

# Does an Integrated Palliative Care Program Reduce Emergency Department Transfers for Nursing Home Palliative Residents?

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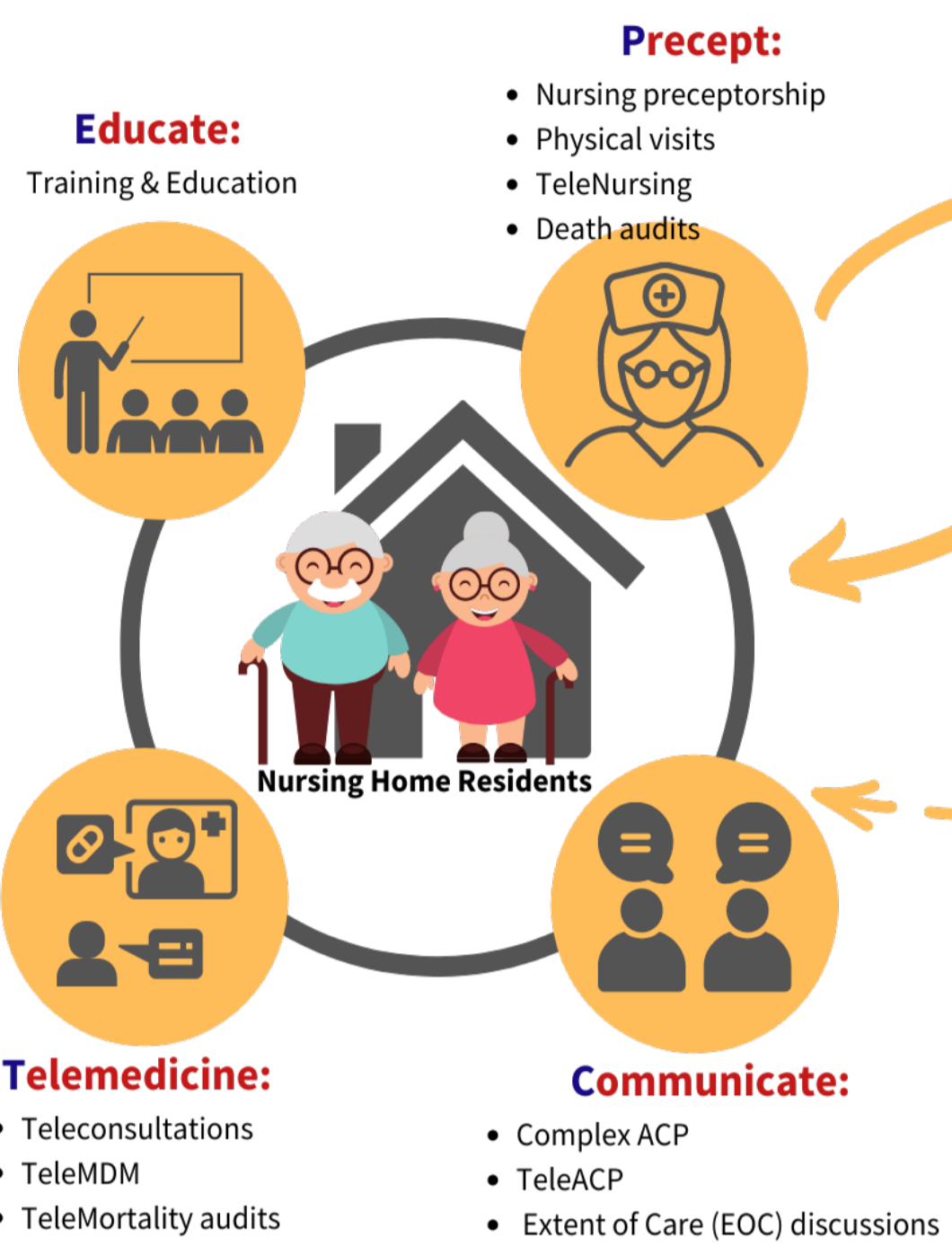
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## Background

The prevention of inappropriate Emergency Department (ED) transfer of Nursing Home (NH) residents helps to reduce iatrogenic complications and improve the quality of life, especially in palliative care residents. Studies have shown that telemedicine, weekly on-site physician visits, Advance Care Planning (ACP) and provision of education to NH staff can reduce ED transfer rates.<sup>1-2</sup> However, no study has evaluated the impact of an integrated program for NH residents comprising of all the above targeted interventions.

