

Rapid Recovery Therapy Program

GTA Rehab Network Best Practices Day 2017
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\$1 Million



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Agenda

About the Program

- Description of the Rapid Recovery Therapy Program
- Implementation/Success Factors

Results

- Evaluation Framework
- Patient Outcomes and Experience
- System & Patient Flow
- Value for Money

Continuous Quality Improvement

- Quality Improvements
- Sustainability

Learning Objectives

1. Identify the patient outcomes and patient experience of the Rapid Recovery Therapy Program
2. Describe the components and key success factors of the Rapid Recovery program that support an earlier transition to rehabilitative care in the community.
3. Identify how the program impacts access to inpatient rehabilitative care and contributes to reduced ALC days
4. Identify the financial implications of implementing the program
5. Consider how a similar program could be implemented in your context

Background and Goals

- Supported by Assess and Restore Ministry funding
- Expression of Interest submitted by CCAC and all 4 rehabilitative care hospital sites and Community Support Connections and VON (community exercise providers) collaboratively
- Built upon MHLHIN Rapid Recovery program
- Implemented in January 2016
- To improve healthcare for frail seniors and others who have experienced a recent loss in functional ability, and have shown restorative potential. (Assess and Restore Guideline, 2014)
- To optimize the use of healthcare resources to serve this population, increasing capacity of rehab and low intensity beds by shifting some care/capacity to community care with a Rapid Recovery Therapy Model.

Rapid Recovery Therapy Program

- A 30-day home-based intensive rehabilitation program to shift care from inpatient rehabilitative care to the community.
- Patients are typically discharged 5-14 days earlier from inpatient rehabilitative care (General Rehab, Low Intensity Rehab, Activation/Restoration), or are discharged from acute care to Rapid Recovery avoiding an admission to inpatient Rehabilitation level of care (General Rehab or Low Intensity Rehab).
- Therapy intensity is similar to inpatient rehabilitative care in the first week and approximately 3 times per week thereafter.



Rapid Recovery Therapy Program

Inpatient Rehabilitative Care*

Eligible for early discharge (5-14 days earlier) to Rapid Recovery

Transition of Care Teleconference

Letter to Primary Care

Transition of Care Report

Acute Care, eligible for rehabilitation

Eligible for discharge to Rapid Recovery in lieu of inpatient Rehabilitation

Rapid Recovery Therapy Program

- Daily therapy for 7 days
- Intermittent visits after
- One therapy provider
- 40-60% of PT visits by PTA
- Other therapy and nursing services as required (regular guidelines)
- Max 30 days
- Designated Care Coordinator per neighbourhood
- RAI-HC by Day 5
- PSW (option for PT/OT to assign protocols)

Transition teleconference

Letter to Primary Care

Community Support Services

Community Rehabilitation

Outpatient Rehabilitation Services

*Rehabilitative Care includes Rehabilitation, Low Intensity Rehab, Activation/Restoration

Benefits for Patients

- ✓ Patients benefit from practicing skills in their own environment
- ✓ Increased task-specific practice
- ✓ Greater motivation for achieving goals
- ✓ Surrounded by family and community supports
- ✓ Option for utilizing our Home Independence Program standardized ADL protocols for PSW providers that promote the Assess and Restore philosophy (Protocols cover dressing, bathing, falls prevention and exercise)
- ✓ Most patients prefer to be at home
 - Who are caregivers for an older adult spouse, or young children
 - Have a terminal illness and want more time at home with their family
 - Who are eager to return home, some of whom have refused inpatient rehabilitative care
- ✓ Patients with cognitive impairment recover in their own environment

Eligibility Criteria include:

1. Patient is medically stable and does not require inpatient medical management or 24-hour nursing care.
2. Home supports available: care needs can be met in home environment with available supports including family, private pay, community support services, homecare up to regular service guideline maximums.
3. Patient requires daily therapy for 1 week or more in order to achieve functional independence goals.
4. Therapy needs are primarily PT and OT (1- 1.5 hour total/day). The patient does not require SLP, SW, RD greater than regular home care service guidelines.
5. Patient will participate in therapy program regularly; is motivated to participate and able to apply and carry over new learning.
6. Patient is able to participate in therapy sessions of 45-60 minutes per session.
7. RAI-CA AUA (Assessment Urgency Algorithm) score of 3-6.

