

## Background

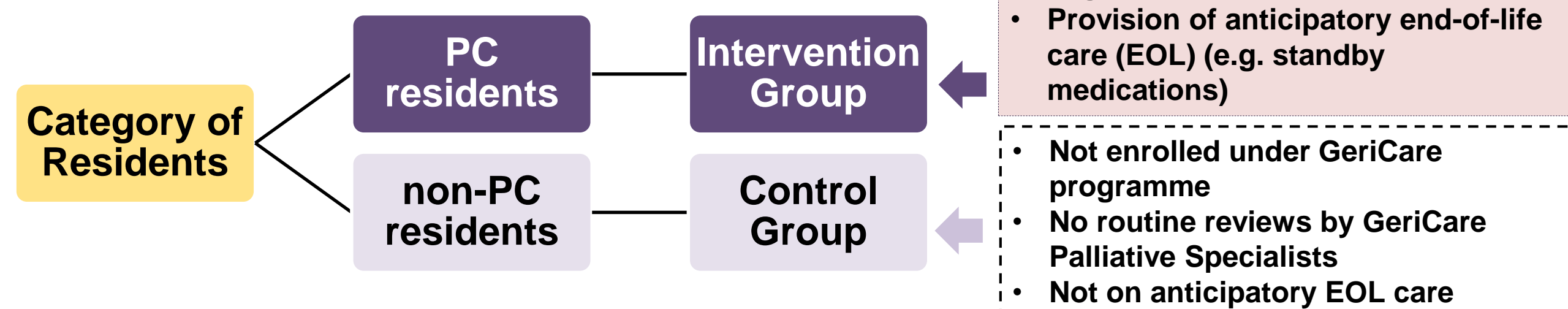
- Early identification of palliative care (PC) needs, and provision of PC can improve quality of life<sup>1</sup> and reduce acute healthcare utilisation<sup>2</sup>.
- GeriCare is an interventional programme that screens for and provides PC to nursing home (NH) residents with PC needs.

**Aim:** To investigate the impact of GeriCare interventions on NH residents in their last year of life.

## Methodology

GeriCare of Yishun Health conducted a retrospective study of all residents who died in 2022 from 5 NHs using the data sets collected from January – December 2022.

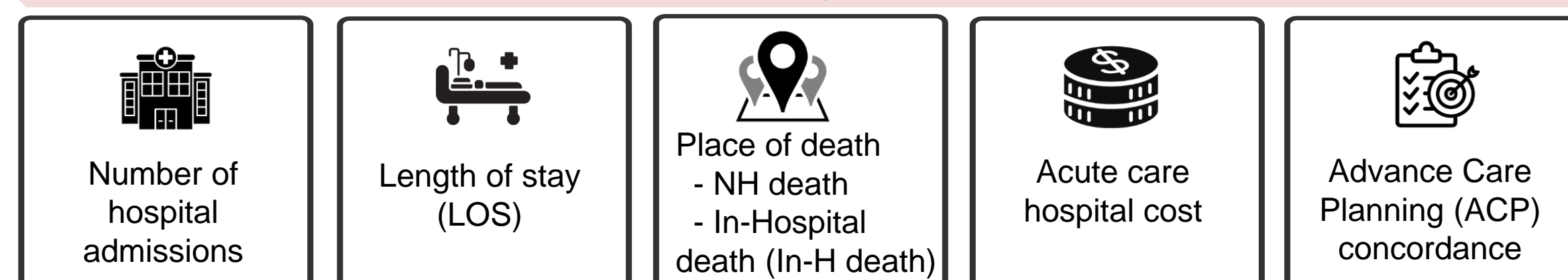
**Differentiating characteristics of the sample group** (i.e. Category of Residents):



**Geriatric Palliative Screening Criteria for Nursing Homes Residents (Abbreviated)**  
Please refer to GeriCare if ANY one of the following criteria is met.

