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Health Quality Transformation 2015 - Oral Presentations

4056

Using Clinical Dashboards and Decision Support to Support Guideline-Concordant Mental Health Care

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Background/Context:

Medical error and deviation from best practice is associated with a high proportion of hospital admissions. The Canadian Adverse Events Study (2004) estimated that the adverse event rate was 7.5 per 100 hospital admissions. Similarly, the literature suggests that mental health practitioners often do not adhere to practice guidelines when delivering care as evidenced by low rates of metabolic monitoring in individuals being prescribed antipsychotics and high rates of antipsychotic polypharmacy.

Ontario Shores Centre for Mental Health Sciences (Ontario Shores) has been recognized by the Healthcare Information and Management Systems Society (HIMSS) for being the first hospital in Canada and the first mental health hospital in the world to achieve Stage 7 on the Electronic Medical Record Adoption Model (EMRAM). Stage 7 speaks to an organization's achievement of delivering care in a paperless environment, embedding automated decision-support and using aggregated clinical data from the electronic medical record (EMR) to drive quality improvement. Achieving Stage 7 reflects the high standard of quality at Ontario Shores and demonstrates the organization's commitment to advancing care for individuals living with mental illness.

Objectives:

Ontario Shores aimed to reduce the risk of medication errors by implementing computerized provider/physician order entry (CPOE) and bedside medication verification (BMV) at high rates. Additionally, Ontario Shores aimed to leverage its EMR investment to systematically implement clinical practice guidelines (CPGs) for Schizophrenia on its inpatient units as part of a 5-year action plan to implement CPGs for a variety of mental health conditions. The implementation of CPGs addresses our goal of ensuring that evidence based, standardized best practice approaches are utilized for the assessment, diagnosis and treatment of inpatients with Schizophrenia.

Measures:

Outcome measures include:

- Medication and Patient Scanning Rates (BMV rates)
- Computerized Physician Order Entry Rates (CPOE rates)
- Percentage of Inpatients with Schizophrenia Referred to CBT for Psychosis
- Percentage of Inpatients with Schizophrenia Referred to Supported Employment/Vocational Therapy
- Percentage of Inpatients Receiving Antipsychotics that Have Metabolic Monitoring Completed at Appropriate Intervals
- Percentage of Inpatients with Schizophrenia Prescribed Antipsychotic Monotherapy (Excluding Clozapine)

Change Concepts:

A multidimensional approach was utilized to ensure success of the change initiative. Key domains of focus for Ontario Shores in achieving benefit realization of the EMR included: pervasiveness of use, clinical decision support, governance, clinical and business intelligence, and health information exchange within a mental health setting. Key strategies that led to clinical transformation have included disseminating adherence results on television screens across the hospital, providing individualized feedback to clinicians about their practice, creating customized electronic templates with embedded decision-support rules to reduce errors of omission, and disseminating clinical dashboards to physicians and key stakeholders to highlight individual/program CPG adherence compared to hospital averages.

Outcomes and Results/Lessons Learned :

By supporting the closed loop medication process, the EMR implementation has enabled patient safety and quality of care goals at Ontario Shores. Ontario Shores has been able to increase CPOE rates to 95% for all orders entered, medication scanned rates to 96% of all medications administered and patient scanned rates to 99% of all patients provided with medication which has contributed to a reduction in the potential for medication errors.

Similarly, adherence to best practice metabolic monitoring protocols have approximately doubled, referrals to CBT for psychosis have more than doubled, and antipsychotic polypharmacy rates have decreased since implementation of this change strategy. This has led to a more appropriate use of clinical resources and improved care for patients with significant mental illness. The results demonstrate how implementing CPGs continues to increase decision support in the EMR leading to improved patient outcomes.

Key recommendations and lessons learned include:

- Ensure consistent open communication with all clinicians on the importance of the use of data from EMR to enhance quality of care and patient safety;
- Develop infrastructures to create opportunities for surveillance on key patient safety practices (i.e. CPOE, medication and patient scanning);
- Develop ongoing adoption strategies to support the use of EMR for quality of care and patient safety;
- Develop innovative reporting processes to enhance opportunities to improve adherence and clinical outcomes. Much of the success of this initiative is rooted in shining the light on clinical practices through the use of clinical scorecards and leveraging technology to make it easy for clinicians to do the right thing.

4398

Putting Data in the Hands of Providers: Rethinking "More is Better" Gaining Traction in Health Organizations

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Background/Context:

Optimizing value and eliminating waste in medical care is a worldwide concern. In some countries, evidence shows that a significant amount of medical care is unnecessary and does not add value. Unnecessary tests, treatments and procedures can lead to avoidable harm for patients, and increased spending and wait times for the system.

In response to these challenges, and inspired by the success of the Choosing Wisely campaign in the United States, Choosing Wisely Canada was launched in April 2014. Choosing Wisely Canada (CWC) is focused on supporting clinicians and patients in achieving the goal of 'the right care at the right time', while limiting exposure to unnecessary tests, treatments and medical procedures. As part of its implementation, CWC introduced the Early Adopter Collaborative to serve as a learning platform for sharing knowledge, tools and experiences, of which North York General Hospital (NYGH) was a participant.

Objectives:

The CWC and NYGH interventions focused on several key objectives, such as: encouraging physicians to engage in conversations with patients about overuse of tests, treatments and medical procedures; empowering patients to make informed choices; cultivating a culture of responsible stewardship of health care resources; engendering public dialogue on the issue of "more is not always better"; and engaging health system stakeholders at all levels.