Additional Criteria for Acute Care

- Patient would have an expected rehab length of stay of 7-15 days. Goals for in-home therapy are expected to be achieved within 30 days.
- The patient does not require the structure and environment of an inpatient rehabilitation setting to achieve goals (such as cueing or supervision for initiating daily activities related to cognitive behavioural impairments).

Additional Criterion for Rehabilitative Care

- Patient is able to be discharged to home between 5-14 days earlier than team's Expected Date of Discharge (date of discharge without the Rapid Recovery Therapy Program)

Exclusion Criteria related to other care pathway, special programs and high intensity care needs

Referral Process

Electronic referral list on SharePoint accessible to Care Coordinators at all hospitals (to manage referral volume within budget target)

Eligibility checklist for patients from acute care

Information about the program discussed with patient (and caregiver)
Brochure provided. Consent obtained.

Use of Service Pathway function in CHRIS software (bundle of 4 prepopulated service offers to community therapy provider)

Transition of Care Teleconference with hospital rehabilitative care team and community therapist prior to discharge, with summary report.

Transition of Care Notes sent from acute care by noon on day of discharge

Implementation/Success Factors

- ✓ Project lead role
- ✓ RFP for community providers, with performance indicators
- ✓ Hospital staff work groups re: readiness for discharge, recommended process, outcome measurement
- ✓ Acute care staff engagement (acute stream started 6 weeks after rehabilitative care stream)
- ✓ On-site and OTN education for staff
- ✓ Attendance at team rounds to raise awareness of the program, help to identify potential candidates
- ✓ Monthly meetings with therapy providers
- ✓ Regular email updates, feedback to teams



EVALUATION

Evaluation Framework – Data Inputs

Area of Focus	Data Inputs
Program Performance <ul style="list-style-type: none">▪ Is the Rapid Recovery Program operating as intended?	<ul style="list-style-type: none">▪ Patient volumes and demographics (age, sex)▪ Hospital Length of Stay▪ Days Saved based on difference between Early and Expected Discharge Date▪ Transition of care meeting prior to hospital discharge▪ Transitions to Community Supports at end of RRTP▪ Linkage to primary care▪ Patient Experience
System & Patient Flow <ul style="list-style-type: none">▪ Do we observe changes in patient flow in the WW region, including rehabilitation, restorative and/or acute care beds?	<ul style="list-style-type: none">▪ ALC Acute to Rehab and ALC Acute to Low Intensity Rehab▪ Idle Beds Days*▪ Wait Time for Rehab and Low Intensity Rehab Beds▪ Rehab and Low Intensity Rehab LOS▪ Occupancy Rate

Evaluation Framework – Data Inputs

Area of Focus	Data Inputs
<p data-bbox="142 325 465 425">Health/Clinical Outcomes</p> <ul data-bbox="170 501 658 711" style="list-style-type: none"><li data-bbox="170 501 658 711">▪ What is the impact of early discharge on patient/clinical outcomes?	<ul data-bbox="730 329 1798 886" style="list-style-type: none"><li data-bbox="730 329 1798 601">▪ Activities of Daily Living (ADL) Long Form scores for patients at:<ul data-bbox="826 444 1489 601" style="list-style-type: none"><li data-bbox="826 444 1363 486">• Discharge from Hospital<li data-bbox="826 501 1441 544">• Day 7-9 of Community Care<li data-bbox="826 558 1489 601">• Day 28-30 of Community Care<li data-bbox="730 672 1561 886">▪ Additional assessment scores including:<ul data-bbox="826 729 1541 886" style="list-style-type: none"><li data-bbox="826 729 1541 772">– Modified Caregiver Strain Index*<li data-bbox="826 786 1464 829">– Modified Falls Efficacy Scale<li data-bbox="826 843 1329 886">– Timed Up and Go Test
<p data-bbox="142 942 490 985">Value for Money</p> <ul data-bbox="170 1061 645 1218" style="list-style-type: none"><li data-bbox="170 1061 645 1218">▪ What is the Value for Money of the Rapid Recovery Program?	<ul data-bbox="730 946 1823 1382" style="list-style-type: none"><li data-bbox="730 946 1823 1046">▪ Average cost of Hospital Rehab/Low Intensity Rehab Bed<li data-bbox="730 1061 1760 1160">▪ Average cost of Acute care per day (as it relates to ALC days saved)<li data-bbox="730 1175 1760 1275">▪ PSW, OT, PT and Nursing costs in the community (Day 0-30)<li data-bbox="730 1289 1108 1332">▪ Bed Days Saved<li data-bbox="730 1346 1431 1389">▪ Clinical outcomes vs cost of care

Rapid Recovery Referrals and Sample Size

148 patients have been accepted into the RRTP over 15 months.