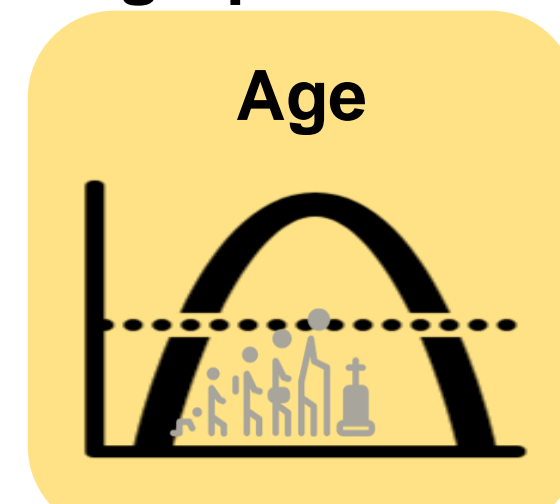
Needs PC based on medical status (e.g. end-organ failure, advanced cancers, on-going serious condition, advanced neurological disease), not for curative treatment.	Frequent hospital admissions (e.g. 3 or more admissions in the last 12 months).
Progressive functional decline within the past 6 months (e.g. wheelchair bound to bed bound, loss in appetite, weight loss, frequent falls).	Any other reasons that resident may benefit from GeriCare support? (e.g. family support, complex communications, etc.)

A comparison between **PC residents** and **non-PC residents** in their last 1 year of life was done in the following areas:

