Health Report Manager (HRM)
Improved Follow-Up for Patients with Mental Health and Addictions

February 26, 2019
What is HRM?
Integrating Digital Health: Health Report Manager (HRM)

What it is: HRM delivers patient reports securely from hospitals and specialty clinics to a community-based physician’s EMR.

HRM saves clinics an average of 33 minutes per clinician per day on the processing of paper reports. (Individual experiences may vary.)

HRM eNotifications:

What it is: short electronic messages delivered through HRM that provide near real-time notifications to primary care providers of when their patient(s) are discharged from hospital emergency departments or admitted/discharged from in-patient units.
HRM by the Numbers

REPORTS HAVE BEEN SENT TO CLINICIANS ACROSS ONTARIO
37,000,000+

CLINICIANS RECEIVING REPORTS
9,500+

REPORTS SENT IN DECEMBER
(includes eNotifications)
1,470,000+

HOSPITAL SITES
(163 Hospital Sites and 74 Independent Specialty Clinics)
237

HOSPITALS SENDING eNOTIFICATIONS
104

eNOTIFICATIONS SENT TO DATE
2,365,000+
Benefits of HRM to Sending Facilities

Benefits of HRM
1. Workflow efficiencies
2. Lower printing and faxing costs
3. Administrative, legal and operational efficiencies

$30,000 in cost avoidance annually for a medium community hospital using HRM*

Audit trail to confirm sending and receiving of HRM reports

Ontario Benefit:

$100,000 in cost avoidance annually for a large community hospital using HRM*

$15M average per year and growing in cost avoidance enabled by HRM

eNotifications results in fewer hospital readmissions

* Cost avoidance determined based on 2016 HRM User Survey
Why 9,500+ Clinicians Love HRM: Better Patient Outcomes

- Improved **transition, efficiency** and **coordination** of patient care
- **Secure** transmission and handling of patient reports
- **Searchable** text-based reports for trend analysis in the EMR
- **Faster follow up** care after hospitalizations to reduce likelihood of complications or readmissions
- **23 to 33 minutes** of practice time saved per day for each physician on HRM
- Enhanced **patient safety** through HRM

23 to 33 minutes of practice time saved per day for each physician on HRM
HRM for Mental Health & Addictions Support
HRM Adoption: Mental Health & Addictions

Integration with Mental Health Institutions

<table>
<thead>
<tr>
<th>Sending Facility</th>
<th>HRM Go-Live Date</th>
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<tbody>
<tr>
<td>Ontario Shores Centre for Mental Health Sciences</td>
<td>Nov-16</td>
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<tr>
<td>Homewood Health</td>
<td>Nov-17</td>
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<tr>
<td>Centre for Addiction and Mental Health</td>
<td>Mar-18</td>
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<tr>
<td>Canadian Mental Health Association - Waterloo Wellington</td>
<td>Apr-18</td>
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<tr>
<td>The Royal Ottawa Healthcare Group</td>
<td>Aug-18</td>
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<tr>
<td>Waypoint Centre for Mental Healthcare</td>
<td>Sep-18</td>
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Physicians enrolled in HRM*

- Psychiatrists/Psychotherapists: 38
- General Practice / Family Medicine: 7211

*As of Jan 2019
Scenario for Consideration
HRM’s Impact

Measuring the clinical impact of HRM
HRM eNotifications: Pilot and Benefits Evaluation

Pilot Initiative: 2014
• Pilot and benefits evaluation of HRM eNotifications was collaborative effort among East Toronto Health Link, Michael Garron Hospital (MGH), South East Toronto FHT (SETFHT), and OntarioMD
• MGH and SETFHT analysed EMR data (incl. chart review) to understand:
  • Volume of eNotifications received,
  • Volume of eNotifications reviewed by clinician within 7 days of discharge, and
  • Volume of patient follow-up appointments within 7 days of discharge.
• Pilot focused on Case Mix Groups (CMGs) identified by MOHLTC for complex patients (Cardiac, CHF, COPD, Pneumonia, Diabetes, Stroke, GI)

Benefits Evaluation: Impact on Patient Care
• 100% of eNotifications from pilot hospital to SETFHT were reviewed by clinicians within 7 days
• Based on MOHLTC definition, 54% of the eNotifications resulted in an appointment
  • Study participants identified patient choice to be a limiting factor in follow-up schedule
  • 57% of patients were determined to be complex based on MOHLTC definition
  • Evaluation identified improvements in 7 day follow-up appointment rate from 37% (baseline) to 54%

*Note: Evaluation did not assess correlation between 7 day follow-up appointments and patient health outcomes.
Impact Analysis of eNotifications: OntarioMD and IC/ES

Research Initiative
Partnering with OntarioMD, IC/ES will identify if there is a correlation between eNotifications and patient readmission rates to hospital Emergency Departments.

