



ST VINCENT'S
PRIVATE HOSPITAL

BRISBANE

A FACILITY OF ST VINCENT'S HEALTH AUSTRALIA

How models of community specialist palliative care influence patient outcomes

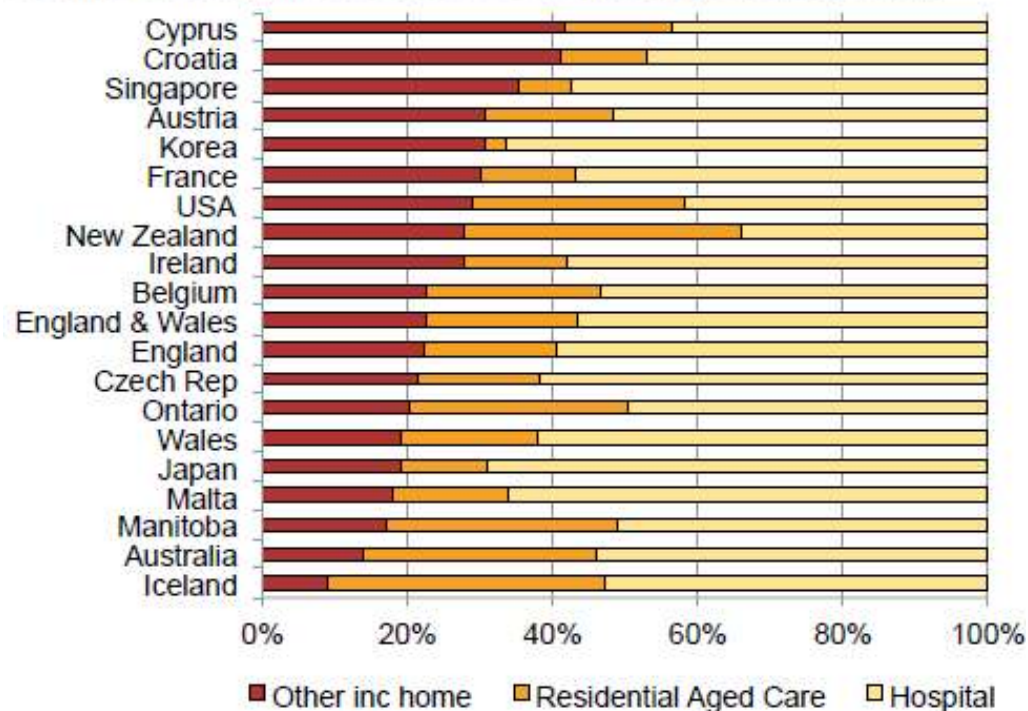
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Choice in death

- 60 – 70% of Australians want to die at home, yet few do so (Grattan Institute, 2014)
- In the next 25 years the number of Australians who die each year will double
- Evidence supports access to home palliative care increases the chance of dying at home and reduces symptom burden without impacting on carer grief - **somewhat**

Figure 1: Few Australians aged over 65 die at home
Location of deaths in selected OECD countries; per cent of deaths



Source: (Broad et al., 2013 (2013))



Table 1
Selected studies of the proportion of patients with cancer who died at home

First author	N	Data collected	Response rate	Country	% of patients who died at home	Key findings
<i>Prospective studies of patients</i>						
Tiernan et al. (2002)	191	c. 1996	98%	Ireland	44	82% of patients wished to die at home but only 47% did so owing to uncontrolled symptoms and the inability of families to cope. This led to hospital and hospice admissions.
Tang and McCorkle (2003)	180	2001–2002	87%	US	20	87% of patients wished to die at home. 30% died in their preferred place of death. Congruence between preferred and actual place of death was reduced by re-hospitalization and lack of hospice homecare during the last few days of life.
<i>Survey of bereaved caregivers</i>						
Catalán-Fernández et al. (1991)	335	1984–1986	72%	Spain	45	Patients from rural areas and higher socio-economic levels were more likely to die at home.
<i>Retrospective reviews of patient records</i>						
Moinpour and Polissar (1989)	28 828	1980–1985		US	34	Patients receiving hospice care were 2.8 times as likely to die at home.
Higginson et al. (1998)	132 910	1985		UK	27	Trends in cancer deaths over a 10-year period in the UK population indicated a decrease in hospital and nursing home deaths.
Higginson et al. (1998)	132 570	1994		UK	27	Home deaths varied by region, declined with age and there were more home deaths for men than women.
Hunt and McCaul (1998)	2 207	1990		Australia	18	56% (1990) and 63% (1993) of patients who received hospice care died in their own home, though this was less likely if patients were older, lived in a rural area or had a haematological malignancy, and more likely if patients were aged 40–60 years.
Hunt and McCaul (1998)	2 323	1993		Australia	20	
Constantini et al. (2000)	17 597	1991		Italy	48	Proportions of home deaths varied across regions and with a greater proportion in rural or semi-rural areas. Greater number of home deaths among females, married and widowed and those of high educational level.
Carroll (1998)	82	1992–1994		Scotland	30	72% of patients wished to die at home. 55% died in the place they preferred, owing in part to poor symptom control leading to hospital admission.
Gatrell et al. (2003)	6 900	1993–2000		US	22	Home deaths were more likely for males, younger patients, those living in affluent areas and those with respiratory malignancies.
Bruera et al. (2003)	13 577	1996–1998		US	35	51% of patients died in hospital. Patients were more likely to die in hospital if they were male, 'black', had a haematological malignancy and lived in a county that included the metropolitan area.

