



Summary Report

# Outpatient Rehabilitation Access & Transition Indicators 2015-16 FY

September 2016

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# GTA Rehab Network Summary Report: Outpatient Rehabilitation Access and Transition Indicators 2015-16 FY

## 1. Background

In Q3/Q4 2013-14, health service providers in the Toronto Central (TC) LHIN participated in a pilot to collect and report outpatient rehab (OPR) data based on standardized definitions for total hip/knee replacement (THR/TKR) and stroke patient groups. The purpose of the pilot was to test the feasibility of collecting and reporting a proposed minimum dataset of performance measures for outpatient rehab. Further details and lessons learned from the TC LHIN wide OPR pilot were published in a separate report<sup>1</sup> by the GTA Rehab Network and shared with the:

- TC LHIN Clinical Utilization Clinical Efficiency (CECU) committee to assist with system planning and volume allocation processes, and
- Rehabilitative Care Alliance (RCA) Outpatient/Ambulatory Task Group to inform work of the task group in developing and evaluating a standardized provincial minimum dataset of performance measures for publicly-funded outpatient rehab programs.

Since completion of the initial pilot, health service providers of the GTA Rehab Network OPR data working group<sup>2</sup> have been participating in two outpatient rehabilitation data reporting initiatives and included the hip fracture patient group in both reporting initiatives.

### 1.1. Current outpatient rehabilitation data reporting initiatives

#### First Initiative: Standardized OPR reporting to the TC LHIN

Since Q3 2014-15, health service providers of the OPR data working group have continued to report a subset of the data elements (i.e., discharged patient volumes, attendances/visits of health and nursing professions) for the THR/TKR, stroke and hip fracture patient groups to the GTA Rehab Network. These data elements are reported on a quarterly basis based on standardized definitions. The GTA Rehab Network reports system trends based on data analyzed to the TC LHIN.

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<sup>1</sup> GTA Rehab Network (2015). Piloting a minimum dataset for outpatient rehabilitation: Lessons learned. Available from [http://www.gtarehabnetwork.ca/uploads/File/reports/OPR\\_Data\\_Pilot\\_Report\\_Feb\\_2015\\_final.pdf](http://www.gtarehabnetwork.ca/uploads/File/reports/OPR_Data_Pilot_Report_Feb_2015_final.pdf)

<sup>2</sup> The Outpatient Rehabilitation Data Working Group includes representatives from Bridgepoint Active Healthcare – Sinai Health System, Holland Centre – Sunnybrook Health Sciences Centre (SHSC), Providence Healthcare, St. John’s Rehab – SHSC, St. Joseph’s Health Centre, Toronto Rehab – University Health Network (UHN), West Park Healthcare Centre, GTA Rehab Network and Toronto West Stroke Network.

## Second Initiative: Phase 2 OPR Data Collection Initiative

Two missing performance indicators (i.e., primary reason for admission to an OPR program and primary reason for discharge from an OPR program) were identified after analyzing data reported in the initial pilot. The OPR data working group proposed that the primary reason for admission and discharge would add further meaning to the analyzed indicators of the pilot, and should be part of the minimum dataset of OPR performance measures. The OPR data working group was interested to continue reporting the minimum dataset of performance measures of the initial pilot including the *primary reason for admission*<sup>3</sup> to an OPR program and *primary reason for discharge*<sup>4</sup> for post-THR/TKR, post-stroke and post-hip fracture patient groups. Performance data were submitted quarterly to the GTA Rehab Network for analysis. Performance indicators based on the *access and transition and financial performance quadrants* of the *Performance Framework for Outpatient Rehabilitation*<sup>5</sup> include:

- rehab ready referral patient volumes
  - admission wait time based on referral source
  - admitted patient volumes
  - referrals declined and reasons for declining referrals
  - accepted referrals cancelled and primary reason for cancelling referral
- Based on 'restore/optimize function' as the primary reason for admission in the access and transition quadrant*
- discharged patient volumes
  - episode of care days
  - attendances/visits of health professionals' and nurses' functional cost centres
- Based on discharge reasons from OPR programs in the financial performance quadrant*

The purpose of this continued phase of the initiative is to inform quality improvements in the collection and reporting of the minimum performance measures dataset. Through ongoing quality improvement processes, the OPR data working group is at a state of readiness to share system-level findings of the 2015-16 FY access and transition indicators

<sup>3</sup> The *primary reason for admission to an OPR program* category includes: a) restore or optimize function post-acute injury/onset, b) maintain function, c) education/peer support/self-management and d) primarily consultative or assessment-based.

<sup>4</sup> The *primary reason for discharge from an OPR program* category includes: a) treatment complete, b) treatment incomplete (change in medical status, transferred to other outpatient program, patient choice, unknown/other.

