STROKE NETWORK *of* Southeastern Ontario

Community Stroke Rehabilitation Program
Annual Report – June 2019

Released each June, this annual report provides an overview of the Community Stroke Rehabilitation Program (CSRP) since service inception in 2009 and reflects the most recent fiscal year data (April 1 – March 31).

Background: With this program, eligible stroke survivors following their hospital discharge to either community or Long-Term Care (LTC) receive the appropriate level of therapy to support their ongoing rehabilitation through the provision of: Physiotherapy (PT), Occupational Therapy (OT), Speech-Language Pathology (SLP) and Social Work (SW). Services are provided through the South East Local Health Integration Network (LHIN) Home and Community Care, with the exception of PT in the LTC home setting. Additionally, clients discharged from acute care are referred to the Rapid Response Nurse Program.

For patients leaving hospital and going to the community, rehabilitation care plans focusing on the patient's goals are developed with the patient and their family/caregivers, hospital interprofessional stroke team and the South East LHIN Care Coordinator. A Community Rehabilitation Planning meeting may occur between the hospital team, community provider and patient/family prior to patient leaving hospital. For patients leaving hospital and going to a long-term care home (LTCH), an interprofessional care planning conference is organized following admission to the LTCH, and involves the patient and their family, community therapist and members of the LTC care team as determined by the Director of Care or designate.

KEY FINDINGS 2018-19

- ✓ A 19% increase in referrals for this fiscal (n=71); referrals from acute care comprised the majority at 53% with 40% coming from rehab sites; over the past 5 years, there has been a 66% increase in annual referrals from volumes of 270 to 447.
- ✓ Increased number of Community Rehab Planning Meetings for both PCH and QHC.
- ✓ Average number of days to first therapy visit stable at 4 days
- ✓ Average number of visits after acute care: OT 5, PT 5.9, SLP 3.6 and SW 3.5. Average number of visits after rehab: OT 8.6, PT 9.1, SLP 5.6 and SW 3.5.
- **Referrals to the CSRP from Brockville Hospital (acute) remain lower than expected and low number of Community Rehab Planning Meetings were documented (n=2).**
- **Social Work Services are frequently underutilized.**
- **Those living in rural and small population areas averaged one additional day of wait time for services.**
- **Patients residing in large population centres received a higher average number of PT, OT and SLP visits as compared to patients residing in the other three population categories.**
- **Median and average ages for patients admitted to the CSRP is decreasing especially for males.**

What's New?

To further support transitions from acute stroke units and respond to patient and provider feedback, a pilot of referrals to the South East LHIN's Rapid Response Nurse (RRN) program, in conjunction with referrals being made to the Community Stroke Rehabilitation Program of the South East Local Health Integration Network (LHIN) began in October 2017. The pilot was initiated in Kingston and subsequently expanded to include Belleville and Brockville. Pilot results indicated that the most frequent RRN interventions included medication reconciliation, links to primary care, family support and health teaching including risk management and safety plans. In response to the positive pilot findings, all clients discharged from acute care to the CSRP, will receive an RRN referral going forward.

Note: Glossary of acronyms can be found at bottom of Page 7

Ontario

Annual Review of Community Stroke Rehabilitation Program

TABLE 1 - Number of Patients Completing Community Stroke Rehabilitation Program

FISCAL	Total Referrals	Year over Year Percent Change (↑ or ↓)	# Referred to Community	# Referred to LTC
2009/10	173	-	145	28
2010/11	182	↑5%	153	29
2011/12	236	↑30%	226	10
2012/13	242*	↑2%	228	13
2013/14	271	↑12%	256	15
2014/15	270	-	260	10
2015/16	281	↑4%	276	5
2016/17	329	↑17%	320	9
2017/18	376*	↑14%	364	11
2018/19	447*	↑19%	432	14
TOTALS TO DATE	**2807**	**↑158%**	**2660**	**144**

*** 1 unknown destination**

There was a significant increase in referrals again in this fiscal (n=71).

Note: Beginning with this fiscal (2018/19, analysis of subsequent data within this report **was conducted only on patients who had completed the CSRP (i.e. 12 weeks)** during the fiscal period (n=370). Previously, clients were included if receiving first visit within the reporting period but may not have completed the program. Moving to this method provides for more accurate data analysis.