The Impact of Community-Based Palliative Care on Utilization and Cost of Acute Care Hospital Services in the Last Year of Life

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TABLE 2. CRUDE (A) AND ADJUSTED (B) EFFECT OF EXPOSURE TO THE COMMUNITY PALLIATIVE CARE SERVICE ON PLACE OF DEATH FOR PEOPLE DYING OF CANCER IN WESTERN AUSTRALIA, 2001–2011

A. Place of death according to exposure to the community palliative care service

<i>Place of death</i>	<i>Ever received community palliative care service</i>								<i>Significance testing^a Significance (2-sided)</i>
	<i>No</i>				<i>Yes</i>				
	<i>n</i>	<i>Percent^b</i>	<i>95% CI</i>		<i>n</i>	<i>Percent^b</i>	<i>95% CI</i>		
		<i>Lower, %</i>	<i>Upper, %</i>			<i>Lower, %</i>	<i>Upper, %</i>		
In hospital	9130	75.9	75.0	76.8	8421	50.9	49.9	52.0	≤0.001
Out of hospital	2901	24.1	22.6	25.7	8109	49.1	47.9	50.2	≤0.001

B. Adjusted likelihood of dying out of hospital according to exposure to the community palliative care service

Original research

Common care practices among effective community-based specialist palliative care teams: a qualitative study

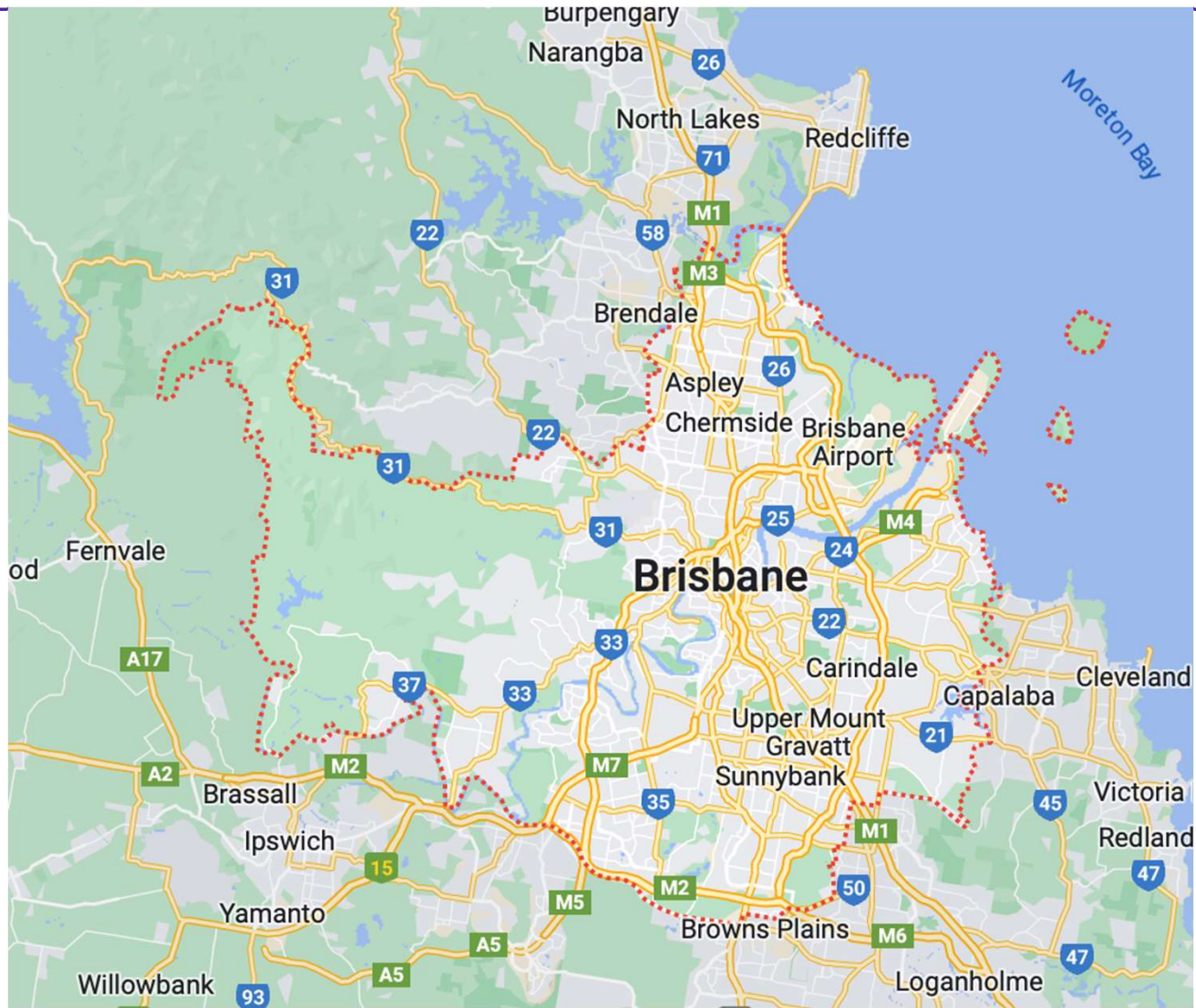
Hsien Seow,^{1,2} Daryl Bainbridge,¹ Melissa Brouwers,^{1,2} Deanna Bryant,³ Sue Tan Toyofuku,⁴ Mary Lou Kelley⁵

