

Diagnoses, symptoms and outcomes in aged care residents referred to a community palliative care service

Dr. Catherine Brimblecombe
Aged Care Registrar, Western Health
Advanced Trainee in Geriatric & Palliative Medicine

Background



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- Ageing population: absolute & proportion

ABS 2013

- Ageing associated with
 - Comorbidity
 - Functional impairment & institutionalisation
- Residential Aged Care Facilities
 - Growing population
 - Ageing population

AIHW 2012



Background



- 2005: 26% of all deaths in Australia (32% of those aged 65+) occur in residential care

Broad et al 2013

- 2012-13: 7.9% of all new admissions to Australian ACF 'requiring palliative care' (5.6% of all residents)
- Higher with increasing age

AIHW 2014

Background



- Access to services
 - Guidelines & advisory service
 - Identify
 - Palliative goals
 - Need for specialist palliative care (SPC) involvement
 - Accept
- Significant variability between SPC services
 - Consultation/advice only model
 - Auto-accept & review all ACF referrals



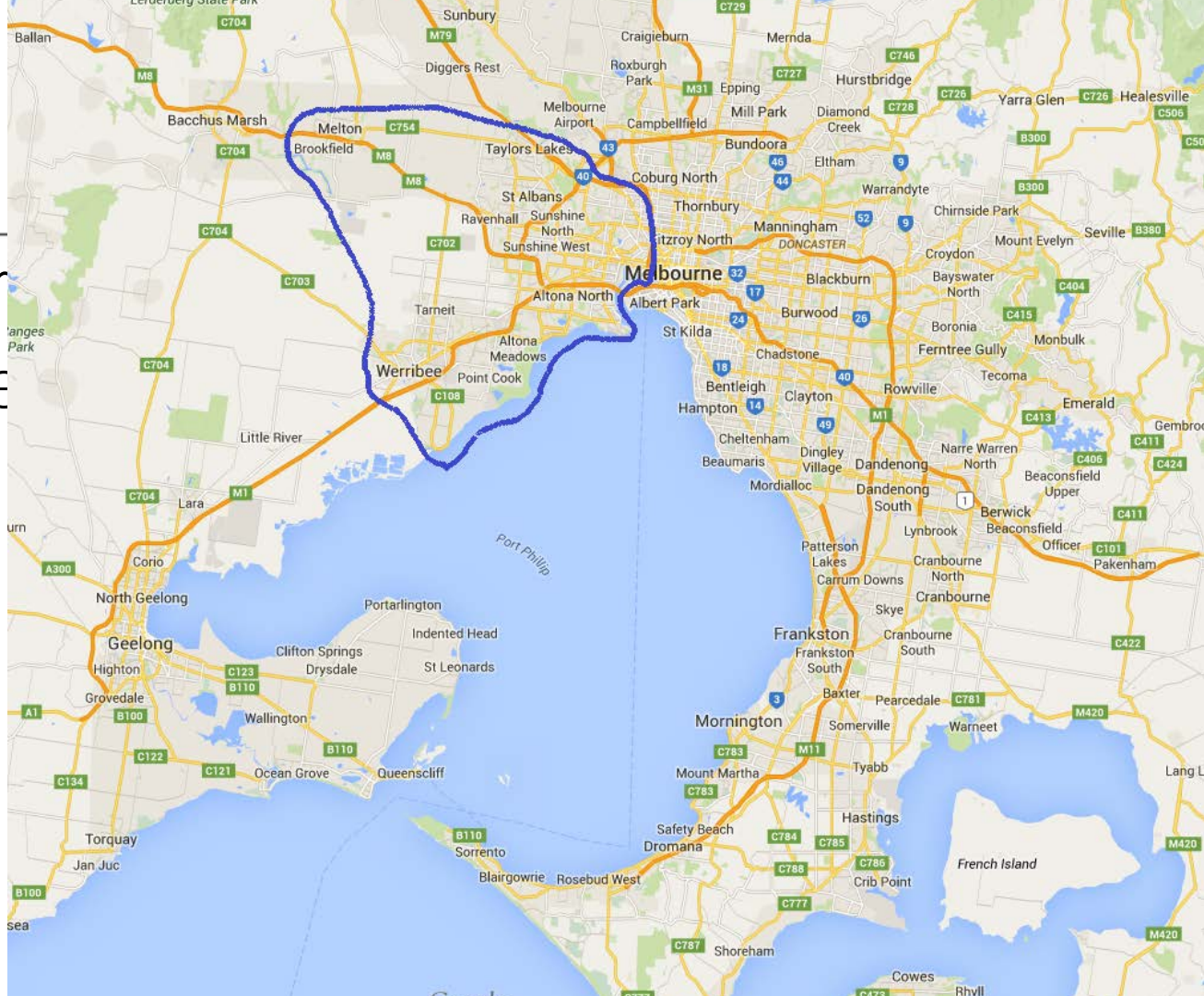
Background



- Figures on proportion of specialist palliative care patients residing in ACF not readily available
- July-December 2013: of all referrals to ambulatory/community palliative care, 9.2% nationally (16.2% in Victoria) received directly from ACFs

PCOC Report 16, 2014