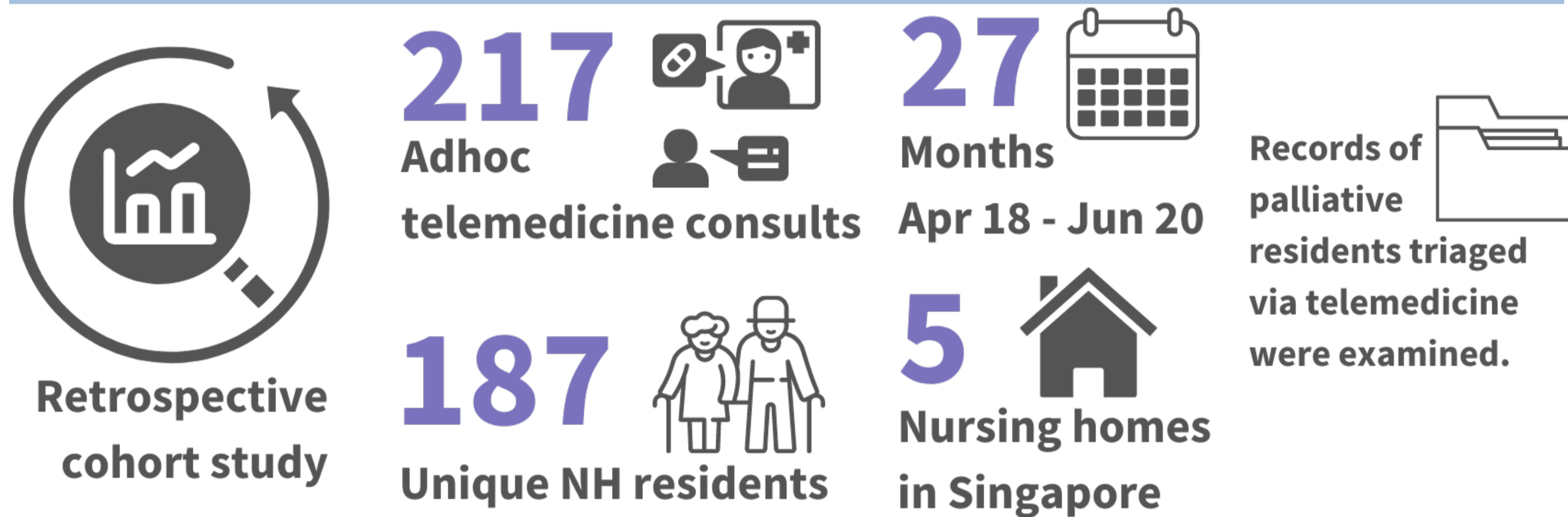
## Objective



The GeriCare Palliative program comprises of the **EPICT** model of care. In Adhoc consults, NH residents who were planned for ED transfers were first triaged by the team via Telemedicine. NHs were given support to manage residents in which ED transfers were averted using the model.

**AIM: To evaluate the impact of the GeriCare Palliative Care Program in reducing ED transfers for NH Palliative residents.**