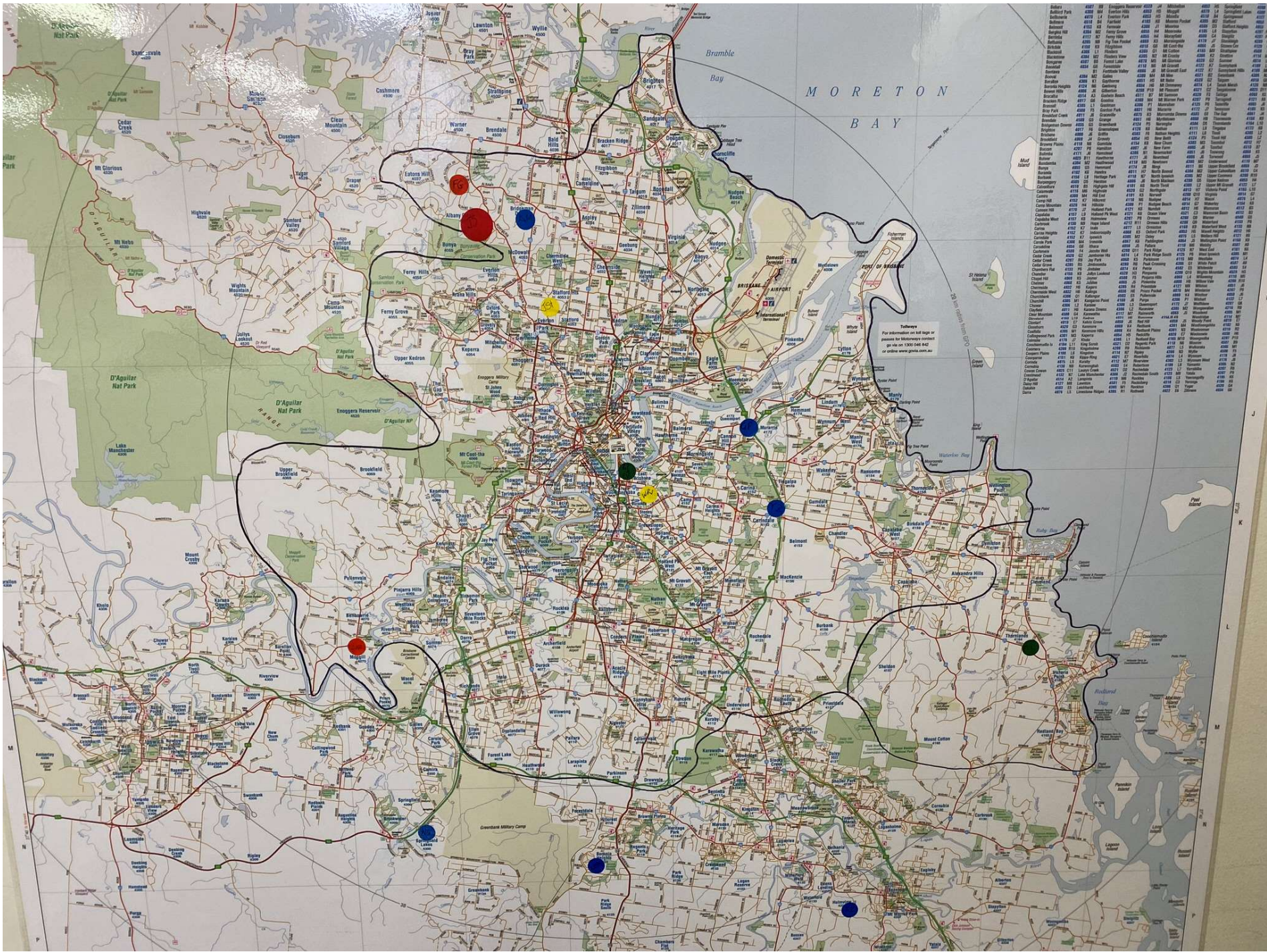
Table 3 Seven common care practice themes

Care practice themes	Description as a practice principle
1 <i>Specialised expertise 24/7</i>	Provide dedicated expertise 24/7 so that the patient never feels alone
2 <i>Intrateam communication</i>	Communicate and connect as providers so the patient does not have to repeat their story numerous times
3 <i>Timeliness</i>	Respond in a timely and effective manner so that the patient experiences minimal discomfort and distress
4 <i>Physical symptom and psychosocial–spiritual management</i>	Attend proactively to the wellness of the patient's mind, body and soul so all forms of suffering can be alleviated
5 <i>Education and preparedness</i>	Provide education and guidance so that the patient can prepare for what lies ahead
6 <i>Peace and fulfilment</i>	Support the patient to resolve personal affairs and realise goals so that they can feel fulfilled, and at peace
7 <i>Advocates for patient preferences</i>	Serve as advocates so that the patient can achieve the type of care, and death desired



