Evaluation of the timeliness of a multidisciplinary assessment of breathlessness in palliative care: a Stanford Quality Improvement Project

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Calvary | Health Care Kogarah

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Background

- Breathlessness reduces functional capacity and quality of life
- Increases risk of death by 80% in people with advanced cancer
- Is systematically under-recognised and under-treated in palliative care
- Assessment of breathing related-distress is essential to address psychosocial issues and cognitive processes that drive breathlessness

(Connor, Morris et al. 2020; Weingaertner, Scheve et al. 2014; Maddocks, Lovell et al. 2017)

Local problem

- One fifth of people admitted to home community palliative care services with moderate to severe breathing related distress did not have their breathlessness re-assessed or documented within 7 days

(Palliative Care Outcomes Collaborative 2020: Phase Report Calvary Sydney - Community)

The service was not providing adequate responsive care for patients with breathing related distress

PCOC SAS

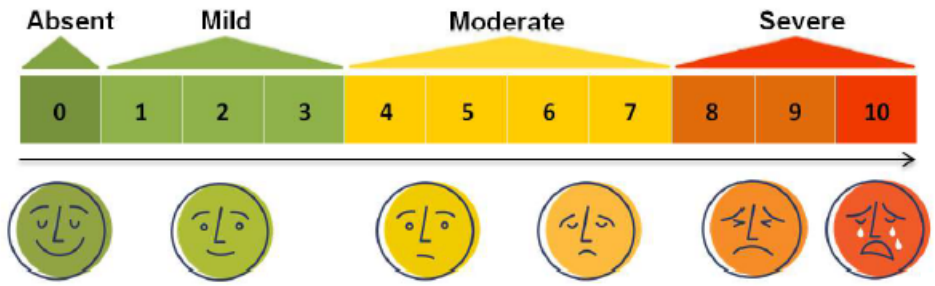
PCOC palliative care outcomes collaboration

(Please complete or affix Label here)

UPI:
Surname
First name:
DOB:

Symptom Assessment Scale

Please use this form to tell us about the symptoms that bother, worry or distress you. This information will help us to meet your needs.



1. Write the day or date in the first row.
2. Use the scale above to choose a number between 0 and 10 that shows how bothered, worried or distressed you are.
3. You can add other symptoms in the blank space at the bottom of the list.

Date/Day									
Difficulty sleeping									
Appetite problems									
Nausea									
Bowel problems									
Breathing problems									
Fatigue									
Pain									

Aim: SMART Goal

Between 01 May and 31 September 2021, we will increase the proportion of patients with moderate or severe breathing-related distress* on admission to home community palliative care services who have a *repeat assessment within 7 days* from 34% to 90%

***PCOC SAS breathlessness score ≥4**

PCOC: Palliative Care Outcomes Collaboration; SAS: Symptom Assessment Scale

Team Members

Dr Angela Rao (RN, PhD)
Team leader

Dr Elaine Gallagher (MBBS, MRCP, DipPallMed – CMO CPCT

Kate Andrews (BAppSc (Phty))
Physiotherapist

A/Prof Annmarie Hosie (RN, PhD)
Mentor

Felicity Forby (BAppSc OT)
Occupational Therapist

Carmen Sanchez RN MNP
Nurse Practitioner

Prof Meera Agar (MD, PhD)
Mentor

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Methods

MEASUREMENT

Should we be entering breathlessness assessment into PalCentre?

What measure should we use? PCOC SAS or breathing, thinking, functioning assessment

Who should complete BTF assessment? Physiotherapist who specialises in respiratory assessment?

Nurses to integrate BTF assessment into usual practice? For which patients? Those who screen SAS ≥4 or all patients?

Habitual practice of entering scores (30%)

MATERIALS

Technological issues of access to PalCentre software to enter scores

Discussion of the use of an app/laptop to facilitate ease of data entry. Staff have laptops but on the road it is 'clunky' and software is slow to load (10%)

PROBLEM
Repeat breathlessness assessment not completed within 7 days

ENVIRONMENT

Resourcing of AHPs prioritised to screen and address immediate respiratory, end of life care and falls risk issues due to high volume of acutely unwell patients, urgent need for equipment delivery

Variable to inconsistent capacity to prioritise scores in the lower moderate range (10%)

METHODS

Training needed on how to enter PCOC SAS scores into PalCentre (10%)

No benchmark time point for repeat breathlessness assessment

Paper based referral system (allied health)

No automated referral process for moderate SAS breathlessness scores

Unclear on referral that case manager wants AHPs to focus on dyspnoea

PERSONNEL

Screening delays due to part time medical and allied health staffing

Workload: staff shortages present inability to focus on lower scores due to competing crises (50%)