<sup>5</sup> GTA Rehab Network (2013). Developing a Performance Framework for Outpatient Rehabilitation. Available from <http://www.gtarehabnetwork.ca/uploads/File/reports/Developing-a-Performance-Framework-for-Outpatient-Rehabilitation---February-2013.pdf>

for this sector as a one-time report to support and inform the work of the TC LHIN CECU committee in its system planning. This summary report represents the first time the participating OPR programs across the TC LHIN are reporting the *access and transition indicators* in a standardized approach as defined by the working group.

## 1.2. Objectives of the Access & Transition Indicator Summary Report

- To demonstrate the achievements of participating hospitals in data reporting based on standardized definitions developed by the OPR data working group.
- To share the experiences of participating organizations in implementing this OPR data collection initiative.
- To outline the status of the OPR system performance for the access and transition quadrant indicators identified by the OPR data working group to organizational senior leadership and the TC LHIN. A comparison of current system performance relative to best practice recommendations will be identified, where it exists.

## 1.3. Key Considerations

### 1.3.1. Data collected by Participating Organizations in the Phase 2 OPR data initiative

The following organizations participated in the collection and reporting of the Phase 2 OPR data reporting initiative (as outlined in **Section 1.1**):

- Bridgepoint Active Healthcare – Sinai Health System
- Holland Centre - Sunnybrook Health Sciences Centre (SHSC)
- Providence Healthcare
- St. John’s Rehab – SHSC
- St. Joseph’s Health Centre
- Toronto Rehab – University Health Network (IJHN)
- West Park Healthcare Centre.

Performance indicators that participating organizations collect and report on are summarized in the next two tables.



Participating Organizations	Access and Transition Performance Indicators				
	Rehab ready referral volumes	Referrals declined and primary reason for declining	Accepted referrals cancelled and primary reason for cancellation	Admitted patient volumes	Admission wait time based on referral source
Bridgepoint Active Healthcare	√	√	√	√	√
Providence Healthcare	√	√	√	√	√
Holland Centre				√	
St. John's Rehab	√	√	√	√	√
St. Joseph's Health Centre				√	√
Toronto Rehab	√	√	√	√	√
West Park Healthcare Centre	√	√	√	√	√

Participating Organizations	Financial Performance Indicators		
	Discharged volumes	Episode of Care Days	Attendances or Visits
Bridgepoint Active Healthcare	√	√	√
Providence Healthcare	√	√	√
Holland Centre	√		√
St. John's Rehab	√	√	√
St. Joseph's Health Centre	√	√	√
Toronto Rehab	√	√	√
West Park Healthcare Centre	√	√	√

### 1.3.2. Caution regarding potential existence of data inaccuracy

Despite significant improvements made in processes as compared to earlier reporting periods, data integrity issues may still exist. Organizations developed manual processes to collect data and cross-check data accuracy; however, manual processes are still prone to errors.

### 1.3.3. Primary reason for admission to an OPR program

The outpatient rehab data reported in this summary report was based only on the 'restore/optimize function post-acute injury/onset' as the primary reason for admission to an OPR program. Participating organizations were unable to consistently report volumes of rehab ready referrals based on the three other primary reasons for admission to an OPR program (i.e., [ i.] Maintain function, [ii.] Education/peer support/self-management and, [iii.] Primary consultative or assessment-based).

### 1.3.4. Admission wait time reporting

The *admission wait time*<sup>6</sup> reported for the patient groups was based on the standard definition and does not account for patient choice in delaying the first appointment date offered by the OPR program. The date of first appointment offered by the OPR program was not collected as part of the minimum dataset of performance measures identified and piloted.

### 1.3.5. Resource intensive nature of initiative

The OPR data elements of the minimum dataset are stored in different systems within an organization and across different organizations (e.g., paper referral records, electronic scheduling & referral information systems such as Medical Information Technology, Inc. or MEDITECH, Electronic Patient Record system, Workload system). The need to utilize different systems to integrate the information and implement audit processes to ensure data quality contribute to the resource intensive nature of this OPR reporting initiative.

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<sup>6</sup> The OPR data working group defined **Admission wait time** (in days) as [date '*ready for rehab*'] – [admission date (first treatment appointment)]. For hospital referrals (acute care, internal rehab/CCC and OP program or external rehab/CCC organization), the date '*ready for rehab*' is defined as the date the patient was discharged from hospital. For community referrals (physician group/specialty clinics, CCAC, other), the date '*ready for rehab*' is defined as the date the patient was referred by provider.