Community Area

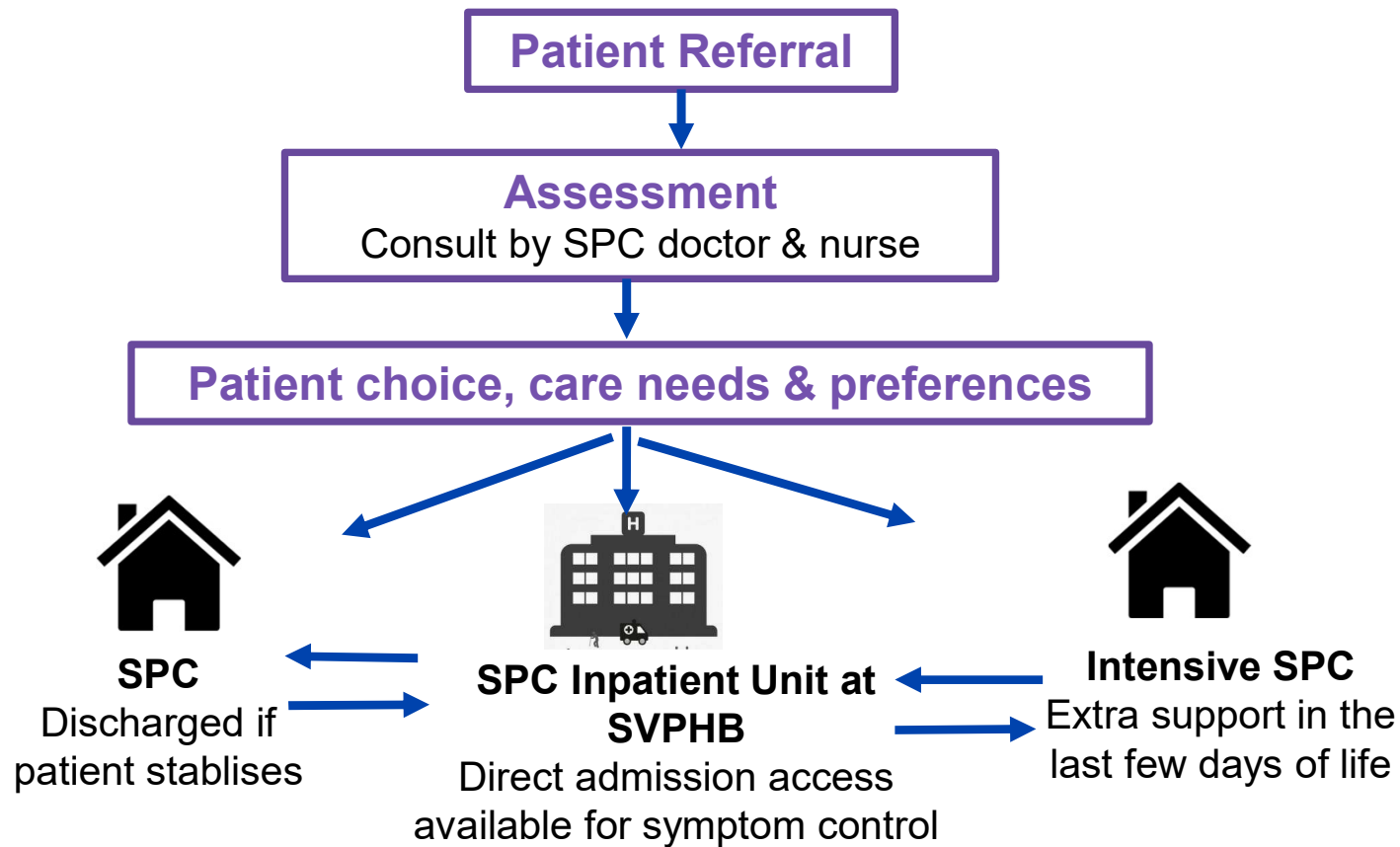




Different models and outcomes

- **1 year data – BUPA/Medibank/Public**
- **5 year data - BUPA**

Model Mechanics



SPC: Specialist Palliative Care

- Comprehensive support 24 / 7 days per week for patients their families & carers including domicillary nursing and allied health services

Program



Multidisciplinary team

Clinical Nurse

Nurse Practitioner

Doctors – specialists/trainees

Case managed

Allied Health – Physiotherapy, Occupational Therapy, Counselling, Pastoral Care

Equipment – mix of public availability and private availability

AIN – assistant in nursing – 3 to 12 hour shifts

BUPA



- **Patients with BUPA hospital insurance**
 - **Prognosis less than 12 months**
 - **Clear diagnosis and terminal prognosis**
 - **No cost to patient**
 - **Case managed**
-
-
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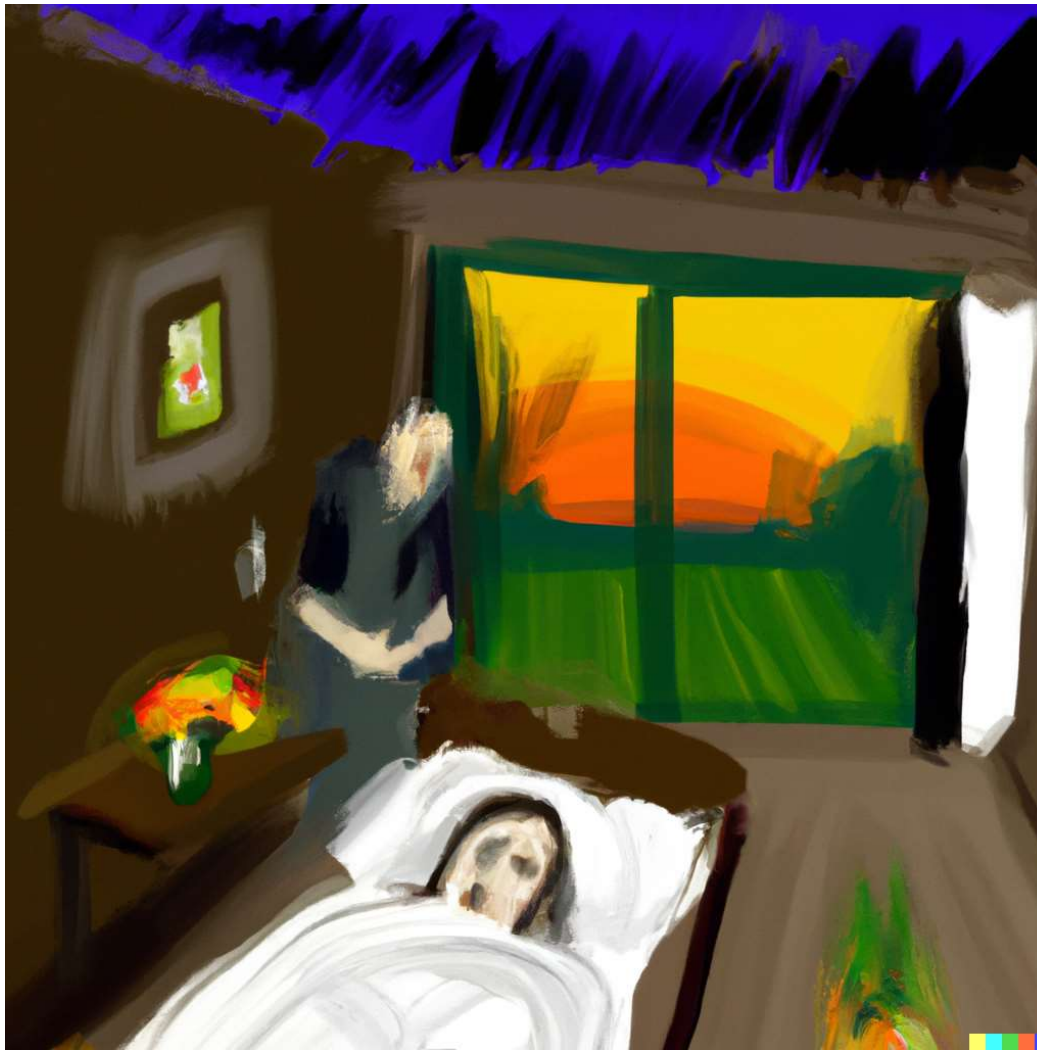
Medibank