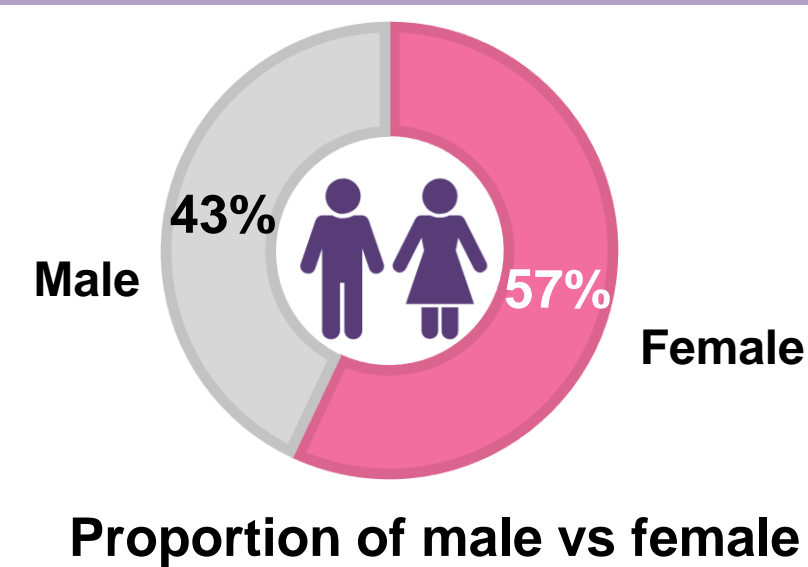


## Results

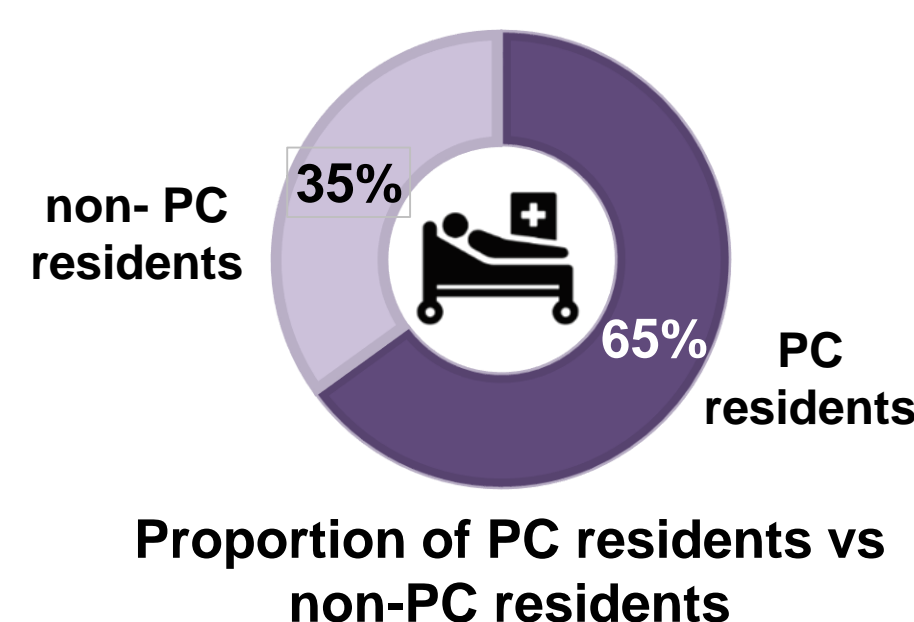
### Demographics



- N= 157 decedents
- Age range: 21 – 108 yrs old
- Mean age: 82 yrs old

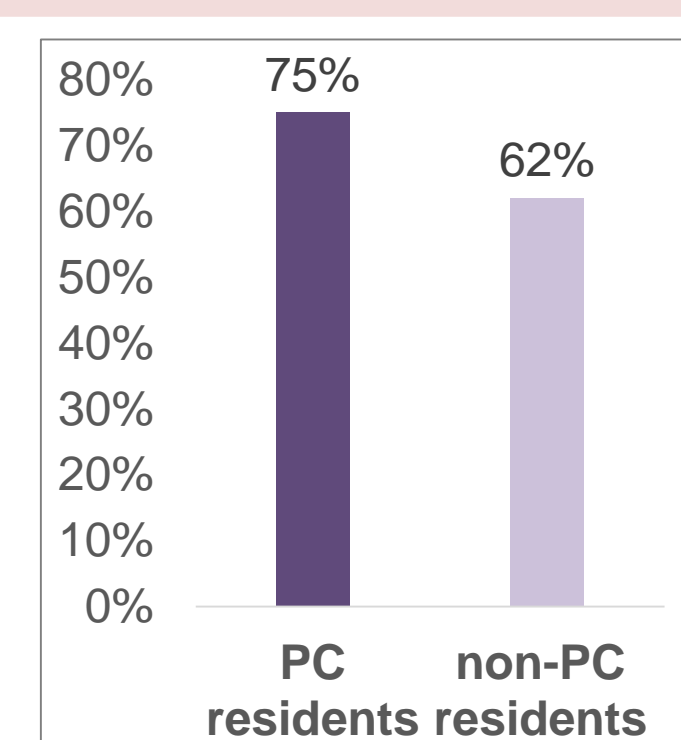


Race distribution	
Chinese	89.8%
Others	4.5%
Indian	3.8%
Malay	1.3%
Eurasian	0.6%

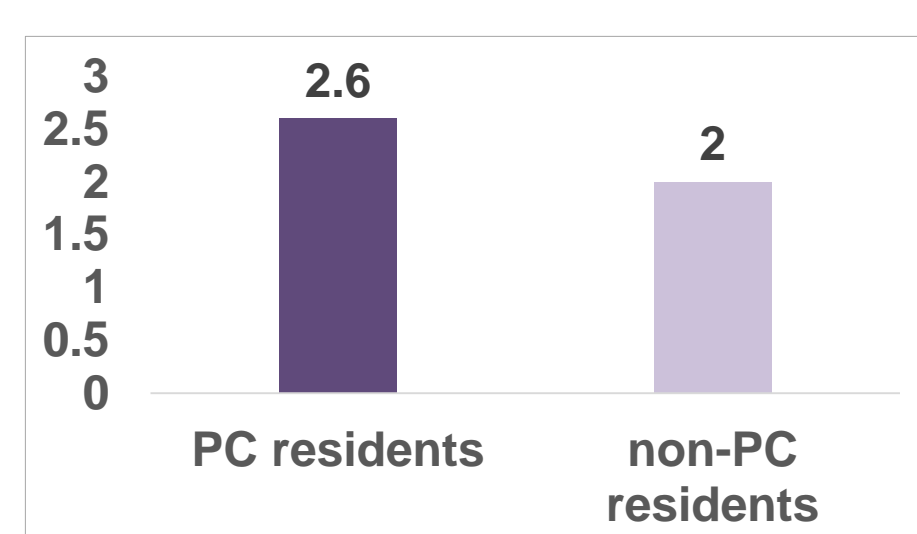


### 1. Comparison between PC residents and non-PC residents on hospital admission in the last 1 year of life

Compared to non-PC residents, more PC residents had hospital admissions and had more admissions per resident per year.



