

APPENDIX B: DIGITAL HEALTH

Experience from other jurisdictions suggests that digital health is a powerful tool for advancing integrated care, shared accountability, value-based healthcare, and population health management approaches.

In this section your team is asked to assess its current digital health capabilities and propose plans for building off this existing capacity to meet the minimum readiness requirements and Year 1 expectations set out by the Ontario Health Team Guidance Document. Responses provided in this section will be evaluated based on the degree to which your team seeks to integrate already existing infrastructure and improve disparities in digital capacity across the members of your team. Responses will also help the Ministry understand what supports teams may need in the area of digital health.

By completing this section, the members of your team consent that the relevant delivery organizations (i.e., Cancer Care Ontario, Health Shared Services Ontario, Ontario MD, and/or eHealth Ontario) may support the Ministry of Health's (Ministry) validation of claims made in the Current State Assessment by sharing validation information (e.g., the number of EMR instances, including the name and version of all EMRs used by applicants) with the Ministry for that purpose.

B.1 Current State Assessment

Please complete the following table to provide a current state assessment of each team member's digital health capabilities.

See Table B1

B.2 Digital Health Plans

Where gaps are identified through the current state assessment, the plans below should include an approach for addressing these gaps. As you articulate your plans please identify what non-financial support and services you will require from the Ministry or delivery organizations.

B2.1 Virtual Care

Describe your plan for how you will build off your team's existing digital capabilities to further expand virtual offerings in Year 1. If some or all of the members of your team do not have virtual care capacity, what steps will you take to ensure that by the end of Year 1 your team offers one or more virtual services? Provide an assessment of how difficult it will be for your team to meet the following target: 2-5% of Year 1 patients who received care from your team had a virtual encounter in Year 1. Describe how you will determine whether your provision of virtual care is successful or not (e.g., measures of efficacy or efficiency).

The Guelph and Area OHT will build off our existing digital capabilities to address two system needs: the need for providers to consult and refer to provide seamless care and the need for patients to access alternatives to face to face visits.

1. Clinician to clinician virtual care is available locally using:
 - OTN eConsults. As of August 2019, 111 primary care physicians have signed up for the OTN Hub and one-third of those providers have completed 3 or more eConsults within the past 6 months.
 - Ocean eReferral Network – The System Coordinated Access (SCA) program has expanded the Ocean eReferral network in Guelph and Area. More than 75 clinicians are sending electronic referrals using the program. 7,313 patients are currently eligible to receive e-mail confirmations of referrals and 2,021 (28%) have received e-mailed notification of their referral.
2. Clinician to patient virtual care is provided as follows:

In Year 1, the team will expand primary care's access to palliative and MH&A populations through the use of the Think Research Virtual Care platform. Current benefits of the use of this solution are documented in the SWLHIN section of the evaluation completed by Women's College Hospital Institute for Health Systems Solutions and Virtual Care (WIHV) <https://tinyurl.com/yyl84kkkr>.

Currently, 567 (0.34%) Guelph and area residents have had a virtual visit with their own primary care provider (1,071 visits total). Patients are also regularly accessing specialist virtual visits using OTN Hub, including Year 1 population visits with mental health and addiction professionals <https://otn.ca/providers/specialist-allied/evisit/#>. OTN eVisit Activity in 2018-2019 includes a total of 2,660 events of which 1635 were Studio (room based) and 1,024 between patient and provider computers (PCVC). These events enabled virtual visits for 2,177 Mental Health, 21 Neuro and 99 Primary care encounters.

Moving forward, we will accelerate adoption of these platforms to ensure the G&A OHT will reach initial goals of expanding virtual care offerings. Virtual visit options will be used to increase palliative patient access to primary care and secondary palliative care providers to optimize palliative care in the home in the last 90 days of life.

A potential Year 2 initiative is being explored that would leverage an existing virtual care application called Relief whereby patients/caregivers can track their symptoms daily. Concerning trends are flagged to a member of the 'Integrated Primary Care Team'.

There are increased Virtual Care licenses being procured by the eCE through the OTN vendor of record to enable MH&A clients with Tier 5 needs to connect with care without having to make/keep an appointment and/or visit a clinic. Further support from the Ministry to obtain additional licences as per the playbook will be necessary. The app will allow nurses/outreach workers in the field to virtually connect the client with a primary care provider to facilitate check-ins. Additionally, the OTN platform will continue to be leveraged to support visits and psychiatry service.