- **Selected patients who have Medibank hospital insurance**
- **Express a desired wish for end of life care at home**
- **Clear diagnosis and terminal prognosis**
- **No cost to patient**
- **Case managed**

Public program

- **Prognosis – advanced, progressive disease**
- **Based on symptom needs**
- **No cost to patient**
- **Case managed – probably lower ratio**
- **Standard cohort – next patient admitted to service**



Funding

BUPA:

- Fee for service

Medibank:



- Capitation
- Set amount per patient admission till death or discharge
- Penalty for admission to a SVHA facility

Public program:

- Fixed amount for service
- Broad targets around occasions of service

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Supporting choice: an innovative model of integrated palliative care funded by a private health insurer

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BUPA 1-yr data

Table 1 Participant characteristics

	Total (<i>n</i> = 250)	BPCCP† cohort (<i>n</i> = 130)	Standard‡ cohort (<i>n</i> = 120)
Gender			
Female	135 (54.0)	71 (54.6)	64 (53.3)
Male	115 (46.0)	59 (45.4)	56 (46.7)
Age, mean (SD) (years)	73.9 (12.8)	75.3 (12.5)	72.3 (12.9)
Lives alone	30 (12.0)	15 (11.6)	15 (12.5)
Days on service, median (IQR)	45.5 (22.0–79.0)	46.0 (17.0–79.0)	45.5 (26.5–79.0)
Malignancy diagnosis	209 (83.6)	108 (83.1)	101 (84.2)
Status at 1 year			
Alive	72 (28.8)	34 (26.2)	38 (31.7)
Died	147 (58.8)	77 (59.2)	70 (58.3)
Discharged	31 (12.4)	19 (14.6)	12 (10.0)

Medibank: 1-yr data (1 May 2020 - 30 April 2021)



	Total N=132	Standard cohort N=65	Medibank cohort N=67	p-value
Age (years, median (IQR))	75 (65-83)	74 (66-81)	76 (63-84)	0.77 ¹
Gender				0.61 ²
Female	60 (45.5)	31 (47.7)	29 (43.3)	
Male	72 (54.5)	34 (52.3)	38 (56.7)	
Lives alone	13 (9.8)	5 (7.7)	8 (11.9)	0.41 ²
Primary diagnosis of malignancy	111 (84.1)	57 (87.7)	54 (80.6)	0.27 ²
Primary diagnosis				
Lung cancer	18 (13.6)	10 (15.4)	8 (11.9)	
Colorectal cancer	15 (11.4)	10 (15.4)	5 (7.5)	
Prostate cancer	13 (9.8)	5 (7.7)	8 (11.9)	
Other GIT cancer	12 (9.1)	7 (10.8)	5 (7.5)	
Other malignancy	53 (40.2)	25 (38.5)	28 (41.8)	
Cardiovascular disease	6 (4.5)	2 (3.1)	4 (6.0)	
End stage kidney disease	6 (4.5)	0 (0.0)	6 (9.0)	
Respiratory failure	4 (3.0)	3 (4.6)	1 (1.5)	
Other non-malignant condition	5 (3.8)	3 (4.6)	2 (3.0)	

Actual and preferred place of death BUPA



Table 3 Preferred and actual place of death for those who died
(*n* = 147)

	BPCCP† cohort (<i>n</i> = 77), <i>n</i> (%)	Standard‡ cohort (<i>n</i> = 70), <i>n</i> (%)	<i>P</i> -value
Final PPD			0.028*
Home§	41 (53.2)	22 (31.4)	
Non-acute hospital	25 (32.5)	31 (44.3)	
Acute hospital	4 (5.2)	8 (11.4)	
Unknown	7 (9.1)	9 (12.9)	
Actual place of death			0.036
Home§	35 (45.5)	18 (25.7)	
Non-acute hospital	34 (44.2)	39 (55.7)	
Acute hospital	8 (10.4)	13 (18.6)	

Actual and preferred place of death Medibank



	Total N=132	Standard cohort N=65	Medibank cohort N=67	p-value
Died	104 (78.8)	46 (70.8)	58 (86.6)	0.026 ¹
Outcome				<0.001 ²
Death (In Community)	66 (50.0)	20 (30.8)	46 (68.7)	
Death (In Hospital)	38 (28.8)	26 (40.0)	12 (17.9)	
Discharge - Moved Out Of Area	3 (2.3)	2 (3.1)	1 (1.5)	
Discharge - No Palliative Care				
Needs	2 (1.5)	2 (3.1)	0 (0.0)	
Alive/on service at study end	23 (17.4)	15 (23.1)	8 (11.9)	

	Total N=132	Standard cohort N=65	Medibank cohort N=67	p-value
For those who died:	N=104	N=46	N=58	
Days on service (median (IQR))	18.0 (8.0-53.5)	39.0 (13.0-72.0)	13.5 (7.0-25.0)	<0.001 ³
Preferred place of death				<0.001 ²
Home	82 (79.6)	26 (57.8)	56 (96.6)	
Inpatient palliative care unit	18 (17.5)	18 (40.0)	0 (0.0)	
Acute hospital	3 (2.9)	1 (2.2)	2 (3.4)	
Actual place of death				<0.001 ¹
Home	66 (63.5)	20 (43.5)	46 (79.3)	
Inpatient palliative care unit	25 (24.0)	18 (39.1)	7 (12.1)	
Acute hospital	13 (12.5)	8 (17.4)	5 (8.6)	
Achieved preferred place of death	82 (79.6)	34 (75.6)	48 (82.8)	0.37 ¹
Place of death: Preferred, Actual				
Home, Home	64 (62.1)	18 (40.0)	46 (79.3)	
Inpatient PallCare, Inpatient PallCare	15 (14.6)	15 (33.3)	0 (0.0)	
Hospital, Hospital	3 (2.9)	1 (2.2)	2 (3.4)	
Home, Inpatient Pallcare	10 (9.7)	3 (6.7)	7 (12.1)	
Home, Hospital	8 (7.8)	5 (11.1)	3 (5.2)	
Inpatient Pallcare, Home	1 (1.0)	1 (2.2)	0 (0.0)	
Inpatient Pallcare, Hospital	2 (1.9)	2 (4.4)	0 (0.0)	

