

# Why wait?

## Proactive Rehab Screening Service (PReSS)

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## Early rehab

- ✓ Orthogeriatric services
- ✓ Stroke services
- ✓ Geriatric services (Acute Care of the Elderly or ACE units)

All others – wait for acute teams to request rehab consult.

**Proactive Rehabilitation Screening Tool**

**Care needs**

0	Largely independent
1	Requires help from 1 person
3	Requires help from at least 2 people (incl 1:1 supervision)

**Equipment needs**

0	No specialised equipment
1	Basic equipment (mobility aid, wheelchair, pressure care, brace, walking belt)
2	Highly specialised equipment (prosthesis, hoist, customised aid, communication aid, tracheostomy)

**Number of therapy disciplines**

0	0
1	1 discipline
2	2-3 disciplines
3	4-5 disciplines
4	>5 disciplines

**Therapy disciplines involved (tick)**

Physiotherapy	Speech pathology
Occupational therapy	Dietician
Social work	Liaison psychiatry or psychology
Aboriginal liaison officer	Prosthetist, orthotist
Stomal therapist	

**Therapy intensity**

0	No therapy
1	Low – less than daily (< 5 sessions)
2	Moderate – daily therapy (5+ sessions)
3	High – 2 assist required for therapy sessions & <10 sessions
4	Very high – 2 therapy sessions per day (i.e. 10+ sessions)

**Other**

1	Pre-existing physical or cognitive disability
2	Medically stable (no acute care needs) for at least 24h but other discharge barriers

Total Score: \_\_\_\_/15 →

RULE IN FOR REHAB  
 REVIEW  
 RULE OUT

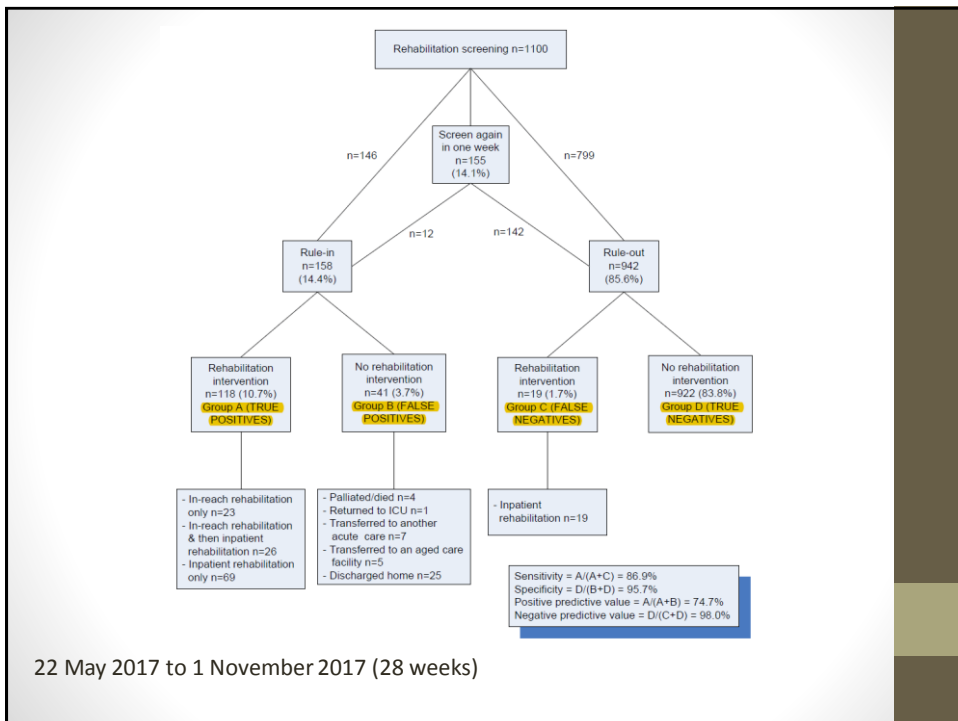
## Barriers to discharge

- Pre-morbid conditions with residual disability, such as previous stroke and developmental disability
- Cognitive impairment
- Swallowing and communication
- Continence
- Mobility and surgical restrictions on weight-bearing
- Independence in activities of daily living
- Insight
- Emotion, psychological and behavioural factors
- Social issues such as homelessness or inappropriate housing