103 patients have completed the RRTP at the time of the evaluation.

Complete data is available for 81 RRTP patients for the evaluation.

- 60% of program patients are women
- Average age for all patients is 71 years old.
- While the average age of female RRTP patients is 6 years younger than males, this is largely the result of the inclusion of 6 female participants under the age of 44.
- The most common Rehab Client Group (NRS reported or estimated) referred to RRTP were Orthopedics (Fracture of Lower Extremity), Medically Complex, Debility.

Referrals

Referral Steam	% of Total Referrals
Acute Care	61%
General Rehab	28%
Low Intensity Rehab (Restorative Care)	10%
Activation/Restoration (Convalescent Care)	1%

Referral Challenges

- Build awareness and trust with hospital therapists regarding the program and supports in the community
- Paradigm shift related to earlier discharge from inpatient to community setting
- Understanding which patients were appropriate
- Challenges with the need for intermittent toileting assistance
- Lack of home caregiver supports



Early Discharge from Hospital

- RRTP patients are being discharged 7.4 days (for Rehab), and 8.6 days (for Low Intensity Rehab) earlier based on the teams' expected discharge date.
- On average, acute care patients would typically save 19 days (for Rehab) and 42 days for Low Intensity Rehab.

Therapy Utilization

- Approximately 80% of RRTP Patients are receiving seven or more therapy visits in the first seven days at home. Many others received 6 visits in the first seven days. No missed care has been reported by providers, therefore, reasons for cancelled visits are client related: preference, location, or readmission to hospital.
- On average patients received 12-13 PT and PTA visits combined (approx. equal split) and 3 OT visits.

Therapy	Average Direct Therapy Time per Visit (minutes)
OT	58
PT	48
PTA/OTA	43
Overall	50

PSW Utilization During Program

PSW utilization was higher for patients from acute care and low intensity rehab, than patients discharged from general rehab.

Referral Group	Average PSW Visits per Patient in 30-35 days
Acute	26.1
General Rehab	12.7
Low Intensity Rehab	21.2
Overall	21.5



PATIENT OUTCOMES AND EXPERIENCE

Clinical Outcomes: ADL Long Form

The ADL Long Form Score from the RAI-HC (Home Care Assessment Tool) was used as the primary outcome measure. A lower score indicates greater functional independence. Overall, RRTP patients showed improvements in the 30 days following hospital discharge.

RRTP Group	Hospital Discharge	Interim (Day 7-9)	Day 28-30	Change
Rehab	3.1	2.2	0.8	-2.3
Low Intensity Rehab	7.0	5.6	1.9	-5.1
Overall Rehabilitative Care	4.50	3.1	1.1	-3.40
Acute	6.6	5.5	2.6	-4.0
Usual Care Rehab		2.5	2.5*	0

Clinical Outcomes

Achieving ADL Independence (excludes Bathing)

- Most Rehab and Low Intensity Rehab patients, along with half of the Acute patients, reached the highest ADL-measured level of functionality over the course of treatment. However, this does not necessarily represent all of the improvement they achieved.
- A patient with an ADL score of 0 could continue to gain strength, balance or no longer requiring a gait aid. This represents a ceiling/floor effect of the measure. Additionally, it may not be the patient's goal or a realistic goal to achieve 0 for all 7 activities.

RRTP Group	% with ADL of 0 Score at Day 7-9	% with ADL Score of 0 at Day 30
Rehab	43% (n=10)	78% (n=18)
Low Intensity Rehab	23% (n=3)	54% (n=7)
Acute	22% (n=10)	49% (n=22)

Clinical Outcomes: Timed Up and Go

- Patients referred from rehab and acute care (the majority of referrals) achieved a discharge TUG score of 20.5-23.3 seconds. This suggests that half of these patients had good mobility, likely did not require a gait aid and could likely go outdoors alone.