The G&A OHT has the eHealth Centre of Excellence (eCE) as a core partner. Our ability to leverage the experience of this group, who led the innovation procurement within the Provincial Vendor of Record for Virtual Care, is an important element of our projected success. The eCE has secured licenses through the OTN vendor of record to support salaried clinicians in the immediate term – and will be expanded to more physicians when Ontario physician billing codes are resolved. eCE is committed to support change management needs of the G&A OHT.

The eCE has achieved significant success in virtual care during the past 18 months that apply not only to our Year 1 priority populations but will support us in addressing the needs of our full attributed population. Recent successful adoption of virtual care in Waterloo-Wellington include:

- 76% of Primary Care Providers (PCP) adopting Virtual Visits have conducted at least one virtual visit with their patients.
- Over 7,800 patients are registered to use the platform, and over 15,000 visits have been completed.
- 64% of registered patients have had at least one virtual visit (41% of invited patients have registered).
- Patients typically request virtual visits with their PCP for: medication and prescriptions, following up on test results, addressing new health issues, and managing chronic conditions.

In Year 1, the G&A Area OHT Digital Health Working Group will, as part of the development of the 'Guelph and Area Digital Health Plan', review the virtual offerings of all partners and will streamline offerings such that all partners are using an optimized and consolidated set of virtual care tools. These will include Think Research Virtual Care app, and OTN eVisits to enhance the care not only of the Year 1 priority populations but of the full attributed population over time. As mentioned, the eCE has recently procured additional licenses to support OHT development.

Additional virtual care innovations have been identified for future adoption within the G&A OHT. These include the following applications:

1. Mobile version of PSS (to support real time documentation in the patient's EMR)
2. Adoption of digital self-assessment (Inter-RAI) to assist with triaging referrals to the most appropriate provider
3. Access to the 24/7 Serious Illness Call Line for palliative symptom support

We are confident that we can achieve our Year 1 target with the two recommended applications (i.e. OTN eConsults and Ocean eReferral Network). We are optimistic that through focused effort and change management support from the eCE, that we can increase the number of practices set up for virtual visits and the number of patients who register for this.

Telemedicine remains an uninsured service. Remuneration is provided through the provincial telemedicine program. While the absence of an OHIP billing code for physician virtual visits is an ongoing concern, the clinical pathways to support our priority populations involve many other provider types with alternative compensation

models who will use these applications. Expansion of existing OHIP billing codes (i.e. K738 and K739) to include clinician-to-patient eConsults, will greatly improve the pool of physicians and patients who can benefit from this service.

B2.2 Digital Access to Health Information

Describe your plan for how you will build off your team's existing digital capabilities to provide patients with at least some digital access to their health information. Provide an assessment of how difficult it will be for your team to meet the following target: 10-15% of Year 1 patients who received care from your team digitally accessed their health information in Year 1.

The G&A OHT Digital Health Working Group (DHWG) will assist our partners to complete the following tasks in order to provide our patients with at least some digital access to their health information:

1. Optimize and expand use of System Coordinated Access (SCA) eReferral which sends emails to patients to confirm and provide information about their appointment. This includes appointment details, prep instructions and provides patients the ability to confirm their appointment by email. It then updates the referring physician record once complete.
2. Expand the use of CognisantMD (OCEAN) secure patient messaging application to provide patients with the opportunity to acquire and send their Personal Health Information.
3. Expand the use of existing online appointment booking systems (e.g. Caredove) which also give patients digital access to their appointment information and secure messaging. Guelph FHT physicians are already using online booking and EWFHT will start using an online booking system in October.

Additionally, the DHWG will explore the feasibility of expanding other current digital access applications including the following:

1. MyChart as a regional portal for patient information including care plans for our priority populations
2. Current practices at CMHAWW will be supported, sustained and considered for spread to other patient populations within the OHT. These include:
 - a. Sending PHI to CMHAWW patients via email encrypted attachments such as a "Next Steps" letter confirming the next steps in their care plan
3. A longer-term objective will be to complete the development of the Waterloo Wellington Mental Health and Addictions Portal (WW MH&AP), hosted by CMHAWW CaseWorks. Currently the WW MH&AP allows 10 mental health and addiction agencies (including hospital MH&A outpatient services) to access referral information and manage waitlists. Further development could allow patient digital access to their mental health and addiction health information. Once established for this population this functionality could be explored for other patient populations.

