LEADing Practice Challenge

Citizen Health Information Portal (CHIP)
Consumer Health Strategy: Citizen Health Information Portal (CHIP)

In 2014, Saskatchewan launched a consumer health strategy aimed at providing individuals with access to their health system information and empowering them to participate in achieving better health outcomes.

By providing individuals with access to their health information, it helps improve the health literacy of Saskatchewan citizens and allows for proactive conversations about their health with their care teams.

As a result of extensive citizen engagement, the Citizen Health Information Portal was created - a citizen-centric patient portal – uniquely designed for, by and with the help of citizens themselves.
Progress to Date

2014
- Citizen engagement occurred where requirements were identified, prioritized and strategic roadmap drafted
- Procurement for strategic vendor to provide a product that meets the needs of the SK citizens
- Strategic partnership awarded to TELUS Health to build a consumer health portal for SK

2015
- CHIP design and development
- eHealth worked with TELUS Health to develop and integrate data sources for CHIP
- Continued engagement and strategic communication with citizens and providers around CHIP data sources, business rules, change management and support plans

2016
- CHIP pilot launched to approximately 1100 citizens
- Continued engagement with citizens and providers around CHIP
- Benefits evaluation – Surveys, focus groups, interviews, and detailed analysis
- Planning and design for phase 2

2017+
- CHIP design and development with new information and functionality based on citizen feedback
- Medical Imaging (MI) reports, patient history flowing from CHIP to EHR, device integration (FRIBit, BP cuffs, etc.)
- Deployment to 100,000 Saskatchewan citizens!
- CHIP is a secure, online electronic service for citizens
- Provides citizens with access to their health system information
- Allows citizens to track and enter health information about themselves
- Allows users to share their information with their health care providers or family members that are also users of CHIP
- Allow users to enter biometric data, both manually and through approved devices
  - May include items such as daily weights for those with heart failure
  - Blood glucose readings for those with diabetes
- CHIP also allow users to track trends and graph their data to visually see their progress
- Each landing page provides a medical summary, and allow users to enter their own personal health data and history such as their allergies, family history, and daily blood pressure readings
- Prescription history is available, and it displays the past 25 months worth of data
  - This information is sourced through the provincial Pharmaceutical Information Program (PIP)
  - Users also have the option to enter their own information such as over the counter medications or herbal supplements under their medication profile
- Lab results are available and are sourced from the provincial Saskatchewan Lab Results Repository (SLRR)
  - General lab results are available
  - STI results are available 7 days after the test result
- Immunization data is available in CHIP based on data from the provincial public health application Panorama
- CHIP also provides information on admissions, transfers, and discharge from regional acute care facilities across SK
- In total, there are four provincial repositories that flow data into CHIP for citizens to access
Highlights of Future Functionality

New sources of health information:
- Medical Imaging Reports
- Physician Reports (e.g., Discharge Summary, Consult Reports, etc.)

Improving Information Flow for Patients and the Health System
- Sending patient-entered Patient History data from CHIP to EHR
- Requesting appointments for PHC visits, Immunizations, etc.
- Secure Messaging
- Renewing prescriptions
- Referral /consult Status

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Practice Transformation

CHIP was the first consumer facing application for eHealth!
  o A Citizen Advisory Panel was created and a pivotal part of shaping CHIP

Innovative communication
  o Auto e-mail updates to citizens when new data is available in their CHIP accounts
  o Facebook updates to keep citizens informed on CHIP
  o Dedicated CHIP e-mail inbox and trained Service Desk team to handle public inquiries and troubleshooting

Ongoing engagement of citizens to create a citizen-centric application
  o Regular communication to participants
  o Surveys requesting citizen feedback
  o Focus group discussion for open dialogue on the citizen experience

Support and commitment from all divisions within the organization
  o Quick turnaround time from idea to roll out (less than 2 years) on small budget (~$1M), with lots of time upfront targeted at citizen engagement
Supporting New Models of Care

- Providing citizens with access to their health system data to empower them to take ownership and a proactive role in their health
  - Citizens control what data they enter, who sees their data, and what aspects of their data are shared in their CHIP account

- Improving the provider-citizen encounter
  - Allowing citizens time to absorb and learn about their health results and information for value-added questions and conversations with the provider during clinic visits
  - Providing the opportunity to message their provider, through secure messaging in CHIP, if their provider has a CHIP account

- Removing barriers to access
  - Decreasing time and travel for those living in rural and remote areas through online results access
  - Accommodating data access to those without a family doctor or are transient in nature

- Helping to improve overall health literacy
  - Providing access to information as well as links and tools in CHIP to help citizens understand and process the information to make informed decisions about their own health
Of the participants involved in the rollout, 316 responded to the baseline survey (February 11th), 589 responded to the mid-point survey (April 21st), and 520 responded to the post-rollout survey (August 11th) – resulting in a 28%, 54%, and 47% response rate respectively.
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From the words of CHIP participants...