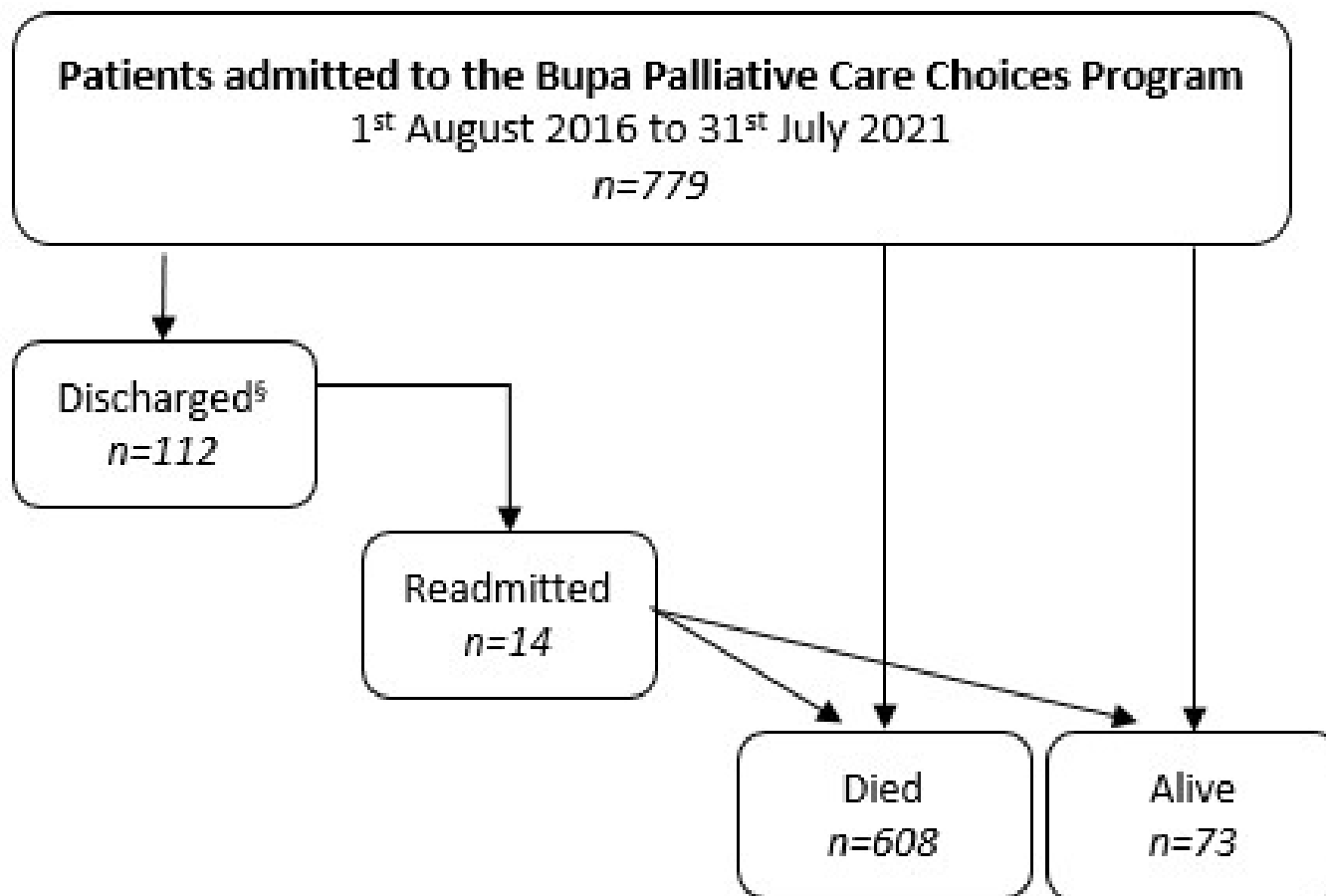
IQR: Interquartile range.

¹Pearson's chi-squared test of independence. ²Fisher's exact test. ³Wilcoxon rank-sum.

Table 2 Characteristics of participants who died during the study period

	Total (<i>n</i> = 147)	BPCCP† cohort (<i>n</i> = 77)	Standard‡ cohort (<i>n</i> = 70)
Median age (range) (years)	76 (34–97)	78 (35–94)	75 (34–97)
Male	68 (46)	35 (45)	33 (47)
Lives alone	13 (9)	4 (5)	9 (13)
Days on service, average (range)	58 (1–311)	54 (1–191)	64 (4–311)
Days on service, median (range)	45 (1–311)	45 (1–191)	46 (4–311)
Malignancy diagnosis	127 (86)	65 (84)	62 (89)
Most frequently occurring malignancy			
Lung	26 (18)	10 (13)	16 (23)
Gastrointestinal tract	16 (11)	10 (13)	6 (9)
Colorectal	14 (10)	5 (6)	9 (13)
Most frequently occurring non-malignant condition			
Cardiovascular disease	6 (4)	4 (5)	2 (3)
Respiratory failure	5 (3)	4 (5)	1 (1)