Measures:

Across the CWC campaign, several measures are being used to assess the impact and spread of the campaign, including:

- Provider attitudes and awareness
- Provider ordering behaviour
- Patient perceptions and outcomes

At NYGH, three key measures are being used to determine the outcomes of the interventions on provider ordering behavior. Initiatives were implemented across the Emergency Department, Pre-Operative Clinic, Inpatient and Ambulatory areas of the hospital, and primarily focused on reducing Medical Imaging and Laboratory testing. The measurement process compared the volume of activity since the intervention was implemented, to the same time period in the previous year.

- # of patient pre and post implementation

- # of tests pre and post implementation
- # of add on requests pre and post implementation

Change Concepts:

With a strong history of providing the best quality care, at the right time, in the right place, NYGH built on the use of the computerized provider order entry system, advanced electronic medical record, clinical order sets and patient flow strategies to introduce Choosing Wisely. Following the launch, hospital leadership and clinical chiefs were engaged in reviewing the Choosing Wisely recommendations and suggesting additional ones. Patient and Family engagement was also a critical component of the campaign with a patient advisor engaged in discussions throughout the design, idea generation and implementation. Valuable insights and feedback from all stakeholders were received, validated and incorporated into clinical order sets and medical directives.

NYGH also recently led a research study to examine the spread effect of the Choosing Wisely lab utilization efforts at NYGH on community-based lab ordering by NYGH physicians, in which a 5% decrease was observed in tests in clinics surrounding the hospital.

Outcomes and Results/Lessons Learned :

After a year of implementing Choosing Wisely at NYGH, significant results have been achieved and sustained:

- Emergency Department Lab Testing: 40% decrease since September 2014
- Pre-Op Laboratory Testing: 37% decrease since January 2015
- Inpatient Laboratory Testing: 5% decrease since January 2015
- Community Lab Testing by NYGH Physicians: 5% decrease since January 2015
- Inpatient ICU Chest X-Rays: 20% decrease since January 2015
- I npatient CT Exams: 5% decrease since January 2015

Throughout the implementation of Choosing Wisely at NYGH there have been several learnings worth noting:

- Physician Leadership. Strong leadership presence by NYGH's VP Medicine, who focused on frequent communication with the Medical Advisory Committee, complemented by strong support from each Medical Chief through discussions with their clinical teams, helped to achieve success across the hospital.
- Administrative Leadership and Project Management support. Support from a Director and project manager to lead efforts, help drive deliverables, mitigate risks, and track milestones was critical to keep the project on course.
- Leveraging existing EHR functions and processes. Changes to treatment and testing protocols were implemented through the existing leadership culture of evidence-based practice, supported by a comprehensive electronic ordering system at NYGH.
- Patient insights through design and implementation. Integrating Patient Advisors in the governance, design and implementation of all initiatives helped to ensure a balanced approach that would meet the needs of patients and clinicians.

4367

Advancing the Quality Agenda by Realizing the Potential of EMRs

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Background/Context:

An estimated 80% of patient data is collected in community-based physician practices. Largely through the adoption of Electronic Medical Records (EMRs) systems in Ontario, this patient data has now been digitized and transformed from paper-based to electronic format. OntarioMD's successive EMR adoption programs have allowed for close to 12,000 community –based physicians to adopt EMRs for approximately 10 million patients. The adoption of EMRs has provided an opportunity for health care providers to realize the potential of EMRs in using patient data to improve patient safety and the overall quality of health care.

Objectives:

Through OntarioMD's EMR adoption programs, OntarioMD has gained valuable insights into how physicians and their staff manage change and their EMRs to improve patient outcomes and practice efficiency. With every new generation of EMRs, opportunities exist to move Ontario's EMR users along the path that ultimately has an impact on the patient population by using EMRs to support diagnostic decision making, prevent medical errors, monitor patients for preventive visits and screening, and improve quality of care delivery.

With than in mind, OntarioMD refocused its services to support continuous improvement of EMR use, with the objective of helping physicians and their staff to realize the value and potential of their EMR.

Measures:

OntarioMD has developed the EMR maturity model, nationally recognized by Canadian health informatics professionals. The model is the basis for the EMR Progress Assessment (EPA), an online tool for physicians and their clinical staff to assess their current EMR use and identify opportunities for improvements. The EPA provides its users a tangible measure of their EMR use and progress based on a continuum of levels from Level 0 (Paper Based) to Level 5 (Population Impact), where each level builds upon the EMR functionality of the preceding level. The EPA provides physicians with precise scores (e.g. 1.7) to raise their awareness around areas of improvement to enhance patient outcomes.

Change Concepts:

OntarioMD has consistently leveraged the EPA to advance the health quality agenda in Ontario. The EMR Practice Enhancement Program (EPEP) leverages the EPA and its practice advisors, who have long-standing relationships with physicians through the EMR adoption process as well as clinical Peer Leaders who act as EMR experts and mentors, to support physicians in advancing their EMR use.

OntarioMD has harnessed the intelligence gained through EPAs and engagements with physicians to tailor its support to EMR users more effectively to advance their EMR use in areas of chronic disease management, preventive care and delivering proactive care.

Once physicians comprehend and realize the tangible results from changes to their EMR use, their level of awareness is elevated to use their EMR to unleash the power of the patient data and influence the quality of care. One success leads to another and the cycle of quality improvement becomes established.

Outcomes and Results/Lessons Learned :

OntarioMD has collected over 3,500 EPA assessments between July 2013 and July 2015 to assess the current level of EMR use in practices. With the OntarioMD's evidence-based approach, physicians have successfully transitioned physicians towards establishing clinical processes (EMR Maturity Level 2) in their day-to-day practice operations to manage complex diseases and conditions, monitor medications/prescriptions, and setup alerts and reminders to manage preventive care screenings for their patients.