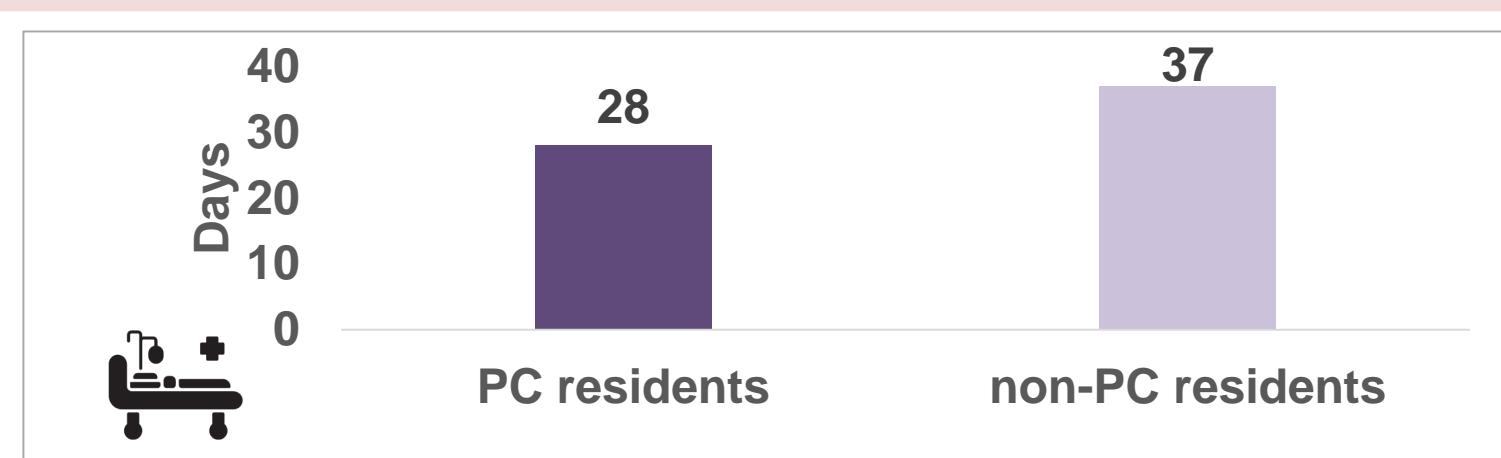
Hospital admissions in last year of life



No. of admissions per resident per year

### 2. Comparison between PC residents and non-PC residents on hospital LOS

PC residents had lower hospital LOS per resident per year than non-PC residents.

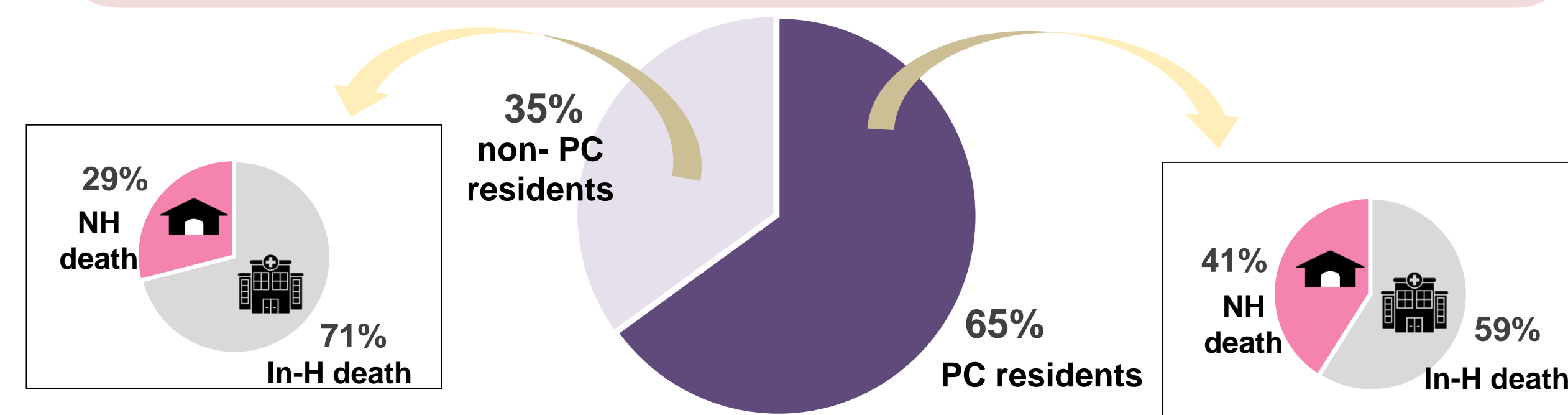


Avg. hospital LOS per resident per year

## Results (continued)

### 3. Comparison between PC residents and non-PC residents on place of death

More PC residents died in the NH than non-PC residents (41% vs 29%).