TABLE 2 – Community Stroke Rehab Program Admissions/Total Unique ED Visits for Stroke Admissions

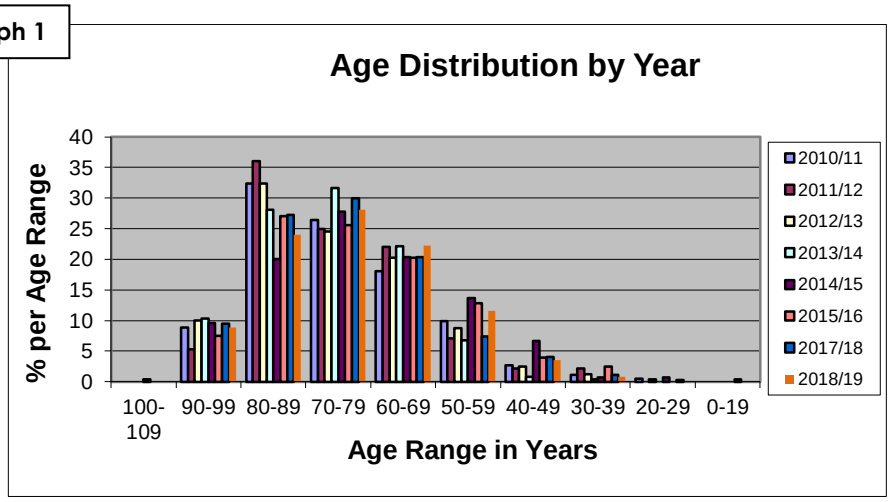
Fiscal	Total unique ED visits with Stroke	# Admitted to CSRP	% Admitted to CSRP
2009/2010	921	173	**18.8**
2010/2011	887	182	**20.5**
2011/2012	887	236	**26.6**
2012/2013	918	242	**26.4**
2013/2014	1143	271	**23.7**
2014/2015	1232	270	**21.9**
2015/2016	1282	281	**21.9**
2016/2017	1167	329	**28.2**
2017/2018	1170	376	**32.1**

Using the most recently available data from the Canadian Institute of Health Information (CIHI) 2017/18, the total reported number of individuals with stroke for fiscal **2017/18** was 1,170 and the percentage of patients referred to the CSRP was 32.1% (an increase from the previous fiscal of 2016/17).

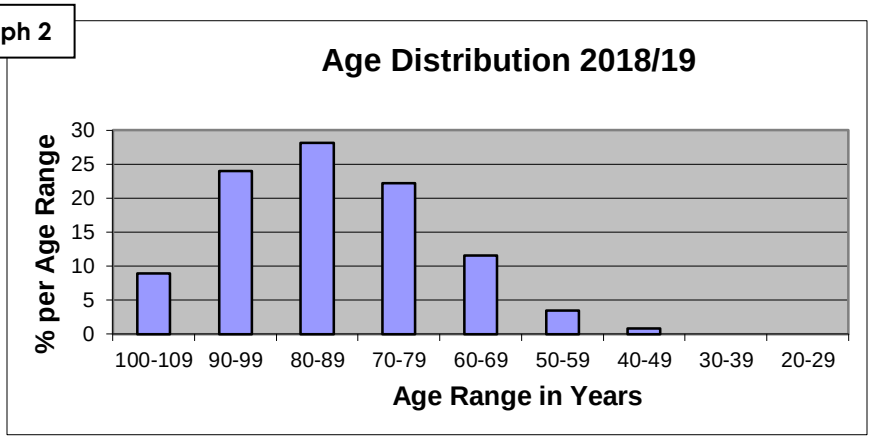
TABLE 3 - Average & Median Ages of Patients Referred to CSRP

	Fiscal 10/11	Fiscal 11/12	Fiscal 12/13	Fiscal 13/14	Fiscal 14/15	Fiscal 15/16	Fiscal 16/17	Fiscal 17/18	Fiscal 18/19
Average Age (years)	74	74	74.5	75.5	70.7	71.6	73.6	73.8	72.9
Median Age (years)	76	77	77	76	72	73	76	75	73