## 2. Findings

The 2015-16 FY Access and Transition OPR indicators summary report is the first report of its kind in Ontario and likely Canada. Participating outpatient programs reported indicators based on standardized definitions of data elements. A high-level overview of the data findings across participating organizations is as follows:

- The total patients admitted in the seven participating OPR programs across the four Quality Based Procedure (QBP) patient groups (THR/TKR primary unilateral, stroke and hip fracture) in 2015-16 FY was 4296.
- Based on the number of 'rehab ready' referrals<sup>7</sup> received per patient group:
  - Declined referrals to OPR programs were relatively low (<5%) across the THR/TKR primary unilateral, stroke and hip fracture patient groups. (See Sections 2.2 and 4.1)
  - Acceptance rate of referrals per patient group to OPR program was high.
  - Cancellation rates of accepted referrals across the THR/TKR primary unilateral, stroke and hip fracture patient groups ranged from approximately 16-21%. This may be interpreted to represent the administrative burden in processing referrals which do not translate into a patient admission in the OPR sector. (See Section 2.3)
- Cross-LHIN acute care hospital referrals were high in the stroke patient group as compared to the total hip/knee replacement (primary, unilateral) patient groups. (See Section 2.5)
- Admission wait time: (See Section 2.6)
  - 54% of the total knee replacement patient group was seen within the recommended wait time of 7 business days<sup>8</sup> from acute care referral source.
  - Less than 50% of stroke patients referred from acute care or inpatient rehab programs were seen within 7 calendar days.

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<sup>7</sup> The OPR data working group defined **Date patient 'ready for rehab'** based on the referral source. For hospital referrals, date patient is 'ready for rehab' is defined as the date patient was discharged from hospital. For community referrals, the date patient is 'ready for rehab' is defined as the date patient was referred by provider.

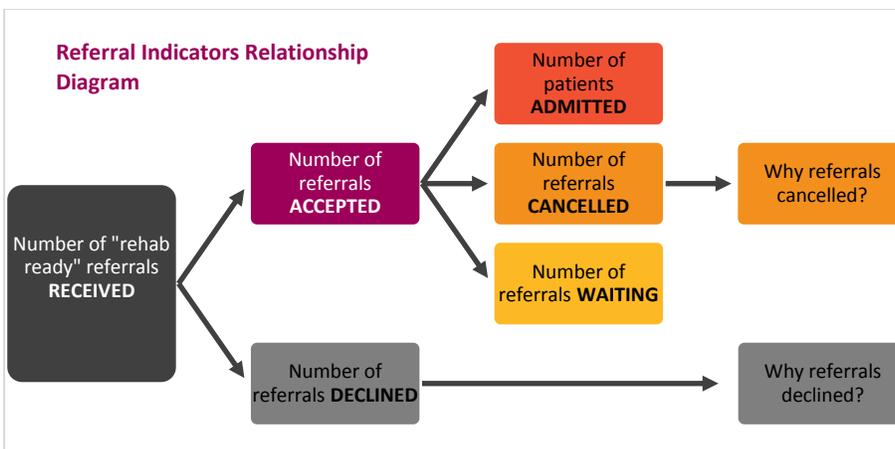
<sup>8</sup> GTA Rehab Network (2014). Outpatient Rehab Model of Care following Primary, Elective Total Joint Replacement, p. 6. Available from [http://www.gtarehabnetwork.ca/uploads/File/reports/TJR\\_OPR\\_Model\\_of\\_Care\\_June\\_2014\\_.pdf](http://www.gtarehabnetwork.ca/uploads/File/reports/TJR_OPR_Model_of_Care_June_2014_.pdf).

## 2.1. Referrals Indicator Summary

	“Rehab Ready” Referrals <b>Received</b> for 2015-16 FY	Referrals <b>Accepted</b> for 2015-16 FY	Referrals <b>Declined</b> for 2015-16 FY	Patients <b>Admitted</b> for 2015-16 FY	Referrals <b>Cancelled</b> for 2015-16 FY
THR Primary Unilateral	789	753	18	609	123
THR Primary Bilateral	11	*	*	7	*
THR Revision	73	*	*	56	*
TKR Primary Unilateral	1151	1076	45	906	185
TKR Primary Bilateral	94	*	*	80	*
TKR Revision	76	*	*	54	*
Stroke	1507	1332	57	1145	254
Hip Fracture	356	334	1	273	69

Please note:

- (1) The number of referrals is not equivalent to the number of patients.
- (2) Referrals accepted, declined, admitted or cancelled in one reporting period may come from referrals received from previous reporting periods.
- (3) Findings reported in the summary table do not include St. Joseph’s Health Centre and Holland Centre – SHSC data as both organizations were not able to report on the full dataset.
- (4) \* denotes data were not collected



## 2.2. Reasons for Declining OPR Referrals Based on Referral Source<sup>8</sup> by Patient Group

(Findings reported do not include Holland Centre – SHSC and St. Joseph’s Health Centre data as organizations were not able to report on this indicator.)