## Methodology

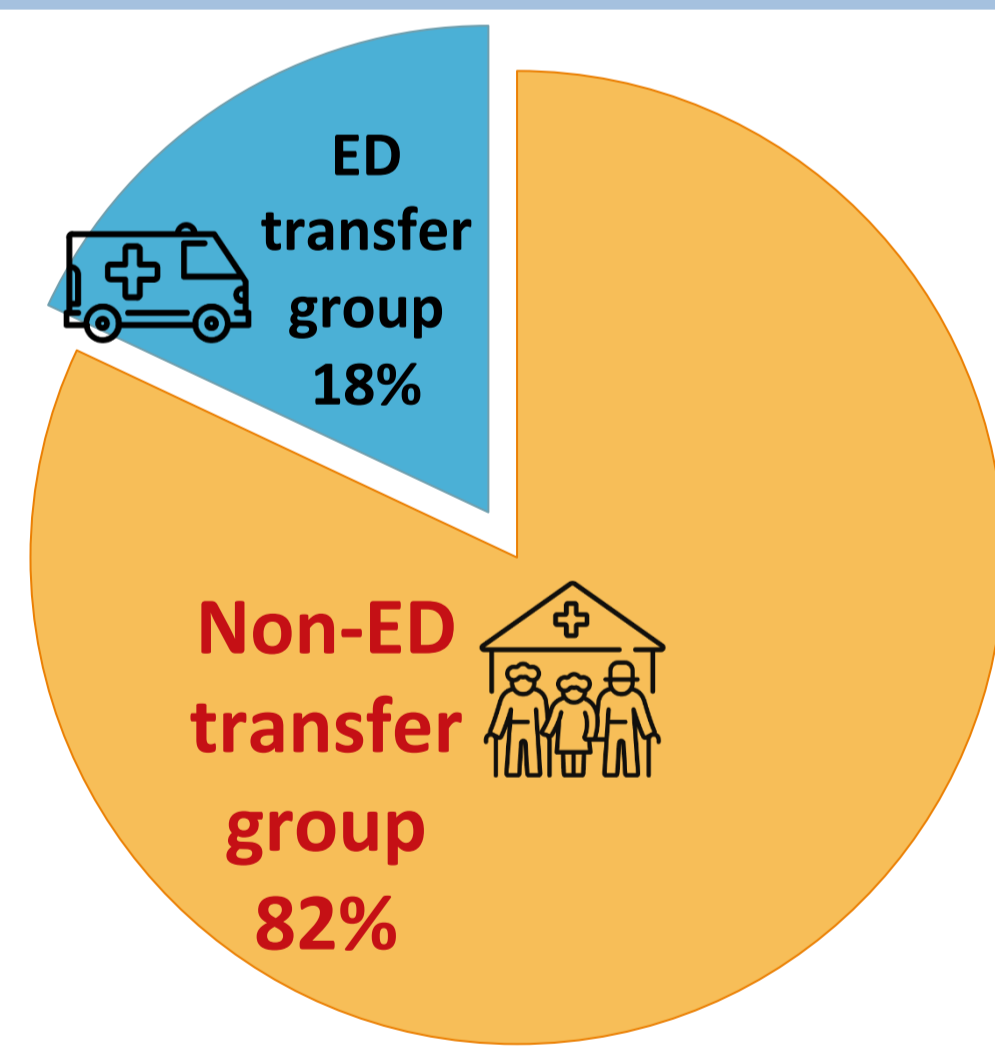


- Inclusion criteria**
- Life-limiting illness with prognosis less than one year as estimated by a palliative care nurse.
  - Residents who are symptomatic based on Edmonton Symptom Assessment Scale-Revised.<sup>3</sup>
  - Residents with two or more hospital admissions in the past year.