Solution Review Criteria

Proposed addition or expansion of applications to address Digital Access to information will be reviewed by the DHWG using these criteria:

1. Solution applies to our Year 1 priority patient populations
2. Solution is scalable to all attributed regional patient populations
3. Solution is sustainable because of:

- a. Funding
 - b. Change management support
 - c. Approval of Admins, Clinicians and Patients
 - d. Clinical Value confirmed from tested organizational workflows including in the emerging Integrated Primary Care Team (IPCT) model
 - e. Operational Value confirmed from tested patient, family caregiver, provider and organizational workflows
 - f. Feasible interoperability with regional partners systems solutions
4. Patient Safety
 - a. Patient Safety Risks have been evaluated and controlled as required
 5. Security and Privacy risk assessments
 - a. Acceptable impact on security and privacy policies and procedures

Background on our recommended solutions

System Coordinated Access (SCA) eReferral

The eHealth Centre of Excellence (eCE) is the regional delivery partner of the System Coordinated Access (SCA) Program, outlined in the Ontario Health Teams: Digital Health Playbook (August 2019). The SCA Program deploys the Ocean eReferral technology developed from an innovation procurement (with a consortium consisting of Think Research, CognisantMD and the Centre for Effective Practice) delivering more than 60,000 eReferrals integrated from within primary care EMRs (Telus PSS, QHR Accuro, OSCAR).

A key component of the Ocean eReferral technology developed by the consortium is how it builds on long-term patient / clinician relationships that assists in a shared interpretation of information. Patients who have consented with their primary care provider, receive information about their referral and can confirm appointments through e-mail in a way that securely updates their record in both the referring clinician and receiving clinician records.

<https://support.cognisantmd.com/hc/en-us/articles/235577547-Basic-Patient-Messages-Workflow>

<https://support.cognisantmd.com/hc/en-us/categories/115000080251-Patient-Messages>

CognisantMD (OCEAN) secure patient messaging

Cognisant MD (OCEAN) Patient Messages allows providers to securely send messages and attachments with PHI to patients. Additionally, patients can interact with their providers by completing forms and questionnaires online. With Ocean's EMR integration, patient records are seamlessly updated without any scanning, typing, or manual staff involvement.

Achieving the 10-15% target will be moderately difficult for the following reasons:

- Sustainable funding is required to support the MyChart platform once the Canada Health Infoway funding expires. We are committed to evaluating the implementation options and exploring partnerships with community, regional and provincial partners to support the spread of existing instances of MyChart to optimize the sustainability of the MyChart platform.

- SCA, “Next Step” letters, eReferrals all require on-the-ground resources to enable the collection of email consents from primary care patients. We will leverage existing infrastructure and the continued support of the eCE QBIC team to support this work.
- Provincial funding is required to support the completion of the development of the Caseworks Access Portal. If that funding becomes available, we will explore how the Caseworks Access Portal can be leveraged to support patients with mental health and addictions needs, as well as other patient cohorts, by providing digital access to their health information.

B2.3 Digitally Enabled Information Sharing

Describe your plan for ensuring that patient information is shared securely and digitally across the providers in your team for the purposes of integrated care delivery, planning (e.g., pooling information to understand population health needs and cost drivers, population segmentation, integrated care pathway design).

Integrated Care Delivery

The ideal state of integrated care is "One Patient - One Record", facilitated by a single EMR for clinical documentation. Recognizing the challenges in achieving this vision (i.e. changing clinical documentation practices across sectors), our alternative ideal state is two-fold.

First is to have fewer instances (versions, services) of each platform. Within our to-be-developed G&A OHT Digital Health Strategy, we will explore consolidation of instances within platforms. For example, we currently have several instances of the CaseWorks system. Recognizing that a purpose-built system is most ideal for the Mental Health population, CaseWorks will have an enterprise functionality (by year end) that links all CaseWorks instances and would support shared care plans. This could expand to other software platforms with appropriate funding. As another example, could we achieve 1 instance of PSS for Primary Care rather than the approximately 30 we have today. This simplification of the environment would result in fewer systems to interface, thereby reducing the complexity of integrating the systems.