- 121 referrals out of 3803 referrals received or 3% were declined across 4 patient groups:
  - Stroke (n=57/1507, 4%)
  - THR primary unilateral (n=18/789, 2%)
  - TKR primary unilateral (n=45/1151, 4%) and,
  - Hip fracture (n=1/356, 0.2%).

The percentage of declined referrals reported was based on the 2015/16 FY number of referrals declined and 2015/16 FY number of rehab ready referrals received.

- The two highest referral sources with declined referrals across 4 patient groups were:
  - Acute care (n=59/121 or 49% of all declined referrals) and,
  - Physician Group/Specialty Clinic (n=50/121 or 41% of all declined referrals).
- For THR and TKR primary unilateral patient groups: Long admission wait time was the main reason for declining referrals representing 78% (14/18) of THR primary unilateral declined referrals and 87% (39/45) of TKR primary unilateral declined referrals.
- For stroke patient group: Program not offering requested service (n=26/57, 46%) and time since onset too long (n=12/57, 21%) were the 2 top reasons for declining stroke referrals.
- For the stroke patient group, declined referrals came from all *referral sources*<sup>9</sup>. In comparison, declined referrals for THR/TKR primary unilateral and hip fracture were mainly from acute care and physician group/specialty clinic referral sources.

(See Appendix Section 5.1 for details)

## 2.3. Primary Cancellation Reasons based on the Number of Referrals Cancelled by Patient Group

(Findings reported do not include Holland Centre – SHSC and St. Joseph’s Health Centre data as both organizations were not able to report on this indicator.)

- Out of 3495 referrals accepted by the outpatient programs, 630 referrals were cancelled across 4 patient groups:
  - THR primary unilateral (n=123 or 16%)
  - TKR primary unilateral (n=185 or 17%)
  - Stroke (n=254 or 19%) and,

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<sup>9</sup> **Referral Sources** from OPR data are categorized as the following: a) acute care, b) inpatient/outpatient rehab/CCC programs, c) external rehab/CCC organization, d) physician Group or Specialty Clinic, e) CCAC and f) Other.

- Hip fracture (n=69 or 21%).
- The 3 highest primary referral cancellation reasons for accepted referrals were:
  - Patient cancelled referrals (n=203, 32% of all referrals cancelled)
  - Attended other outpatient programs (n=168, 27% of all referrals cancelled)
  - Attempted – no contact from patient (n=99, 16% of all referrals cancelled)
- Working group members reported that OPR programs were receiving multiple referrals per patient in 2015-16FY. This approach contributed to the observed cancellation rates.

#### 2.4. Number of Admitted Patients Based on Referral Source by Patient Groups

Number of patients admitted based on referral source	THR Unilateral (n=1330)	TKR Unilateral (n=1548)	Stroke (n=1145)	Hip Fracture (n=273)
Acute Care (n=2917)	1200	1349	363	5
Internal Inpatient/Outpatient Rehab/CCC Programs (n=1102)	105	153	604	240
External Rehab/CCC Organization (n=126)	4	11	97	14
Physician Group/Specialty Clinic (n=138)	18	29	77	14
CCAC (n=1)	0	1	0	0
Other (n=12)	3	5	4	0
<b>Total (n=4296)</b>	<b>1330</b>	<b>1548</b>	<b>1145</b>	<b>273</b>

Please note:

(1) Findings reported in the summary table included all participating organizations.

- The main referral source for admitted outpatient THR and TKR (primary, unilateral) patient groups was acute care representing 90% of all referrals for THR primary unilateral and 87% of all TKR primary unilateral referrals.
- 53% of the admitted outpatient stroke patients came from internal inpatient/outpatient rehab/CCC & OP programs followed by acute care (32% of all referral sources).
- 88% of admitted outpatient hip fracture patients came from internal inpatient/outpatient rehab/CCC & OP programs.

## 2.5. Acute Care Referrals by LHIN

(Findings reported include all participating organizations.)

### 2.5.1. Total Hip Replacement, Primary Unilateral

Total Hip Replacement, Primary Unilateral (n=1200)	% of Referral by LHIN
Central (n=9)	0.8%
Central East (n=*)	*
Central West (n=*)	*
Toronto Central (n=1186)	98.8%

Please note: (1) \* denotes value less than 5 and greater than zero.

### 2.5.2. Total Knee Replacement, Primary Unilateral

Total Knee Replacement, Primary Unilateral (n=1349)	% of Referral by LHIN
Central (n=37)	2.7%
Central East (n=9)	0.7%
Central West (n=*)	*
HNHB (n=*)	*
Mississauga Halton (n=7)	0.5%
Toronto Central (n=1292)	95.8%

Please note: (1) \* denotes value less than 5 and greater than zero.