## Results

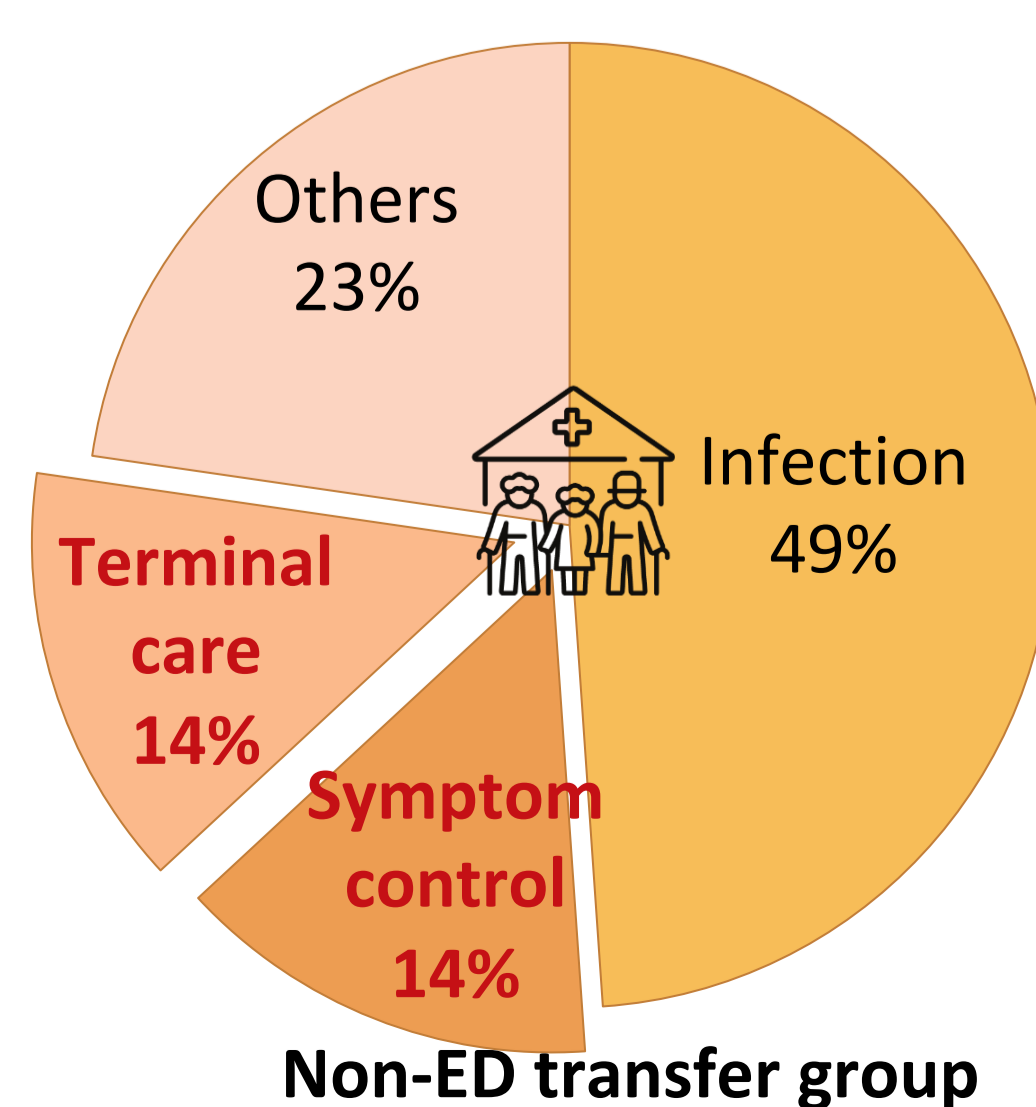
