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Bridging Hospitals and Home Care to Support Safe Transitions Home

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Learning Objectives

- Identify three translatable strategies to optimize and support more patients in their return to home after hospitalization.
- Implement best practices used by home health agencies to reduce hospital readmission risk for stroke patients.

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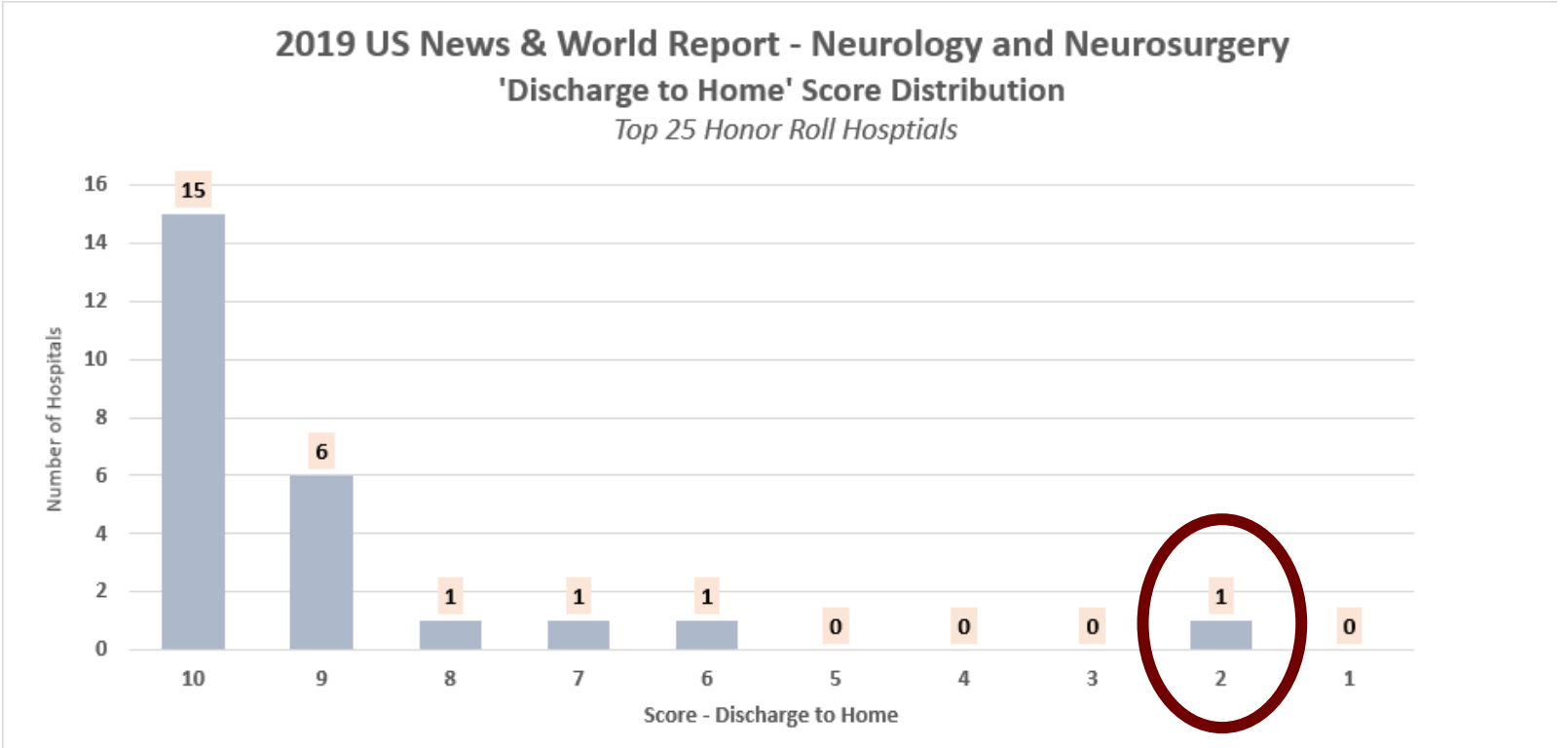
An External Signal



An internal analysis of Ischemic Stroke 'Discharge to home' (All Payer) demonstrated *bottom decile* performance as compared to other Academic Medical Centers

Why Do We Care?