Methods

EFFECT: Delays (>7 days) in the reassessment of moderate to extremely severe breathlessness SAS scores	
CAUSE CATEGORY	**CAUSE**
Measurement	Should all clinicians be entering scores on PalCentre?
	What measure should we use? PCOC SAS? Breathing, Thinking, Functioning (BTF) Assessment?
	Who should complete BTF assessment? Physiotherapist? Nursing?
	Which patients should we use BTF on? Moderate to severely breathless or all patients?
Environment	Resourcing of allied health professionals – immediate issues prioritised (end of life care, falls management)
	Variable to inconsistent capacity to prioritise scores in the lower to moderate range due to competing crises
Methods	No automated referral process for moderate SAS breathlessness score (≥4)
	Allied health use a paper based referral system
	Training needed on how to enter PCOC scores into PalCentre software
	No benchmark time-point for repeat breathlessness assessment for non-urgent cases.
	The need for breathlessness assessment and management is unclear on referrals to allied health
	No habitual practice entering scores
Materials	Technological issues of access to PalCentre software to enter scores
	Discussion of the use of an app/laptop to facilitate ease of data entry – staff have laptops but the software is clunky and slow to load while on the road
Personnel	Screening delays due to part time allied health and medical staff
	Workload - staff shortages creates inability to focus on lower scores given competing crises

1. Consistency of practice in scoring (i.e. scoring distress and not the severity of breathlessness) and action to scores

2. Preventative mindset (proactive, not reactive). Assess scores before a crisis situation arises.

3. Timely allied health breathlessness referral where applicable - eliminate referral lag

4. Nursing and allied health staff to create a habitual practice of entering SAS scores at each assessment

Methods

Print Repo

Assessments collected at each patient contact in an episode

One-off assessment (profile data collection)

Assessment	Phase	Source	PCPSS				SAS							
			Pain	Other Symptoms	Psychological / Spiritual	Family / Carer	Sleeping	Appetite	Nausea	Bowels	Breathing	Fatigue	Pain	
25/03/2022	Stable		1	1										
22/12/2021	Stable		1	1		1	2			5			4	
24/03/2022	Deteriorating		2	2	0	0				4		5	5	
30/03/2022	Unstable		2	2	2	2			10				10	
28/03/2022	Stable								0				2	
22/12/2021	Stable		1	1	1	1	2	2	0	4	7	0	5	
15/03/2022	Stable		0	1	0	0	0	3	1	0	6	4	0	
29/03/2022	Deteriorating		0	2	1	2	0	0	0	0	5	7	0	
30/03/2022	Deteriorating		0	2	0		0				5	5	0	
30/03/2022	Deteriorating		2	2	1	2	5	5	0	3	5	3	7	
24/03/2022	Stable		2	1	1	1	0				5	3	8	
15/03/2022	Stable		1	2	1		0	2		0	5	4	1	
24/03/9202	Deteriorating		0	2	2	2	0	0	0	1	4	1	0	
04/11/2021	Stable		0	1	0	0	0	0	0	0	4	0	0	
13/01/2022	Stable		1	1	0	0					4	4	3	
24/03/2022	Stable		1	1	1	0	0	3	0	0	4	4	6	
23/03/2022	Deteriorating		1	2	1	1	0	2	0	0	4	3	2	
11/03/2022	Deteriorating		1	2	2	2	0	4	2	2	4	7	4	
23/03/2022	Deteriorating		2	1	1	1	4	3	0	3	4	5	5	

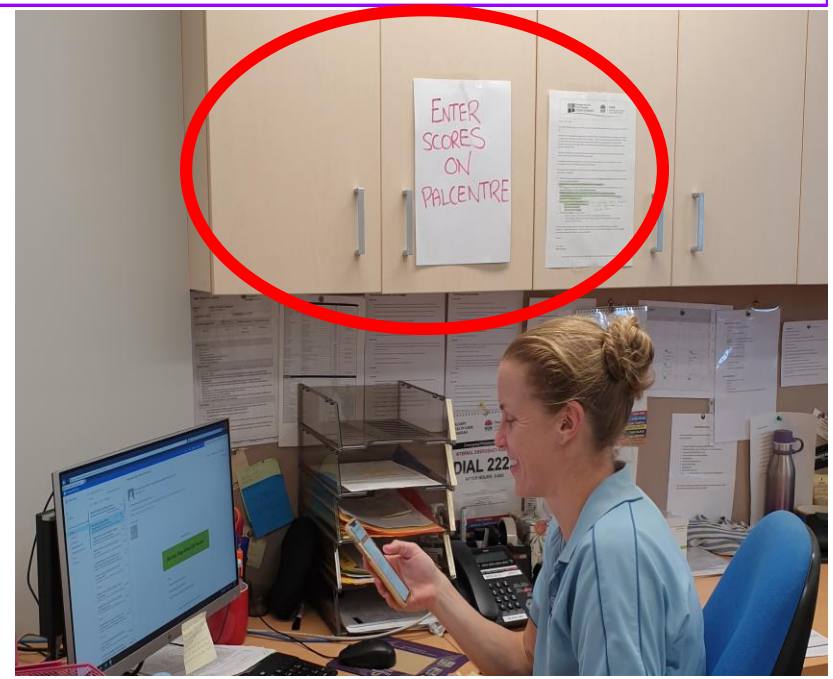
PalCentre software

Nursing and allied health staff to create a habitual practice of entering SAS scores at each assessment