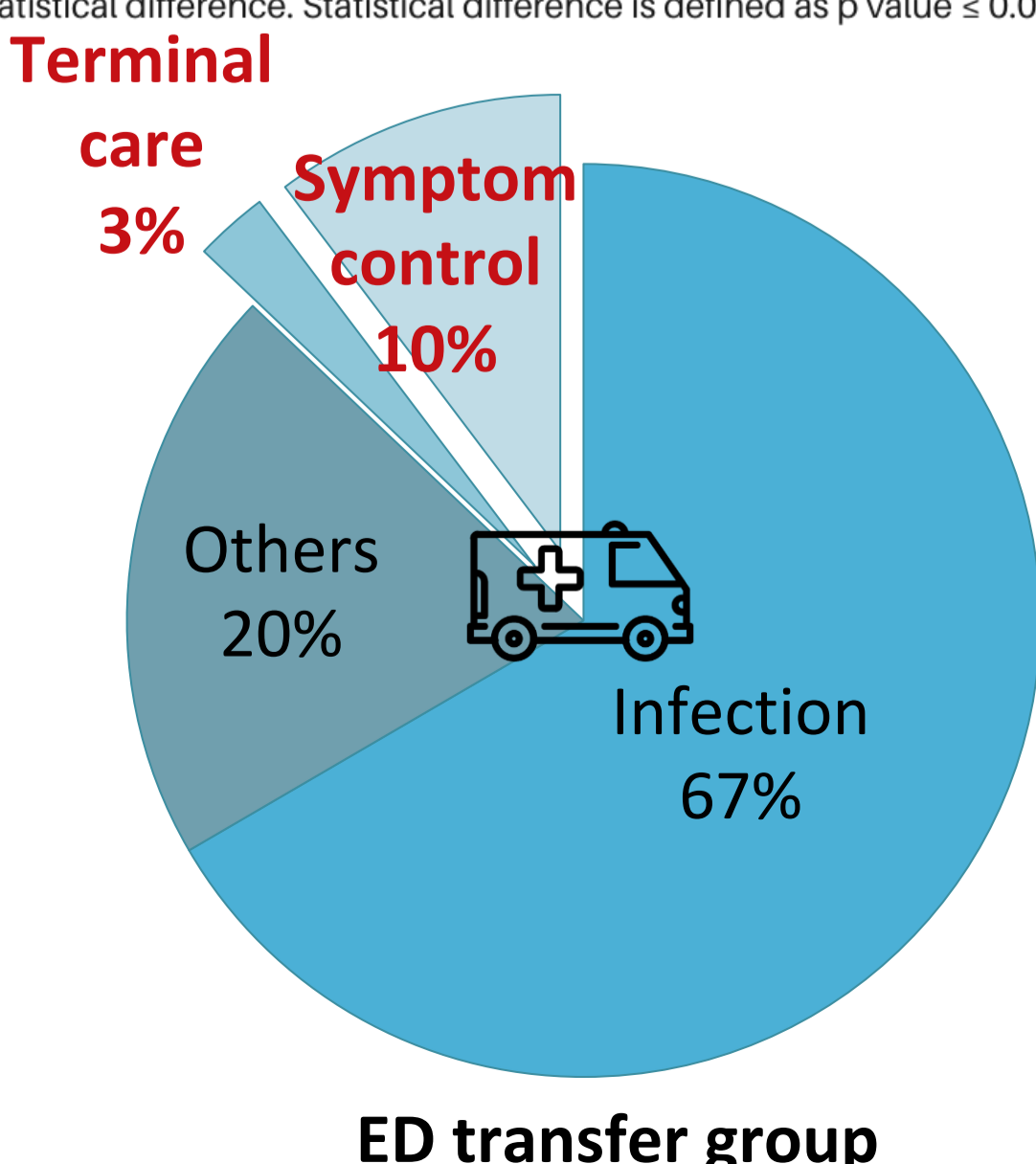
### 1. Demographics and ED transfer rates

