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Project #47: The Impact of Acute Care Physical and Occupational Therapy Delivery Models on Discharge to Skilled Nursing Facility

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#47

The Impact of Acute Care Physical and Occupational Therapy Delivery Models on Discharge to Skilled Nursing Facility

(HFH/Rehab Services)

HFH Acute Care Physical and Occupational Therapy Delivery of Care Process Improvement

HENRY FORD HOSPITAL

Adele Myszenski, DPT, Jenny Trimpe, MPT, Therapists in the Department of Rehabilitation Services, Henry Ford Hospital

AIMS

1. Improve PT and OT Evaluation Response Time for general medicine and surgery patients on the GPU in order to improve patient, provider and therapist satisfaction and promote earlier discharge planning.
2. Standardize the prescription of PT and OT frequency and prioritization of delivery of care to improve patient equity.
3. Promote efficiency and decrease daily workflow disruptions to support therapists in maximizing productivity.
4. Improve patient outcomes including functional mobility, ADLs, discharge destination of home versus SNF.

CHANGES IMPLEMENTED

Staffing Model: Weekend to Weekday staffing ratio increased by 41% to 1:2.8 therapists: removed bottlenecks on weekends, staff redistributed across 7 days.

Timing: New consults triaged by date and time of admission and date and time of consult prioritizing those admitted more than 24 hours and those with consults more than 18 hours old.

Frequency Prescription for ongoing patients: Guidelines for frequency of follow -up visits based on potential discharge to home with increased PT and/or OT intervention.

Daily prioritization and triaging: Standardized definitions assigning a priority level to each patient based on frequency prescription and the date of the last PT or OT visit.

Therapy team communication: Creation of "Pick Up Lists" and twice daily huddles for Priority Level 1 and Priority Level 2 lists.

	Historical	Pandemic	Novel
Timeframe	Pre-Pandemic Prior to March 2020	March 2020-June/July 2020	PDCA August-December 2020 Full implementation January 4, 2021
Daily Prioritization Process	•Pathway patients* •New evaluations in order received via EPIC •Ongoing patients with a next treatment date of today or prior Problem: Backlog of new evaluations, 24-48 hour minimum wait time compounded ongoings, never caught up	•Elective surgeries cancelled; decreased Pathway patients •New evaluations could be picked up same day •Focus on discharging home increased due to lack of SAR Problem: Patients admitted within past 24 hours tended to be less medically ready	•Pathway patients* •New evaluations by order received, those over 18 hours old prioritized higher; also pts admitted >24 hours are prioritized •Ongoing patients assigned a Priority Level 1, 2 or 3 based on frequency and number of days since last visit
Screening evaluations	No screening process. Clinican empowered to defer completely independent or dependent patients, however inconsistent	Screening all COVID patients – EMR, telehealth, 1 discipline. Screening all new evals for readiness or appropriateness eliminating completely independent or dependent patients	Screening new evaluations in the pick up list only for readiness; inappropriate consults
Therapist driven Frequency	"Right Patient, Right Provider" Triaging: Usually based on discharge recommendation:	Reduced volume allowed increased frequency; Rehab placements were limited by availability	Frequency Redefined:
Distribution of Staffing on Weekends vs Weekdays	GPU staffing on each weekend day was 18% of the staffing on a weekday for each discipline. For every 1 therapist working on a weekend day, there are 6.8 therapists working on a weekday.	Due to need for social distancing and reducing staff on site on a daily basis, staffing reallocated evenly 7 days a week. *This was not sustainable as the pandemic ended and stay-at-home orders were lifted and staff were less willing to have a regular weekend day.	Redistributed GPU staff levels to increase equity between weekend days and weekdays; GPU staffing is now 38% of the staffing levels on a weekday on Saturdays and 41% on Sundays.

METHODS

Patient Population & Measuring Results

Henry Ford Health System — all for you

Admission to GPU – General Medicine/Surgery

Required 1 or more PT or OT visits on the following floors:

HFH B1 INTERNAL MED	HFH H4 SURGERY
HFH B4 INTERNAL MED	HFH I4 SURGERY
HFH B6 INTERNAL MED	HFH H5 CARD TELE
HFH F1 HOSPITALIST MED	HFH I5 CARD TELE
HFH F2 PULMONARY MED	HFH H6 TRANSPLANT
HFH F4 INTERNAL MED	HFH P6 SURG SPECIALTY
HFH F6 INFECTIOUS DISEASE	HFH P2 HEM/ONC/BMT
HFH H2 NEPHROLOGY	
HFH I2 NEPHROLOGY	

Cohort 1 - Historical acute rehabilitation delivery of care model January 1, 2019 to August 30, 2019

Cohort 2 – Post-implementation of Novel delivery of care model January 4, 2021 – August 30, 2021

