



**Calvary**

Effect of a proactive model of Palliative Care service delivery in Residential Aged Care Facilities on hospitalisation and location of death

Continuing the Mission of the Sisters of the Little Company of Mary

# Project Partners

Calvary Health Care ACT  
Clare Holland House SPC  
service Canberra

Goodwin Aged Care  
Services Canberra



# Palliative Care Services Plan 2013- 2017 (ACT Health)



# How can we improve palliative care outcomes for people living in residential aged care?

- 51% Australian dying in acute hospitals
- Nationally 10% dying in Residential Aged Care

# Why do more Australian's die in hospital than Residential Aged Care?

- Lack of knowledge in the community re hospitalisation and end of life care
- Few financial incentives for GPs for RACF home visits and extended consultations
- High turnover of RACF staff can lead to variations in knowledge of palliative care
- Limited specialist palliative care services available

# The Pilot Study

- 12months funding for PCNP
- Clare Holland House partnered with Goodwin Aged Care Services - 4RACF's = 350 residents
- 9 months pilot study 4 Nov 2014 – 4 Aug 2015
- All other facilities in Canberra (22) received “usual care” during the trial so no one was disadvantaged

# What was the new model?

- Integrated model SPC partnering with RACF's to implement the Palliative Approach (PA) Toolkit with two additions –
  - **Palliative Care Needs Rounds (PCNR)** at the pilot sites
    - Education Pall Approach needs V's SPC needs
    - Identify residents for **case conferencing**  
GOCD, ACP
    - Referrals out
  - **Add goals of care discussions (GOC)**

# One Residents experience

- Discussed at the PCNR
- SPC referral
- SPC Assessment and management plan established
- Case Conference
- GOCD
- ACP completed
- Improved quality of life





# Methods

## **Sample** (from 4 Goodwin facilities)

- Intervention: 104 residents identified with Palliative care needs using the PA toolkit or who died during the pilot
- Control: all decedents that the facilities had complete data (173)

## **Data matching**

- We match all decedents in the intervention (58) against the 173 controls based on age, sex, age-modified Charlson score, primary diagnosis and ACFI using propensity score matching.

# RESULTS



# Results

## Demography

- Female: 75% (intervention) vs. 62% (control);  $p = 0.05$
- Dementia: 40% (intervention) vs. 29% (control)
- ACP: 64% (intervention)
- Goals of care discussion: 79% (intervention)

# Hospitalisation (3-month prior death) / Hospital death

	Treatment effect	p-value	95% Confidence Interval	
Hospital visits	0.07	0.71	-0.31	0.45
Total length of stays	-2.17	0.02	-4.01	-0.32
Hospital Death	-0.11	0.31	-0.33	0.10

- After matching the two groups, for the **full sample**, we find:
  - Insignificant change in hospital visits ( $p = 0.71$ );
  - **45% reduction** in overall length of hospital stays (an average of **2.17 days reduction** with  $p = 0.02$ );
  - Insignificant change in the no. of hospital deaths ( $p = 0.31$ ).



CLUBHOUSE

# Hospitalisation (3-month prior death) / Hospital death

	Treatment effect	p-value	95% Confidence Interval	
Hospital visits	0.20	0.35	-0.22	0.63
Total length of stays	-3.22	<0.01	-5.05	-1.40
Hospital Death	-0.10	0.04	-0.20	-0.00

- After we **exclude between-rounds referrals/non-referrals**:
  - Insignificant change in hospital visits ( $p = 0.35$ );
  - **67% reduction** in overall length of hospital stays (an average of **3.22 days reduction** with  $p < 0.01$ );
  - **10% reduction** in hospital deaths ( $p = 0.04$ ).



# Hospitalisation (3-month prior death) / Hospital death

	Treatment effect	p-value	95% Confidence Interval	
<b>Hospital visits</b>	0.34	0.09	-0.05	0.73
<b>Total length of stays</b>	-2.00	0.03	-3.80	-0.20
<b>Hospital Death</b>	-0.16	<0.01	-0.24	-0.07

- For those with **SPC referral**:
  - Insignificant change in hospital visits ( $p = 0.09$ );
  - **42% reduction** in overall length of hospital stays (an average of **2 days reduction** with  $p = 0.03$ );
  - **16% reduction** in hospital deaths ( $p < 0.01$ ).