“I am very impressed to date with what this program has to offer. There are many ways in which I believe that this service has improved my quality of life and care. Having access to my personal records makes it much easier to educate myself about medical conditions and the associated tests that come with them. This is important to myself in a number of ways. Firstly, with the ability to research test results before visiting really improves my understanding of what the doctor is talking about during a follow up visit, with a better base understanding I am able to contemplate better questions to ask during follow up in order to satisfy my concerns. I feel this is highly beneficial especially when following up with a specialist where appointments may be six months to a year apart. Secondly, I feel this also reduces a large magnitude of stress associated with chronic illnesses where one may be active in frequent testing, but only follow up with these tests once or twice a year. It adds a feeling of security with the ability to monitor test results and alert your health care provider with concerns. Health care providers are also human and can make mistakes where things may go unnoticed. For example, having the ability to see that liver stiffness in a fibroscan, or that a viral count or liver alt has increased to an alarming rate brings me a great sense of relief knowing that I can ask questions, and bring my concerns to the attention of a Medical practitioner in a reasonable period of time in situations where early detection and time is a contributing factor to measure of well-being.” – Anonymous
From the words of CHIP participants...

“I didn’t feel very engaged. Now with CHIP, CHIP has literally been a lifesaver for me. Cause I’ve been able to get my results before I even see the doctors, I’m able to formulate the questions that I need to ask the doctor and get far more engaged in my health care.”—Anonymous

“I think it’s important. I think access to increased technology is good thing. There’s a lot of people who don’t have a family doctor and they need that data, they might be to get into a Mediclinic and...so this is a one way that you can have care from one doctor to the other.”—Anonymous

“As a renal patient, I am constantly having blood work done and other medical tests done, so I am able to go into the system and look up my information and ensure that it is both timely and up-to-date. I like being able to access the information and have it at my fingertips, as opposed to having to wait for my doctor’s office to phone me, which can take a week to two weeks depending on the requisitions that have been submitted. I see CHIP as a global benefit to health care. If, for some reason, I am admitted to a hospital, that information could be accessible to anyone in the health care profession. It could be the voice that I may not have if I am in a circumstance where I can’t speak for myself. So, as that database grows, that information is more readily available to individuals and I think it will benefit everyone.”—Tyler M.
From the words of CHIP participants...

[On life without CHIP] “I’ll be disappointed because it will feel like going back to the dark ages, you know, like when the power goes out and you don’t know what to do with yourself, right? Yeah it will definitely feel like a step backwards.” — Anonymous

“Thank you. Living in rural Sask has been good for me but CHIPs has made it even better. I can manage my health care with ease and be aware of red flags telling me I need to contact the doc or worse get to the hospital. Thank you I can rest easy.” — Diane B.

“I love CHIPing. I love the look and versatility of the CHIP site. I am a lab manager within the Saskatoon Health Region. I had a personal motive for wanting to get on the trial as well as a professional motive. I think our patients who have to manage their results for being diabetic and on blood thinners will greatly benefit from viewing their results. This program will give back patients better management of their care. I don’t have much testing done. The couple times has been of benefit and has reduced follow up visits to my physician. Often patients are told no news is good news but we know as health providers the occasional one falls through the cracks. If we can view results personally the worry and wait is drastically reduced. Have a wonderful day and I am hoping this program gets Provincial support to increase the membership.” — Lenore H.
From the words of care providers on the benefits of CHIP for patients & practice...

“The ability for my patients to share complex information that would be too difficult and time consuming to do in person at every visit.” – Anonymous

“It will empower patients and positively impact patient care decisions by building trust and a team-oriented approach to care.” – Anonymous

“In general, information sharing in a transparent manner is good.” – Anonymous

“I hope I can keep up with the patient expectations and provide communication on another safe portal to discuss health care for my patients as this form of communication is the way of the future to improve provider patient communications.” – Anonymous

“I hope CHIP will allow my patients to access their health profile ensure the information is correct and review the test results without waiting for me to respond to phone calls. I am hoping they will be reassured with normal results minimizing my phone calls and motivated by results. Many of my patients like to keep in-formed regarding all aspects of their health records and want to be active participants in determining the rationale for their health care.” – Anonymous
See what CHIP participants had to say...

“CHIP is Making a Difference (SHORT VIDEO)” by eHealth Saskatchewan  [https://vimeo.com/167122757]

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