

# Completion of an Advance Care Plan (ACP) with patients with advanced neurological conditions, the evidence



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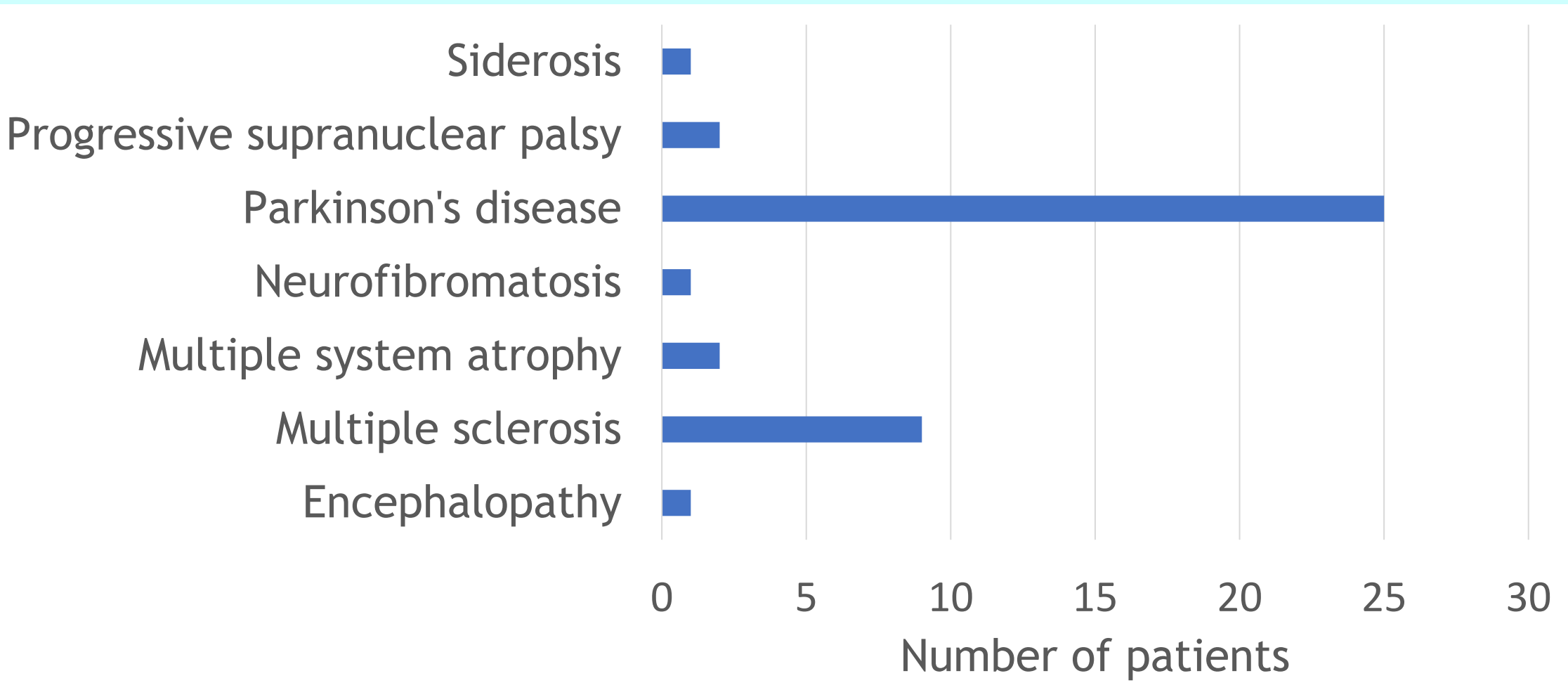
## Introduction

As a result of service development through COVID-19, a community based Speciality Doctor was recruited to write Advance Care Plans for patients with progressive advanced neurological conditions through domiciliary visits. This study seeks to understand how their Advance Care Plan (ACP) may impact patients, their primary health care provider (PHCP) and hospital admission rates.