# Preferred place of death (PPoD) Intervention Group

- 58 deaths in the intervention group
- 76% (n = 44) documentation PPoD
- Of the residents with known PPoD - **100% died PPoD**
  - 4 hospital 9%
  - **39 RACF 89%**
  - 1 Hospice 2%

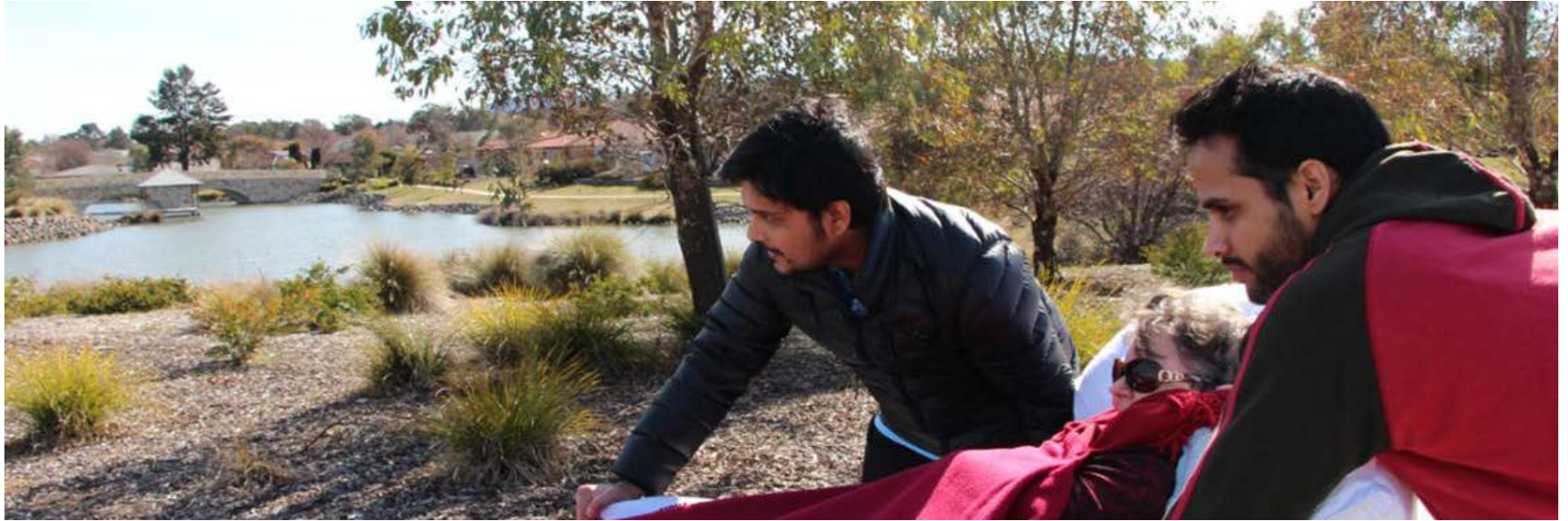
# Cost Savings

- Reduction in overnight hospital stays by 2.17 days (full sample)
- Based on the **3-month** assessment window of hospitalisation, conservative estimate of cost saving due to lowering hospital bed occupancy if all 104 residents in the intervention group died would be:  
**\$207,174**  
and this far exceeds the salary of the PCNP.

# Conclusion

The model demonstrated that it was:

- Logical
- Feasible
- Efficacious
- Acceptable



The next step:

Further research work is needed

# Thank you -Goodwin Aged Care Services

Thank you to all Goodwin Staff- Special thank you

**Robyn Boyd**

Executive Manager of Residential Care

**Tamra McLeod**

Aged Care Nurse Practitioner



**GOODWIN**

**THE BETTER LIFE CHOICE**

**Nikki Johnston** Palliative Care Nurse Practitioner

**Dr Michael Chapman** Palliative Medicine Specialist

**Clare Lovell** Specialist Palliative Care CNC

Clare Holland House Calvary Health Care ACT

**Prof Liz Forbat** Director for the Centre for Palliative Care Research

Health Care Bruce and the Australian Catholic University

**A/Prof Wai-Man (Raymond) Liu** Associate Professor/Deputy

Director of Research Australian National University