Some key highlights of family physicians that have completed the annual surveys with EMR maturity use at level two and beyond are as follows:

a *Medication Management:* 91% are using the EMR, beyond basis prescription creation and renewals, to now manage and/or monitor their patients' active medication list.

b *Encounter Documentation:* 76% at level three are using the EMR to enter clinical data for focused patient visits and encounter notes using customized templates/forms e.g., sophisticated prenatal care templates. Of these, 59% are beginning to identify and streamline documentation using more structured templates for patients' with complex conditions e.g., diabetes management.

c *Laboratory Results Management:* 80% are downloading comprehensive laboratory results directly into the patients' record in the EMR and generating basic trending analysis on patients' progress over time.

d *Preventive Care:* 57% are using EMR to setup reminders and alerts for managing due or overdue preventive care services. Of these, 48% are generating reports for opportunistic and population based screening at the practice level.

As OntarioMD shifts its focus to EMR Enhanced use, this information will inform and continuously drive the change management planning required to assist physicians in achieving a higher level of EMR maturity.

4162

Using Technology to Transform Care: Engaging and Activating Families in the Implementation of a Consumer Health Portal

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Background/Context:

The existence of web-based portals and electronic health records are making it much easier for patients and families to access health information in a timely and convenient manner. This access has the potential to promote enhanced activation in care. Activated health care consumers are those that have the skills, knowledge and motivation to participate as active members of the team and manage their care more successfully (Von Korff et al, 1997). Based on

feedback from patients and families who were requesting easier and more timely access to their health information, the development of an online portal became a priority at Holland Bloorview Kids Rehabilitation Hospital. Holland Bloorview is a pediatric rehabilitation hospital serving over 7,000 outpatient and 600 inpatient clients every year. Our population includes: children with cerebral palsy, acquired brain injury, muscular dystrophy, amputation, epilepsy, spina bifida, arthritis, cleft-lip and palate, autism and other developmental disabilities. Engaging patients and families at all levels has become an important organizational priority resulting in over 150 family, child and youth leaders. It was a natural opportunity for patients and families to be engaged in all aspects of this project from grant development through to implementation and evaluation.

An online portal called connect2care was launched in December 2014 and results have been extremely positive. The connect2care portal provides clients and families with electronic access to their medical records, online appointment cancelling and booking features, and a secure two-way messaging system to connect with their care providers. This presentation will describe the array of integrated engagement strategies that were employed, and will present the features of the connect2care portal that resulted from this deep and broad engagement.

Objectives:

Objective #1: Development of an impactful consumer health portal through the active engagement and feedback of clients and families in all areas of decision-making.

Objective #2: Successful enrollment and usage rates that demonstrate the value of the consumer health portal.

Measures:

Qualitative feedback from clients, families & employees at all stages of the project, including documented changes to the portal based on recommendations by these stakeholder groups. User enrollment and usage data has been captured and measured against proposed project deliverables. Planned measures also include Canada Health Infoway system and use surveys.

Change Concepts:

This project had extremely tight timelines resulting in a change management approach that would bring patients, families, and clinicians onboard quickly and effectively. A change team was implemented with representation from all stakeholder groups (including family leaders). This team made decisions about communication strategies, documentation practices and identified gaps in knowledge that would require mediation and training. As a result, communication materials using a variety of mediums were developed and small group training sessions for clinicians addressed concerns and created interest and integration from the onset. Finally, two parents were hired as enrollment facilitators to support registration to the portal. These parents were able to speak authentically about the value of the tool, creating trust and excitement early on. They also gathered feedback during these interactions and were able to share this information at the weekly project meetings to enable iterative changes to the portal.

Outcomes and Results/Lessons Learned :

To date (December 2014 to May 2015), over 600 users have been registered for the online portal, with over 2800 uses within a 7-month timeframe. As the project deliverables to be reached by December 31, 2015 cited 750 registered clients/families with 1400 uses, early results demonstrate value and success that surpasses our initial aggressive targets.

Engaging patients and families in all aspects of the project – from concept development to implementation and evaluation – has resulted in a highly successful tool. As well, the use of families and patients as enrollment leaders was a powerful facilitator of trust in the registration process. These enrollment leaders actively looked for opportunities to enroll, including waiting rooms, at the bedside and at evening/weekend educational events. In partnership with Canada Health Infoway, there is vast opportunity for spread of learnings from the project across the system.

4283

Lessons Learned in Provider Engagement – a Key Factor in the Successful Adoption and Utilization of the Champlain BASE eConsult Service

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Background/Context:

There is an opportunity to improve access to specialist care through the use of innovative eHealth solutions such as electronic consultation (eConsult). However, recruiting health care providers to try out new technology-based initiatives

can be challenging.

The Champlain BASE (**B**uilding **A**ccess to **S**pecialists through **e**Consultation) service electronically links primary care providers (PCPs) with specialists to obtain guidance on a patient case. PCPs (MDs/ NPs) log onto a secure web-based system and complete a simple electronic form with the option to upload pertinent files that may help the specialist. Specialists are expected to respond within one week. Communication between both parties is iterative, and the PCP ultimately closes the case and completes an associated 5-question survey.

Provider engagement ultimately determines the success of eConsult. Active participation by PCPs and Specialists dramatically boosts the number of eConsults, thereby reducing waitlists and unnecessary referrals, and gaining more timely access to specialist care for patients.