BUPA – 5 year data



BUPA – 5 year data

Characteristics	Patients <i>n</i> =779
Age (years), median (SD)	77 (13.01)
Gender, male	392 (50.3)
Gender, female	387 (49.7)
Lives alone	94 (12.1)
Primary disease, malignant	634 (81.3)
Lung	84 (10.8)
Other gastrointestinal	80 (10.3)
Colorectal	77 (9.9)
Primary disease, non-malignant	146 (18.7)
Cardiovascular	39 (5.0)
Respiratory failure	35 (4.5)
Dementia	10 (1.3)
Outcome at end of	
Died	608 (78.0)
Discharged [‡]	98 (13.1)
Alive	69 (8.9)
Length of stay [¥] (days), median (IR)	47 (16-117)

BUPA – 5 year data

	Patients <i>n=558</i>
Achieved preferred place of death	478 (85.7)
Did not achieve preferred place of death [±]	80 (14.3)
Home as preferred place of death	295 (52.9)
Home as actual place of death	235 (42.1)
Home, achieved as preferred place of death	235 (79.7)
Inpatient palliative care unit, preferred place of death	212 (38.0)
Inpatient palliative care unit, actual place of death	230 (41.2)
Acute inpatient setting, preferred place of death,	51 (9.1)
Acute inpatient setting, actual place of death	93 (16.7)

Administration of the FAMCARE-2 tool



Questionnaires with a letter of introduction and pre-paid return envelope are posted at set time points.

Those time points include:

In the first 2 years, patient surveys were sent 2-3 weeks after first multi-disciplinary team meeting and carer surveys were sent 5-6 weeks after bereavement.

After 2 years, surveys were sent in 4-monthly cycles.

FAMCARE

Patients admitted to the Bupa Palliative Care Choices Program

1st August 2016 to 31st July 2021

n=779

FAMCARE-2 surveys sent[§] (*n*)

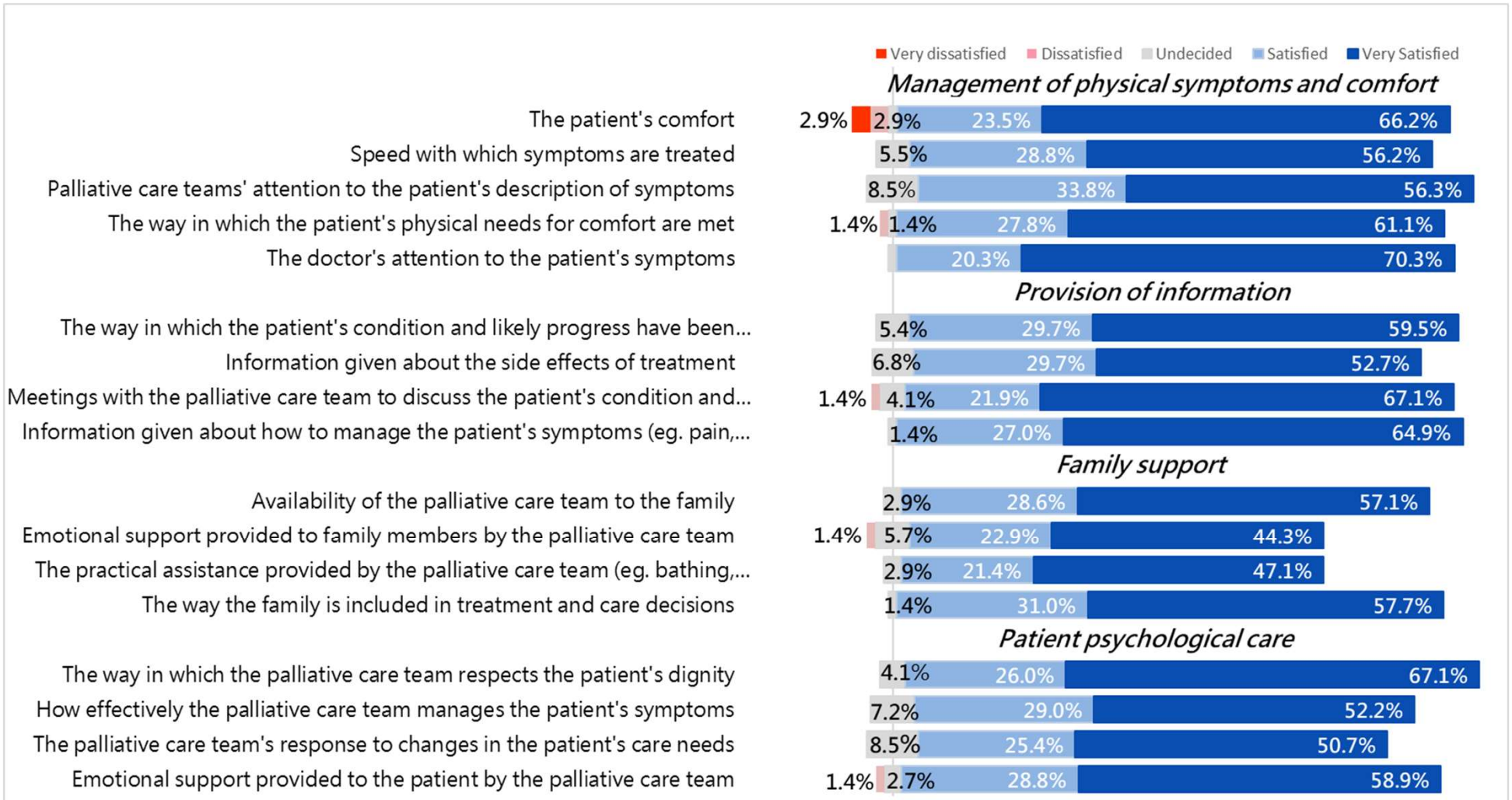
Patient	336
Carer (bereaved)	585



Returned survey responses *n*(%)

Patients	91 (27%)
Carers (bereaved)	204 (35%)

