Wait Times Initiative – Update

Long wait times to access specialty consultation have been well documented in Canada. A 2020 survey of Kingston Health Sciences Centre (KHSC) specialists showed that ~ 50% of patients with non-urgent referrals wait more than 6 months and 25% wait more than 12 months for a specialist consultation. The ongoing COVID19 pandemic has only exacerbated this.

Since mid-2020, the initiative to *Eliminate Wait Times for Specialty Access has been very active in looking at evidence-based interventions to improve capacity or reduce demand* with support from KHSC, Queen’s/SEAMO leadership and the Primary Care Physician’s Council of FL&A.

Actions and Progress - Identifying and Deploying Evidence-Based Innovations

_Five Working Groups_ were established to each tackle areas of evidence based innovations. Membership was comprised of specialist and primary care volunteers along with patient representatives, administrative leaders and supported by project manager(s) (see section on Innovation team below). Oversight by a _Leadership team_ (KHSC, patients, Queen’s, SEAMO, Primary Care Physicians Council) and expert advice from an _Evaluation Team_ has been ongoing to assess impact. The full list of members is in the July 2021 newsletter (see [https://kingstonhsc.ca/innovation](https://kingstonhsc.ca/innovation)).

Working Group 1 – Central referral and triage using digital tools

Working Group 1 (WG1), led by Drs. Natasha Cohen and Rupa Patel, developed recommendations for central intake and triage using digital tools. “Central referral”, whereby patients are referred to a specialist group...
(rather than individual physicians) and assigned the next available appointment based on urgency, supports reduced wait times and enhances equity of access to care. Within KHSC many, but not all, specialty groups are already moving in this direction using current paper/FAX methods.

**Progress:** Based on WG1 recommendations of key components for a successful central referral and the information that our new HIS will not have eReferral functions embedded within it, KHSC under the leadership of Val Gamache O’Leary (CIO at KHSC) was successful in obtaining funds to pilot an alternative approach: integration of Ocean eReferral (for primary care referrals) plus Novari eRequest wait list management software (for specialist office management of Ocean plus faxed referrals). This will be integrated into QuadraMed, and eventually Lumeo (Cerner HIS). Details on this large new effort are found in a separate section below.

Working Group 2 - Pathways for Primary Care Management of Common, Non-Urgent Consults

Working Group 2 (WG2), led by Drs. Jason Beyea and Matt Dumas, has focused on the development of easy-to-follow patient management pathways for common, non-urgent conditions for which long wait times currently exist. Evidence to support this work comes from a similar program in Calgary where implementation, of GI (and now many other) pathways, has been led and welcomed by the primary care community with dramatic impacts on wait lists (see graph).

**Progress:** Nine conditions (see table below) were initially identified for pathway development. Each pathway is developed with guidance from a development group comprised of relevant specialists and primary care physicians. CPD accredited events “launch” each pathway and, to date, 7/9 are now live (as indicated with checkmarks) – and are found in a new KHSC website ([https://kingstonhsc.ca/refer](https://kingstonhsc.ca/refer)).

<table>
<thead>
<tr>
<th>✔ MGUS</th>
<th>✔ GERD</th>
<th>✔ Irritable Bowel Syndrome</th>
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<tr>
<td>✔ Parkinson’s Disease</td>
<td>✔ Dyspepsia</td>
<td>✔ Chronic Diarrhea</td>
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<tr>
<td>Anemia - TBD</td>
<td>✔ NAFLD</td>
<td>Dizziness - TBD</td>
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Once launched, new referrals suitable for pathways are redirected and referrals closed.

The focus is now on two areas: how to evaluate impact AND what other conditions may be suitable for pathway development. Discussions are also underway with interested hospital groups from other regions within the province, such as Thunder Bay Regional Health Sciences Centre and Grand River Hospital / St. Mary’s Hospital, who have expressed interest in leveraging this pathway work and applying it to their communities.