Objectives:

To understand the key attributes of the Champlain BASE eConsult service which contribute to successful engagement of PCPs and specialties/specialists.

Measures:

We evaluated provider engagement by analyzing utilization and outcomes data collected on an ongoing basis. Key indicators include:

- Service growth (registered PCPs and specialties)
- Usage trends (number of cases completed)
- Specialist response intervals

Change Concepts:

The Champlain BASE eConsult service was developed and championed by clinician leads, family physician Dr. Clare Liddy and endocrinologist Dr. Erin Keely, in collaboration with the Champlain LHIN, Bruyère Research Institute, The Ottawa Hospital, and Winchester District Memorial Hospital. Proof-of-concept was implemented in 2010 with a limited number of users and specialty groups. An enhanced version of the service which incorporated physician feedback was subsequently launched in Spring 2011, based on the following key principles:

- A simple, common form for all specialty services
- Option to submit cases to a specialty rather than an individual specialist (thereby reducing PCP uncertainty over the appropriate/available choices), as well as to specific community specialists
- A convenient registration and individualized orientation process for participants
- An easily accessible centralized technical support hub which also provides off hours assistance
- Specialist commitment to response interval, which ensures PCPs can count on receiving high quality responses within a week
- System design which offers flexibility and the opportunity for unique adaptations by providers to align with their clinical processes/workflows
- Embedded close-out survey which provides feedback to specialists and allows for continuous evaluation and assessment of the impact of the service

The combination of these features ensures that the service is easy to use and provides high clinical value. As a result, continuous growth in registered PCPs and participating specialties has occurred organically, much of it through word of mouth. By sharing experiences and encouraging colleagues to participate, new users (PCPs and Specialists) from various regions are deliberately seeking us out to join the service and enhance current practices.

Outcomes and Results/Lessons Learned :

The eConsult service has demonstrated significant value for providers and their patients. Usage and breadth continues to expand rapidly. Below are values as of June 30 2015, relative to those reported in our previous submission in May 2013:

- Increase from 1083 cases completed to 7893 (7-fold increase)
- Increase from 244 registered PCPs to 751 (627 MDs and 124 NPs from 76 towns/cities)
- Increase in participating specialties from 25 to 69

Supporting metrics (based on PCP surveys for 7893 cases) contributing to this growth include:

- Consistently, over 70% of all cases submitted did not require a face-to-face referral, and 40% of all cases actually led to avoidance of an unnecessary referral
- Excellent perceived value of the service (4.7 out of 5 on average), with specialist providing a new or additional course of action to what PCP originally planned in 58% of cases
- Timely response intervals (specialist response to PCP):
    - Median = 0.8 days
- Average = 2 days

- Fastest response = 5 minutes

The Champlain BASE eConsult service has seen dramatic adoption and growth across primary care communities as well as specialty services. The growth is mainly due to the fact that the service has found a simple and effective approach to address a significant need. At the heart of the service is ensuring patients can have access to timely advice/guidance from specialists. The simplicity and consistent performance of the service, including the predictability of quality responses (both from specialists and support team), have led to repeat usage and strong endorsement amongst peer groups. This is in contrast to the many challenges faced in recruiting clinicians to try out typical eHealth initiatives.

4194

1-800 Imaging Pilot: Building Partnerships between Primary Care and Medical Imaging

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Background/Context:

Ensuring timely access to medical imaging for primary care providers (PCPs) has been a challenge in Ontario. The 1-800 Imaging Pilot was created to improve access to medical imaging services in the Toronto Mid-West Health Link as a collaboration between the Joint Department of Medical Imaging (JDMI), Women's College Institute for Health System Solutions and Virtual Care (WIHV), Toronto Centre LHIN, and the Seamless Care Optimizing Patient Experience (SCOPE) Project.

The pilot was designed as a call centre, created to improve integration between PCPs in the community and medical imaging within a tertiary sub-specialized environment. Services available to PCPs through the call centre include: expediting urgent imaging and reports, coordinating real-time radiology consultations, and providing general information and navigational support.

Prior to the implementation of the navigation hub, PCPs in the community did not have a direct link to any of these services. Often community-based PCPs requiring urgent investigations to make clinical decisions were impeded by long wait times; over-crowded emergency departments (ED) were used as a method to expedite imaging for patients.

The 1-800 Imaging hub was piloted from May 2014 to March 2015 with a group of 60 PCPs in Toronto, also registered in the SCOPE Program.

Objectives:

The primary objective of the pilot was to assess if the navigation hub would impact the number of avoidable ED visits and increase the appropriateness of imaging requested.

Measures:

1-800 Imaging was designed according to the Institute for Healthcare Improvement 'Triple Aim' framework to improve patient and provider experience of care, better population health, and lower per-capita costs of care[1].

Outcome measures were:

- Reduction of ED visits: number of urgent imaging cases that avoided an ED visit (as reported by users)
- Improvement in appropriate imaging: number of consults that avoided an inappropriate test order (as reported by users)
- Improvement in patient and provider experience

Process measures included:

- Call volumes
- Services accessed
- Repeat users of the call centre

[1] Berwick DM, Nolan TW, Whittington J. (2008). The Triple Aim: Care, health, and cost. *Health Affairs*, 27(3), 759-769.