SAS scores breathlessness to be entered on PalCentre, even if score is zero **(All staff)**

Access for all allied health staff to PalCentre **Kate (PT and OT access)**

PCOC representative to provide inservice to allied health staff to facilitate PalCentre uptake **Martin**



Methods

Key Drivers

1. Consistency of practice in scoring (i.e. scoring distress and not the severity of breathlessness) and action to scores

2. Preventative mindset (proactive, not reactive). Assess scores before a crisis situation arises.

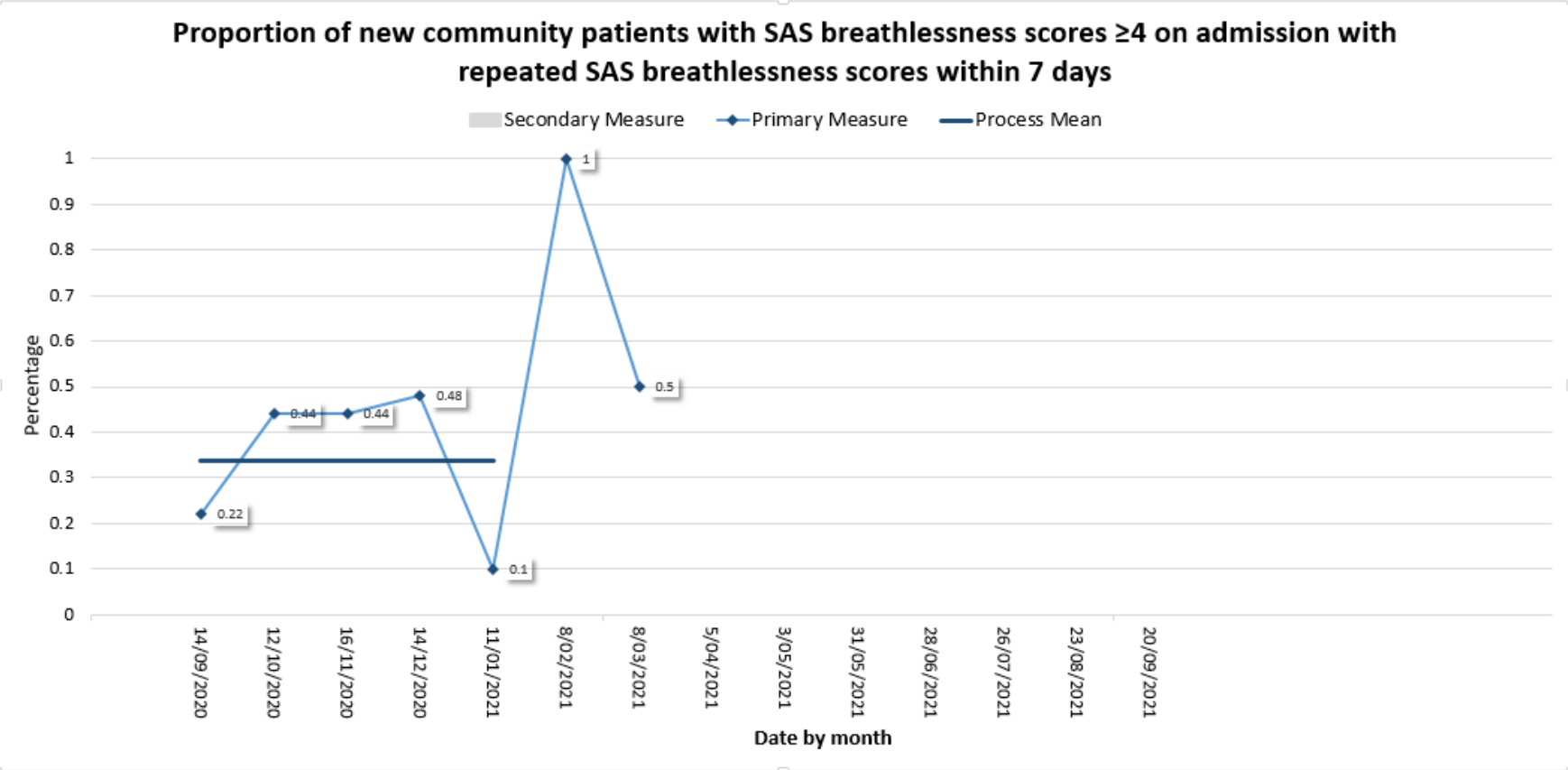
3. Timely allied health breathlessness referral where applicable - eliminate referral lag