Working Group 3 - Direct specialist phone access for primary care

WG3, chaired by Dr. Naz Alavi, focused on improvements in time-sensitive communication between primary care providers and specialists. Their work is now completed with two main products:

- **Telephone information for primary care to contact specialists for time sensitive guidance** (generally via Switchboard and paging on call consultant) was distributed to primary care physicians (PCPs) in January 2021. Evaluation suggested little change in total call volumes and satisfaction from primary care.

- **Primary care “back office” and cell phone access** – in order to facilitate specialists’ ability communicate urgently with primary care physicians, PCPs in our region have provided back office/cell phone contact information. Over 100 have provided this information and this list is accessible through KHSC’s QuadraMed PCS. The list can be accessed by visiting the “Web Links” section in PCS and selecting the item titled “PCP Contact Info”.

Working Group 4 - Optimizing virtual care to increase capacity
Under Dr. Genevieve Digby’s leadership, WG4 has been focused on “optimizing” virtual care (VC; phone & video visits). Specifically, WG4 hoped to answer: can VC improve wait times by increasing capacity?

**Progress:** WG4 has highlighted some issues that need to be addressed to optimize VC – within both infrastructure and human resources. KHSC VC Steering Committee has been engaged to ensure complementary efforts. Data collected from respirology, oncology and neurology are currently being analysed to determine net impact of VC on total patient visits/new patient visits. Once this is completed a manuscript describing this work will be written and recommendations made.

Working Group 5 – Embedding specialty clinics in primary care offices
Drs. Liz Touzel and Shawna Johnston led WG5 which focused on enhancing capacity, communication, and education by embedding selected specialty clinics into primary care practices. This is already in place for psychiatry (under Dr. Renee Fitzpatrick’s leadership) and our primary care survey identified a number of other clinical specialities where embedded clinics could be of high value: General Pediatrics, General Internal Medicine and Gynecology. WG5 established with SEAMO that such clinical work will be “in scope” for participating clinicians, identified interest from leaders in the relevant specialties and primary care practices willing to pilot this. Furthermore, a set of principles was agreed to guide how clinics work.

**Progress:** Spring 2022 saw the “launch” of pilots of embedded clinics as follows:

<table>
<thead>
<tr>
<th>Embedded clinic (specialist)</th>
<th>Primary Care Practice</th>
<th>First Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatrics (Dr. A. Moore)</td>
<td>Kingston Community Health Centre</td>
<td>April 2021</td>
</tr>
<tr>
<td>General Internal Medicine (Drs J. Murphy and M. Leung)</td>
<td>Frontenac Doctors</td>
<td>June 2021</td>
</tr>
<tr>
<td>Gynecology (Dr. S. Chamberlain)</td>
<td>Queen’s Family Health Team</td>
<td>June 2021</td>
</tr>
</tbody>
</table>

In Nov 2022 an evaluation workshop was held: feedback from patients was very positive (see graph) as was primary care provider feedback.

Given the small scale of this program it is not possible to determine any “generic” effect on wait times – that would require more widespread deployment and the main factor affecting the ability to scale this is specialist numbers/availability.

Evaluation Team
Under the able leadership of Drs. Catherine Donnelly and Sidd Srivastava an Evaluation Team with representation from each working group kicked off its work in October 2020. An over-arching Logic Model is guiding the evaluation plan. Many of the key metrics are not collected within current administrative systems, so for-purpose data will be required. Each WG is providing the key measures they wish to track for a) successful implementation, b) outputs, and c) impact. The work of the Evaluation team is supported by Mr. Alex Hamilton – a Data Scientist in the Centre for Health Innovation.
Leadership Team
Overseeing all this work has been a very engaged Leadership Team with membership from KHSC, Queen’s, SEAMO, and primary care, clinical champions and, most importantly, patient experience advisors. Their guidance, advice and support in moving the initiative forward has been invaluable.

eReferral- eRequest – progress!

Directly as a result of WG1 efforts in the Wait Times Initiative, a large, complex project is underway introducing eReferral (with the Ocean platform for primary care partners supported by eServices Ontario) integrated with Novari’s wait-list management software, eRequest, to several specialty practices.