Change Concepts:

1-800 Imaging partnered with the SCOPE Project, which provides navigational and consultation services through a virtual interprofessional health team to a group of 60 community PCPs for their medically complex patients, most at risk of avoidable ED visits and hospital admissions. The imaging call centre was staffed during business hours by imaging clerical staff and supported by an on-call radiologist. The following services were provided:

1 Appropriateness Consult: Support for PCPs in selecting the most appropriate imaging

2   Radiology Consult: A second opinion on imaging, reports, or recommendations from subspecialized radiologist

3   Urgent Imaging: Access to urgent imaging for patients with appropriate acute symptoms

4   Urgent Reporting

5   General Informational Requests

Outcomes and Results/Lessons Learned :

Process measures (May 2014 to March 2015):

There were a total of 227 calls to the imaging call centre:

- 103 urgent imaging requests
- 40 appropriateness consults
- 10 radiology consultations
- 7 requests for expedited reports
- 67 requests for information
- 36 unique callers (60% of pilot audience)
- 22 users accessed the call centre multiple times (61% of callers)

Outcome results:

Participating physicians reported that 40 ED visits were avoided by accessing the call centre and 40 appropriateness consultations were provided to help determine the imaging that was most appropriate for their patients.

A post-call survey was completed following 42 calls; 100% of respondents indicated that they were satisfied with the service and 100% stated that they would recommend the call centre to their colleagues.

Lessons Learned:

In implementing an innovative, user-friendly call centre, supported by trained service agents, the 1-800 Imaging Pilot introduced existing best practices in customer service to healthcare delivery. The pilot demonstrated feasibility of a navigation hub that was highly acceptable to PCPs.

The project illustrates that PCPs value conversations with radiologists to gain clinical insights and validation on imaging decisions. One of the challenges was reconciling clinical appropriateness and urgency with existing wait lists. Furthermore, there was a limited ability to report conclusively on patient outcomes related to appropriateness consults and ED visits. As the service expands and regional models are considered, evidence-based guidelines should be integrated to ensure appropriate, equitable, and efficient use of imaging resources.

The 1-800 Imaging Pilot served as an opportunity to develop a partnership between the JDMI and community-based PCPs, to elicit feedback, and to tailor medical imaging services to their needs. Preliminary lessons learned have built the foundation for a redesign of the imaging journey to meet the needs of community-based PCPs and their patients in an integrated and seamless way.

4041

Seamless Transitions: Hospital to Home

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Background/Context:

Hospital discharge can be challenging for patients/carers and those coordinating care. Effective transition from acute to community care is an essential element of high quality patient care.

Mississauga Halton has one of the fastest growing populations in Ontario, with the highest projected hospital bed day increase. The region's aging population, set to double by 2034, requires more healthcare resources to meet their complex and chronic needs.

In 2014/15, Trillium Health Partners (THP) admitted 50,000 patients with no beds immediately available. Mississauga Halton CCAC (MHCCAC) admitted 10% more patients to service from hospital, and 20% more from community referrals.

MHCCAC and THP, with investment from the Mississauga Halton LHIN, established a partnership to improve transitions from hospital to home.

Using insights from patients, families, physicians, MHCCAC and THP staff, and community providers, a Design Team, under joint project manager's leadership, designed a new hospital to home transition approach – *Seamless Transitions*.

Seamless Transitions is a cross-sector, leading practice approach, focused on meeting patient needs in most appropriate setting, by most appropriate provider, in most cost-effective manner.

Objectives:

Create a consistent, integrated, person-centered approach for hospital to home transitions that improves patient experiences, while eliminating process duplication and gaps in communication and care that put patients at risk.

154 staff across both organizations attended brainstorming sessions, generating 1,301 ideas in response to five questions about improving hospital transitions. Feedback was amalgamated with patient, physician and community provider input.

How might we:

- *better communicate with patients/ families about going home?*
- *better share information about patients with care team members?*
- *better involve community providers before patients leave hospital?*
- *better collaborate to optimize community resources?*
- *reduce wasted time/ duplication in our work?*

Measures:

Outcome measures: patient experience, length of stay, ALC days/rates, percentage patients discharged home with support.

Process measures: average time from admission to first visit (*My Story initiated*), percentage patients' primary care physician notified within 24 hours of discharge (*Plan of Care* sent), percentage patients received a *Plan of Care* on discharge, percentage follow-up phone calls made within established post-discharge criteria.

Balance measure: compare readmission rates for patients transitioned using *Seamless* approach against readmission rates for all other THP-CVH Medicine program patients during same time (i.e. current process).

Process measures monitored daily, reviewed weekly and used to inform changes and continuously refine approach to reach optimal effectiveness. Outcome measures tracked and reported monthly.

Plan-Do-Study-Act (PDSA) cycles used to refine approach's key components.

Change Concepts:

Seamless key components:

- **Integrated, mobile care team**
- **Transition planning starting on admission** (patients streamed into pathways based on post-acute care coordination needs)
- **Enhanced care coordination – Transition Coordinator role** (single point of contact for transition planning between all providers and patient)
- **Discharge rounds**
- **Comprehensive, individualized written transition plan –** *My Story, Plan of Care* (plain language summary, care team updates, follows patient into community)
- **Timely, accurate information flow** – from community providers – among hospital teams – back to community providers (everyone in circle of care inform care plan)
- **Post-discharge calls**

Seamless test phase concluded June 2015. Both organizations currently reviewing outcomes to make informed decisions on next steps, including identifying and mitigating barriers to achieve successful spread/implementation.

Outcomes and Results/Lessons Learned :

A 52% reduction in readmissions for *Seamless* patients (any diagnosis within 30 days), compared to all THP-CVH Medicine program patients, was observed.

Findings attributed to integrated care team's proactive, collaborative transition planning approach, enabling more patients to transition smoothly out of hospital and remain/recover at home, freeing capacity for others needing acute care.

Reduced readmission rate will save potentially 0.9 days for every patient who experiences the *Seamless* process and reduce patient mortality rates (readmissions increase death rates).