Graph 1

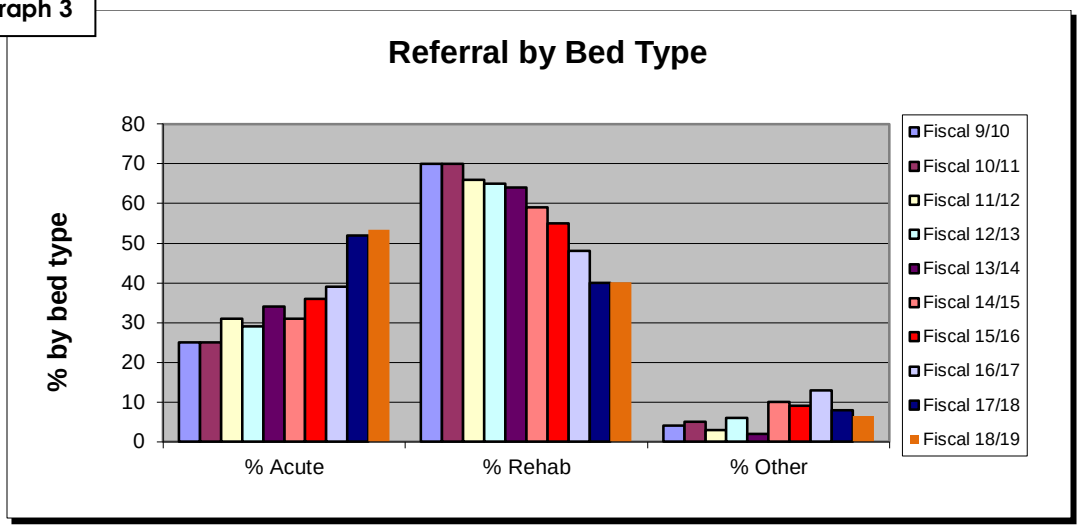


Graph 2



The previous three fiscal reporting periods have seen a downward trend in median ages of patients. When examined by gender, males had an average age of 70.8 years (median 71), and females had an average age of 75.2 (median 77) suggesting that the downward trend may be attributed to the decrease ages of male patients. Males comprised 51.6% of the cohort.

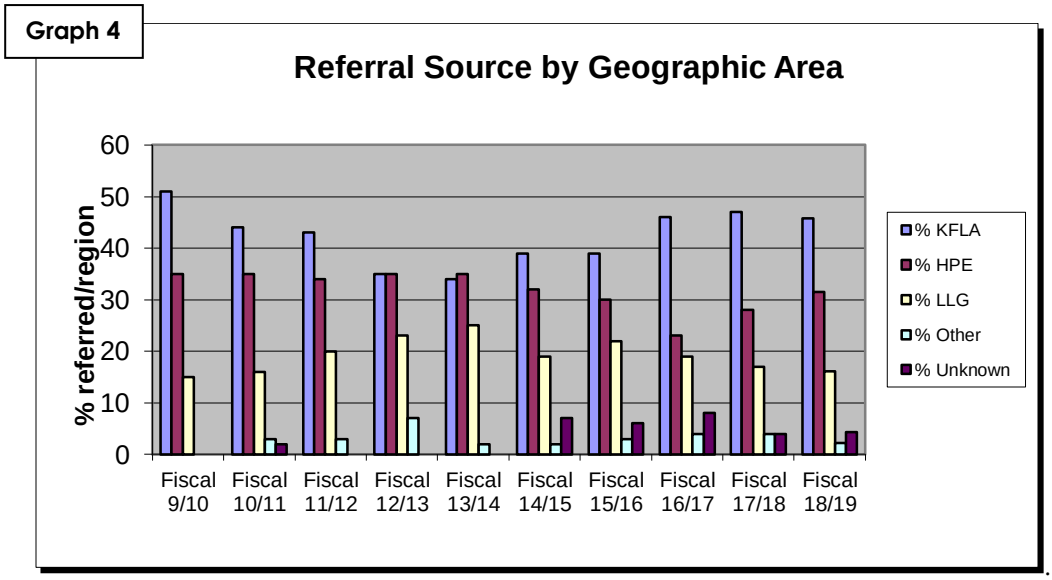
Graph 3



Referral rates from acute care beds constituted the majority at 53% with 40% coming from rehab. Referrals from other sources* were down from last fiscal FY at 7%. (Graph 3)