### 2.5.3. Stroke

Stroke (n=363)	% of Referral by LHIN
Central (n=112)	30.9%
Central East (n=49)	13.5%
Central West (n=*)	0.3%
Mississauga Halton (n=5)	1.4%
Toronto Central (n=196)	54.0%

Please note: (1) \* denotes value less than 5 and greater than zero.

- The outpatient rehab stroke referrals admitted to TC LHIN OPR programs had a higher cross-LHIN referral volume than other patient groups.

#### 2.5.4. Hip Fracture

- The 2015-16 FY OPR referral volume from acute care (n=5) were all from TC LHIN acute care hospital sites for hip fracture.

#### 2.6. Admission Wait Time<sup>10</sup> of Admitted Patients per Patient Group

(Findings reported do not include Holland Centre – SHSC data as Holland Centre was unable to report on this indicator.)

Please Note: Admission wait time reported below does not account for patients declining the first appointment offered by OPR programs and patients' choice of waiting to start outpatient therapy.

Patient Group	Recommended access admission for outpatient rehab	2015-16 FY findings
THR primary unilateral	Within 2-6 weeks after acute care discharge <sup>11</sup>	<ul style="list-style-type: none"> <li>- For <u>acute care referral source</u>, 81% (405/501) of admitted patients were seen within week 3 post-acute care discharge.</li> <li>- 80% (503/631) of admitted patients across <u>all referral sources</u><sup>12</sup> were seen by week 3 from the date 'ready for rehab'</li> <li>- The reported indicator does not include the Holland Centre – SHSC model, which accounts for 52% of discharged volumes in TC LHIN OPR programs for the THR primary unilateral patient group.</li> </ul>
TKR primary unilateral	Within 7 business days based on discharge date	<ul style="list-style-type: none"> <li>- For <u>acute care referrals</u>, 54% (501/935) of admitted patients were seen within 7 calendar days.</li> </ul>

<sup>10</sup> The OPR data working group defined **Admission wait time** (in days) as [date '**ready for rehab**'] – [admission date (first treatment appointment)]. For hospital referrals (acute care, internal rehab/CCC and OP program or external rehab/CCC organization), the date '**ready for rehab**' is defined as the date the patient was discharged from hospital. For community referrals (physician group/specialty clinics, CCAC, other), the date '**ready for rehab**' is defined as the date the patient was referred by provider.

<sup>11</sup> GTA Rehab Network (2014). Outpatient Rehab Model of Care following Primary, Elective Total Joint Replacement, p. 6. Available from [http://www.gtarehabnetwork.ca/uploads/File/reports/TJR\\_OPR\\_Model\\_of\\_Care\\_June\\_2014\\_.pdf](http://www.gtarehabnetwork.ca/uploads/File/reports/TJR_OPR_Model_of_Care_June_2014_.pdf).

<sup>12</sup> **Referral Sources** from OPR data are categorized as the following: a) acute care, b) inpatient/outpatient rehab/CCC programs, c) external rehab/CCC organization, d) physician Group or Specialty Clinic, e) CCAC and f) Other.

Patient Group	Recommended access admission for outpatient rehab	2015-16 FY findings
	from acute care or CCAC (if patient requires CCAC post-acute care discharge) <sup>11</sup>	<ul style="list-style-type: none"> <li>- The referral volume from CCAC was less than 5 for public reporting.</li> <li>- 50% (564/1134) of admitted patients across <u>all referral sources</u> were seen within 7 calendar days from the date 'ready for rehab' for the TKR primary unilateral patient group.</li> <li>- The reported indicator does not include the Holland Centre – SHSC data, which accounts for 24% of discharged volumes in TC LHIN OPR programs for the TKR primary unilateral patient group.</li> </ul>
Stroke	Within 48 hours of discharge from an acute care hospital or within 72 hours of discharge from inpatient rehabilitation <sup>13</sup>	<ul style="list-style-type: none"> <li>- 44% (159/363) of admitted patients from <u>acute care referral source</u> and 37% (224/604) of admitted patients from <u>internal inpatient rehab/CCC or outpatient rehab referral source</u> were seen within 7 calendar days</li> </ul>
Hip Fracture	None identified	<ul style="list-style-type: none"> <li>- 53% (147/273) of admitted patients across all referral sources were seen for their first appointment by week 2 of the rehab ready date.</li> </ul>

### 3. Qualitative Feedback on the Outpatient Rehab Data Initiative

In an effort to obtain qualitative information from participating hospitals regarding the process of collecting and submitting outpatient rehab data, a questionnaire was developed. The content of the questionnaire is listed in **Section 5.2**.