Since the goal of this is to create a paperless single integrated system for new referral management, it not only integrates Ocean referrals but also digital fax referrals (with a new referral-only digital fax line) for new outpatient consults from any source (Primary care, Emergency, inpatient services etc.). In order to future proof this work, standard referral templates have been created incorporating primary care input, that will facilitate eventual onboarding of all specialties into this system. As well as integrating information on eConsults and where appropriate, inclusion of the pathways (previously described) on the referral forms.

With the oversight of a Steering Committee and Project team, pilots will launch in May/June 2022 in General Internal Medicine, Pediatrics, Urology, and General Surgery. Phase II planning is underway to onboard more specialties. Our goal is to see this eventually transition to the entire organization—so ALL specialties will eventually go “paperless” for receiving, triaging and booking new referrals.

Data Science, Digital Health and Analytics – planning for the future

As work in the projects above has evolved, it is clear that the place of “digital health” in KHSC and Queen’s will only increase. The opportunities for analysing administrative and patient data to develop better systems of care and patient management will be harnessed. New tools and technologies utilizing digital platforms for care and communication will only become more common. The Innovation workshop held Feb 2020 on Digital Health, Machine Learning and AI underscored how our world is changing and innovations in using data to enhance value of care and to understand and solve problems we face daily will be key.

The new Centre for Health Innovation (formerly the Human Mobility Research Centre) in Watkins wing (KGH) is a joint KHSC-Queen’s Centre now led by Dr. Amber Simpson, a computer scientist and Canada Research Chair in Biomedical Computing and Informatics. With her leadership, opportunities for increased collaboration in utilizing our own data (from our current information system and the future regional HIS) to develop solutions to problems in patient flow, integration of services, and patient care outcomes will increase.

Early discussions, for example, in how understanding better the characteristics, volume, and variation in types of patients coming to our Emergency Department, could lead to opportunities to deploy innovative solutions to the challenges around ER utilization and flow. Similarly, we are looking at optimizing OR scheduling to enhance throughput – part of that work is just beginning with Kings Distributed Systems who is keen to pilot with us a novel machine learning approach to surgical block allocation (Project Osler | Applications | Kings Distributed Systems (kingsds.network).

Funding and Growing the Innovation Team

The Innovation team, working with KHSC leaders (in particular our CIO Valerie Gamache-O’Leary), Faculty of Health Sciences (Dr. Jane Philpott), SEAMO (Dr. Steve Vanner during the time he was Acting Medical Director and Danielle Claus, Executive Director) and through the City of Kingston Fed Dev grant (HI-YGK), has been successful in obtaining >$2M in funding in the past two years. The majority of these funds are from the
Ontario Health to support eReferral projects and licences. A philanthropic donation is supporting a new full time Queen’s Project Manager (Madelaine Meehan) and 0.2 FTE Data Scientist (Alex Hamilton). SEAMO funding will help roll out more pathways, embedded clinics and eReferral through support of an Innovation Project Assistant (position to be filled) and Madelaine. A new KHSC Project Manager, Lisa Palmer, is responsible for the entirety of the eReferral project (in addition to many other KHSC projects!) and with funding from the HI-YGK grant we will be recruiting a full time Innovation Data Engineer, to be embedded in Decision support (KHSC) – part of their role will be to facilitate curation of hospital data to facilitate innovation project work. Finally, we thank administrative assistant Darlene Evans, working in the KHSC CIO office for her always willing administrative support. We aspire to have a team ready and able to undertake new innovation projects in digital health, models of care delivery and more to enhance the value of care delivered at KHSC and in our region.

We thank ALL of you for your efforts and hope you have found this Newsletter useful to see how your part in the big picture is really making a difference. We particularly thank all the Wait Times initiative working groups (see next page for full list!). Finally, a shout out to KHSC Chief of Staff Dr. Mike Fitzpatrick whose support for the creation of an Innovation Portfolio and Innovation Lead position at KHSC is how it all began back in 2018.

Any questions? Please feel free to contact us here:

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