## Method

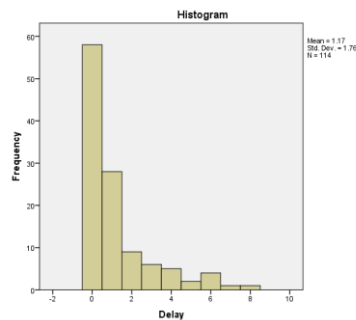
- Inclusion: all admission , 6 mo period 2017
- Exclusion: haem/oncol, geris, orthogeris, stroke services
- Screen
  - Day 5-7 after admission
  - Day 3-5 after transfer from ICU
- Age up to 75y
- Screener: medical/nurse/researcher
- Method: medical records review for rehab screening score + clinical flags

- Cut-off score  $\geq 7$  (determined after 1<sup>st</sup> 50 screens)
- $\geq 7$  can still be ruled-out for clinical reasons (e.g. already in RACF, palliative pathway)
- $< 7$  can still be ruled-in if there are barriers to discharge identified



## Benefits for screening

- In Group A (n=118)
  - Acute teams requested rehab consult n=37 (34%)
  - Found by screening n=81
    - Ready for rehab with 2d of screening n=27 (33%)
- Low administrative delays to transfer to inpatient rehab bed



## Rehab care settings

### Care settings - where rehabilitation is delivered

Care setting 1: Inreach to Acute

Care setting 2: Sub-acute Inpatient

Care setting 3: Day Rehabilitation Service

Care setting 4: Outpatients Service

Care setting 5: Home-based Rehabilitation

Care setting 6: Outreach

Care setting 7: Telehealth

## 0: Rehab screening



### Care settings - where rehabilitation is delivered

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## Redesigning rehab consultation service at SVH

- All patients are screened by CNC
- Those “ruled-in” are reviewed by a rehabilitation physician
- In-reach rehab started for those with acute care needs
- Rehab physician assists acute teams to fast-track to most appropriate rehab care setting
- Measurable outcomes (motto: **you can't improve it if you don't measure it!**)
  - Improve patient flow
  - Reduce process inefficiencies and administrative delays for inpatient rehab

## Burden of screening

- Screening time low (2-3 mins) but trying to find the notes is most time consuming (welcome electronic med records!)
- 45 screens/week
- Time to prepare for screening 30 mins/d
- Time for screening 60-90 mins/d
- Assume total CNC time required = 10h/week

## Cost of screening

- 2 h per day of CNC time = \$100. Total cost **\$26,000 pa**
- 41 “wasted” consults in 6 months (Group B) = 80 h of rehab physician time pa = **\$11,000 pa**
- Cost of in-reach rehab team (1 FTE PT & OT) = **\$200,000 pa**

## Minimum cost savings

- Pick up 1 patient for IP rehab – can save at least 2 days = \$2000. Picked up 27 patients = **\$108,000 pa**
- Pick up 3 pts for MRT – can prevent 1 inpt rehab episode. Each rehab episode is a min of 1 week stay = \$5754. For 23x2 who have MRT and go home, this equates to **\$265,000 pa**

## Different scenarios

Conditions	Sensitivity	Specificity	Positive predictive value	Negative predictive value
All patients and rehabilitation intervention defined as in-reach and/or inpatient rehabilitation (n=1100)	<b>86.1%</b>	<b>95.8%</b>	<b>74.7%</b>	<b>98.0%</b>
ICU patients (n=295)	<b>91.2%</b>	<b>97.1%</b>	<b>72.1%</b>	<b>97.1%</b>
If all patients with PRESS $\geq 7$ were ruled-in (n=1100)	<b>51.8%</b>	<b>94.7%</b>	<b>58.2%</b>	<b>93.3%</b>
If all patients with PRESS $\geq 6$ were ruled-in (n=1100)	<b>67.9%</b>	<b>89.9%</b>	<b>48.9%</b>	<b>95.2%</b>
All patients and rehabilitation intervention defined as inpatient rehabilitation only (n=1100)	<b>84.9%</b>	<b>94.2%</b>	<b>63.9%</b>	<b>98.1%</b>
Screened by nurse (n=540, 49.1%)	<b>79.3%</b>	<b>96.1%</b>	<b>70.8%</b>	<b>97.5%</b>
Screened by doctor (n=442, 40.2%)	<b>92.3%</b>	<b>95.8%</b>	<b>78.9%</b>	<b>97.5%</b>
Screened by research assistant (n=118, 10.7%)	<b>85.7%</b>	<b>94.2%</b>	<b>66.7%</b>	<b>98.0%</b>



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  - Olivia Misa (rehab CNC)
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