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Study aims



- Establish proportion of referrals to CPCS of ACF residents
- Clarify referral patterns & determine whether standard referral details can be used to predict symptom care needs & episode outcomes
- Review prevalence of key diagnoses and evaluate for any relationship with symptom prevalence and episode outcomes

Study method



- Low-risk HREC approval for retrospective cohort design
- Identify referrals of ACF residents
- Data collection
 - Patterns: source, reason, urgency
 - Outcomes: admit/non-admit, reason for ending episode, episode duration
 - Primary diagnoses & comorbidities
 - Admission: palliative care phase, symptoms & performance status



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Results



Population



- 6 months' referrals reviewed
 - 01 July – 31 December 2013
 - 955 total referrals received (uncorrected)
 - 268 unique referrals of permanent ACF residents*
*includes new permanent admission to ACF from hospital
- 162 (60.4%) female
- Mean age 84.4 years (range 43.2 - 99.4 years)

Referrals



- Source
 - ACF 213 (79.5%), public hospital 47 (17.5%)
- Urgency
 - Urgent 131 (48.9%), routine 81 (30.2%)
- Reason
 - SM 54 (20.1%), EOLC 27 (10.1%), non-specific “palliative care” 185 (69.0%)

Referral outcomes



Admitted = 214

- Deceased = 163
 - At ACF = 157
 - Acute hospital = 4
 - PCU/hospice = 2
- Discharged = 49
- Other = 2