<10 seconds = normal

<20 seconds = good mobility, can go out alone, mobile without gait aid

>30 seconds – problems, cannot go outside alone, requires gait aid

(rehabmeasures.org)

RRTP Group	TUG Scores and Improvements - Average for RRTP (measured in seconds)		
	Average Initial Assessment	Average Discharge Assessment	Average Improvement
Rehab	31.4	20.5	-10.8
Low Intensity Rehab	47.2	35.6	-11.6
Acute	35.6	23.3	-12.4
Overall	36.2	24.3	-11.8

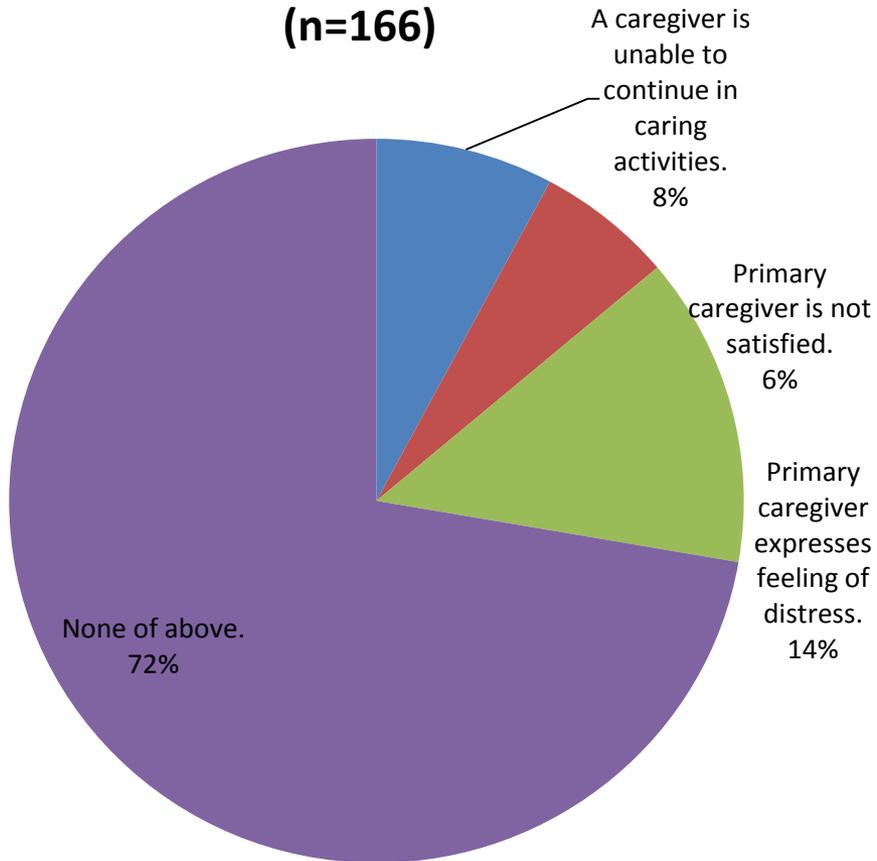
Patient Self-Efficacy

- The Modified Falls Efficacy Scale (Hill et al., 1996) is designed to measure perceived confidence in daily activities.
- Patients rate 17 statements “On a scale of 0-10 , how confident are you that you can do each of these activities without falling?” (0=not confident/not sure at all, 10=completely confident)
- Patients had an average discharge Modified Falls Efficacy Scale score of 7.9 and an average improvement of 1.8. In a hospital setting MFES scores of less than 5 are considered to be a predictor of patient falls.

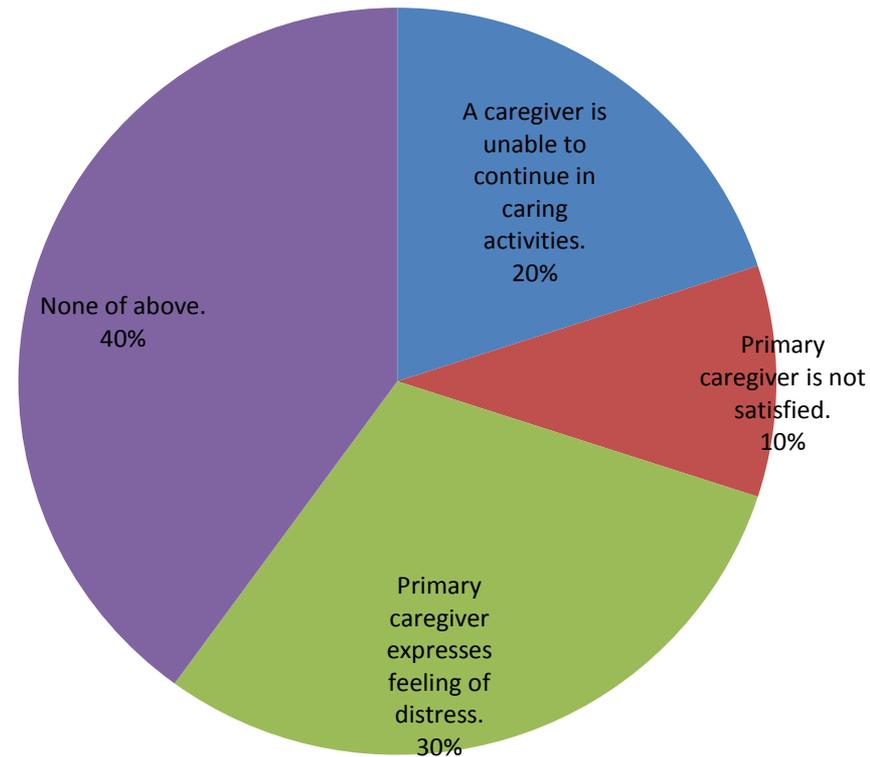
RRTP Group	MFES and Improvements - Average for RRTP		
	Average Initial Assessment	Average Discharge Assessment	Average Improvement
Rehab	6.5	8.8	2.3
Low Intensity Rehab	5.6	7.1	1.6
Acute	5.9	7.6	1.7
Overall	6.0	7.9	1.8