- 82% of residents who were supposed to be transferred to ED averted transfers after adhoc teleconsultation.
- Statistically significant, more males were in the ED transfer group compared to females.
- Both groups had similar age, comorbidity and frailty scores.
- Non-ED transfer group had a higher proportion of terminal care and symptom control conditions.



ED transfer group (n = 39)	Variables (p-value)	Non-ED transfer group (n = 178)
80.3 ± 9.6	Age (0.610)	81.3 ± 11.2
28 (71.8%)	Gender (*0.002)	98 (55.1%)
11 (28.2%)		80 (44.9%)
6.9 ± 2.4	Charlson Comorbidity Index (0.531)	6.7 ± 2.4
7.1 ± 0.7	Clinical frailty score (0.214)	7.3 ± 0.8

\*Denotes statistical difference. Statistical difference is defined as p value ≤ 0.05.



Others included metabolic disorders, skin conditions and neurological conditions.

## Results (Continued)

### 2. ACP completion

More ACPs were documented in the Non-ED transfer group compared to the ED transfer group (Fig 1.)

- 43% of the male residents had documented ACP compared to 55% of the female residents in the ED transfer group.
- More ACPs documented comfort care (70% vs 21.7%) in the Non-ED transfer group than the ED transfer group (Fig 2.)

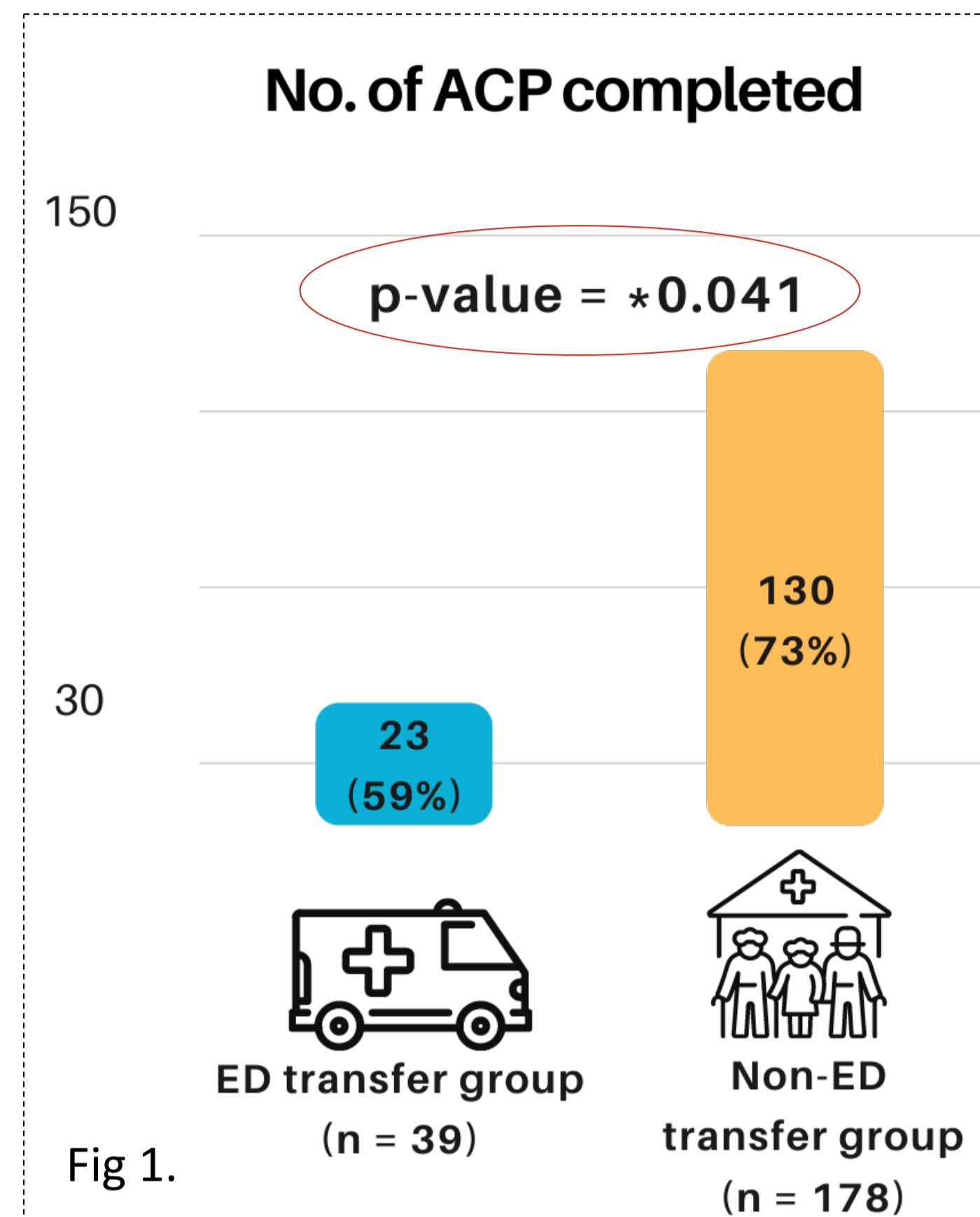


Fig 1.