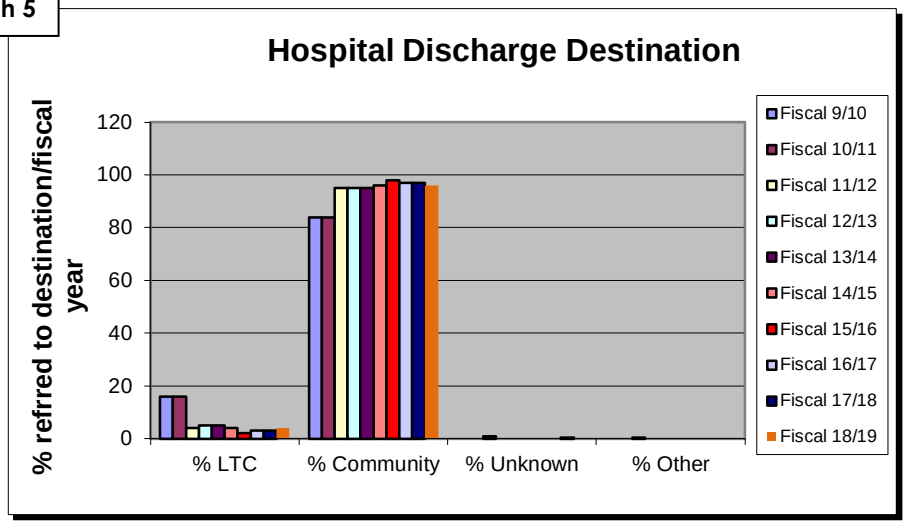
** Other sources include LHINs (Home and Community Care) and out-of-region hospital.*

Graph 4



Distribution of referrals by geographic area remains relatively stable with a small increase in Hastings Prince Edward (HPE).

Graph 5



Graph 5 – Hospital Discharge Destination

Hospital discharge destination has remained relatively stable over the previous eight fiscal years with referrals to LTC constituting a very low proportion of the total (n=11). (Graph 5)

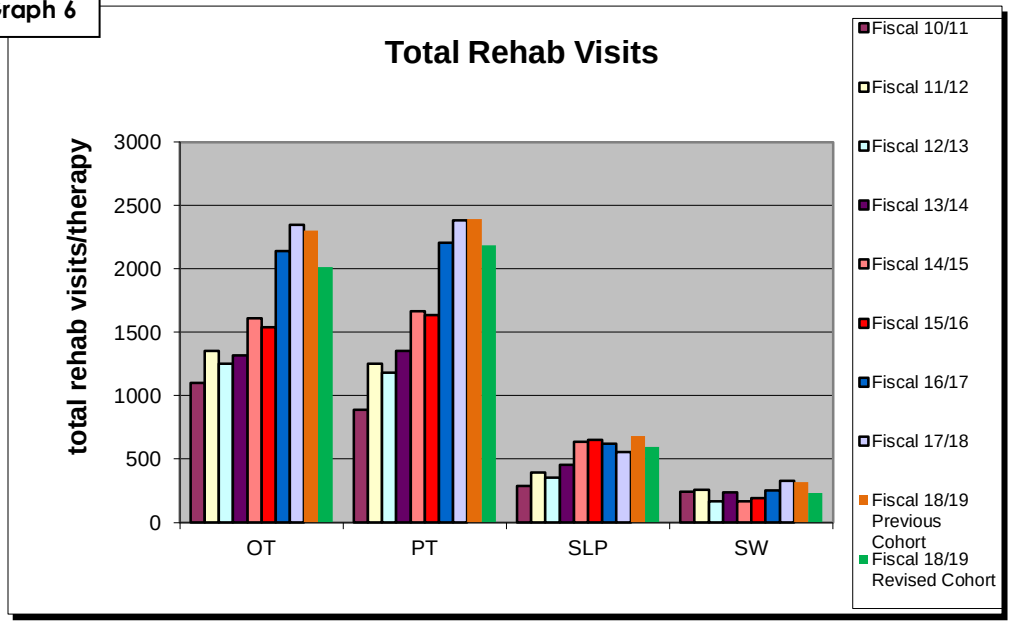
TABLE 4

Average & Median Days Waiting to First Scheduled Rehabilitation Visit

Time – Hospital Discharge to First Scheduled Rehabilitation Therapy Visit (days)	Fiscal 10/11	Fiscal 11/12	Fiscal 12/13	Fiscal 13/14	Fiscal 14/15	Fiscal 15/16	Fiscal 16/17	Fiscal 17/18	Fiscal 18/19
Average Days Waiting	4.9	4.6	4.4	4.3	4.3	4.5	4.1	4.7	4.15
Median Days Waiting	5	4	4	4	4	4	4	4	4