In Mississauga Halton, average cost to care for hospital patient is $842/day, versus $42/day in community. Potential system level cost savings are incremental and align with provincial Health System Funding Reform. More efficient use of resources improves outcomes for patients and providers.

Patient experience improved measurably. *Seamless* patients reported feeling better prepared to leave hospital,

commenting personalized care plans eased hand-off to community providers.

Emphasis on patient/carer engagement exemplifies commitment to putting patient's needs first, outlined in Minister Hoskin's *Action Plan for Health Care*.

Seamless patients don't appear to have lower length of stay for acute or ALC portion of hospital stay. This may be result of normal variation, confounding factors or inconsistent care processes across Medicine program. Further analysis required.

Exciting opportunity to apply lessons learned through *Seamless* to other patients/providers in province. A comprehensive guidebook, summarizing partnership journey and design process, serves as a blueprint for other organizations seeking to implement a similar transition approach.

4229

Patient-Centred Access to Nursing and Complex Personal Support Through a Culture of Quality Improvement

Valerie Armstrong

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Background/Context:

Access to timely care is important to patients and caregivers, and is a measure of the quality of health care that a person receives. The Ministry of Health and Long-Term Care introduced a new measure for access to timely care, a five-day wait time for in-home nursing visits for all patients and personal support visits for patients with complex care needs. In alignment with the Ministry's commitment, the five day wait time indicators were incorporated into the CCAC sector's 2014/15 quality improvement plans (QIP).

Objectives:

NSM CCCAC Senior Executive Team and Board of Directors identified timely access to care for these services as a priority area for improvement within our 2014-15 Quality Improvement Plan (QIP). A quality improvement (QI) charter was developed with an aim statement and stretch targets for improvement based on provincial CCAC comparators. The aim being that all patients in North Simcoe Muskoka receiving nursing and all complex patients receiving personal support, would experience a wait time for service of 5 days or less from the initial service authorization date to first visit by the service provider.

NSM CCAC benchmarked performance provincially and established stretch targets to move towards being the best in the province. The stretch targets were as follows:

- With a baseline performance (2012-13) of 89.9 percent for visiting nursing, a stretch target of 92 percent was established.
- With a baseline performance (2012-13) of 62.1 percent for personal support for complex patients, a stretch target of 77 percent was established.

Measures:

Outcome measures:

- Percent of complex patients with wait time from "initial service authorization date" to first personal support visit billed of 5 days or less.
- Percent of patients with wait time from "initial service authorization date" to first nursing visit of 5 days or less.

Process measures:

- Cycle time from service authorization to first offer (an internal CCAC business process).
- Cycle time from service offer to first visit (CCAC and contracted service provider business processes).

Further defects and balancing measures are highlighted in the QI initiative charter found in the uploaded mandatory documentation file.

Change Concepts:

Led by the Quality Improvement Team, QI tools such as cause and effect diagrams, process mapping, chart audits and pareto charts were used to assist in understanding and analyzing the barriers to achieving the 5 day wait time targets for both nursing and complex personal support referred from hospital and community. The analysis informed change ideas focused on streamlining and automating business processes, and service authorization e-form controls (i.e., locked fields), selecting those change ideas which would have the greatest impact on the indicators. Change ideas were communicated through staff and contracted service provider education sessions and knowledge exchange forums before implementation, which was completed by June 2014.

Through control charting, progress towards targets was monitored on a weekly, monthly and quarterly basis. By the third quarter of 2014-15, NSM CCAC achieved the nursing and complex personal support from hospital, wait time stretch target.

Further, a two-point analysis of community personal support referrals where the wait time was greater than 5 days, was conducted between June-August and September-December 2014 and focused on cycle time from service authorization to service offer. Additional change ideas were identified (i.e., changes to current manager review process and additional service authorization e-form controls) and were implemented in January 2015.

Outcomes and Results/Lessons Learned :

NSM CCAC successfully achieved the stretch target for both nursing and complex personal support from both hospital and community by March 2015; a 15 percent improvement in personal support access for complex patients.

Phenomenal success was achieved because:

- Leading QI practices were applied and risks to achieving aims were proactively identified and managed through change ideas and process controls.
- There was broad organizational commitment to quality improvement of the wait time access measure, with accountability for monitoring and reporting structured at the Senior Executive Team and Board.
- Board commitment to quality improvement and to public transparency, demonstrated by their formal approval to report monthly 5 day wait time results on the NSM CCAC website, initiated in January 2015.

With a commitment to year over year improvement, the five day wait time indicator continues to be a priority in NSM CCAC's 2015-16 QIP. New stretch targets have been established. The focus of 2015-16 analysis will be understanding factors that contribute to variance, particularly how patient choice and availability impacts wait times. Through control charting, progress to target is monitored monthly and quarterly.

4382

The Collective Implementation and Impact of Health Links: A Formative Evaluation of the South East Local Health Integration Network Health Links

Cheryl A. Chapman, Robert Webster

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Background/Context:

In Ontario, health system spending is highly concentrated on 5% of the population who generally have multiple health concerns and numerous encounters with the health system. Providing care for these individuals is complex and requires enhanced coordinated of care. Health Links is an Ontario initiative that brings together local health providers to provide enhanced coordinated, patient-centred care for the purpose of improving better outcomes, better patient experience, and ultimately improving the sustainability of the health care system.

