that we believe will accelerate the operational transformation towards a much more integrated care delivery system. These are relevant and important from both a health strategy and operations perspective, and offer a view into the shifting health delivery value chain, and how the health sector needs to prepare for this future, today.

1. **Virtual first**: integrating or scaling virtual approaches to all aspects of clinical service delivery.

2. **Focus on value**: shifting from outputs to outcomes—with value, quality, and patient outcomes closely linked to funding-model reform and integrated care.

3. **Advanced population management**: forging new partnerships and communities with sectors outside of health, focused on a whole-system approach.

4. **Future of the hospital**: focusing on flexible design and the connected patient experience, enabling hospitals to respond to changing clinical needs and supporting patients across the health ecosystem.

For each of these shifts, we’ve outlined:

- **Current capabilities** in the health care system
- The **disruptors** affecting current ways of working and accelerating integration
- **Future-state capabilities** and where health systems can aspire to be
- **Smart next steps** towards enhanced integration
**COVID-19: Accelerating the path to health system integration**

**Shift 1: Virtual first**

**Virtual care is here to stay.** COVID-19 has disrupted how and where care is delivered. Models of care have been modernized to support patients with new technologies and new resource models. Rapid investments in virtual-care solutions have accelerated Canada down a path where, if enabled by continued smart investment, we'll see significant long-lasting impacts on how patients receive care.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Before COVID-19, virtual care existed in pockets across the health system. Usage was closely linked to inaccessibility of essential health care services, or heightened degrees of comfort with providers and patients.</td>
<td>A recent Deloitte survey of health executives prior to COVID-19 found that more than a quarter of outpatient, preventative, long-term care, and well-being services would move to virtual delivery by 2040.</td>
<td>In the future, virtual care will be at the core of service delivery.</td>
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<td>The pandemic has changed perspectives of providers and patients on the use of virtual care.</td>
<td>The pandemic has taken this to a new level. Some providers we are working with have been able to make as much as 90 percent of care activities virtual — levels previously unheard of and ones that providers and patients are excited to sustain.</td>
<td>Organizations will adopt a ‘virtual front door’ for all aspects of care, strengthening and simplifying how patients access the health system. Health human resources and traditional clinical spaces will be redesigned with a virtual-first, in-person-second philosophy.</td>
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<td>Historical challenges faced by providers—including cost, adoption, access, geography, interoperability with existing systems, privacy, and licensure—have been met with fresh thinking that focuses on the scale of the opportunity, rather than the scale of the challenge.</td>
<td>The shift toward virtual-first care is enabled by robust technology infrastructure, including policy changes to enable clinical care both in virtual settings and across provincial borders. The rapid improvements in infrastructure, hardware, software, and high-speed bandwidth, both at home and across Canada, has significantly reduced the technological impediments to receiving and providing virtual care.</td>
<td>Virtual care will not be limited to singular functions—solutions will seek to provide continuous, connected care delivered via a spectrum of digital and telecommunication technologies.</td>
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<td>This cascades into health human resources and settings of care—both of which are being rethought and redesigned enabling patients to receive traditionally hospital-based services from their homes.</td>
<td>Enhanced use of virtual care and a virtual-first approach to care delivery will disrupt how patients typically interact with the health system.</td>
<td>Rather than usage of the health system being closely tied to sickness and injury, adoption of a virtual-first approach will drive focus toward well-being and prevention rather than treatment.</td>
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Smart next steps for health system leaders

1. **Engage physicians, staff, and patients in your network**—understand what models of care have changed, what outcomes have been achieved, and how to scale these capabilities further

2. **Design and implement a virtual-first strategy**—create a new vision for the organization predicated on a virtual-first approach. This is particularly relevant for systems undergoing clinical or structural changes in care delivery

3. **Seek new solutions and partnerships that sustain virtual and home health delivery capabilities**—evaluate, prioritize, and strategically invest in solutions that align with your vision
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Shift 2: Focus on value

As care becomes more integrated across the system, traditional ways of funding and compensating providers will change. COVID-19 has accelerated funding reform, as new service providers enter the health space, and existing service providers who are now compensated differently push for changes to deliver more integrated care.