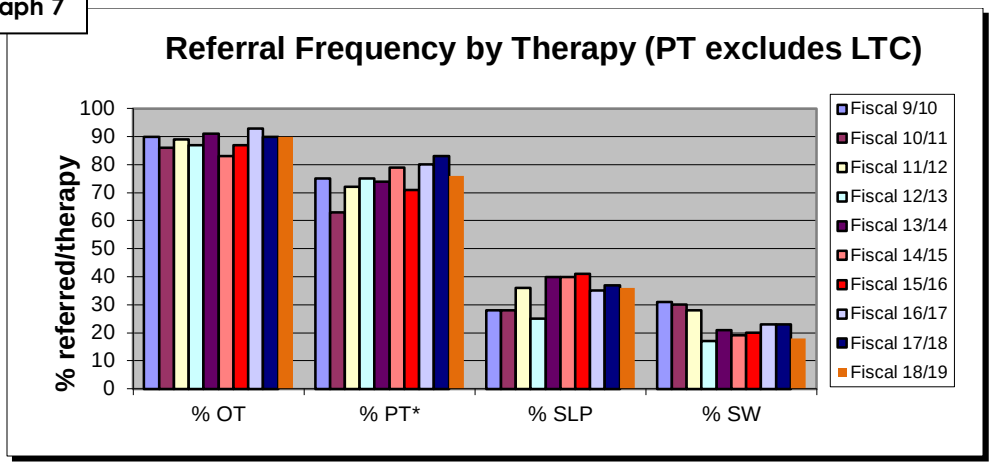
This fiscal, the median remained stable with a slight decrease in the average. The shortest time to first scheduled visit for this fiscal is same day service (the highest wait time was 32 days).

Graph 6



Note: This Communique amended the cohort used for data analysis to reflect only visits received during the 12-week CSRP. However, in the above graph, two cohorts have been included for fiscal 18/19; total visits using the previous cohort definition which shows a slight increase in SLP with other therapies remaining relatively stable and the revised cohort which will be used in future Communiques. (Graph 6)

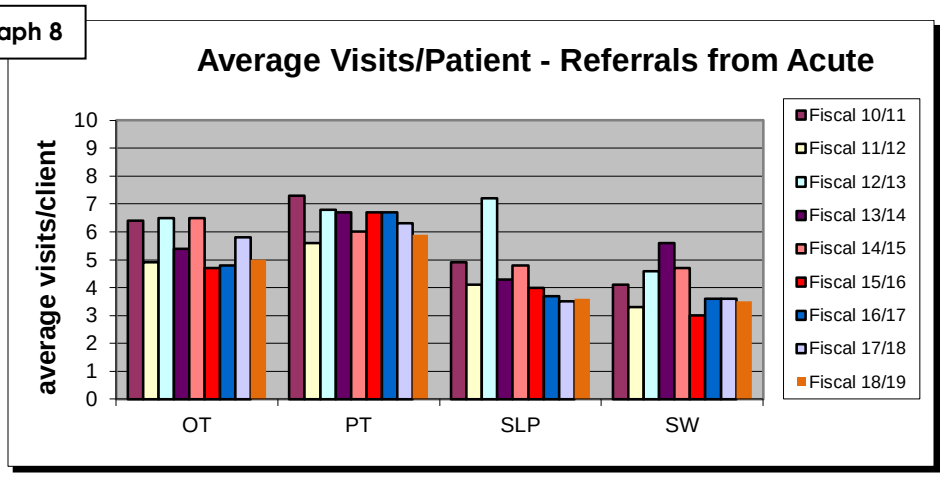
Graph 7



The percentage of individuals referred to each of the disciplines remained relatively stable as compared to last fiscal with a slight decrease in physio and SW. (Graph 7)