- **Early supported discharge** for the *right* patients – *with the right supports* - has been **shown to improve the health and well being for survivors of mild to moderate stroke** [1]

- Rehabilitation following stroke, that occurs in the patient's natural context and familiar setting, **enhances neuroplasticity and supports functional recovery** [2, 3, 4]

- **Home based stroke rehabilitation programs** have been shown to be as **effective at optimizing functional recovery** for mild to moderate stroke survivors, when compared to inpatient programs [5]

- Recovery at home following a stroke, has been **shown to improve patient satisfaction** [6]

Our Approach

Stroke 'Discharge to Home' workgroup

(MD, RN, PT, OT, SLP, Rehab, Social Work, Case management, Home Health)

- Reviewed "current state" disposition decision-making guidelines
- Performed targeted chart reviews to understand opportunity
- Partnered with home health to learn breadth, scope of services

Stroke Pathway to Home…

1

Identify eligible Ischemic Stroke patients

‘Mild Stroke’ definition:

- **Pre-intervention NIHSS ≤5** *(OR)*
  24hour Post-intervention NIHSS ≤ 5
- AMPAC ≥ 34 *(~48 hours)*
- ICU stay < 72 hours
- Support at home adequate for discharge needs
- Resides within *Penn Medicine at Home* catchment

2

Optimize inpatient recovery and discharge readiness[7]

- **Initiate daily therapies**; if possible, coordinate with caregivers to provide education and gauge family readiness
- **Early patient and family communication around possibility of home discharge;** set expectations, educate
- Continued discussions around eligibility in daily Stroke dispo rounds
- Referral to *Penn Medicine at Home*, through our defined ‘Stroke pathway’

3

Timely and Intense home therapy

- **Day after discharge – Home health admission**
- **Daily therapy sessions** in the first week post-discharge (Mon-Sun)
- **Functional outcome measures pre/post** to evaluate recovery
- Ongoing therapy needs determined by Home care team, through case conference

Measures of Success

- **% Ischemic Stroke patients discharged home**
- **Functional outcomes - Pre / Post Home therapy**
- **30 Day Readmissions –** *Stroke and Non-Stroke related*

Early Pilot Outputs

Operational Metrics	Results
Home health admission within 24 hours of discharge	84%
Average time to first home PT / OT visit	1- 2 days
% patients with at least 4 *consecutive* PT visits	80%
% patients with at least 4 *consecutive* OT visits	68%

Timeframe: June – Sept 2020; N=25 patients

Early Pilot Outputs

Functional Outcomes	Home Health – Initial Evaluation	Home Health - Discharge
AMPAC ADL (Avg) *(Scores range from -2.73 to 115.4; higher is better)*	**54** (Needs assistance with ADL)	 **62** (Independent with ADL, some assistance with IADL)
Ambulation (Avg) *(7 levels: Dependent – Independent)*	**Supervision**	 **Independence**
TUG (Avg) *(Scores > 13.5 seconds indicates high risk of falls)*	**23.3 seconds**	 **17.3 seconds**

30 day Readmissions – 0

Learnings and Iteration

Refined to ‘right-size’ home therapy services

Stroke Pathway to Home…

1 — Identify eligible Ischemic Stroke patients

‘Mild Stroke’ definition:
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- AMPAC ≥ 34 *(~48 hours)*
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2 — Optimize inpatient recovery and discharge readiness[7]
- **Initiate daily therapies**; if possible, coordinate with caregivers to provide education and gauge family readiness
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3 — Timely and Intense home therapy
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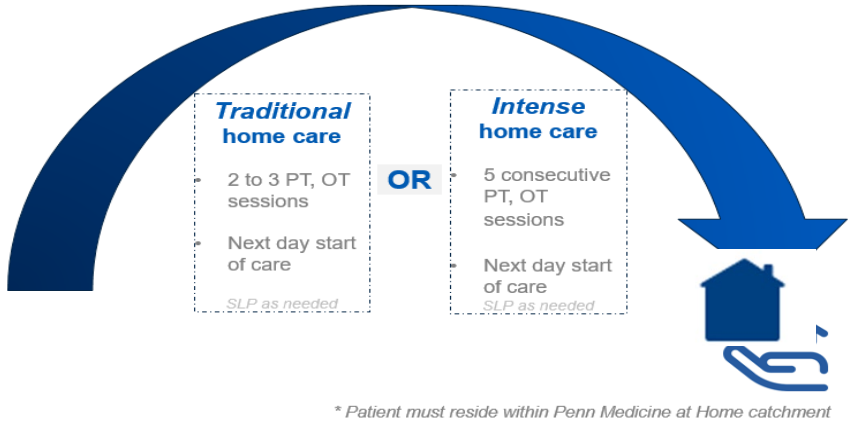


** Patient must reside within Penn Medicine at Home catchment*

Program Outcomes

Operational Metrics	Traditional Path	Intensive Path
Sample	**30**	**33**
Admission to home health (within 24-48 hours of discharge)	77%	88%
Average time to first home PT / OT visit	4-6 days	3-4 days