<sup>13</sup> Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-based procedures: Clinical handbook for stroke (acute and postacute). Toronto: Health Quality Ontario; 2015 December. 148 p. Available from: <http://www.hqontario.ca/Portals/0/Documents/evidence/clinical-handbooks/community-stroke-20151802-en.pdf>

The objectives of the administering the questionnaire were:

- To understand processes participating hospitals undertook to improve data quality since the initial pilot period in 2013-14.
- To identify challenges participating sites deal with to participate in this initiative and mitigation strategies implemented.
- To identify lessons learned by participating sites.

Six of seven (86%) participating hospitals of the OPR data working group responded to the Outpatient Rehab Data Initiative Questionnaire. Key areas identified in the questionnaire by participating organizations relate to efforts undertaken to improve data quality, the value and challenges of the OPR data initiative and other considerations.

### **3.1. Improving Data Quality**

After the initial OPR data collection pilot in 2013-14, participating organizations undertook ongoing changes in their internal processes/systems to improve data quality for this reporting initiative. These changes involved staff resource and information management system investments, clinical workflow practice changes and establishment of data audit processes.

#### Changes in Information Management Systems

To enable data collection/reporting, all participating organizations have invested resources to add or change data fields/codes in their information management/database systems in varying degrees since the 2013-14 initial pilot. Some examples of investments made by participating organizations include:

- The Holland Centre - SHSC used an external programmer to upgrade its rehab registration database.
- West Park Healthcare Centre custom built its software scheduling system to include all data elements required to report the OPR performance indicators, thus eliminating the need to collect data from different systems.
- Providence Healthcare developed its own Excel database and links this to the MEDITECH system to generate data reporting.

#### Human Resource Involvement

Across all participating organizations, different roles with different responsibilities (summarized in the table below) were required to ensure data quality in this OPR reporting initiative.

Roles	Responsibilities
Decision support team	To collect & analyze OPR data To develop reports and audit data integrity
Administrative support/coordinators of OPR programs	To enter data fields in registration systems
Coders (this role is applicable to St. John's Rehab – SHSC only)	To validate accuracy of data elements
Clinical managers, case managers, or patient coordinators	To provide oversight and confirm accuracy of data entry and analyses To follow up on issue(s) and develop action plans to improve processes
Rehab professional practice leaders and clinicians	To ensure accuracy in workload documentation of services provided To discharge patients in a timely manner administratively

One organization was able to quantify the time involved by different roles for each reporting period in this fiscal year.

*Decision support (one FTE): 8 days/quarter*  
*Patient flow coordinator & manager (one FTE): 4 days/quarter*  
*Director of Information & Performance (one FTE): 1 day/quarter*  
*Patient care managers (3 FTEs): 1 day/quarter*  
*Administrative Assistants (2 FTEs): 20 hours +/-week*  
*Therapists (18 FTEs): 1 hour/week*

Another organization reported dedicating 10-15 minutes per week during scheduled clinical meetings to ensure data completeness of referrals. For the same organization, the administrative coordinator role was reported to have increased by 0.25 FTE partially due to data reporting activities.

#### Data audit processes

Participating organizations developed iterative data audit processes through weekly or monthly validation report generation. The audit process involves coordination amongst different roles from decision support, administrative support, managers and clinicians.

### Education/Training

All participating organizations expressed the need for ongoing education/training to ensure stakeholders involved are aware of the standardized definitions of data elements.

Organizations reported that:

- Administrative staff and coders need to be aware of ongoing changes implemented in their database/information management systems.
- Clinicians need to be aware of the importance in discharging patient cases in a timely manner to ensure data is captured in the correct reporting period. This was identified as a challenge to monitor for patients who did not complete their treatment program. As a mitigation strategy, St. John's Rehab – SHSC established automated data quality error reports based on workload entries. The reports were sent directly to clinicians to prompt clinicians to discharge inactive cases.

### **3.2. Value of the OPR Data Initiative**

Participating organizations expressed that this initiative facilitated establishment of a common language through standardizing definitions of key indicators. The standardized data allowed organizations to benchmark with similar programs of other organizations, and facilitated other internal improvement changes related to business operations, workflow, care planning and data collection and reporting. The data also provided a snapshot of patient volume trends across each month reflecting seasonal variation and helped organizational leadership in program planning.

*“The initiative highlighted the need to implement electronic solutions for rehab services and to integrate the current electronic patient record system, registration/referral system and upgrade workload measurement system for rehab services.”*

*“This project was a catalyst for building data fields into our custom software to enable us to capture/collect/analyze/utilize outpatient rehab program data for more efficiency... and for program planning. This project has also forced us, in a good way, to work more collaboratively with our peer organizations and allows us to network, share information and learn from each other in various ways.”*

*“This has been a worthwhile initiative.”*

*“This information helps a lot in many other projects and analysis.”*

*“The data is shared with our Director and continues to affirm the high productivity and human resource needs of the outpatient team.”*

### 3.3. Challenges and Other Identified Considerations

#### Resource and information management system limitations

St. Joseph's Health Centre and Holland Centre – SHSC were not able to collect the entire minimum dataset in the Phase 2 Outpatient Rehab Data Reporting initiative due i) lack of electronic solutions to integrate their database/information management systems and ii) limited human resource capacity to manually collect the dataset. Bridgepoint Active Healthcare – Sinai Health System also identified that ongoing changes, limited by their current resources, are still being implemented in their MEDITECH system to ensure data integrity in reporting.

