

Digital Health Initiatives: A Principled Framework

Digital health initiatives, through their ability to connect systems, simplify processes, and communicate and leverage data, have potential to support each arm of the quintuple aim: improve the patient experience, improve population health, reduce costs, improve health care professional well-being, and advance health equity. The way in which these digital health initiatives are conceptualized, designed, implemented and optimized can support or hinder the extent to which benefits are realized. Moreover, the perspectives of various stakeholders – such as physicians, other regulated health providers, hospitals and organizations, vendors, patients, governments, and regulators - play a significant role in shaping how digital health initiatives are adopted and understood.

To ensure the success of a digital health initiative, it is vital that it is reviewed through a consistent principled framework. The intended use of this framework is for system stakeholders to apply the principles to new and ongoing digital health initiatives relevant to any physician, and throughout the entire lifecycle of the digital health initiative, from conception to optimization.

Physician Engagement	<ul style="list-style-type: none">• Engage physicians, including through the Ontario Medical Association, OntarioMD, and the organizations at which they work, as key partners through the full lifecycle of an initiative – from conception and design to implementation and ongoing optimization – to ensure it responds to an identifiable need and the usability addresses that need directly.• Engage a diverse group of physicians including representatives from all that would be impacted directly or indirectly, by the initiative. Diverse physician experiences drive different needs, including specialty, geographical region, practice type, technology maturity, age, and patient population. Input from these different voices is necessary to tailor the initiative to the unique medical practices.
Simplify Processes & Minimize Additional Burdens	<ul style="list-style-type: none">• Design the initiative from inception with a goal to identify opportunities to reduce existing burdens and leverage the potential of the initiative to simplify processes.• Identify and reduce any new and additional administrative and technical burdens the initiative will cause physicians, and address with the appropriate resources and supports to ensure physician well-being, practice sustainability, and patient care are not compromised.• Eliminate or prevent any new financial burdens the initiative will cause physicians. Costs of the initiative must not be downloaded onto physicians by vendors.
Benefits for Physicians	<ul style="list-style-type: none">• Physicians must experience benefits from the initiative beyond measurable efficiencies that contribute to better delivery of and higher quality care, as well as support and improve physician well-being.

	<ul style="list-style-type: none"> • Evaluation (with strong physician involvement) plays an important role in measuring and realizing if the desired benefits were achieved.
Collaborative Discussions	<ul style="list-style-type: none"> • All policy and implementation discussions on the initiative must include physicians in early planning stages. • Government-led digital health initiatives must be discussed collaboratively between the Ministry of Health, Ontario Health, Ontario Medical Association, and OntarioMD.
Interprofessional Scope	<ul style="list-style-type: none"> • Operational requirements to support the initiative must be clearly identified from the outset and evaluated to determine the health care professional or staff person that is most appropriate to fulfill them. • Systems should support role-based access and documentation that enables delegation, oversight, and clear accountability in collaborative team models. • Workflow design of the initiative must reflect the interdisciplinary nature of care and requirements in collaborative care models must go beyond physicians.
Tailored Initiatives	<ul style="list-style-type: none"> • The initiative must be tailored to different settings and practice-types given the diversity of large institutions to small or solo community-based practices, recognizing that the latter often lack administrative and technical support or additional capacity. A one-size-fits-all approach is unlikely to succeed. • Physicians must have appropriate choice in the right technologies for their practice type. • Efforts to tailor initiatives must also be done in conjunction with supporting system-wide interoperability and integration.
Education & Support	<ul style="list-style-type: none"> • Physicians must be provided with effective change management resources and supported to undertake proper and easily accessible training and education, with targeted approaches for early, mid, and late adopters of the initiative. For community-based physicians, these resources should continue to be provided by OntarioMD. • Where patients are gaining access to technologies and data, tools for digital health literacy must be developed and accessible to them. Physicians must not bear the burden of navigating digital health literacy supports for patients. • Vendors must provide timely support to their physician clients.
Coordinated Timing & Continuous Communication	<ul style="list-style-type: none"> • The timing and implementation of the initiative must be coordinated with other digital health initiatives within and between Ministries to ensure new requirements are timed and coordinated appropriately to enable physicians to learn and implement new processes in a reasonable timeframe and with sufficient capacity. • Physicians must receive communications about the initiative throughout its lifecycle, including ample advance notice of the initiative prior to implementation, and continuous timely updates from the Ministry of Health/Ontario Health and/or system stakeholder as the initiative progresses.

Maintaining Patient Trust & Supporting Digital Health Literacy	<ul style="list-style-type: none"> • The initiative must maintain and not erode trust in the physician-patient relationship. • Patients should have access to their data in a way that empowers their role in their own care and supports their digital health literacy, while supporting the physician-patient relationship and physician data needs.
Collaborative Data Governance	<ul style="list-style-type: none"> • Data governance regarding the initiative must be developed in partnership with system policymakers, physicians, and other partners.
Data Usage Restrictions	<ul style="list-style-type: none"> • The limited intended purposes of acquiring data for the initiative must be explicit (and it must be explicit that the data will not be used for any secondary purposes other than those explicitly stated). • The government must only use any data acquired from physicians for the limited intended purposes of the initiative, and any additional purposes must be communicated to and consented to by physicians prior to use.
Integration & Interoperability	<ul style="list-style-type: none"> • The initiative must be integrated seamlessly with physician and team workflows and existing digital infrastructure. • The initiative must minimize the creation of redundant systems and portals with additional log-ins required. • The initiative must be interoperable across practice environments.
Alignment with System Goals	<ul style="list-style-type: none"> • Initiative planning must begin with identifying explicit system goals and needs to be met, and outline how the initiative will contribute to the achievement of them. • Vendors must be accountable to align with and enable system goals, including but not limited to, integration and interoperability. Successful implementation and ongoing use is impossible without vendor commitment to creating compliant and interoperable solutions.
Evaluation & Ongoing Optimization	<ul style="list-style-type: none"> • Pilot testing on the initiative must be conducted on a diverse range of physicians, including representation from all that would be engaged in or otherwise impacted by the initiative, as well as physicians with different levels of digital expertise, as lessons learned on a small scale are often not generalizable to all physicians. • Establish quantifiable outcome measures in addition to output targets prior to implementation to ensure outputs ultimately support system goals. • Set reasonable evaluation points to measure the initiative's outputs and outcomes to ensure they achieve their intended purposes, address the needs of and feedback from physicians, and fulfill the aforementioned principles, and make changes accordingly. • Physicians must be provided with education and change management resources and supported to undertake proper and easily accessible training for any revisions that result from each evaluation and iteration.