## Methods

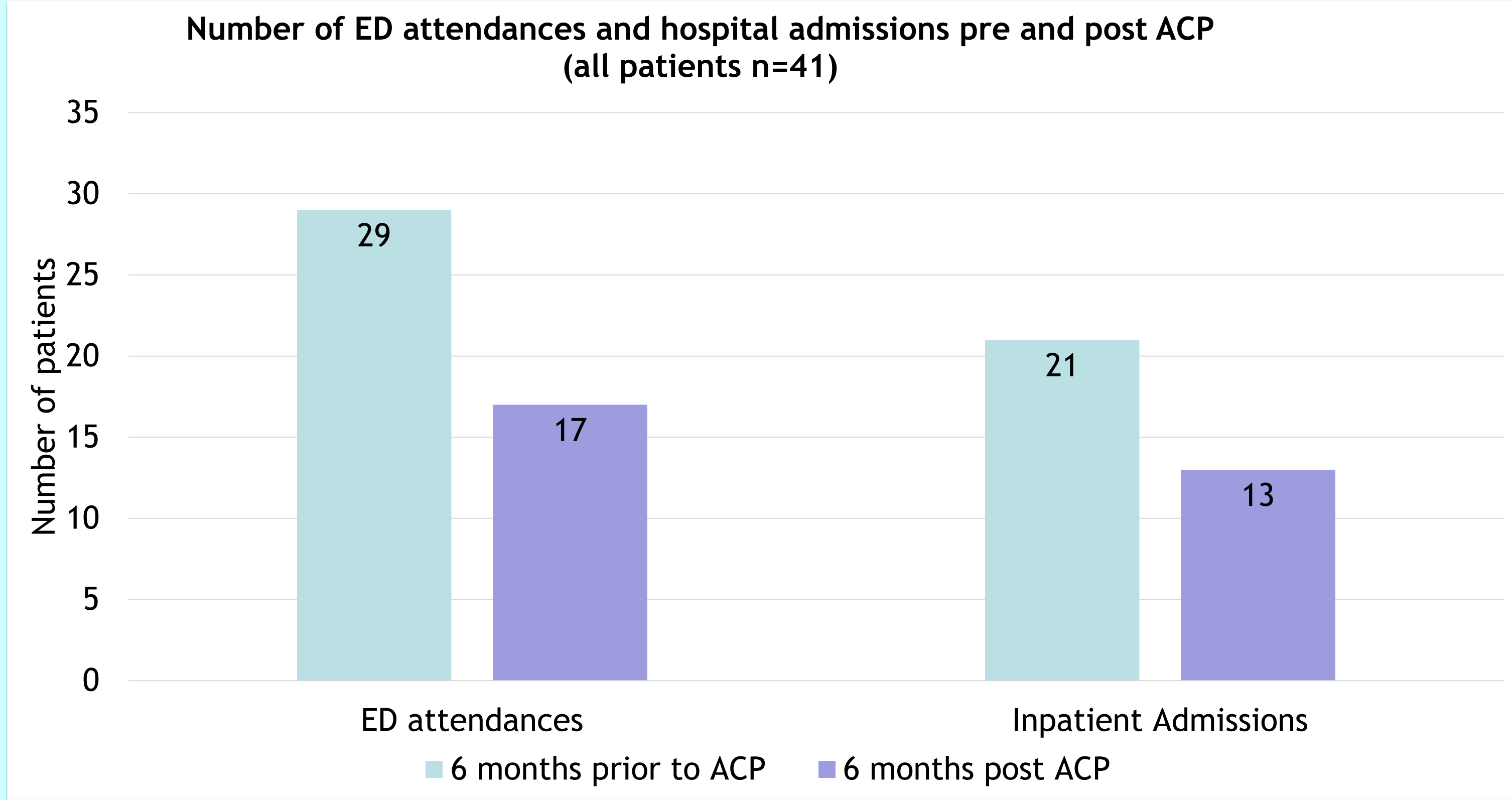
- Retrospective cohort study of 41 consecutive patients who had engaged with an advance care plan with a health care professional during the period of October 2020 to June 2021. This involved between one and six patient domiciliary visits to complete.
- Patient electronic hospital records were examined six months previous to and during each ACP process, and compared to data for a six month follow up post their ACP. Data was collected on diagnosis; number of Emergency Department (ED) attendances; number and length of hospital admissions; and date and place of death. The entire cohort of 41 patients was analysed initially, with subsequent analysis excluding patients who died during follow up to remove this possible source of bias.
- An online survey was sent to the patient's named PHCP in September 2021 about their experience of the ACP process, several patients were under the same PHCP. 9 of 26 PHCPs surveyed replied.