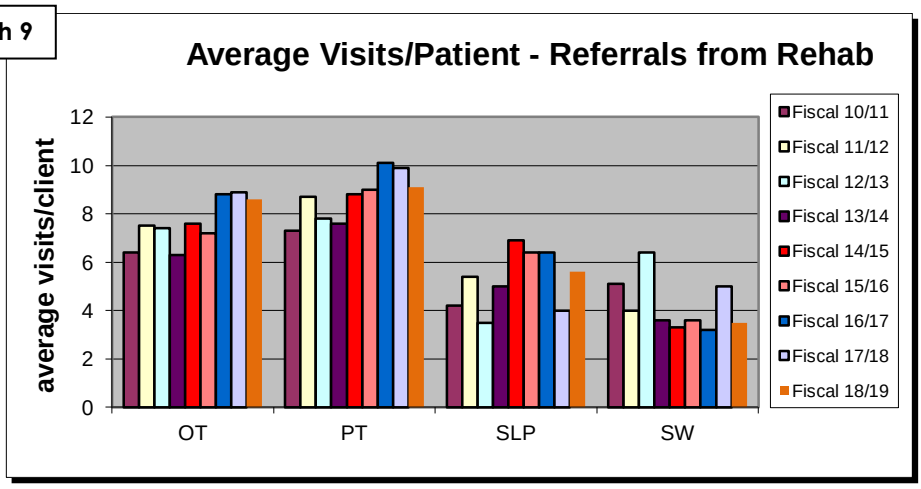
REFERRALS TO THE COMMUNITY

Graph 8



The average visit rate per patient for those discharged from acute beds decreased for OT with other therapies remaining relatively stable. (Graph 8)

Graph 9



Graph 9 – Average Visits/Patient – Referrals from Rehab

The average visit rate per patient for those discharged from rehabilitation settings decreased for PT and SW, increased for SLP and remained relatively stable for OT. (Graph 9)

TABLE 5 – Patients Receiving Eight or More PT, OT and SLP Visits

	PT Rehab Discharges (n=79)	OT Rehab Discharges (n=102)	SLP Rehab Discharges (n=42)	PT Acute Discharges (n=86)	OT Acute Discharges (n=102)	SLP Acute Discharges (n=38)
% receiving 8 or more visits	58%	59%	36%	23%	19%	13%
% receiving 12 or more visits	42%	27%	19%	8%	6%	0%
% receiving 16 or more visits	28%	21%	7%	5%	3%	0%

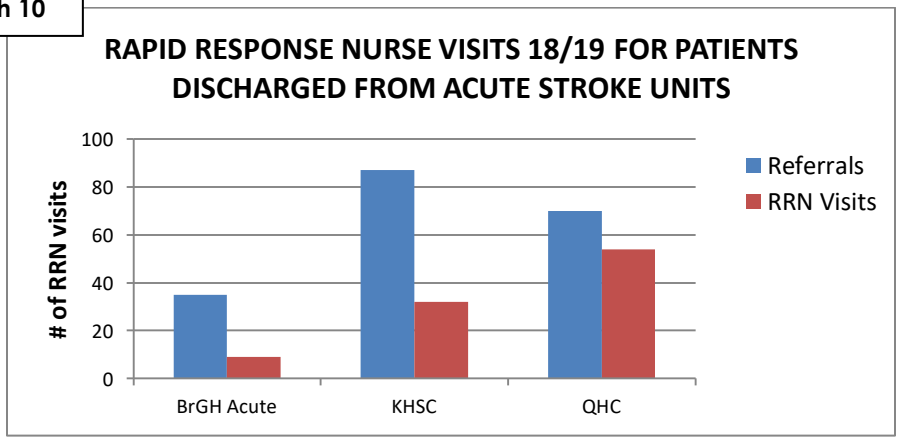
Best practice recognizes that rehab intensity early in the recovery period positively impacts patient outcomes. Table 6 data does not include patients with unknown or out of area referral source nor does it include Quinte Health Care (QHC) data which cannot be accurately segregated by acute and rehab.