4. Nursing and allied health staff to create a habitual practice of entering SAS scores at each assessment

Interventions/ Countermeasures

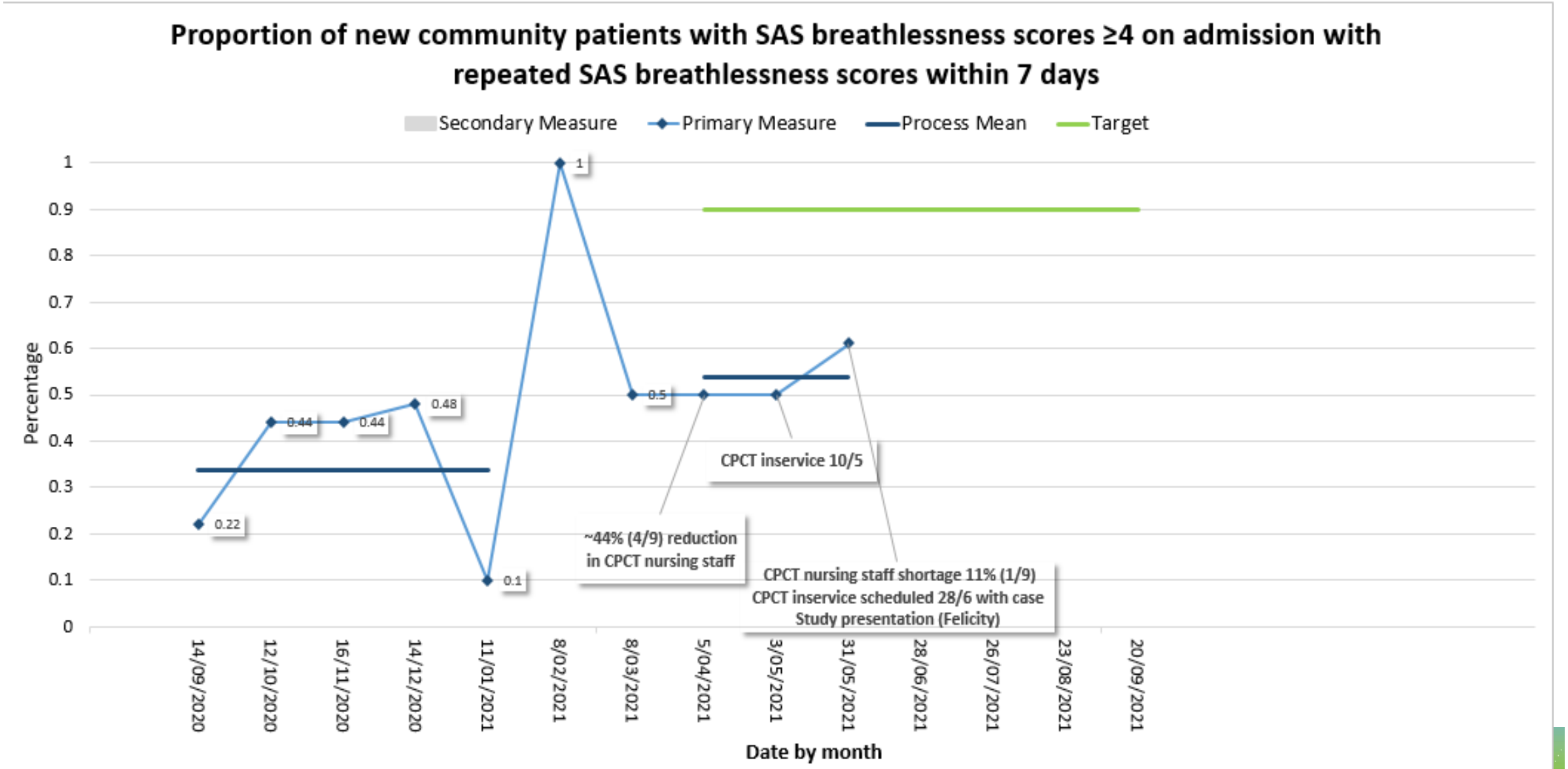
- SAS scores breathlessness to be entered on PalCentre, even if score is zero **(All staff)**
- Access for all allied health staff to PalCentre **Kate (PT and OT access)**
- Repeat CPCT education session w. case study **F/E/C/A.**
- Blue sticker added to journey board to flag new breathless patients **(L2) Carmen.**
- PCOC representative to provide inservice to allied health staff to facilitate PalCentre uptake **Martin**
- CPCT in-service/education May 10 - facilitate allied health/nursing buy in and CPCT nursing ownership of SMART goal **Leanne (CPCT)/ Angela/ Elaine/Carmen**
- Collate fortnightly data (Friday) to present to weekly CPCT team meeting (Monday) **Angela**
- Weekly education and support for correct PCOC score entry, revision of entered scores for all CPCT patients **Elaine**
- Develop flowchart of what to do if SAS breathlessness score ≥4 **Elaine (L2)**
- Attempt to automate PCOC SAS score data collection **Martin/Elaine (L3)**