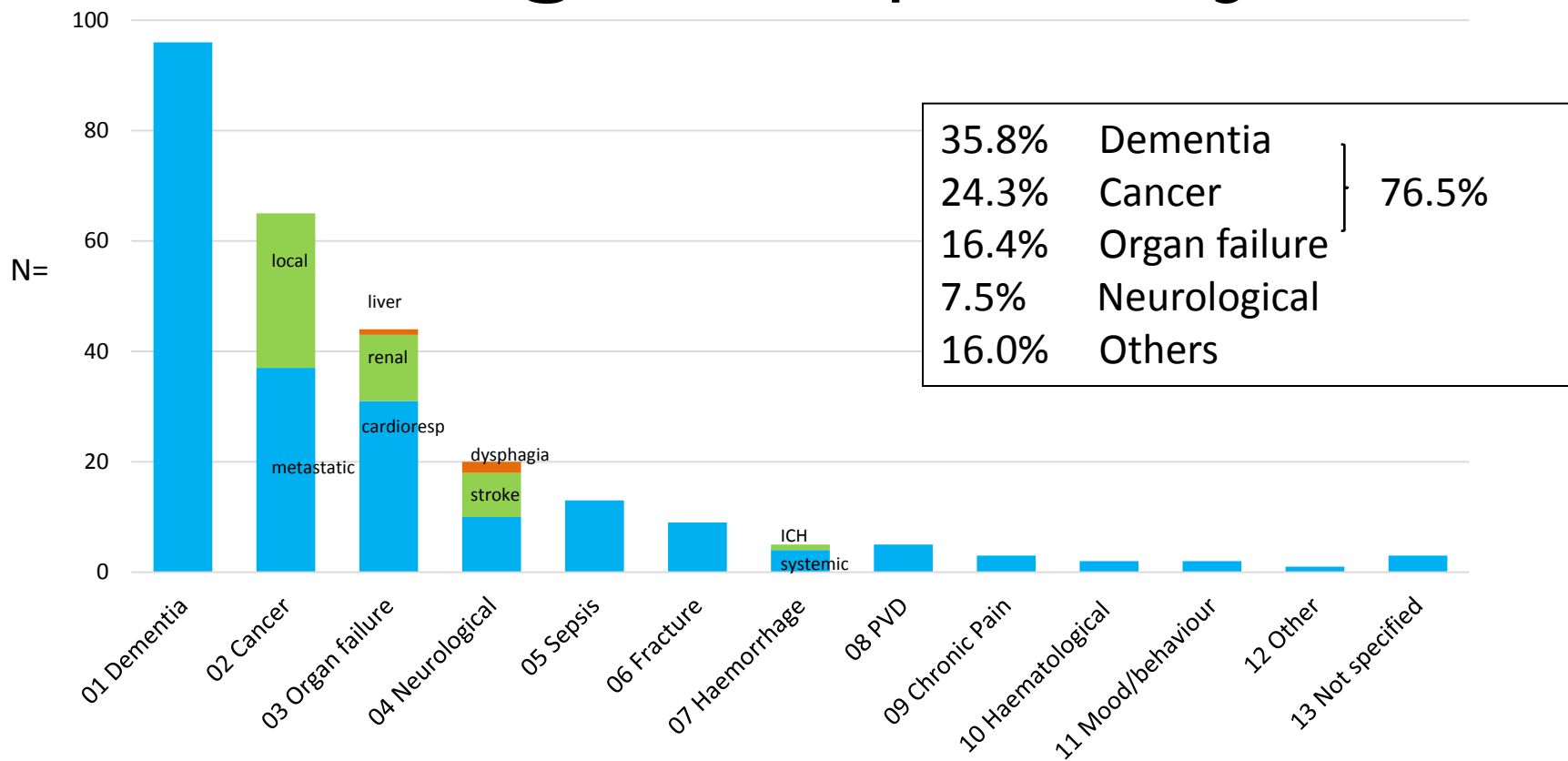
Not admitted = 54

- Deceased prior = 45
- Declined = 9
 - Patient/family = 3
 - CPCS = 3
 - ACF = 2
 - GP = 1

Mean admitted episode duration 47.4 days


(95%CI 38.0-56.8, range 0-506)

Diagnosis: primary



Overall prevalence



- 59.0% Dementia
 - 56.0% Chronic organ disease/failure
 - 27.2% Cancer
 - 31.3% Neurology/stroke
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Symptoms

Symptom prevalence



- Variable estimates of pain prevalence in nursing homes
- Australia
 - 27.8% point prevalence in NH residents (n=917)
McClellan & Higginbotham, 2002
 - 69% of 'palliative' residents (non-malignant) over 10 weeks (n=69)
Parker et al., 2005
- International
 - UK: 37% chronic non-cancer pain, 2% cancer pain
Allcock et al., 2002
 - US: 14.7% had pain at both of 2 assessments 60-180 days apart
Teno et al., 2001

Pain prevalence



- Prevalence of pain on admission assessment: **53.5%** (106/198)

	Dementia (n=71)	Cancer (53)	Organ failure (29)	p
Pain	50.7%	50.9%	72.4%	0.11

- No difference by referral source (43-54%, p0.85) or urgency of referral (49-57%, p0.62)

Other symptoms in palliative care

- Dyspnoea (severe) Claessens et al., 2000 (SUPPORT)
 - 32% Stage III-IV NSCLC, 56% COPD
- Estimated 44-75% of deceased ACF residents experienced dyspnoea in final months of life Gonzales et al., 2011
- Nausea – systematic review Solano et al., 2006
 - 6-68% cancer, 17-48% cardiac, 30-43% renal
 - No info COPD, dementia
- 17% in ACF residents in 48h prior to death Brandt et al 2006