TABLE 6 - Total Community Rehab Planning Meetings/Total Referrals by Geographic Region

	Total Referred 13/14	# (%) CoRP Meetings 13/14	Total Referred 14/15	# (%) CoRP Meetings 14/15	Total Referred 15/16	# (%) CoRP Meetings 15/16	Total Referred 16/17	# (%) CoRP Meetings 16/17	Total Referred 17/18	# (%) CoRP Meetings 17/18	Total Referred 18/19	# (%) CoRP Meetings 18/19
BGH Rehab	21	6 (29)	19	2 (10)	19	1 (5)	12	0 (0)	11	2 (18)	13	2 (15)
Perth	11	0 (0)	10	0(0)	10	0 (0)	5	0 (0)	12	1 (8)	9	1(11)
Quinte Rehab	103	30 (29)	87	23 (26)	83	3 (4)	75	29 (39)	40	33 (82)	47	41(87)
PCH	49	29 (59)	56	21 (37)	59	11 (19)	78	28 (36)	88	41(47)	80	52 (65)

The Community Rehab Planning Meeting is an integral component of the CSRP, particularly for more complex patients transitioning to the community with a focus on those patients being discharged from a rehab setting. Table 5 above provides information in numbers and as a percentage of total referrals for each hospital. Findings demonstrate an increase in meetings for Providence Care Hospital (PCH), QHC and Perth & Smiths Falls District Hospital – Perth Site while Brockville General Hospital (BGH) had a decrease with only two documented meetings.

Graph 10



Referrals to the RRN for all **acute** discharges were initiated across the southeast beginning in Kingston (October 2017), then expanding to Belleville (February 2018) and finally to Brockville in October 2018 (i.e. Brockville has not had the program in place for entire fiscal year (2018/19). Note: As data for QHC cannot be segregated by acute and rehab, rehab referrals has been estimated based on previous analysis (Graph 10). It should also be noted that referrals to the RRN from the rehab setting also occur depending on patient need and complexity.

Rural/Urban

Graph 11

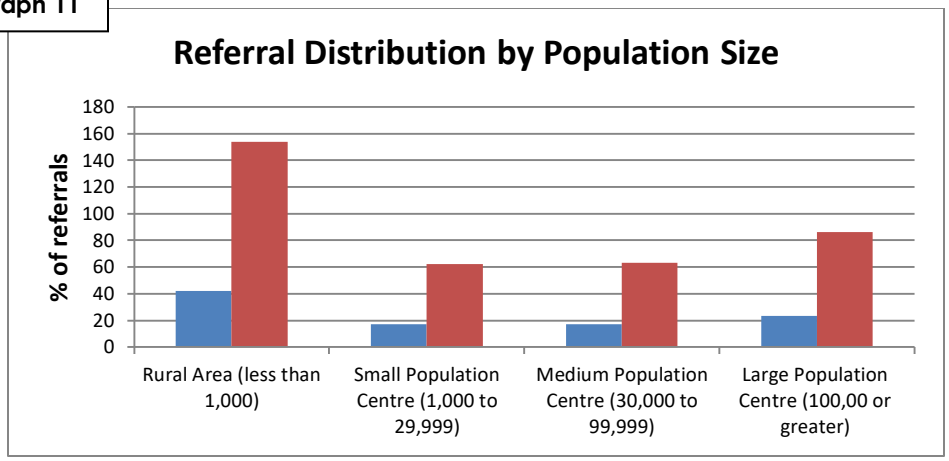


TABLE 7 - Wait Times and Average Visits by Population

	Large Population Centre (n=86)	Medium Population Centre (n=63)	Small Population Centre (n=62)	Rural Area (n=154)
Median Wait Time to First Visit (days) (average)	3 (3.9)	3 (3.5)	4 (5.2)	4 (4.3)
Average PT Visits	10.4	6.5	6.3	6.4
Average OT Visits	8.4	5.9	6.1	6
Average SLP Visits	5.3	4.7	4.4	4
Average SW Visits	4.3	4.3	3.2	2.8

The majority of referrals to the CSRP are for patients identified as living in rural areas. Those living in rural areas and small population centres averaged one additional day of wait time for services. Patients residing in large population centres (e.g. Kingston) received a higher average number of PT, OT and SLP visits as compared to patients residing in the other three population categories. There are no outpatient services available in Kingston (i.e. large population centre) which may be impacting on this finding (Table 7).