Results: Baseline

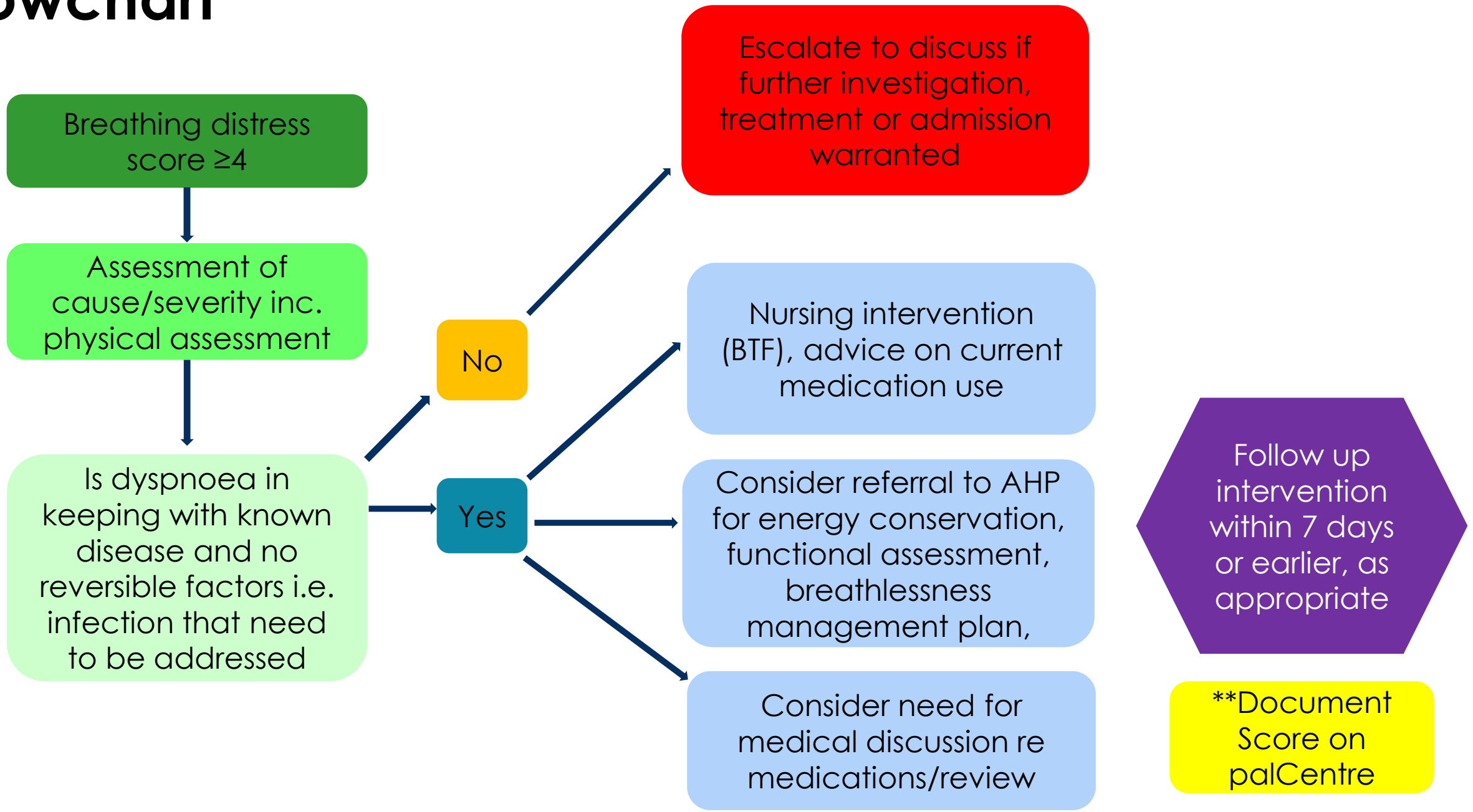


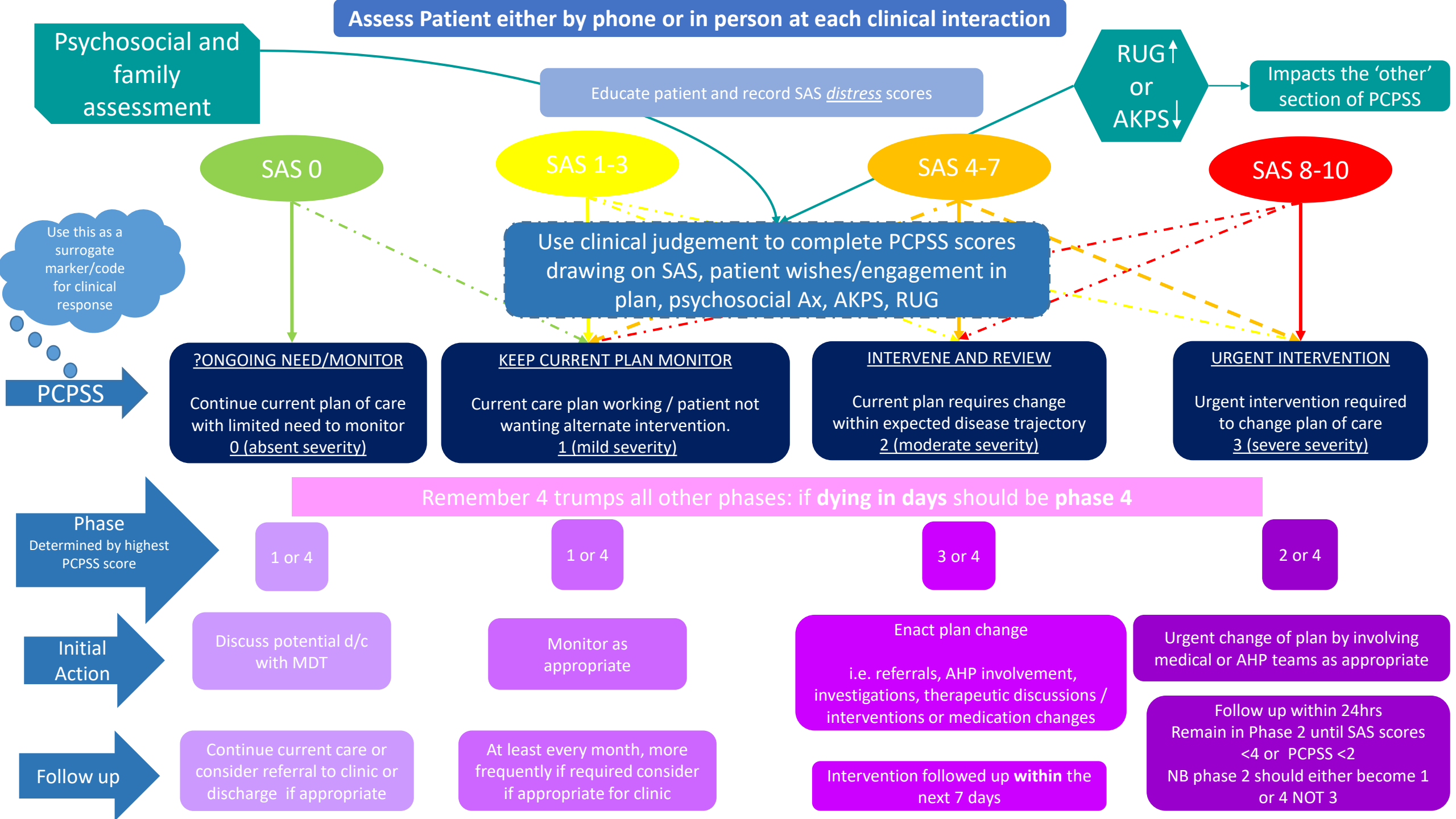
Proportion of breathlessness scores in **2020 was 34%**
Proportion of breathlessness scores entered **before any interventions was 50%**