Caregiver Burden (Source: CCAC RAI-HC data)

Rapid Recovery Initial Caregiver Status (n=166)



Usual Care Initial Caregiver Status (n=30)



30-Day Readmission Rate

- Since January 2016, 23 patients (all RRTP pathways) have been readmitted to hospital (16%).
- 50% were readmitted to hospital but, following their hospital stay, resumed their RRTP pathway
- Most readmissions were due to a medical issue
- 1 readmission occurred within 72 hours of discharge from acute care.

Follow-up to Rapid Recovery

Referrals to SMART Exercise Programs

- At least 56% of patients were offered a program such as SMART or further rehabilitation (outpatient or home-based). 16% were not interested in the referral and 15% preferred independent exercise to a SMART exercise program.
- Referrals to community support services is an area to improve

Communication with Primary Care

- 56% of all patients had a letter sent to their primary care provider at the time of referral to the RRTP. (83% of patients since Sept 2016). Just over one third (38%) of the primary care providers for patients in the RRTP have been informed of their discharge from the program.
- Automated letter at time of referral implemented May 2017.
- Communication with primary care continues to be an area for improvement.





Patient Experience

- 34 patients responded to a 20 question patient experience survey
- 85%+ of respondents Agreed or Strongly Agreed with 10 of the survey questions, indicating a high-level of satisfaction in these areas which included:
 - Therapist visits within the first 24-hours of discharge
 - Involvement in therapy related decision making
 - A sense of collaboration and common goals among the therapy team
 - Safety when doing therapy activities
 - Trust in the therapy team
 - Participation in exercise programs following the RRTP
 - Satisfaction with the amount of therapy
 - Overall happiness of help provided by the therapy team
 - Overall happiness in the ability to leave hospital sooner and continue therapy in home

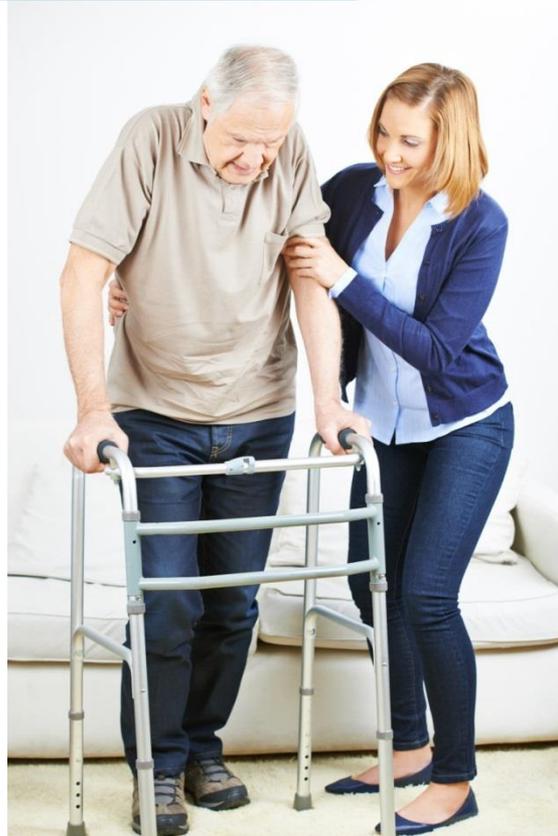
The lowest levels of satisfaction (70-75%) among RRTP patients were related to:

- knowing the name of the therapist who would come for the first visit
- need to repeat their full story to the home therapy team
- amount of information provided by the hospital team regarding the RRTP

Patient Feedback

“The team functioned very cohesively and often exceeded my care expectations. They took the time to communicate regularly with [my children] and often wrote special instructions for the other caregivers. I appreciated how caring and patient they were with me. They have definitely helped me function much better. This program was very beneficial for me and I hope it will continue to be offered to others.”