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<td>Hospitals and health systems across Canada traditionally follow a global-based budgeting approach—effectively basing plans to spend on how funds have always been spent.</td>
<td>The pandemic has reinforced the need for providers to get a handle on their costs and broader supply chain, including such costs as Personal Protective Equipment (PPE).</td>
<td>The shift toward activity-based funding, bundled payments, and accountable care organizations, will create new capabilities for the health system.</td>
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<td>The emergence of new models for funding—including activity and value-based funding—have enabled providers to think differently. As global budgeting perpetuates historical ways of working and resource utilization, versus an activity-based model that more closely follows the patient and incentivizes outcomes, providers have been able to get a better handle of cost drivers to inform resource planning.</td>
<td>The shift toward the use of predictive analytics and activity-based funding is growing around the world. The UK National Health Service, and the Australian Health Care system, for example, have put in place tariffs for a significant proportion of clinical activity, contributing to greater outcomes for patients and enhanced opportunities for integrated care.</td>
<td>Hospitals traditionally focused on generalist clinical activity will transition into centres of excellence where efficiencies can be gained from economies of scale.</td>
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<td>The pandemic has illustrated the need to reinvent current ways of funding the system. New service providers have filled gaps the traditional system could not support. Further, physicians were not properly incentivized to use virtual solutions for delivery.</td>
<td>A new set of costs to manage, as well as overarching sustainability concerns, especially from payers, will further disrupt how organizations manage budgets. Retaining the current funding models, based on historical growth, will place unmanageable pressures on health systems already facing financial constraints.</td>
<td>Value will be sought across all aspects of health service delivery—from the contracts established with vendors, to how programs are planned, how new service providers and physicians are compensated, and how hospitals will be funded.</td>
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<td>This will likely be fueled by a stronger foundation of data, public reporting of provincial indicators, and a robust model of checks and balances instituted by government, focused on value for every public dollar spent, with new entrants in service delivery instigating new funding models.</td>
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Smart next steps for health system leaders

1. **Execute an organization-wide budget review**—establish staffing and resource models for each operational area, understanding the efficiency factor of how costs (and therefore operating budgets) have changed because of COVID-19.

2. **Undertake a core/non-core clinical service assessment based on strategic and financial indicators**—put in place a plan to finally transition away from services not core to your organization’s vision.

3. **Invest in data and analytical capabilities**—enable a holistic view of costs associated with how care should be delivered.

4. **Pull together your network**—engage with local, regional, and provincial partners to understand where influence is needed to sustain new models of care with new service providers.
Managing patients actively across the continuum of care using a ‘whole-system’ approach is the new normal for health. Expanded connectivity and the exponential growth of technology are enabling traditional providers to exist as part of a smart health community, empowering patients to take a greater role in actively managing their care.

**Foundational capabilities**

Health care organizations have defined roles within the health ecosystem. Services are largely structured based on geography, historical usage patterns, and patient expectations for how and where they should receive care.

Because of this, health systems are beginning to plan for services at a regional or provincial level. This allows operators to plan effectively for the patients they serve now—not the patients that may require different services in the future.

The technology underpinning health care is beginning to become more integrated. Historically, the plethora of systems impacted the ability of health information to follow a patient.

The growing integration and interoperability of the health system has enabled providers to address some of the historical challenges with understanding how and when patients utilize the system.

**Disruptive enablers**

The response to COVID-19 has forged new partnerships across the system, and forced a whole-system approach to care, centred around what the patient needs.

This has fueled the acceleration of community health hubs and virtual communities in which traditional roles of players are transformed. As approximately 80 percent of health outcomes are caused by factors unrelated to the medical system, smart health communities are enabling providers to strengthen approaches for chronic disease management and prevention, to reduce the reliance on the traditional medical model.

Adopting a whole-system approach is enabled by advancements in technology—particularly, predictive analytics and Artificial Intelligence (AI). These provide the tools for organizations, both in and outside of traditional health care, to plan for services at a regional or provincial level.

**Future-state capabilities**

Virtual and physical communities will work in partnership with one another to drive a tailored promotion of health and well-being, providing consumer-centric product delivery and care. This includes funding shifts to early-stage interventions to bend the cost curve, and improve outcomes.

Additionally, interoperable data sets will be used to drive new interventions that help keep people healthy without entering hospital. Further, the use of secure platforms will enhance patients’ access to health resources when they require them—without travelling to a hospital.

Providers’ use of actionable health insights—driven by interoperable data and smart AI—will help identify illness early, enable proactive intervention, and improve the understanding of disease progression particularly for high-needs populations, both inside and outside of the traditional health care system.
Smart next steps for health system leaders

1. **Invest in tools**, such as an AI-powered command centre, or a digital twin of your organization, to strengthen the predictability of service delivery.

2. **Design an integrated digital citizen experience** strategy from a population health lens that combines the social and care needs of citizens.

3. **Develop a smart health community**, strengthening engagement of community partners to enable and support consumers to manage their health and well-being needs, especially those in the community with higher care needs by leveraging secure virtual platforms for engagement.
## Shift 4: Future of the hospital

The hospital of the future will look fundamentally different than the hospital of today. As care transitions closer to a patient’s home, and technology disrupts how services are delivered, hospitals will transform into centres of excellence supporting needs for a broader population. To do this, hospitals will need to embrace principles focused on flexible design and a virtual-first approach to care.