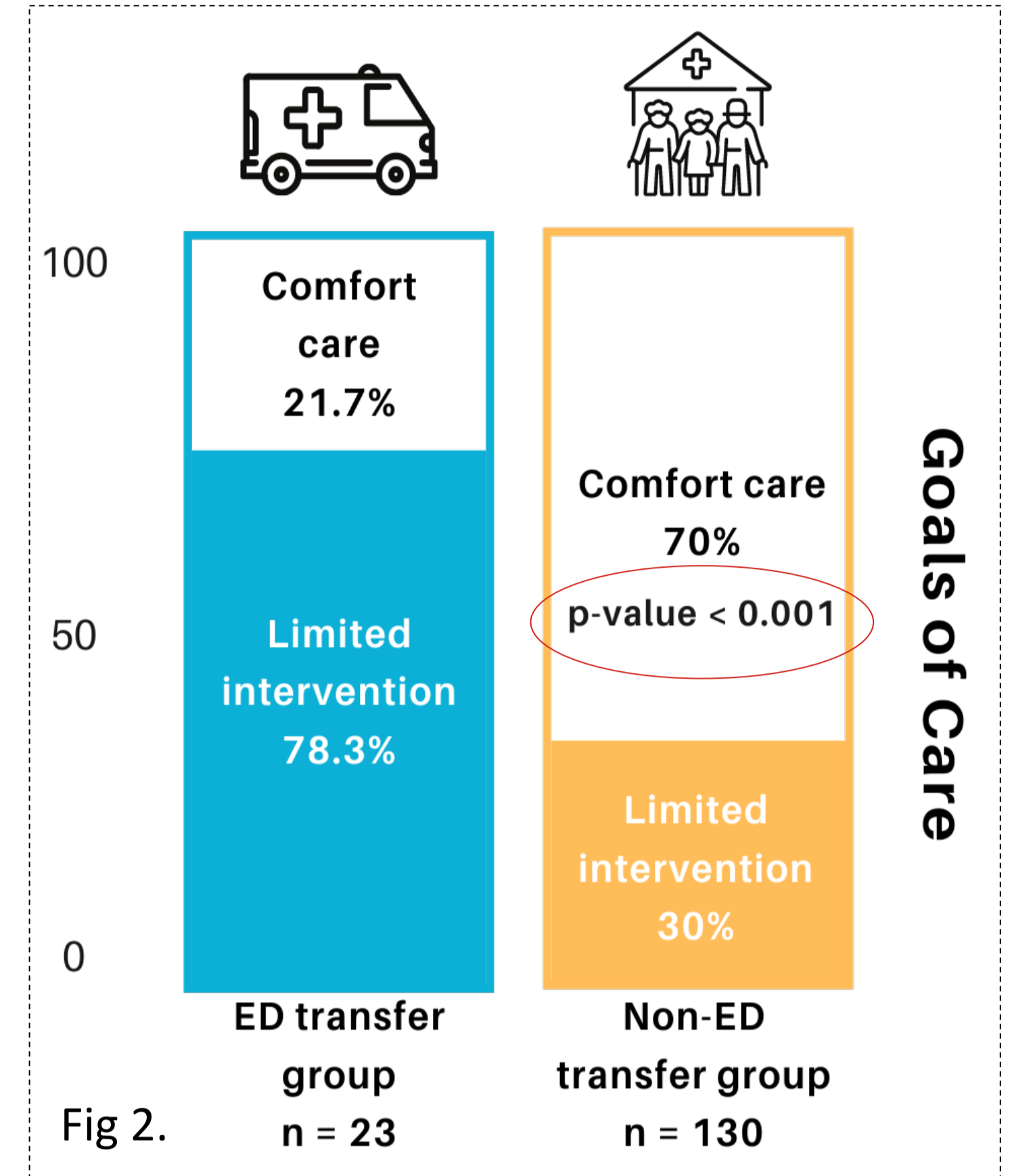


Fig 2.

## Discussion and Conclusion

Model of care	Physical visit <sup>1</sup>	Telemedicine + Training <sup>2</sup>	GeriCare Palliative Care Program (EPICT)
Reduction in ED transfers/hospitalization	36%	6% - 29%	82% ↓

**Discussion 1: An integrated program with clinical support (preceptorship and telemedicine), ACP advocacy and education program led to a significant reduction in ED transfers.**

- ED reduction rate for the program was 82%, compared to lower rates in other programs which used single or dual modality interventions.
- We hypothesized that the lower uptake rates for ACP discussion in our male residents might have contributed to the increased incidence of ED transfers.
- Analysis of residents with ACP revealed that ACP with goals of care documented as "comfort" significantly reduced ED transfers (p < 0.001).
- Suggested that preemptive discussion about End-of-Life care was pertinent in ensuring that the resident's wishes were honored, thus, avoiding unnecessary transfers.

### Discussion 2: COVID-19 Impact

- Our findings revealed that the pandemic did not affect the effectiveness of the program.
- The program enabled residents to continue to receive quality acute and palliative care through conversion of physical visits and ACP to Telemedicine, TeleNursing and Tele-ACP.
- We hypothesized that the transition of in-person preceptorship and ACP to teleconferencing platforms were effective as NH nurses were previously trained.

### Limitations

- As our study was a retrospective cohort study, which involved a modest sample of NHs, the generalizability of the findings might be limited and causation was difficult to establish.
- Further research involving a larger sample size that is inclusive of a control group would make the model of care replicable and sustainable.

## Conclusion

The GeriCare model comprises of a systematic framework, an integration of clinical support, ACP advocacy, and an education program that aims to optimize the residents' quality of life by anticipating, preventing, and alleviating their suffering across the care continuum. The GeriCare Palliative Care Program demonstrated that the whole is greater than the sum of its parts and it is possible to enable NH residents to age-in-place comfortably with targeted initiatives and adequate support.

## References

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