This is the first time using this program. I am quite impressed with the overall improvement from visit to visit. The Rapid Recovery Therapy program is something that I would recommend.”



“There was someone here every day, working with me and encouraging me. Being at home motivated me to do more. I was more active and felt more comfortable doing my exercises because I was in an environment that I knew”.

Patient Feedback



“They all were professional, knowledgeable and courteous. Thank you so very much for making me so confident at all. Great experience during my difficult time.”

Stakeholder Feedback

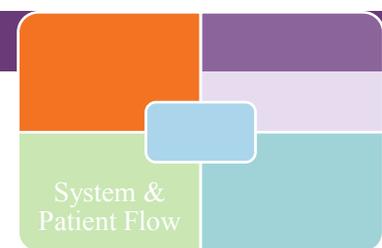


Stakeholder Comments

- The Acute Care RRTP pathway is considered to have the largest benefit
- Toileting and High PSW needs remain a barrier to RRTP
- Feedback about Patient Outcomes for Hospital Teams
- Additional Program Communication for Patients

SYSTEM & PATIENT FLOW

System & Patient Flow- ALC Data

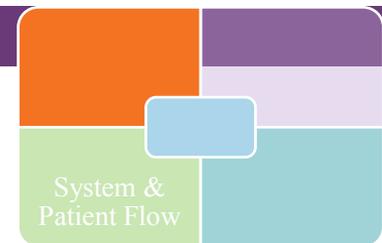


Total Volume of acute ALC patients and Total ALC Days among patients in acute care waiting for rehab and low intensity rehab has decreased since the implementation of the RRTP, continuing a downward trend since 2014/15 Q4.

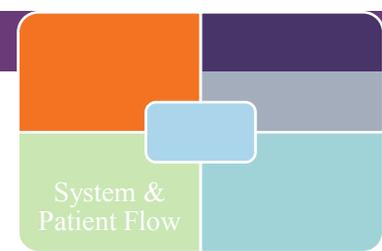
Total ALC Days by Quarter-Acute to Rehab + Acute to Low Intensity Rehab (Restorative)



Change in Waitlist Days and Idle Bed Days



- The average number of waitlist days per month decreased in 2016 compared to 2015.
- The number of Idle Beds appears to have increased since the implementation of the RRTP.
- During 2016, the average monthly idle rehab beds was approximately twice the average of 2014 and 2015. However, there is considerable variation in the number of idle bed days within a year.
- While system and patient flow metrics have shown some improvements since early 2016, these improvements are generally consistent with existing trends and/or within the historical variation of the metrics. Rapid Recovery has likely contributed to these changes, though it may not be the only reason. No definitive conclusions about impact can be drawn.



System & Patient Flow – Potential Bed Days Saved

- **2,217** bed days estimated saved in 15 months by 119 patients.
- **Future State: For 12 patients per month, 2,683 bed days would be saved, or approximately 7 inpatient beds in the system.**
- This calculation excludes days saved in Acute care arising from:
 - ALC days waiting for Rehab/Low Intensity Rehab due to discharge to RRTP
 - Reduced readmit days, net of higher rate of readmission but lower LOS once readmitted

Bed Type	Rehab	Low Intensity Rehab
Number of Patients	32	18
Average Days Saved	7.7	9.6
Total Estimated Days Saved	230	154

Acute Care	Estimated Rehab Avoided	Estimated Low Intensity Rehab Avoided
Number of Patients	46	23
Average Days Avoided	19.1	42.3
Total Estimated Days Avoided (saved)	871	962

VALUE FOR MONEY



Summary of Cost Savings

Referral Source	Net Savings Per Referral	
	Low	High
Acute	\$12,107	\$13,689
Rehab	\$1,652	
Low Intensity Rehab	\$1,317	

- RRTP achieved some value for money by using a OTA/PTA model of care (40-60% of visits)
- Savings are only realized if the beds vacated by RRTP patients are left idle. Otherwise, the savings can be realized in other parts of the system .
- These results can be used for capacity planning for future care needs and growth. For example, instead of adding 10 inpatient rehabilitative care beds, a system might only need to add 3 beds.