Data extracted from EPIC Flowsheets and analyzed by PHS biostats

Demographics: Age, Charleson Score, Length of Stay

Primary outcome variables:

- Aim 1: Timing of PT and OT (number of days from admission to first visit)
- Aim 2: Intensity: Number of visits per patient
- Aim 3: Average number of Stat Calls per day; Overall Therapist Productivity
- Aim 4: Rate of Discharge Destination (Home or Home with home care; SNF; IPR; Other); Rate of Readmission within 30 days

OUTCOMES

8.8% (580) more patients went home rather than Post Acute Facilities

ARHQ estimates $1,800 saving per patient going home: $1.8 miliion

	2019	2021	Difference
Unique MRNs	5640	6913	1,273
Age, mean	64.2	63.4	(0.8)
Charleson Score, mean	7.62	7.80	0.18
Hospital LOS	8.72	8.83	0.11
Discharge Home	3508 (62.2%)	4904 (70.9%)	8.7%
Readmission within 30 days	1325 (23.5%)	1597 (23.1%)	(0.4%)
Expired during stay	30 (0.5%)	40 (0.6%)	0.1%
Total # PT visits	14,059	18,453	4,394
Total # OT visits	13,079	17,292	4,213
Time admit to 1st PT (Days)	2.60 days	2.40 days	-0.20
Time admit to 1st OT (Days)	2.59 days	2.49 days	-0.10
Average PT visits per pt	2.49 visits	2.67 visits	0.18
Average OT visits per pt	2.32	2.5	0.18
Discharge Home	3508 (62.2%)	4904 (71.0%)	8.8%
Inpatient Rehab Facility	219 (3.9%)	221 (3.2%)	(0.7%)
Skilled Nursing Facility	1602 (28.4%)	1410 (20.4%)	(8.4%)
Hospice	175 (3.1%)	186 (2.7%)	(0.4%)
Nursing Home	27 (0.5%)	40 (0.6%)	0.01%
Other	76 (1.3%)	99 (1.4%)	0.01%

Improved consistency of weekend scheduling for therapists
3-6 patients per day were removed from census lists based on triaging
Unnecessary evaluations were reduced by approximately 22%
Successful roll out to all staff therapists
Badge Buddies and Resources created
Patients waited less time between therapy sessions
Improved Trust between therapists
Reduced Discharge Pending calls due to delays in care

RESOURCES CREATED

Treatment Frequency

x / wk	*Always individualized based on patient* *Distinguish Functional Needs & Transient Losses*
QD/BID	Pathway Pt: Home disch is dependent on PT or OT
5-7	Home disch is dependent on PT or OT but not LOS Lung or Stroke pathway based on skilled PT or OT needs
3-5	Requires skilled PT and/or OT to discharge home; needs more intensity and rec is Inpatient rehab
2-3	Home is not dependent on PT or OT; requires subacute rehab, unable to return home with increased frequency
1-2	Unlikely to make significant improvements or can be mobilitized w/ Nursing: Functional deficits are transient
follow up prn	No immediate needs or potential for improvement but that may change if LOS increases. Put next tx date a week from now
Consider 6 clicks score less than 9 or greater than 20 may not need as much skilled therapy. 15-19 have more potential to go home with more therapy if social support available	

Triaging Guideline for DAILY USE

Priority 1***

Evals assigned (pathway, then oldest first)
Discharge Pending calls for patients already assigned
Ongoings with next treatment date today or prior:
QD: Pathway patients / Discharge Pending
5-7x: last seen 2 or more days ago
3-5x: last seen 3 or more days ago
2-3x: last seen 5 or more days ago
1-2x: last seen 7 or more days ago
*** Unavailable non pathway pts become priority 2**

Priority 2 (if no Priority 1s need to be seen)

Evals on pick up list prior 9a < 12hrs old
Ongoings with next treatment date today or prior:
5-7x: last seen yesterday
3-5x: last seen 2 days ago
2-3x: last seen 3 days ago
1-2x: last seen ≥ 5 days ago

Priority 3 (if no priority 2s need to be seen)

Ongoings Non Pathway: seen yesterday OR refused today or pt has no immediate disch plans
Evals in pick up list < 6 hours

Weekend Criteria: (Drag to weekend folder)

Pathways and New Evals plus
Sat: Priority 1 3-5x/wk home rec not seen since Weds
Sun: Priority 1 3-5x/wk IPR/PAC not seen since Thurs

Updated 10.7.2020 Rehab Acute Care/Priority Levels

KEYS TO SUCCESS

Planning and flexibility is essential to design and implement a new delivery of care model.
Defined goals, objectives and timelines aligned with True North vision.
Standardized protocol to implement new delivery of care model.
Commitment, shared vision and communication among acute care rehabilitation team and multidisciplinary staff on GPU units
Health information data to monitor impact over time for cost effectiveness, patient outcomes, length of stay and discharge to home verses SNF
Continuous Cycles of Learning (PDCA)