### 4. Comparison between PC residents and non-PC residents on acute care hospital cost

PC residents had lower acute care hospital cost per resident per year than non-PC residents.

Table 1. Acute care hospital cost per resident per year

Category of residents	Cost per resident per year	Percentage of total cost per resident per year
PC residents	\$ 22, 646	43%
non-PC residents	\$ 29, 478	57%
Total cost per resident per year= \$52, 124		

↓ 14%  
Hospital cost in PC residents

### 5. Comparison between PC residents and non-PC residents on ACP concordance

Concordance to PPOC was better met for PC residents than non-PC residents, but concordance to PPOD was inversely proportional.

Table 2. ACP concordance for care preferences and place of death

Category of residents	Concordance to Preferred Plan of Care (PPOC)	Concordance to Preferred Place of Death (PPOD)
PC residents	98%	56%
non-PC residents	92%	75%

## Discussion and Conclusion

### Discussion:

#### Early identification of PC needs

- Similar to other reports<sup>1</sup>, this study showed that actively identifying residents who would benefit from PC resulted in increased use of PC services in care settings (e.g. NHs).

#### Impact of PC interventions in NH on hospital LOS & healthcare cost

- While PC residents require more hospitalisations than non-PC residents, our findings showed that PC residents tend to have shorter LOS and incur lower cost, which could probably be attributed to the synergistic interventions provided in NHs such as provision of PC, education and training of NH staff and discussions amongst NH & hospital care teams, residents and families on main goals of care.

#### Effect of a PC programme on residents' last year of life

- Parallel to other reports<sup>3,4</sup>, our study tends to demonstrate that residents who are receiving PC in the NH are likely to die in the NHs. It likely implies that dying in the NHs is feasible through quality PC that supports residents' and families' goal of care.

#### Impact of an ACP initiative on quality of care & healthcare utilisation

- An ACP initiative advocates for anticipatory care, values care preferences of the residents and their families, and embraces shared decision making. ACP could guide healthcare providers in optimizing quality care, which could then potentially prevent unnecessary utilisation of resources<sup>5</sup> by honouring their care preferences.

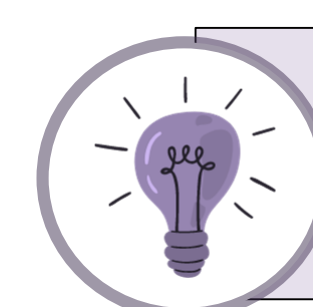
#### Limitations of the study

- However, despite the availability of PC initiatives in the NHs, it was of interest that PPOD concordance was higher for non-PC residents and 35% of the residents who died were not enrolled in the GeriCare programme. A more comprehensive study would be required to dissect the reasons for death and to explore the timeliness of enrolment into the programme.

### Conclusion:



A programme that screens for & provides PC in NH can reduce the overall hospital LOS & acute care hospital cost in the last year of life for NH residents.



An in- depth study into understanding the characteristics & diagnoses of PC & non-PC residents could improve the care process model for residents in their last year of life.



In addition, by carrying out the targeted initiatives to support NHs, the residents could die in a place where care preferences are honoured.

## References

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4. Temkin-Greener H, Mukamel DB, Ladwig S, et al. (2019). *Do Palliative Care Teams in Nursing Homes Improve the Quality of End-of-Life Care for Nursing Home Residents?* Patient-Centered Outcomes Research Institute (PCORI). <https://doi.org/10.25302/7.2019.CER.641>
5. Kwok, Y.C., Ho, Y.C., Yap, D.Y.H., Cho, W.L., Yip, T., Kwok, W.T., Wai, O.T., Ho, Y.A., Chi, Y.W., Man, L.C., & Mau, K.S. (2021, Feb 28). Impact of structured advance care planning program on patients' wish items and healthcare utilization. *Annals of Palliative Medicine*. 10 (2). <https://apm.amegroups.com/article/view/54008/html>