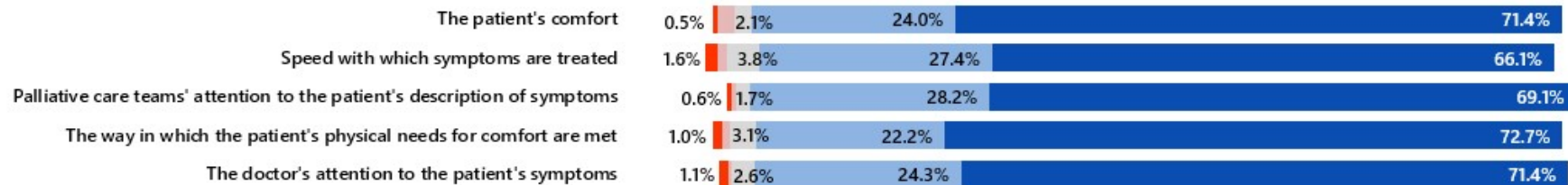
FAMCARE- 2 responses - patient



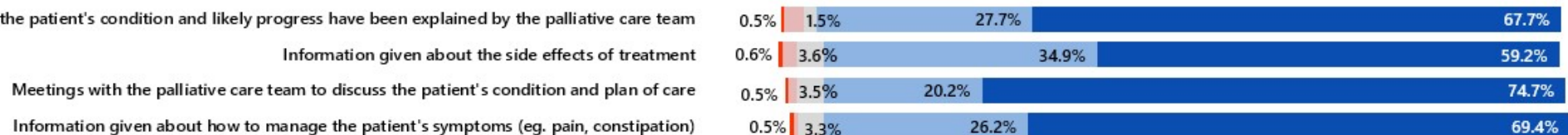
Bereaved carer responses

Very dissatisfied Dissatisfied Undecided Satisfied Very satisfied

Management of physical symptoms and comfort



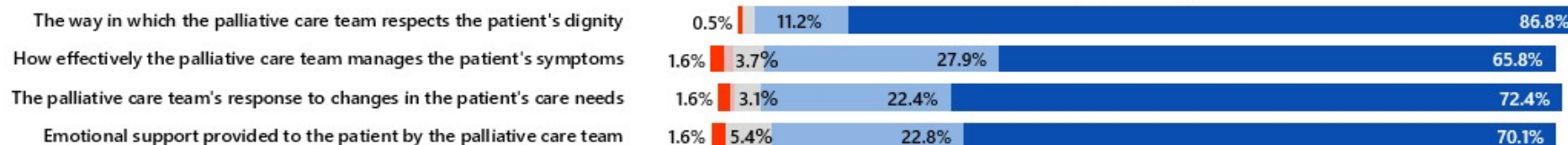
Provision of information



Family support

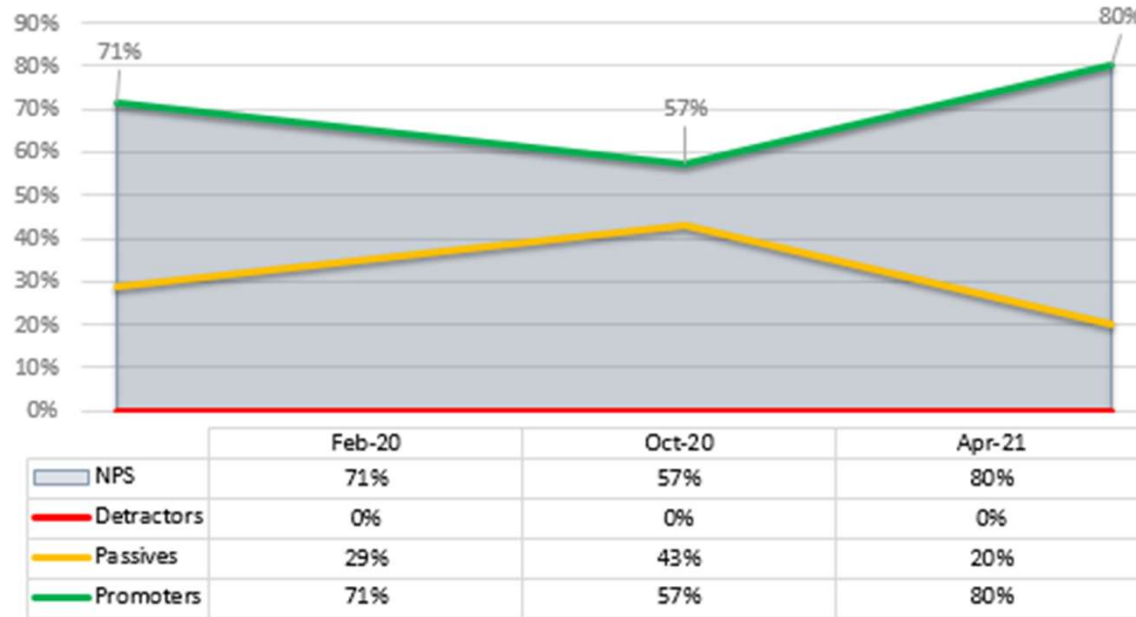


Patient psychological care

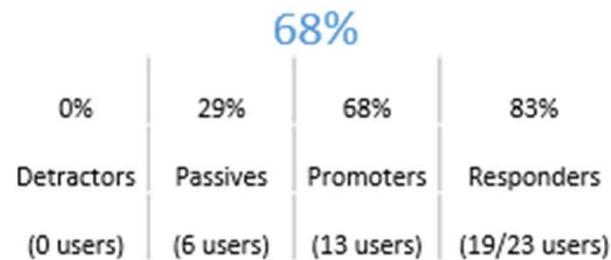


NPS -period October 2019 to April 2021.

NPS over time



Overall NPS score*





Outcomes and lessons

- **Funding/selection can drive outcomes**
- **Very high home death rate with all programs**
- **Selective**
- **Intensive**
- **Funding model – capitation vs fee for service**
- **PPD vs Home death**
- **Broader effect on program**
- **What actually makes the difference?**

Questions