## Patient Diagnosis

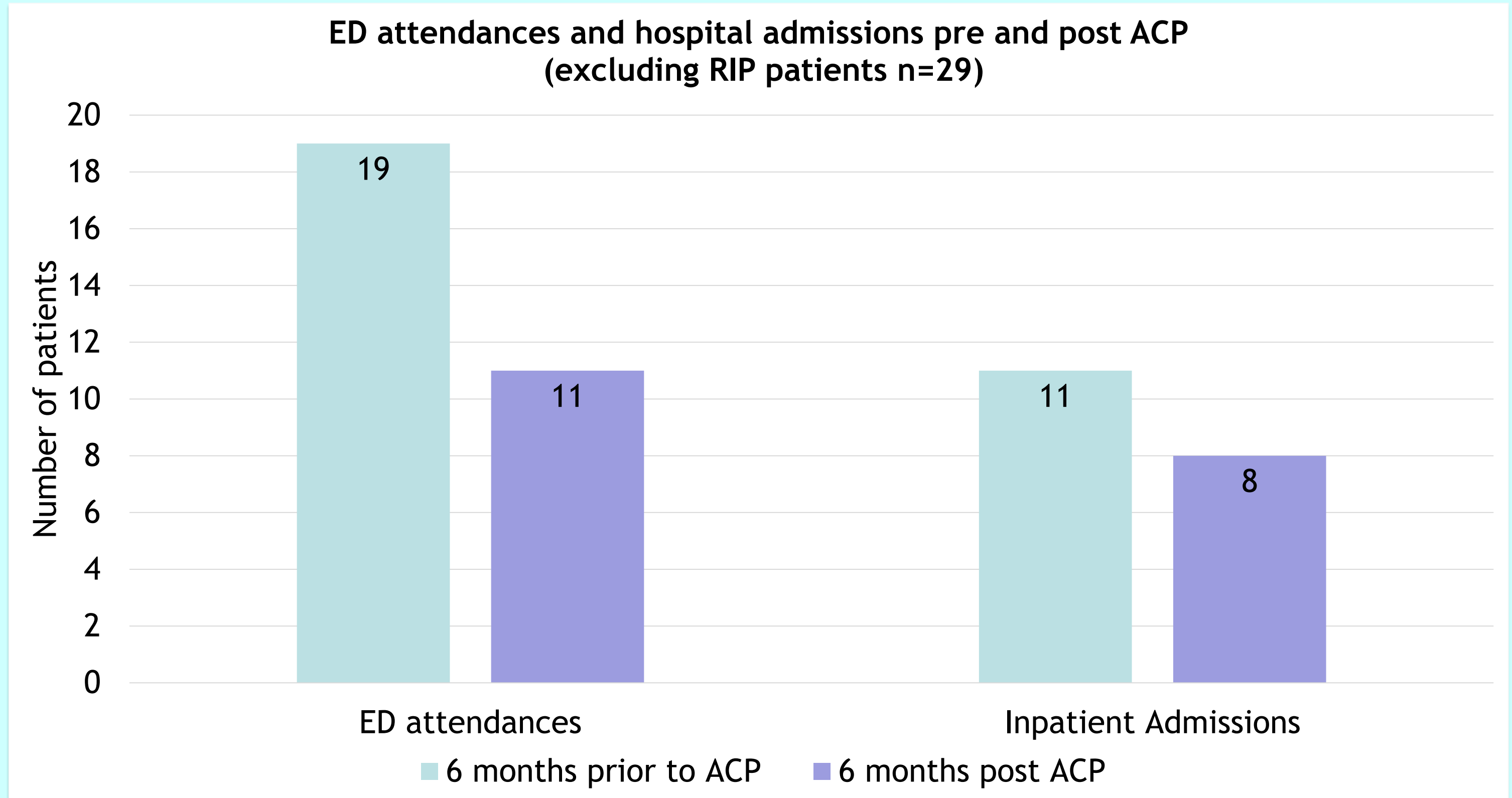


**Figure 1:** 61% had a diagnosis of Parkinson's disease and 22% had a diagnosis of Multiple sclerosis. Patients with Motor Neurone Disease were not involved as they are under a separate service.