#### Sustaining processes for data quality

For participating organizations, the labour intensive nature to ensure data quality in the OPR data reporting was identified as the main ongoing challenge. Based on this feedback, the GTA Rehab Network discussed the option of discontinuing this OPR data reporting initiative with health service providers of the OPR data working group in fall 2015 and winter 2016. Despite the issues identified with data collection, members of the OPR data working group decided to continue with this reporting initiative, highlighted that the value of this initiative outweighed the challenges.

As a mitigation strategy, participating organizations that are further along in integrating the required data elements into their information management systems have developed automated data quality reports for efficiency.

The working group also discussed the option of organizations submitting patient-level data to the GTA Rehab Network for analysis (assuming any applicable required data sharing agreements/privacy issues would first be addressed). However, not all organizations were ready for another change in data collection/reporting from the current aggregate-level data reporting approach.

#### Operational approach of the OPR program

One organization expressed that the low decline rates for the THR/TKR patient groups in 2015-16 FY may not be a true reflection of system pressures. This organization accepted all THR/TKR patient group referrals and re-organized staff resources to accommodate these patients within the recommended access target. The services they provided exceeded the patient volumes for which they were funded. This accommodation also affected wait times to access outpatient rehab services for other patient groups as therapists were transitioned

to prioritize the THR/TKR patient groups over the other patient groups. Adjustments in the program operational approach will occur in the upcoming fiscal year.

#### 4. Future Plans and Recommendations

Participating organizations of the GTA Rehab Network Outpatient Rehab Task Group have expressed the value of this initiative in reporting outpatient rehab data and in helping to sustain the process improvements achieved to date. Given the directions of other system initiatives, the working group will re-evaluate the need to continue this reporting initiative for 2017-18 FY.

##### Resource Matching & Referral (RM&R)

In January 2016, a referral pathway from acute care to outpatient rehab program for total joint replacement (TJR) patients was implemented in RM&R. With enhancements to the current RM&R TJR outpatient platform, there is an opportunity to use the RM&R referral system as a data source for OPR data.

The GTA Rehab Network will continue to liaise with the RM&R project team and TC LHIN to explore the potential to enhance the current RM&R system to include:

- Primary referral cancellation reasons by OP program (i.e., transportation barriers, receiving CCAC services, attended other outpatient programs, patient medically not ready or in acute care, patient requires or admitted to inpatient rehab program, patient not able to attend during hours of operation of OPR program)
- Date of acute care discharge
- Date of first appointment offered.

The GTA Rehab Network will also continue to follow up with the RM&R analytics team to integrate the expert knowledge of this OPR working group and contribute to the enhancement of the analytic tool (ORBIT) with the inclusion of the RM&R TJR outpatient pathway.

The GTA Rehab Network would like to thank the members of the OPR data working group for their work and leadership in this initiative. The list of members of the working group is in **Section 5.3**.



## 5. APPENDIX

### 5.1. Declined Reasons

Reason for Declining Referral (2015-16 FY)	Stroke (n=57)	THR Unilateral (n=18)	TKR Unilateral (n=45)	Hip Fracture (n=1)
<b>Acute Care (n=59)</b>	<ul style="list-style-type: none"> <li>- Program does not offer requested service (1)</li> <li>- Medical condition/ complexity (1)</li> <li>- Cognitive/ behavioural/ psychiatric issues: cannot be met by program (2)</li> <li>- Continence issues: cannot be met by program (1)</li> </ul>	<ul style="list-style-type: none"> <li>- Long admission wait time (14)</li> <li>- Program does not offer requested service (1)</li> </ul>	<ul style="list-style-type: none"> <li>- Long admission wait time (38)</li> <li>- Program does not offer requested service (1)</li> </ul>	
<b>Inpatient / Outpatient Rehab / CCC Programs (n=4)</b>	<ul style="list-style-type: none"> <li>- No OHIP/ out of province (1)</li> <li>- Funding not approved (1)</li> </ul>		<ul style="list-style-type: none"> <li>- Treatment not required (1)</li> <li>- Patient doing well (1)</li> </ul>	
<b>External Rehab/CCC Organization (n=3)</b>	<ul style="list-style-type: none"> <li>- Resides outside catchment area (1)</li> <li>- Program does not offer requested service (2)</li> </ul>			
<b>Physician Group and Specialty Clinic (n=50)</b>	<ul style="list-style-type: none"> <li>- Program does not offer requested services (23)</li> <li>- Time since date of onset too long (10)</li> <li>- Information requested not received (3)</li> <li>- Medical</li> </ul>	<ul style="list-style-type: none"> <li>- Program does not offer requested services (2)</li> </ul>	<ul style="list-style-type: none"> <li>- Program does not offer requested service (1)</li> <li>- Long admission wait time (1)</li> <li>- Time since date of onset too long (1)</li> </ul>	<ul style="list-style-type: none"> <li>- Continence Issue: cannot be met by program (1)</li> </ul>