Methods

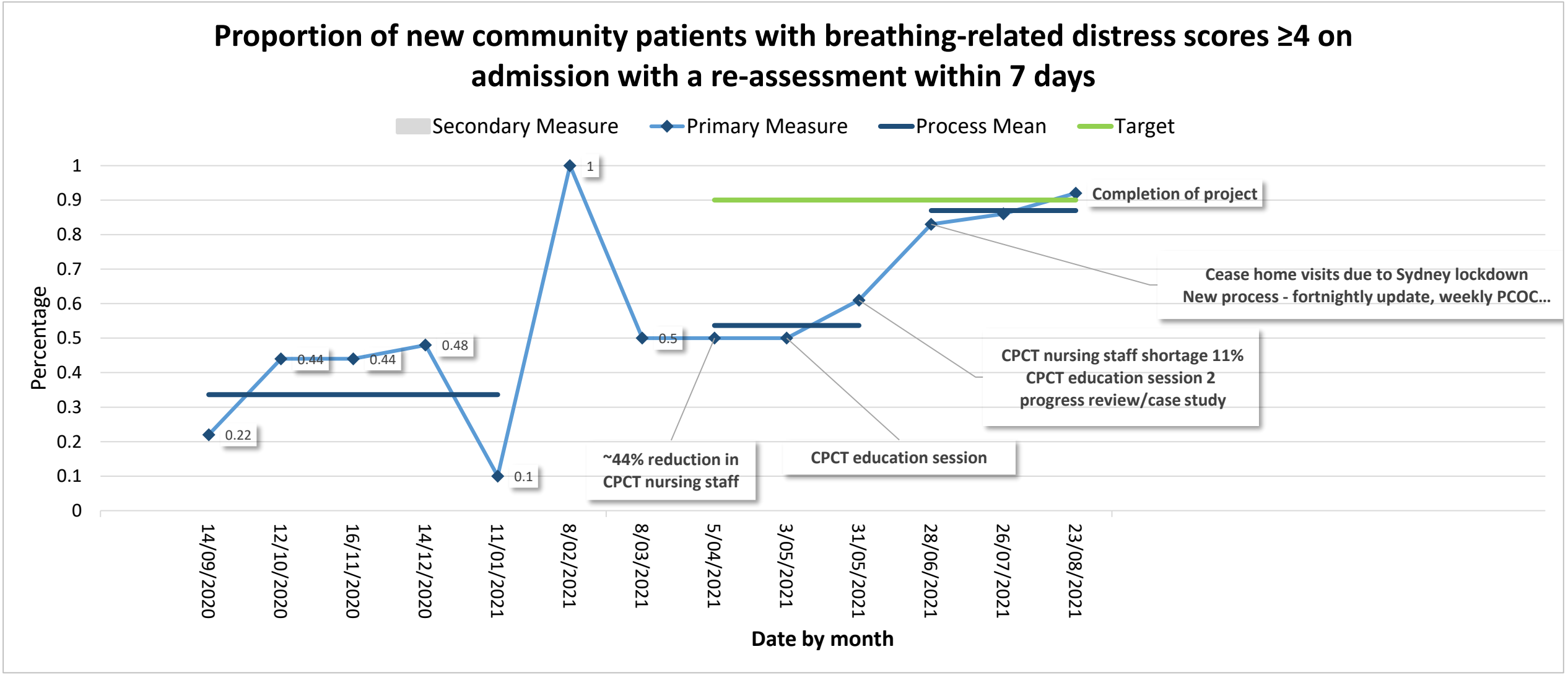

Proportion of new community patients with SAS breathlessness scores ≥4 on admission with repeated SAS breathlessness scores within 7 days
Secondary Measure
Primary Measure
Process Mean
Target
Percentage
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.22
0.44
0.44
0.48
0.1
1
0.5
~44% (4/9) reduction in CPCT nursing staff
CPCT inservice 10/5
CPCT nursing staff shortage 11% (1/9)
CPCT inservice scheduled 28/6 with case Study presentation (Felicity)
14/09/2020
12/10/2020
16/11/2020
14/12/2020
11/01/2021
8/02/2021
8/03/2021
5/04/2021
3/05/2021
31/05/2021
28/06/2021
26/07/2021
23/08/2021
20/09/2021
Date by month

Flowchart


Breathing distress score ≥4
Assessment of cause/severity inc. physical assessment
Is dyspnoea in keeping with known disease and no reversible factors i.e. infection that need to be addressed
No
Yes
Escalate to discuss if further investigation, treatment or admission warranted
Nursing intervention (BTF), advice on current medication use
Consider referral to AHP for energy conservation, functional assessment, breathlessness management plan,
Consider need for medical discussion re medications/review
Follow up intervention within 7 days or earlier, as appropriate
**Document Score on palCentre


Assess Patient either by phone or in person at each clinical interaction
Psychosocial and family assessment
Educate patient and record SAS distress scores
RUG↑ or AKPS↓
Impacts the 'other' section of PCPSS
SAS 0
SAS 1-3
SAS 4-7
SAS 8-10
Use this as a surrogate marker/code for clinical response
Use clinical judgement to complete PCPSS scores drawing on SAS, patient wishes/engagement in plan, psychosocial Ax, AKPS, RUG
PCPSS
?ONGOING NEED/MONITOR
Continue current plan of care with limited need to monitor
0 (absent severity)
KEEP CURRENT PLAN MONITOR
Current care plan working / patient not wanting alternate intervention.
1 (mild severity)
INTERVENE AND REVIEW
Current plan requires change within expected disease trajectory
2 (moderate severity)
URGENT INTERVENTION
Urgent intervention required to change plan of care
3 (severe severity)
Remember 4 trumps all other phases: if dying in days should be phase 4
Phase
Determined by highest PCPSS score
1 or 4
1 or 4
3 or 4
2 or 4
Initial Action
Discuss potential d/c with MDT
Monitor as appropriate
Enact plan change
i.e. referrals, AHP involvement, investigations, therapeutic discussions / interventions or medication changes
Urgent change of plan by involving medical or AHP teams as appropriate
Follow up
Continue current care or consider referral to clinic or discharge if appropriate
At least every month, more frequently if required consider if appropriate for clinic
Intervention followed up within the next 7 days
Follow up within 24hrs
Remain in Phase 2 until SAS scores <4 or PCPSS <2
NB phase 2 should either become 1 or 4 NOT 3

Results



Proportion of SAS breathlessness scores entered within 7 days increased from **34% to 92%.**
Mean increase of 36% in 5 months! Total increase of 58%!