Second is to connect the current suite of EMR platforms in use by our Core Partners (i.e. Caseworks, Telus PSSS, Meditech and CHRIS) with an interface to enable read & write access to a Coordinated Care Plan (CCP). We will select a SINGLE system to be the source of truth for the CPP to ensure a consistent reference point.

The regional clinical viewer, ClinicalConnect, will be leveraged to provide more widespread and mobile read-access of the care plan.

Palliative

Widen the access to a shared, co-authored CCP across multiple point of care systems.

Improve CHRIS access and ensure availability of a current shared care plan using Robotic Process Automation (RPA) software. Steps include:

- a) Enable community members of the integrated care team to have access to CHRIS via Health Partner Gateway (HPG).
 - i) Share each patient's coordinated care plan with all members of the care team as it is authored/updated within EMRs (RPA) or within CHRIS (RPA).
- b) Ensure CCP in CHRIS is available in ClinicalConnect so that a wider group of care providers have read-access to the current CCP.
- c) Widen the use of the Palliative Care EMR tool in Telus PSS created by the eCE's Quality Based Improvements in Care (QBIC). The tool offers a proactive way to document critical illness diagnoses and update palliative progression over time. It also offers decision support and links to community resources and references.

Mental Health & Addictions

- a) Admission and discharge notifications and discharge summaries from Homewood Health Centre will be electronically transmitted, without delay, directly to provider systems (Caseworks, EMRs and those in the healthcare community using Health Report Manager (HRM)).
- b) Widen the use of the Depression and Opioid EMR tools in Telus PSS.

The eCE QBIC Depression/Anxiety tool is designed to help primary care physicians capture critical information during a mental health encounter. The goal is to help standardize documentation, support primary care providers, and support clinical best practices. For those clinics who utilize tablets, this tool is compatible with the OCEAN platform and portions of the tool can be automatically populated with information provided by the patient on the tablet.

- c) The eCE also deploys an Opioid Toolbar developed in partnership with EWFHT, Guelph FHT and TELUS Health. The tool integrates current best practice guidelines directly into a primary care provider’s EMR. This tool helps clinicians meet the current requirements from the College of Physicians and Surgeons of Ontario (CPSO) for monitoring patients on opioids and ultimately leads to better patient care by keeping them on lower, safer doses of opioids for chronic, non-cancer pain.

Other EMR tools created by the QBIC team support the management of:

Heart Failure	Chronic Obstructive Pulmonary Disease
Chronic Kidney Disease	Diabetes
Depression and Anxiety	Chronic Non-Cancer Pain
Low Back Pain	Opioid Prescribing
Osteoporosis	Early Identification for Palliative Care
Hypertension	Preventative care screening - PrevCare tool

Full Attributed Population and Longer Term

- a) We will explore real-time secure messaging platforms. This will enable care providers to securely and quickly communicate patient care issues, access patient charts and care plans from mobile devices when providing care outside of the office setting.
- b) We will pursue robotic codification of information in EMRs (using RPA) and broadened use of best practice tools within PSS (from QBIC), balancing the need to respect clinician workflows with the clinical goals of the G&A OHT.

Standardized/coded data in EMRs improves the ability for proactive primary care: increased influenza immunization (19% ↑), pneumococcal immunizations (18% ↑), and prescription of appropriate therapy for patients with heart failure (88%). Standardized data enables more reliable and interoperable data to share with other point of care systems and population health analytics systems. RPA coding work is in development and working prototypes are being tested for widened use. There will be work done to standardize information across primary care, acute care and home care to allow for cross-sector assessment of quality of care in the future.

- We will work with the eCE QBIC team and clinical and quality leads at core partner organizations to support the required change management including demonstration of clinical utility. Quality Based Improvements in Care (QBIC) at the eHealth Centre of Excellence offers a selection of electronic medical record (EMR) decision support tools for Chronic Disease Prevention and Management (CDPM),

preventative care, lifestyle management and data clean up. A team of highly qualified Change Management Specialists support primary care providers by offering coaching sessions to help clinicians increase their knowledge and ability to use EMR technologies in clinic.