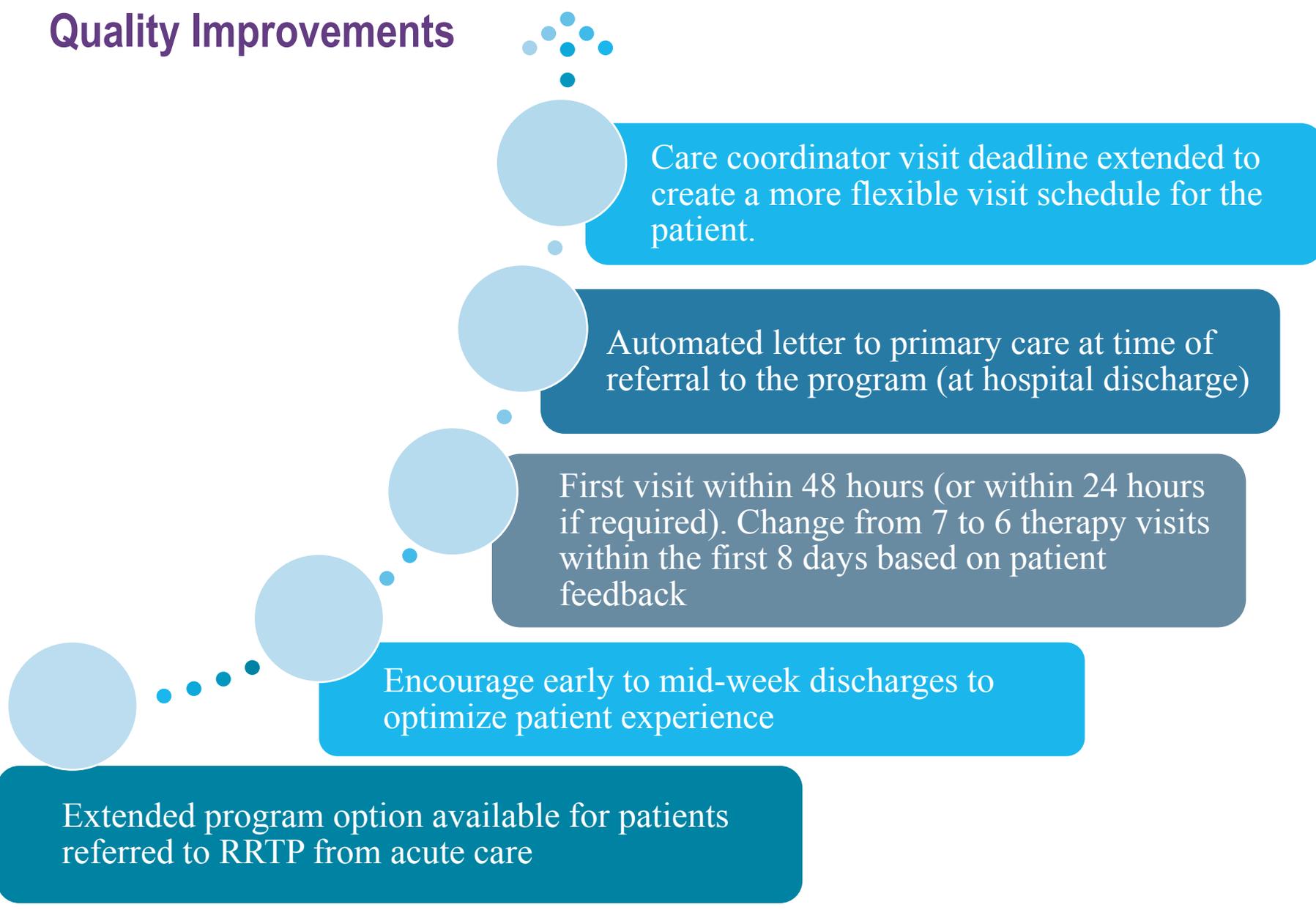
The “Low” scenario assumes only rehab admissions were avoided from acute care, while the “High” scenario assumes a blend of rehab and low intensity rehab admissions in proportion to the data.

Summary of Cost Savings

A referral volume of 12 patients per month translates to approximately \$1 million per year in savings

Referral Scenario	Number of Referrals	Approximate Total Savings from RRTP	
		Low	High
Completed Referrals	103	\$760,000	\$850,000
120 Referrals	120	890,000	990,000
140 Referrals	140	1,030,000	1,160,000

Quality Improvements



Care coordinator visit deadline extended to create a more flexible visit schedule for the patient.