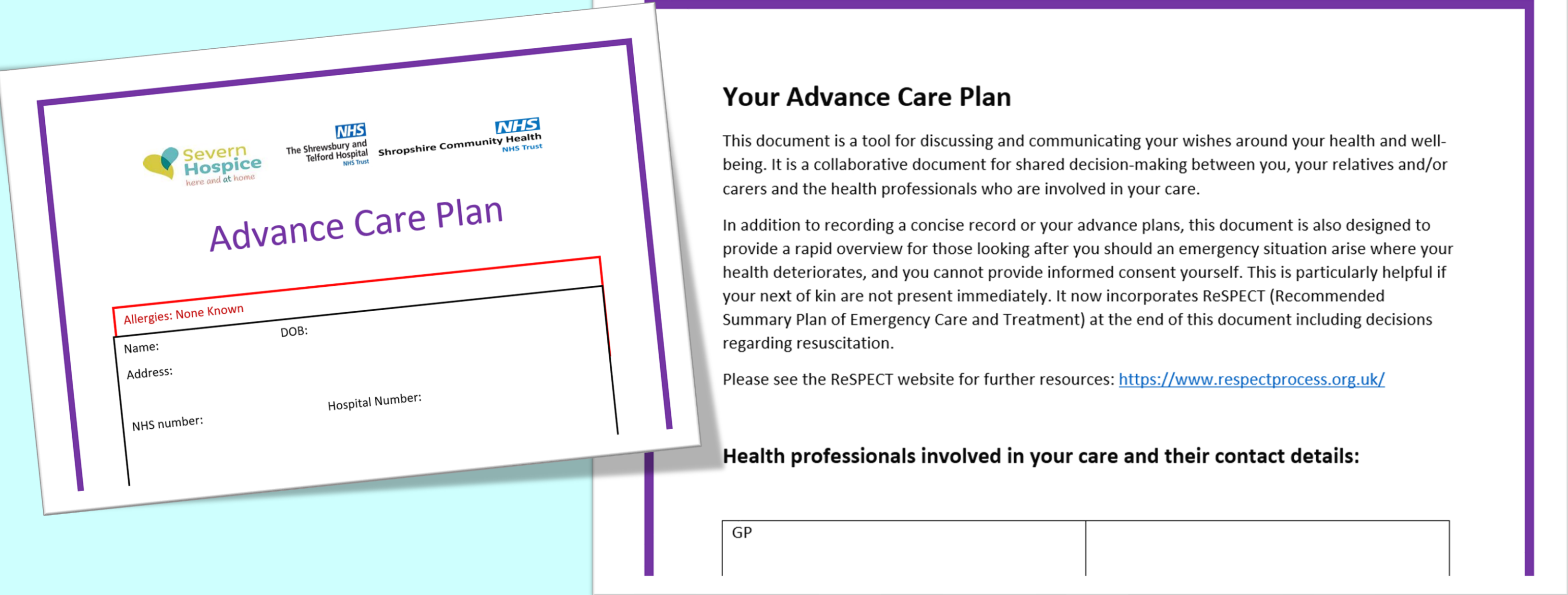
## Emergency Department attendances and Hospital Admissions reduced following ACP