Symptom prevalence



	OVERALL (n=198)	Dementia (71)	Cancer (53)	Organ failure (29)	p
Dyspnoea	26.3%	15.5%	22.6%	55.2%	0.01
Nausea	9.1%	2.8%	15.1%	20.7%	<0.01

- No association of dyspnoea with referral source (26-29%, p0.98) or urgency (24-27%, p0.92)
- No association of nausea with referral source (8-14%, p0.49) or urgency (8-14%, p0.42)

Symptom

Overall, 42.0% of patients (n=84) admitted scored 2 or higher on at least 1 physical symptom

	OVERALL (n=200)	Dementia (71)	Cancer (53)	Organ failure (30)	p
No physical symptoms	7.5%	8.5%	7.5%	3.3%	0.65
PSS Pain 2+	14.5%	9.9%	15.1%	26.7%	0.10
PSS OS 2+	33.5%	25.4%	32.1%	56.7%	0.09
Psychological distress PSS 2+	7.5%	4.2%	3.8%	23.3%	<0.01



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Outcomes



Episode outcomes



DIAGNOSIS	REASON	SM (46)	EOLC (20)	NOS (144)	P
Deceased	76.2%	63.0%	85.0%	80.6%	0.03

Admitted patients who died (n=163) had mean episode duration 29.7 days vs 104.6 days for discharged patients (n=49) (p<0.001)

DIAGNOSIS	REASON	SM (46)	EOLC (20)	NOS (144)	P
Mean duration	47.4 days	70.0	43.5	39.8	0.04

Death prior to admission



- n=45 (16.8%)
- More likely for non-malignant (eg. dementia, organ failure) patients (20.8% and 22.7% respectively) than cancer patients (6.2%) (p0.02)
- Less likely for routine referrals (9.9%) than unspecified (16.8%) and for urgent (22.1%) (p0.06)

Significance of admission assessment

- Australia-modified Karnofsky Performance Status
Abernethy et al., 2005

AKPS	OVERALL (202)	Dementia (72)	Cancer (53)	Organ (30)	Deceased	Mean episode
50-70	33 (16.3%)	6 (8.3%)	16 (30.2%)	5 (16.7%)	18 (54.5%)	77.6 days
10-40	169 (83.7%)	66 (91.7%)	37 (69.8%)	25 (83.3%)	140 (82.8%)	33.9 days
		p0.06			p0.01	p<0.001

Significance of admission assessment

- Palliative care phase

35.6% of cancer patients in P1 vs. 21.9% organ failure & 18.9% dementia (p0.08)

PHASE	N (209)	Deceased (76.2%)	Mean episode duration (47.4)
1 – stable	53 (25.4%)	32 (60.4%)	78.9 days
2 – unstable	21 (10.0%)	15 (71.4%)	47.5
3 – deteriorating	106 (50.7%)	86 (81.1%)	39.0
4 – terminal	29 (13.9%)	28 (96.6%)	6.3

1.7% of cancer patients in P4 vs 15.6% organ failure & 21.6% dementia (p0.003)

Summary



- Aged care facilities' role in provision of palliative care
- ACF residents & SPC
 - comprise over 1/4 of all referrals to MCPC
 - have different diagnoses cf. general SPC population
 - most have at least 1 other serious comorbidity
- Patients with primary diagnosis of cancer referred earlier – longer episodes, higher performance status, more stable (P1) & less likely to die between referral and admission
- Nearly half of referrals are urgent. Associated with shorter episodes and higher chance of dying prior to admission.

Summary



- No difference in mortality between diagnostic groups
- Similar prevalence of pain across dementia, cancer & organ failure groups
- Severe symptoms possibly less frequent in dementia group
 - Potential communication barrier
- Moderate-severe psychological distress more frequent in organ failure group
- 42% of patients are experiencing physical symptoms graded at least moderately severe on admission

Areas for improvement



- Referral timeliness & recognise need for SPC
 - Especially for non-malignant groups
 - Identification of referral request
- Responsiveness for urgent referrals
 - Flexibility for anticipatory referrals: model of care
- Background education and support for organ failure patients
- Differentiate palliative approach from SPC eg. patients with no symptoms

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