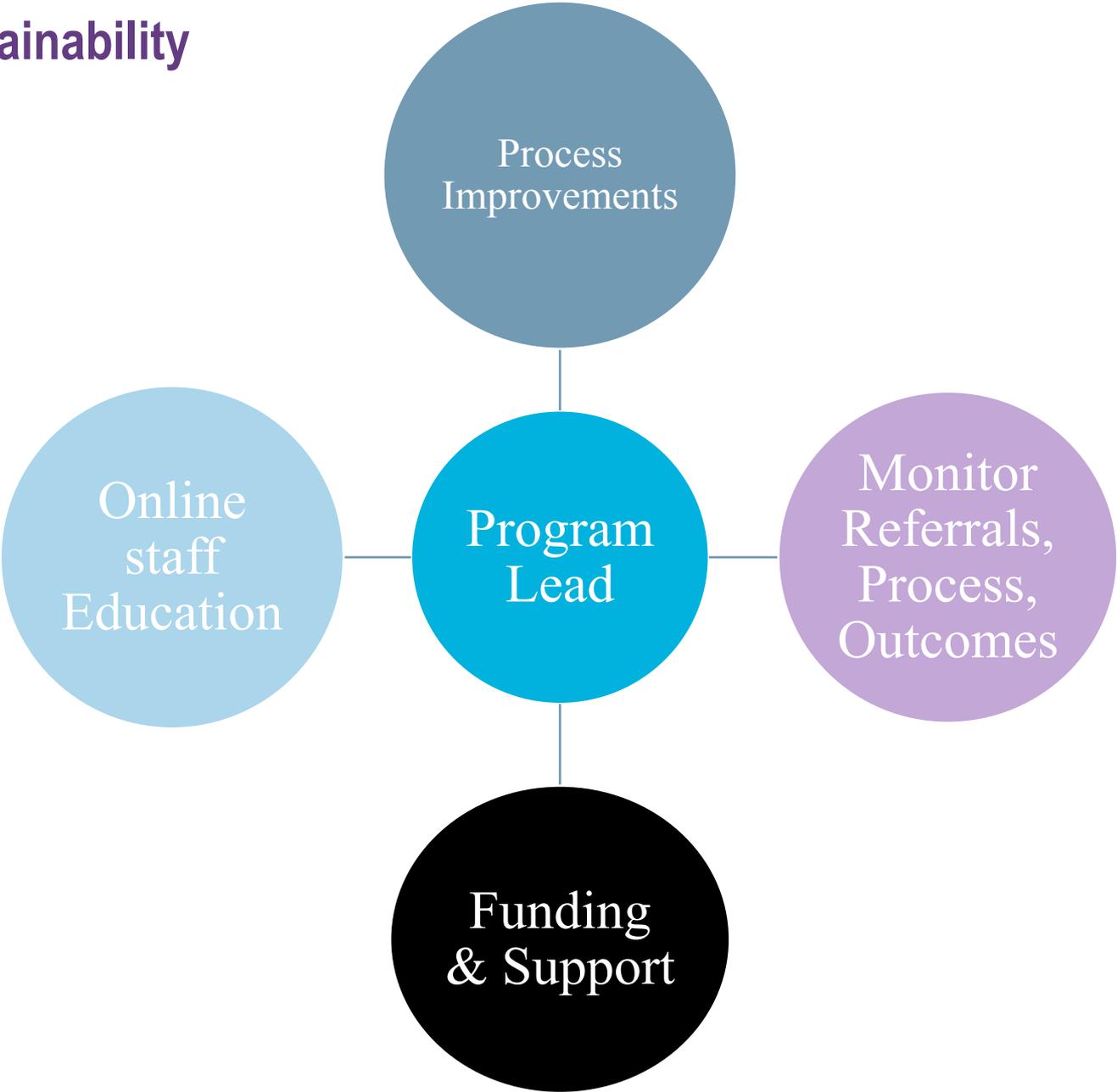
Automated letter to primary care at time of referral to the program (at hospital discharge)

First visit within 48 hours (or within 24 hours if required). Change from 7 to 6 therapy visits within the first 8 days based on patient feedback

Encourage early to mid-week discharges to optimize patient experience

Extended program option available for patients referred to RRTP from acute care

Sustainability



For more information, please contact us:

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