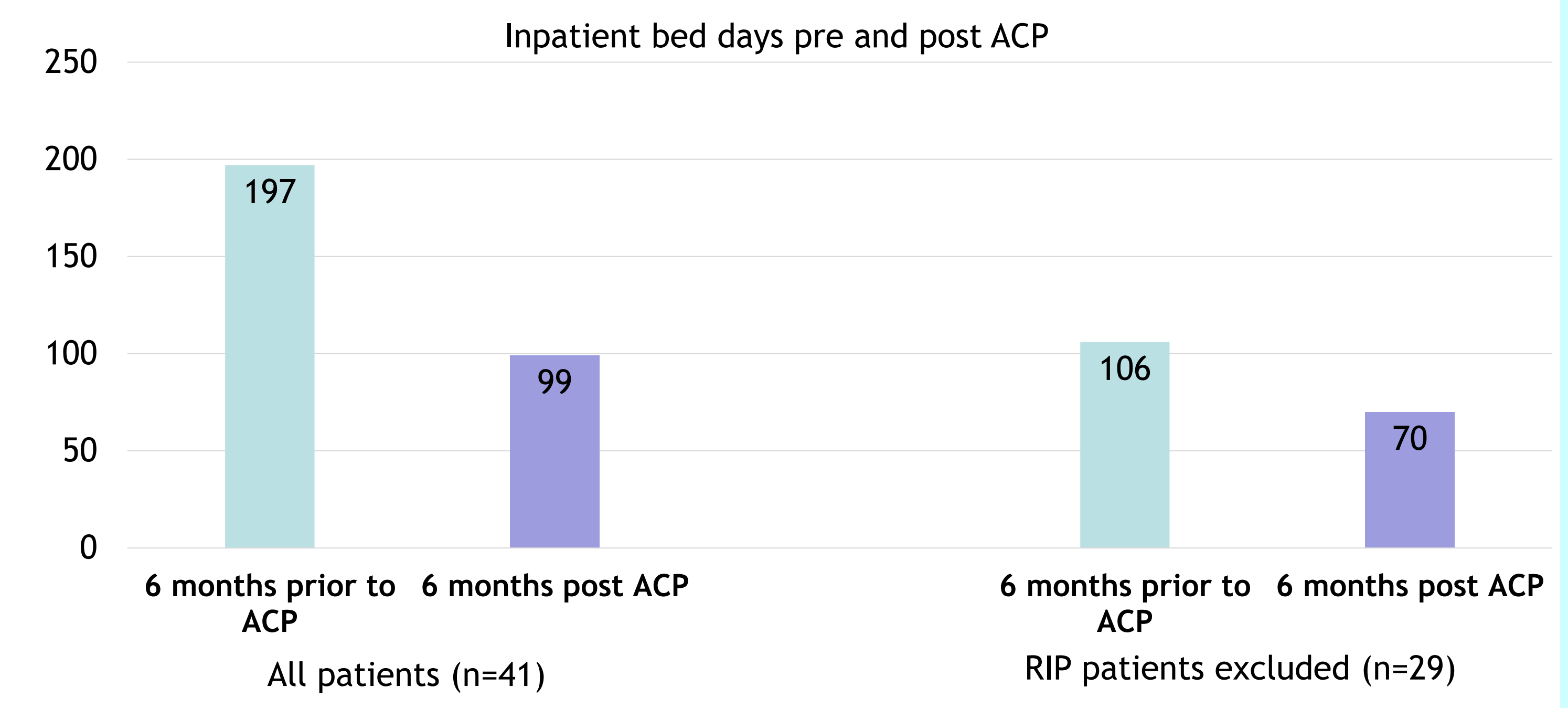
**Figure 2 (all patients):** Six months prior to ACP there were 29 ED attendances and 21 inpatient stays. In the six months post ACP this reduced to 17 ED attendances and 13 inpatient stays.



**Figure 3 (excluding RIP patients):** Six months prior to ACP there were 19 ED attendances and 11 inpatient stays. In the six months post ACP this reduced to 11 ED attendances and 8 inpatient stays.