The South East Local Health Integration Network (LHIN) is geographically divided into 7 Health Links. The LHIN has taken a region-wide, collaborative approach to the development of Health Links to create the conditions needed for Health Link engagement. The 7 Health Links are led by primary health care providers: 2 Family Health Teams, 1 Family Health Organization, and 4 Community Health Centres. The Health Links are focusing on the top 5% of the population defined as persons living with four or more chronic conditions, with an overlay of acute hospital utilization and impacted by the social determinants of health.

At this early point in the implementation of Health Links, the LHIN and Health Link partners were interested in understanding the development of Health Links, the key drivers to success, barriers and challenges, short-term outcomes, and progress towards longer-term impacts. A regional formative evaluation was undertaken as a collaboration of the LHIN and the 7 Health Links. It was conducted by an external group, Cathexis Consulting, and funded by the LHIN. Quantitative and qualitative methods were used including 7 focus groups with partners (n=52); a survey of partners (n=162; 72% response rate), interviews with a purposeful sample of patients (n=36); and an extensive review of LHIN and Health Link documentation.

Objectives:

The purpose of the evaluation was to assess the collective implementation and impact of the Health Links during their first two years of operation. Intended to focus on the impact of the initiative across the South East LHIN as a whole, the evaluation was framed around four objectives:

1 How well designed and implemented are the Health Links?
2 What has been the early impact of Health Links?

3 How can Health Links be made more sustainable?

4 What are the opportunities and recommendations for improving Health Links?

Measures:

Patient access (equity) to primary care services

Patient centred care

Patient experience

Provider experience

Provider engagement

Enablers of Health Link participation

Barriers that hinder Health Link participation

Emergency department visits (local Health Link quality improvement data)

Acute hospital admissions/readmissions (local Health Link quality improvement data)

Change Concepts:

Regional and local Health Link level change concepts include:

- Information technology (IT) strategy – the South East Health Integrated Information Portal (SHIIP). Currently in round 2 of its pilot, SHIIP will allow for information sharing between LHIN hospitals and primary care, identification of patients, and sharing coordinated care information between providers and patients.
- Common planning committee and working group structures
- Region-wide planning and infrastructure
- Region-wide communication strategy
- Quality improvement approach
- Professional development opportunities
- Primary-care-based coordinated care models
- Health Link leadership – regionally and locally; primary care led
- Standardized tools including the coordinated care plan and point of care decision support

Outcomes and Results/Lessons Learned :

While each of the 7 Health Links is independently administered, they are driven by the same logic and goals. In their first 18 months of operation they have shown progress towards their short and long-term outcomes. Examples of improvement include: access to primary care (31% increase), patient centred care and patient experience (35% increase of involvement in decision-making; 26% increase in achieving their goals), provider experience (33% increase in circle of care being clearly defined), and strengthening relationships between health care providers (36% increase in providers knowing where to refer). Common barriers experienced by providers include lack of available time and resources (63%), needing faster access to better technology (40%), and better processes for sharing information (27%), and committed recurring funding to support core Health Link elements (31%). Key enablers include keeping the needs of patients front-and-centre (80%), involving different types of health care providers (87%), building on existing relationships with other providers (80%), and tailoring the Health Links to the local context (80%). As identified in the evaluation, several recommendations to help advance Health Links will need to be thought through, such as the impact of Health Links on primary care practices, the need for adequate funding support, and full implementation of SHIIP, with consideration given to variables such as organization size and culture.

4145

Designing an Integrated Hospice Palliative Care System Across the South West LHIN

Lisa A. Gardner

South West CCAC/SWLHIN, Eden, ON

Background/Context:

The South West LHIN's Integrated Health Services Plan 2013-16 has identified a strategic goal of developing an Integrated Hospice Palliative Care Program for the LHIN. This program will align with the province's "Advancing High Quality High Value Palliative Care in Ontario; A Declaration of Partnership and Commitment to Action" document, released in December 2011. The vision is to better support people with life-limiting illnesses and their families and to dramatically improve individuals and families comfort, dignity and quality of life preceding death. In order foster

collaboration and commitment across all care settings, and between families, providers, academics, funders and policy makers, with shared ownership of solutions and actions the Collaboratives provide leadership for the development and evolution of a comprehensive, integrated and coordinated system of hospice palliative care for the South West through implementing the priorities identified in Advancing High Quality High Value Palliative Care in Ontario

Objectives:

. The priorities include:

- Strengthen Accountability and introduce mechanisms for shared accountability
- Broaden Access and Timeliness of Access
- Strengthen Caregiver Supports
- Strengthen Service Capacity and Human Capital in all care settings
- development of standards and supports for delivery of care;
- support for implementation of best practices;
- education and knowledge transfer; and
- support for building system capacity and access to hospice palliative care
- Improve integration and continuity across care setting
- Build public awareness

Measures:

The performance measures used to evaluate the success of this work across the SWLHIN are based on the Provincial recommendations and include:

1. Home support for discharged palliative care patients
2. R visits in the last 2 weeks of life
3. % of palliative care patients discharged from hospital that were seen in the ER within 30 days
4. CCAC home care wait times
5. Outpatient palliative care wait times- Regional Cancer Centers
6. Hospital readmission within 30 days for palliative care patients

These indicators support the SWLHIN in achieving the strategic goal of a 10% reduction in the total number of hospital days that are attributed to palliative care. A Data and Performance Subcommittee made up of members from different sectors and from across the region have developed a dashboard for reporting and include acute care focused indicators, residential hospice focused indicators and long term care focused indicators. The results of the dashboard link back to accomplishing the strategic goal of a 10% reduction in the total number of hospital days that are attributed to palliative care and the clear message we are hearing from our experience based design work that providers need to support the HPC individuals choice of place of death which is home or hospice rarely in the hospital.