Sustainability

Old process = No process

- Initial assessment breathing score ≥4
- Variable response depending on personnel
- No unified process for action, referrals or follow up

New Process

- Initial assessment breathing score ≥4
- Follow ‘Breathing Flow Chart’
- Discuss next day in morning meeting. Patient automatically flagged as new Phase 3
- Discuss in weekly MDT meeting until no longer Phase 3 patient – indicating no further change in plan required

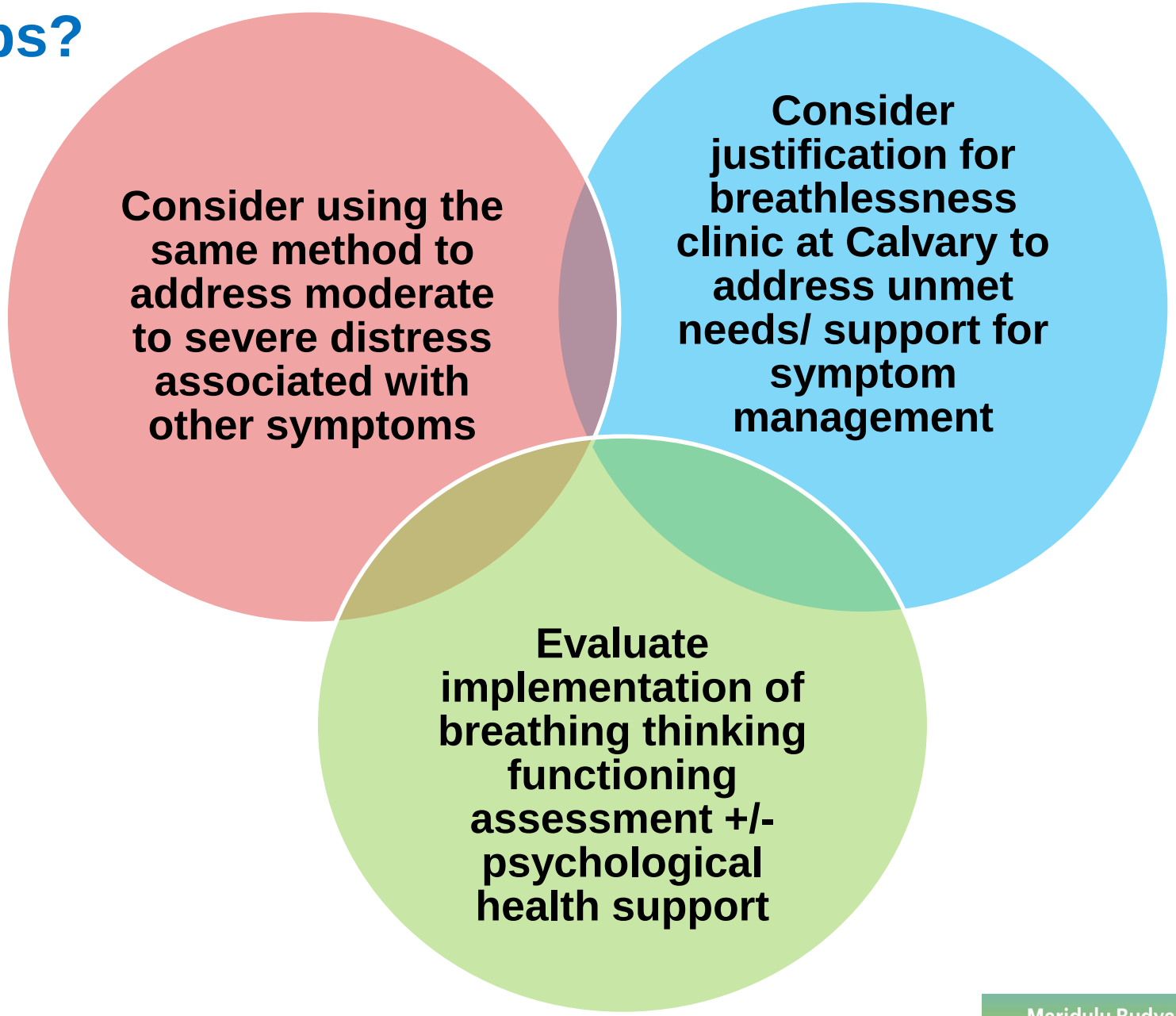
Sustainability

- Identify patients with moderate to severe breathing-related distress as well as other symptoms
- Review moderately distressed patients
- Fill staff knowledge gaps in accurate assessment of Symptom Assessment Scale scores
- Contemporaneous data entry

Key learning points from this project

- Identified breathless patients in need of follow up
- Identified staff support needs for breathlessness scoring and management
- Embedded processes for addressing moderate to severe breathing-related distress

Next steps?


Consider using the same method to address moderate to severe distress associated with other symptoms
Consider justification for breathlessness clinic at Calvary to address unmet needs/ support for symptom management
Evaluate implementation of breathing thinking functioning assessment +/- psychological health support

Conclusion

- The proportion of community patients with a re-assessment of breathing-related distress increased
- Similar QI project is possible in other community palliative care teams who use PCOC SAS scores