## Inpatient bed days reduced following ACP



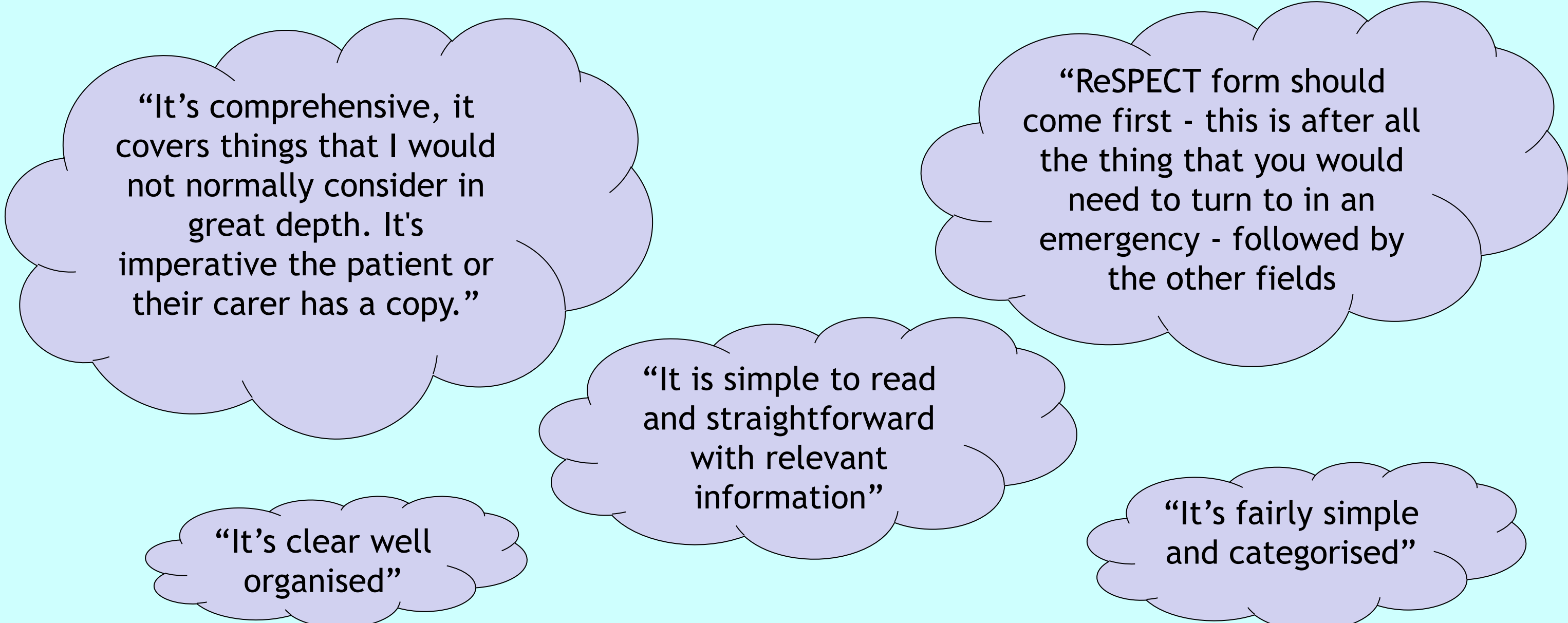
**Figure 4:** Inpatient bed days reduced from 197 six months prior to ACP to 99 days during the six months post ACP. Surprisingly, two prolonged hospital stays post ACP involved care for subarachnoid haemorrhages (26 day and 12 day stays), which may have made this number higher than expected. When excluding those patients that died during follow up, inpatient bed days reduced from 106 six months prior to ACP to 70 days during the six months post ACP.

## Patient Deaths

- 12 of 41 patients (29%) died during the six month follow up.
- All 12 patients died in their preferred place of death with just in case medications available.

## Primary Healthcare Provider Survey

- 89% (8) knew about the ACP and were able to access it.
- No clinician surveyed had used it so far to make a clinical decision.
- 89% (8) felt confident of what an ACP is (8 or above/10 self scoring) with 78% (7) confident to complete/review themselves (8 or above/10 self scoring).
- All responders felt happy for an ACP to be completed on behalf of them, concluding that it should be done by the 'most appropriate' 'experienced clinician' who 'knows the patient best'.



**Figure 5:** Excerpts of Primary Healthcare Providers opinions on the ACP document.

## Conclusions

- This study demonstrates the benefit of the ACP process to patients in terms of achieving their preferred place of death and avoiding unwanted ED attendances and hospital admissions.
- For these 41 patients, there were potentially 12 ED attendances and 8 acute hospital admissions avoided with the help of an Advance Care Plan, with a reduction in 98 bed days during a six month follow up period.
- Positive feedback was gained that primary healthcare providers were happy with the service writing an ACP for their patients, that they would be largely happy to review the document themselves and that the document itself is comprehensive but simple and well organised.
- Future work gauging patient's and carer's opinion of ACP is planned.