LONG-TERM CARE (LTC) RFERRALS

TABLE 8 - Total Referrals to LTC by Fiscal Year

Fiscal 10/11	Fiscal 11/12	Fiscal 12/13	Fiscal 13/14	Fiscal 14/15	Fiscal 15/16	Fiscal 16/17	Fiscal 17/18	Fiscal 18/19
23	8	12	15	10	5	9	11	14

TABLE 9 - Referrals to Enhanced Rehab program for Patients Transitioning to LTC

Referring Organization	# Patients Referred	# Visits OT	# Visits SLP	# Visits SW
Quinte	2	21	18	0
Brockville Garden St.	1	4	0	1
Brockville Acute	3	3	1	0
PSFDH – Perth	0	0	0	0
PSFDH – Smiths Falls	0	0	0	0
KHSC	4	6	3	0
L & A	1	8	5	0
PCH	1	10	0	2
Other/Unknown	2	2	2	0

Note: PT is provided by the LTCH, so data not available for this service. There was one discharge to LTC from out of area and one with an unknown referral source.

GLOSSARY OF ACRONYMS

ALC	Alternate Level of Care
BGH	Brockville General Hospital
CC	Care Coordinator
CIHI	Canadian Institute of Health Information
CoRP	Community Rehab Planning Meeting (formerly Discharge Link Meeting)
CSRP	Community Stroke Rehabilitation (Rehab) Program
ED	Emergency Department
FY	Fiscal Year
HPE	Hastings & Prince Edward
KFLA	Kingston, Frontenac, Lennox & Addington
KHSC	Kingston Health Sciences Centre
L&A	Lennox & Addington
LHIN	Local Health Integration Network
LLG	Lanark, Leeds & Grenville
LTC	Long-Term Care
LTCH	Long-Term Care Home
OT	Occupational Therapy
PCH	Providence Care Hospital
PSFDH	Perth Smith Falls District Hospital
PT	Physiotherapy
SLP	Speech Language Pathology
SW	Social Work

REMINDERS

1. All patients who have experienced a new stroke should be considered for referral to the CSRP prior to discharge including patients transitioning to LTC. **Hospital teams need to complete the South East LHIN Referral Form a minimum of 24-48 hours prior to discharge.** The form should clearly indicate **"**Community Stroke Rehab Program**"** and include suggested therapy plan with focus of intervention. For all patients discharged from acute. A referral to the Rapid Response Nurse should be included. The table below outlines CSRP therapy services. Note that for LTC, PT is provided by the LTCH. Note that all patients discharged from an acute stroke unit should also receive a Rapid Response Nurse referral.

Community Stroke Rehab Program		
	Weeks 1-4	**Weeks 5-12**
OT	**Up to 12 visits over 4 weeks**	**Up to 16 visits over 8 weeks**
PT	**Up to 12 visits over 4 weeks**	**Up to 16 visits over 8 weeks**
SLP	**Up to 8 visits over 4 weeks**	**Up to 8 visits over 8 weeks**
SW	**Up to 4 visits over 4 weeks**	**Up to 4 visits over 8 weeks**

2. **Community Rehab Planning (CoRP) meeting** should be considered for all discharges from rehab. The CoRP ideally occurs within 72 hours of discharge but planning for this meeting could start as early as two weeks prior to discharge. Note that it may take 4-5 days to arrange the CoRP meeting. The OT typically coordinates the CoRP meeting however another therapist may be more appropriate in some circumstances as determined by the Access Care Coordinator and based on recommendations from the hospital team. The most appropriate therapy discipline supports the **Care Planning Meeting in LTCH** in lieu of the CoRP meeting.

3. An extended stay in hospital (e.g. waiting for LTC) does **NOT** preclude the patient from being eligible for the CSRP.

4. Referral to Social Work (SW) should be considered during discharge planning **and throughout the patient's stay on the CSRP**. SW can assist with psychosocial supports, links to vocational support services and assistance with applications for financial support **at any time** post-stroke.

5. Consider referral to **Stroke Survivor and Caregiver Support Groups** and **Stroke Specific Exercise Programs** where available and to other community exercise programs and supports when appropriate. A community visit may be used by the community provider to visit an exercise program with the patient prior to discharge from the CSRP.

6. Information on various community programs is available through the South East Health Line under Stroke Resources.

7. Funding for education is available through the Stroke Network of Southeastern Ontario (SNSEO) in the form of **Shared Work Days** to link with stroke experts. For shared work day applications visit http://strokenetworkseo.ca/events-registration

Need additional information? Please contact:
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