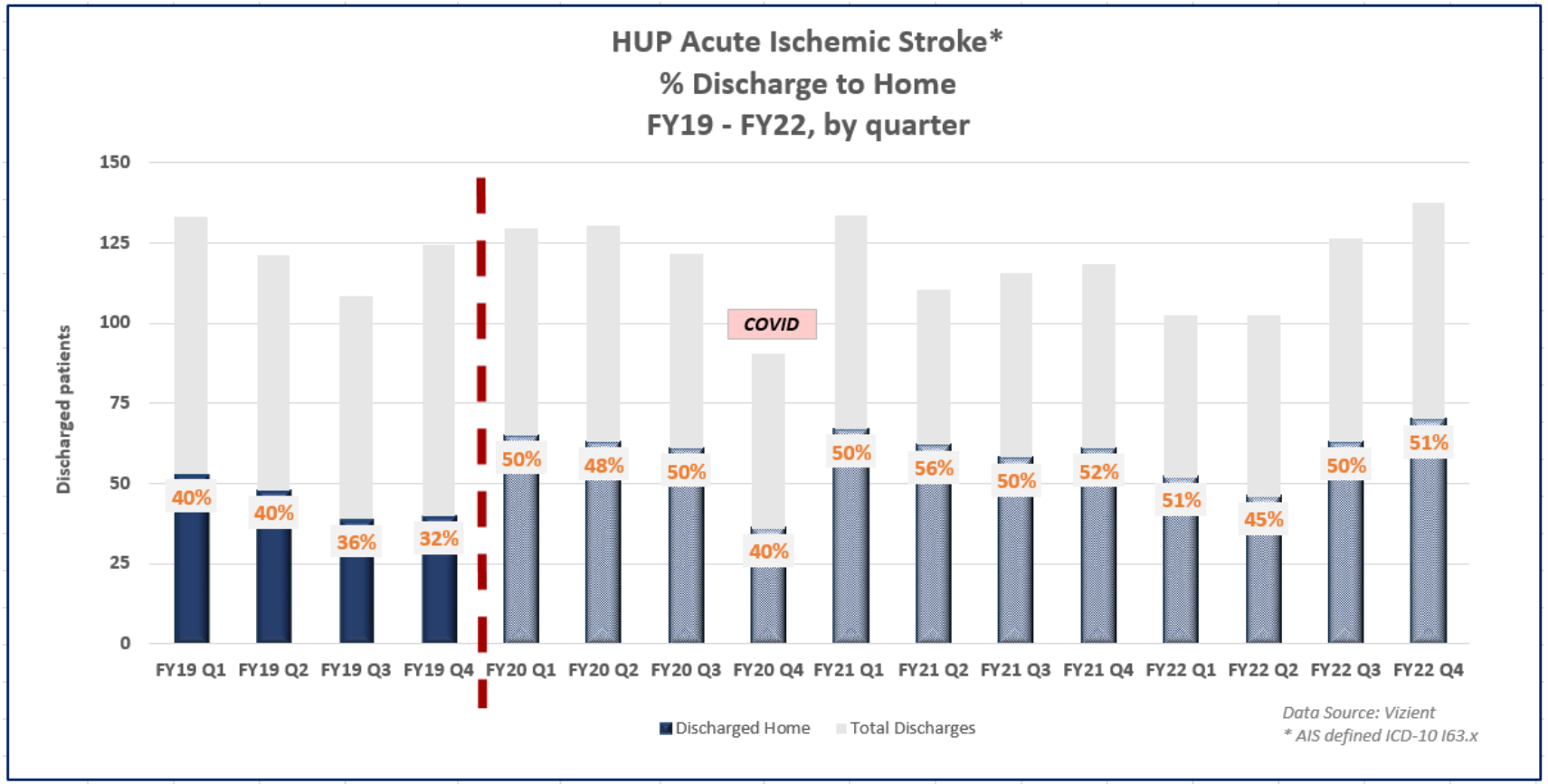
Timeframe: Jan – Oct 2021; N=63 patients

Functional Outcomes

	Initial Evaluation *(Avg)*	Home Health - Discharge *(Avg)*
Ambulation		
Timed Up and Go *Intensive* *Traditional*	**28 sec** **18 sec**	↓ **21 sec** **12 sec**
ADL		
Barthel Score *Intensive* *Traditional*	**80** **80**	↑ **94** **96**

30 day Readmissions – 5

Inpatient Discharge to Home



Increased - and sustained - '% Discharge to home,' while realizing an overall *decrease* in 30 day Readmissions *(FY19 vs. Jan – Oct 2021)*

Lessons Learned

- **Communication is key!**
  - Early referrals to home health for planning, scheduling
  - Early - and consistent - expectation setting with patient, caregivers

- **Leveraging Stroke Dispo rounds**
  - Interdisciplinary and newly refreshed to support a “virtual” format
  - Real-time education to new, rotating clinical team members
  - Supports discussion and collective decision-making around patient dispo eligibility and plan

- **Teamwork, teamwork, teamwork**
  - All disciplines– open, transparent discussions
  - Leadership, ownership, partnership….

- **Transferable approach for other key populations**

Key Takeaways

- **Understand your ‘current state’** – workflow, culture, perceptions of care
- **Spend time defining the ‘right’ target population –** not one size fits all
- **Develop or hone partnerships with local/affiliated home care networks**

Questions?

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