Planning

Both our Data/Decision Support Working Group and Digital Health Working Group identified Integrated Decision Support (IDS) from Hamilton Health Sciences as an appropriate and available tool with which to work to share patient-level information securely and digitally across our OHT providers for planning purposes. IDS not only offers data from across multiple parts of the continuum, but has recently added new analytical support and custom reports for OHTs.

Significant investment is required to collect data from the full continuum of care as well as data available from IDS. We will need coded data from primary care EMRs, CMHAWW, Homewood and GGH's emergency department data (ED data is currently handwritten).

B2.4 Digitally Enabled Quality Improvement

Describe how the members of your team currently use digital health tools and information to drive quality and performance improvement. How will your team build off this experience and capability so that it exists at the team-level?

Real-time Clinical Tools

1. We have built, are utilizing, and will continue to spread digitally enabled best practice, integrated tools that support information flow, provide decision support, and lead to high quality patient experience and outcomes. Tools currently in place in the G&A OHT include the following:
 - a. Patients can use tablets and secure messaging to complete standardized screening and issue related questionnaires. The results are immediately downloaded to the EMR. This allows the provider to spend more time focusing on the patient's healthcare needs thereby improving both the patient and provider experience.
 - b. Many of our clinicians are already using a variety of integrated EMR tools such as custom forms, encounter assistants, and toolbars that facilitate more complete, efficient, and standardized documentation and provide decision support and resource information.
 - c. eReferrals allow the clinician and patient to select the most appropriate referrals based on services offered, location, wait time information, and patient priorities. They also ensure that the required referral information is complete. The system automatically tracks the referral and sends the patient and clinician the details as they become available.
 - d. Using eConsults to get specialist opinions within days, leads to more effective care and may remove barriers to care such as patient mobility and financial constraints. An eConsult may resolve the health issue or confirm that a specialist appointment is not required, thereby avoiding unnecessary specialist referrals.

Quality and Performance Measurement Tools.

- a. Integrated System Performance Dashboards – Dashboards are being used to measure and improve quality and performance. We will work with our regional & provincial partners to evaluate how these dashboards can be refined to support an understanding of outcomes for our attributed population.
- b. Integrated Decision Support (IDS) – Enables sharing of patient-level information securely and digitally across the providers in our team for quality improvement and planning purposes. This platform will continue to be a pivotal enabler of our full understanding of the patient journey and patient & population outcomes.
- c. Wellington Dufferin Guelph Public Health Interactive Reports – WDGPH interactive reports have been developed including community profiles, population profiles, health status reports, surveillance reports, tracking dashboards, health topic specific local data used to identify key opportunities to direct focused quality improvement efforts to address key threats to the health of our populations.
- d. CMHAWW Waitlist Management portal – captures wait time data that is used to improve clinical processes.

- e. Daisy Link - a decision support platform at GGH, Daisy Link is a shared platform created by GGH to permit certain admission/ discharge data to be collected and presented for the purpose of QI projects and QI reporting at the Guelph FHT.
- f. Hospital Report Manager – data from this platform provides clinical, outcome and population health information that can be used to understand and address the health of the populations.
- g. NOTE: a) d), e) and f) will be used to generate practice reports that enable near real time understanding of patient and population outcomes that require clinical and process analysis and improvement.

B2.5 Other digital health plans

Please describe any additional information on digital health plans that are not captured in the previous sections.

In addition to the introduction of OHTs there is also a growing number of initiatives related to consumer digital health as a way to empower patients to become active participants vs. passive recipients in their care. There are a number of companies/vendors that are developing health-related products and services that interact directly with our consumers which is causing confusion amongst health providers and consumers (e.g. which tool is best for me to use? What is the difference between company X and company Y). The WWLHIN has committed to endorsing 6 mobile applications in the next year to enable: virtual visits between patients and providers, residents tracking their referral status electronically, electronic cognitive behavioral therapy, electronic discharge instructions, and electronic directories to help patients navigate their health journey. These applications will be harmonized under one front-facing application that WWLHIN residents can access to engage in the various digital health tools. The need for one front-door is so it can act as the correct door for all consumer needs. As we develop this ideal consumer digital health environment we are looking to add a section dedicated to explaining who the resident's Ontario Health Team is comprised of based on their geography. This work will begin specifically, in partnership, with the Homewood Research Institute (situated in Guelph) for the child & youth mental health population. See Figure XI.