GROWTH / STANDARDIZATION

Provide generalizable and reproducible acute care rehabilitation staffing model that can be replicated in other acute care practice settings
Objective guidelines for treatment frequency and prioritization
Utilize health informatics to justify cost effectiveness of acute care rehabilitation

ACKNOWLEDGEMENTS

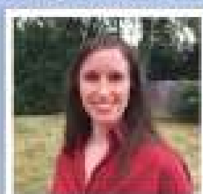
Each patient who has trusted our team to be a part of their journey.
Each therapist in our department.
Diane Bollinger, Clinical Data Analytics, Kathy Neckrock, OTR, Don Frega, OTR, Dhanmeet Singh, PT, Paula Kane, OTR,, Chris Sockow, PT, Tiji Avirah, DPT, Rachelle Dorsey, OTR, Justine Kenyon-Nitsch,OTR, Romina Bello, DPT, Rehab Morning Organizers (Karyn Kuzniar, Laura Porto, Hilary Overmeyer, Allison Dibussolo)

Henry Ford Hospital Physical and Occupational Therapy
Delivery of Care Process Improvement

Primary Process Improvement Team Members

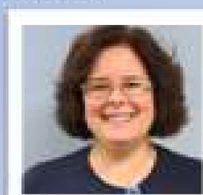
Adele Myszenski, DPT
Supervisor

Dhanmeet Singh, PT
Supervisor



Jennifer Trimpe, MPT
Staff PT, Rehab Educator

Tiji Avirah, DPT
Staff PT, Morning Organizer Lead



Chris Sockow, PT
Staff PT
Primary Screener Organizer

Paula Kane, OTR
Supervisor

Our Rehab Team

72 full and part time PTs, OTs, PTAs, COTAs

28 PT and OT Contingents

- 17 PTs and 17 OTs dedicated to the ICU (168 beds)
- 2 PT Residents Acute Care PT Residency Program (accredited in 2021)

Acknowledgements:

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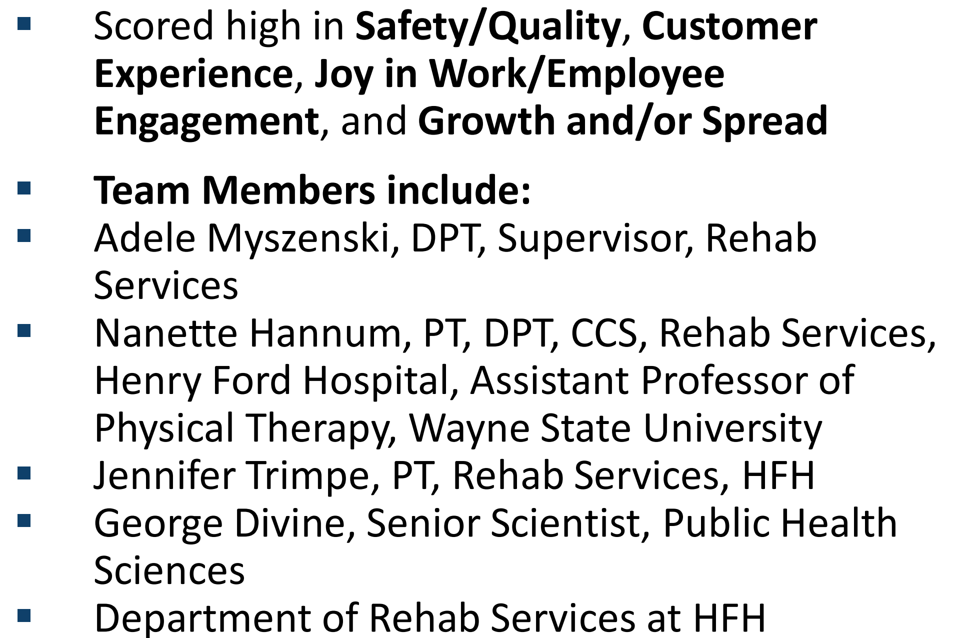

- Scored high in **Safety/Quality**, **Customer Experience**, **Joy in Work/Employee Engagement**, and **Growth and/or Spread**
- **Team Members include:**
- Adele Myszenski, DPT, Supervisor, Rehab Services
- Nanette Hannum, PT, DPT, CCS, Rehab Services, Henry Ford Hospital, Assistant Professor of Physical Therapy, Wayne State University
- Jennifer Trimpe, PT, Rehab Services, HFH
- George Divine, Senior Scientist, Public Health Sciences
- Department of Rehab Services at HFH