Reason for Declining Referral (2015-16 FY)	Stroke (n=57)	THR Unilateral (n=18)	TKR Unilateral (n=45)	Hip Fracture (n=1)
	condition/ complexity (2) - Completed OP services in another facility (2) - Continence issue: cannot be met by program (1) - No OHIP (1) - Previous stroke 5 years ago and completed therapy program with no new condition/ issues (1) - Resides outside catchment area (1)			
<b>CCAC (n=2)</b>	- Program does not offer requested services (1) - Time since onset too long (1)			
<b>Other (n=3)</b>	- Time since onset too long (1)	- Time since onset too long (1)	- Program does not offer requested services (1)	

- (1) OPR data from St. Joseph's Health Centre and Holland Centre - SHSC data were not included in this summary table as both organizations were not able to report this indicator.
- (2) Not all OPR declined reasons from Bridgepoint Active Healthcare – Sinai Health System for the THR/TKR Unilateral patient groups in Q4 2015-16 were collected when the team utilized the RM&R TJR OP referral system to collect this information. In the RM&R TJR OP referral process, the information was not retrievable once the referral was denied in Q4 2015-16 as the referral system just went live late January 2016.
- (3) "Services requested that the OPR programs did not offer" decline reasons are currently unknown across all patient groups.



## 5.2. Outpatient Rehab Data Initiative Questionnaire

The content of the questionnaire consisted of:

- 1) What has your organization implemented to improve data quality in reporting OPR quarterly data?
- 2) What resources/manpower does your organization currently utilize to generate the data reporting for each reporting period? How has this changed from the initial pilot reporting periods?
- 3) How has this OPR data reporting initiative helped your organization in planning and/or operational processes? Please share any learnings gleaned from this initiative.
- 4) What challenge(s) does your organization continue to encounter related to this OPR data initiative? Please share mitigation strategies to address these challenge(s).
- 5) Open Comment

## 5.3. Members of the Outpatient Rehab Data Working Group

Organization	Name of Member	Title
Bridgepoint Active Healthcare – Sinai Health System	Michael Gekas (Co-Chair)	Senior Director, Operational Performance
	Paula Shing	Clinical Manager – Ambulatory Care
	Agnes Tong	Senior Consultant, Corporate Performance & Process Improvement
GTA Rehab Network	Charissa Levy	Executive Director
	Sharon Ocampo-Chan	Project Manager
Holland Campus - SHSC	Deborah Kennedy	Manager, Rehabilitation and Program Development
Providence Healthcare	Saba Ateyah	Director, Information and Performance
	Sharon Crossan	Patient Care Manager, Inpatient stroke and Outpatient Stroke and Neuro Clinic
	Matthew Inch	Decision Support Analyst
	Linda Nasturzio	Patient Care Manager, Inpatient Amputee and Ortho and Outpatient Mobility Clinic
	Meghan Rumford	Patient Flow Coordinator
	Celia So	Decision Support Analyst
	Kelly Tough	Patient Flow Manager
	Yan Wang	Decision Support Team Lead
St. John's Rehab - SHSC	Marie Disotto-Monastero (Co-Chair)	Manager, Clinical Informatics
	Cathy Pupo	Manager, Outpatient Services - Operations

Organization	Name of Member	Title
St. Joseph's Health Centre	Sandra Lenarduzzi	Patient Care Manager, Outpatient Rehabilitation Services, Fracture Clinic, Orthopedic and General Surgery Unit
Toronto Rehab - UHN	Shahin Ansari	Manager, Decision Support
	William Cachia	Manager, Outpatient Services
	Irene Lin	Senior Analyst, Decision Support
	Megan Wormald	Interim Program Service Manager, Stroke
Toronto West Stroke Network - UHN	Shelley Sharp	Regional Director, Regional Stroke Program, Toronto Western Hospital - UHN
West Park Healthcare Centre	Shirley Price	Manager, Rehab Plus, Ambulatory Clinics and Seniors' Mental Health Services
	Sailaja Potaraju	Senior Data Analyst





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