Change Concepts:

Each of the 5 Collaboratives have identified priority change ideas and using PDSA format are working through structures and processes to assess, implement and evaluate their changes. The priority change ideas have been related to the current state build and the future state build to ensure that the changes are promoting the identified future state of Hospice Palliative Care across the SWLHIN. Process mapping has been used to identify the current state of hospice palliative care and again to build a common future state map that is supported by all 5 collaboratives and endorsed by the HPC Leadership Committee. An ongoing Health Equity Impact Assessment has been developed to ensure as system changes occur, marginalized populations are being considered and actions are put in place to meet the needs of the marginalized populations affected in palliative care. Partnerships with the aboriginal communities and leaders have been developed and a formalized critical path and vision wheel developed to identify the aboriginal community needs.

Experience Based Design modelling is in place to ensure the hospice palliative care individuals/families/providers are able to communicate their stories identifying key messages around system improvement for HPC.

Outcomes and Results/Lessons Learned :

Quality Improvement events will be held annually with a strategic emphasis placed on the engagement of health service providers. The use of the HPC Network model has endorsed a cohesive structure around Hospice Palliative Care with the client/families at the core.

Lessons learned from the work of the SWLHIN HPC Network are being shared across other HPC Networks and at the Provincial level through the HPC LHIN/PEOLC Network leads. The HPC Network website is another tool used to share information on the future state work as it is completed. The 5 Collaboratives have developed a tool to share their change idea work and PDSA tools with each other. Below are three of the key projects developed through this work and able to share several more.

CONNECTIVITY: A Community Collaborative Strategy to Improving Responsiveness, Supports and Care Transitions for At-Risk Individuals

Kerry Lynn Wilkie

Cambridge and N Dumfries Lang Health Link, Cambridge, ON

Background/Context:

As the lead for Health Link in Cambridge and North Dumfries and co-located with 25 health and social service partners, Langs partnered with Waterloo Region Police Service to mobilize the health and social services community to address risk factors, develop protective factors and reduce utilization of more costly health and social service interventions and incidence of crime. Based on a model pioneered in Saskatchewan, Connectivity brings together health and social service agencies to meet weekly and collaboratively and proactively address stations of elevated risk and support individuals, potential Health Link clients, to access services. The model was introduced locally to over 100 health and social service stakeholders in 2013, by the Waterloo Wellington Local Health Integration Network (WWLHIN), Waterloo Regional Police Services (WRPS) and the Waterloo Region Crime Prevention Council. In the past year, Connectivity tables have started in communities across Ontario.

Langs is identified as one top three neighbourhoods at risk in the Cambridge community. Research studies have identified the area to be one of high family distress with a high concentration of social and economic needs. The Langs neighbourhood in Cambridge had 10,892 calls for police service over 3 years; 291 were violent incidents and 1,280 were non-violent.

Objectives:

To improve coordination and responsiveness of care, Connectivity brings 18 health and social service agencies to a weekly meeting, to collaboratively and proactively address situations of elevated risk and support individuals to access needed services. In the past 18 months, 155 situations of elevated risk have been addressed. Organizations and systems are responsive and begin to make systematic improvements to service delivery, with the long term vision of reducing emergency room admissions, child protection cases, prosecutions, violent crime and youth victimization.

To enhance interagency collaboration and partnerships by developing early intervention activities to reduce crime and utilization of more costly health and social service interventions/resources.

To change the way front line early intervention services are provided by facilitating the development and implementation of system enablers across health and social services sectors

Measures:

Based on the evaluation of the Saskatchewan model, Waterloo Region police tracked reductions in calls for those individuals referred to Connectivity. Evaluation of the partnership and participant/client experience also shows the benefits of the collaborative response model in Saskatchewan and that of Connectivity. Longterm, there will be overall improved community wellness and safety and decreased costs to the health and social services.

Change Concepts:

At Connectivity meetings, risk factors of individuals are identified and tracked. Individuals are referred to as 'situations' to de-identify the person(s) involved. Local health and social service agencies as well as police identify individuals with multiple risk factors who lack appropriate services and therefore are at 'elevated' risk. Each situation is tracked by a number; risk factors; agencies involved in the response and the presenting agency. Data tracking is shifting from excel spreadsheet to a Ministry data base.

Outcomes and results of the model's implementation in Saskatchewan show recorded achievements in crime reduction and community safety. The studies and outcomes from Prince Albert and Waterloo Region show significant decreases in police calls for service, since the introduction of the model. Data comparisons are not yet available from other communities served by the situation table model; however, existing data provides a strong indication of the lessons learned, outcomes, impact and potential of the collaborative early intervention model.

Outcomes and Results/Lessons Learned :

Connectivity baseline data is comparative to Saskatchewan counterparts. Qualitative feedback indicates health and agencies report significant improvements in collaboration, information sharing, and transitions for patients between services and providers. In the plan-do-study approach to implementing situation tables, lessons are learned with the situation table members experience of bringing forward and following up on situations. Participating agencies report their gain of new insights into the realities and challenges facing their colleagues as they shift services to be delivered effectively and efficiently.

System improvement opportunities have been identified through local and Saskatchewan evaluations. By collating risk

factor data, agencies identify patterns in community needs, risks and opportunities in service delivery. With data bases becoming centralized provincially, data can be used to influence planning and decision making locally and provincially. The spread potential and replicability of this model has been proven with the implementation of Connectivity in Cambridge; as an early adopter, we receive a minimum 2 inquiries/month from other municipalities. Connectivity was formally recognized as the Innovator of the Year by the Association of Ontario Health Centres.