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<td>Hospitals are still thought of as the default for care delivery—providing services for areas of the system that are under-resourced, such as primary care. The pandemic has exposed the difficulties in rapidly transforming spaces for emerging patient needs.</td>
<td>COVID-19 has presented new ways of working that are disrupting traditional delivery models.</td>
<td>The acute-care hospital will no longer serve as the centre of gravity—this will shift to patients.</td>
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<td>Many hospitals do the same things—serve patients coming through the emergency department, care for inpatients, and perform surgeries, and they do this well. Centres of excellence exist in highly specialized care areas, such as pediatrics or transplants.</td>
<td>Hospitals have partnered with new service providers to limit time spent on acute sites. Traditional patient flows in the community and in the hospital have been disrupted through the use of virtual care, and other community providers. Specialty and community hospitals have been converted or repurposed to respond to potential surges in COVID-19 patients.</td>
<td>To do this, providers will need to adopt a series of principles, including using ‘smart’ buildings and assets predicated on flexible design and connectivity, to rapidly respond to changing clinical needs across the region.</td>
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<td>Today, many hospitals are thinking differently about how they can be part of an integrated system. Challenges with underlying IT systems to enable health information to be exchanged seamlessly across providers are beginning to be tackled head-on. The patient journey and experience is becoming the starting point for how providers plan, fund, and grow services.</td>
<td>These trends have significant implications for how hospitals of the future are staffed, sized, and designed. Demographic and economic trends, coupled with accelerating technologies and growing consumerism, are enabling more health care services to take place in outpatient settings and in the home.</td>
<td>Hospitals will embrace the concept of health ecosystem management—or leveraging technology to extend care services across a broader patient catchment. Examples of this include e-ICUs or virtual wards in which areas of the population underserved by specialty resources can be supported using technology without having to travel.</td>
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<td>These trends have significant implications for how hospitals of the future are staffed, sized, and designed. Demographic and economic trends, coupled with accelerating technologies and growing consumerism, are enabling more health care services to take place in outpatient settings and in the home.</td>
<td>The connected patient experience will become the new focus for hospitals—strengthening patients’ navigation of the health system through connected devices in and out of the hospital. Powered command centres are a growing model in the future of hospitals that can equip leaders with real-time information about patients before they enter the hospital.</td>
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Smart next steps for health system leaders

1. **Rethink development plans using Deloitte’s hospital of the future framework**—critically evaluate existing hospital infrastructure from the perspectives of user-centred and flexible design, the connected patient experience, and invest in smart buildings and assets.

2. **Establish a digital vision for your hospital**—refresh stakeholders while celebrating the gains achieved throughout the pandemic, allowing for new voices to influence the future strategy for your organization.

3. **Accelerate the implementation of technology within your organization**—leverage the decision-making processes and models that have enabled your organization to respond to the pandemic as the model for use cases for future technology implementations, and foundational capabilities such as cloud data integration, and flexible architecture.
Conclusion

In the *Future of Health*, we argued that new roles, functions, and players will emerge across data and platforms, well-being, and care delivery along with new archetypes, which will serve as the backbone for the health care ecosystem of tomorrow. Today, this hypothesis is playing out in real time and is very much accentuated because of COVID-19.

Providers now need to scale their points of access to get closer both physically and digitally to their patients, while decreasing delivery costs. Near-term strategies in the post-COVID-19 era will undoubtedly include enabling patient self-service, creating remote and virtual health solutions, digitization, and advanced population management.

As organizations rethink the types of services provided, and the locations where they are delivered, they must also rethink the current parameters of care delivery models and be ready to transform at the enterprise level—not just optimize select pieces of the ecosystem within existing constructs. This will inevitably lead to a more integrated care delivery system.

The four shifts we have discussed present unique opportunities to accelerate transformation across the system. Embracing a ‘virtual-first’ approach will require new thinking on how services are offered to citizens. Similarly, the entrance of new providers across the health system undoubtedly fosters more focus on funding reform, while a whole-system approach will require providers to think about supporting whole populations. This will culminate into the smart hospital of the future, thoughtfully designed as a central hub among other service providers across an integrated system.

These shifts will also need to be considered in conjunction with analytics, cyber resilience, and scenario planning capabilities, along with investment in foundational technology capabilities such as cloud-based data platforms with flexible infrastructure.

Payers, too, will need to respond to these realities, with a continued commitment to shifting funding mechanisms to incentivize and enable the use of digital care, if not the move to wholesale value-based funding approaches. Evaluation of the outcomes in the medium term will become a system priority as will new frameworks and approaches for regulating care outside of the hospital setting.

The past several months has witnessed immense complexity and pressure on our health system—at every level. As we move forward in a much more accelerated way to the future of health, with a common purpose, there is an opportunity to consider some of the smart next steps outlined here to begin to put in place new business models for more integrated health service delivery.

We truly cannot afford to wait—our health systems are already looking very different given the quickened pace of disruption—the future of health is here.
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