The underlying premise of this initiative is that primary care providers follow up with patients, particularly high-risk patients with chronic conditions such as Cardiovascular Disease, Stroke, Cancer, Asthma (Respiratory) and COPD, within 7 days after discharge upon receiving an eNotification.

Emergency Department readmission may be used as proxy measure for patient health outcomes.

Key Opportunities
To identify the value of an OntarioMD product to community providers, patients and the health care system. Specifically, to measure the impact of prompting follow-ups by clinicians within 7 days of discharge from the hospital, in line with established best practices as outlined in guidance such as Health Quality Ontario’s (HQO’s) Primary Care Performance Measurement indicators.

Preliminary collaboration with IC/ES to test the impact of digital health services to patients, providers and the broader health care system.
HRM Value Assessment

Measuring the financial impact of HRM
Background

• In 2016, OntarioMD carried out an HRM User Survey (hospitals and recipient clinicians) to measure the impact of HRM.
  • In addition to satisfaction measures, the HRM User Survey identified proxy measures for the financial impact of HRM (e.g., personnel use to handle patient reports, paper/ink hard costs, number of misdirected faxes, etc.)

• In 2017, OntarioMD engaged Deloitte to assess and validate the results of this HRM value assessment and extrapolate to the provincial setting.

• The Deloitte assessment identified the following as a result of HRM:
  • A medium sized hospital avoids ~$30,000 in annual costs
  • A large sized hospital avoids ~$100,000 in annual costs
  • A clinician practice avoids an average of 33 minutes of resource time per day, per physician*

*Note that the resource time avoidance may not be physician time avoidance but may reflect administrator time.
Summary – HRM Value Assessment Validation

• Purpose: To validate the extrapolated benefits defined in the Deloitte analysis with actual hospital and practice settings

• Status: Early engagement with partner sites and development of information packets identifying User Survey results and Deloitte validation assumptions

• Participants include range of hospitals and community-based care settings representing:
  • Small and large sites,
  • Rural and urban sites,
  • Organized groups and solo providers (for community-based care settings).
HRM Vision and Roadmap
• Dr. Julia is a family physician who has been practicing for 9 years and has been using an EMR for 4 years.

• Dr. Julia is an HRM user and electronically receives health reports from various hospitals and specialty clinics into her EMR when she refers her patients for tests. HRM has allowed her to receive these health reports much more quickly than via fax and streamlines all her patient information into a single record.

• Dr. Julia is comfortable with electronically recording and documenting her encounters in her EMR and is starting to use more advanced tools in her EMR to make decisions and provide insight into the way she provides care.

• Dr. Julia works at three different clinics where she has a unique roster of patients at each clinic.
HRM in the Future

Where are we going?
Scenario for Consideration
### Potential Data and Information Sharing

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Information / Data Delivered via HRM</th>
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<tbody>
<tr>
<td>• Police come to investigate twice</td>
<td>• Police event information such as date/time, incident description, resolution is tracked</td>
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| • Police come to investigate a third time and bring Mary to the hospital emergency department | • Police event information such as date/time, incident description are tracked and shared with the hospital emergency department  
• Previous two incident details could also be shared to describe pattern of behaviour |
| • Mary is admitted to the psychiatric ward and receives inpatient treatment. | • Discharge from ED and Admit to inpatient notification is sent to Mary’s family physician |
| • Mary is discharged from the psychiatric ward and provided with a treatment plan | • Discharge from inpatient notification is sent to Mary’s family physician  
• Medical reports and treatment plan are also sent to Mary’s family physician |
| • Mary continues outpatient treatment | • Progress reports from specialist are sent to Mary’s family physician |
| • Mary begins to use patient-facing tracking tools to track her recovery progress | • Mary’s self-reported tracking can be shared with her specialist and family physician |
Today: Connecting Hospitals and IHFs with Community Care
HRM Roadmap

- My HRM Location Management
- My HRM Preferences
- My HRM Self-Serve
- My HRM Standardized Reports: Data and Report Standardization

- 2018/19
- 2019/20
- 2020/21
- 2021/2022

eNotifications

OntarioMD
Future: Connecting the Circle of Care

- Hospital
- IHF
- Mental Health Services
- Emergency Medical Services
- Police
- Repository
- Personal Health Record
- Community Based Clinician
- HRM
HRM Vision and Mission for the Future

Vision
Connecting the healthcare world to promote efficient, accurate and relevant information to empower the patient and the circle of care.

Mission
For providers, HRM is a service that delivers direct, efficient and accurate information in an intelligent, secure, and personalized way to optimize clinical and practice outcomes.
Supporting Mental Health in Primary Care: The Future

- eREFERRAL
- eCONSULT DEPLOYMENT AND EMR INTEGRATION
- EMR QUALITY DASHBOARD
- POPULATION HEALTH INDICATORS
- DHDR / DHIR EMR INTEGRATION
- eVISITS

Community Based Clinician
Thank you!

Questions and Discussion? Follow us on social media!

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