

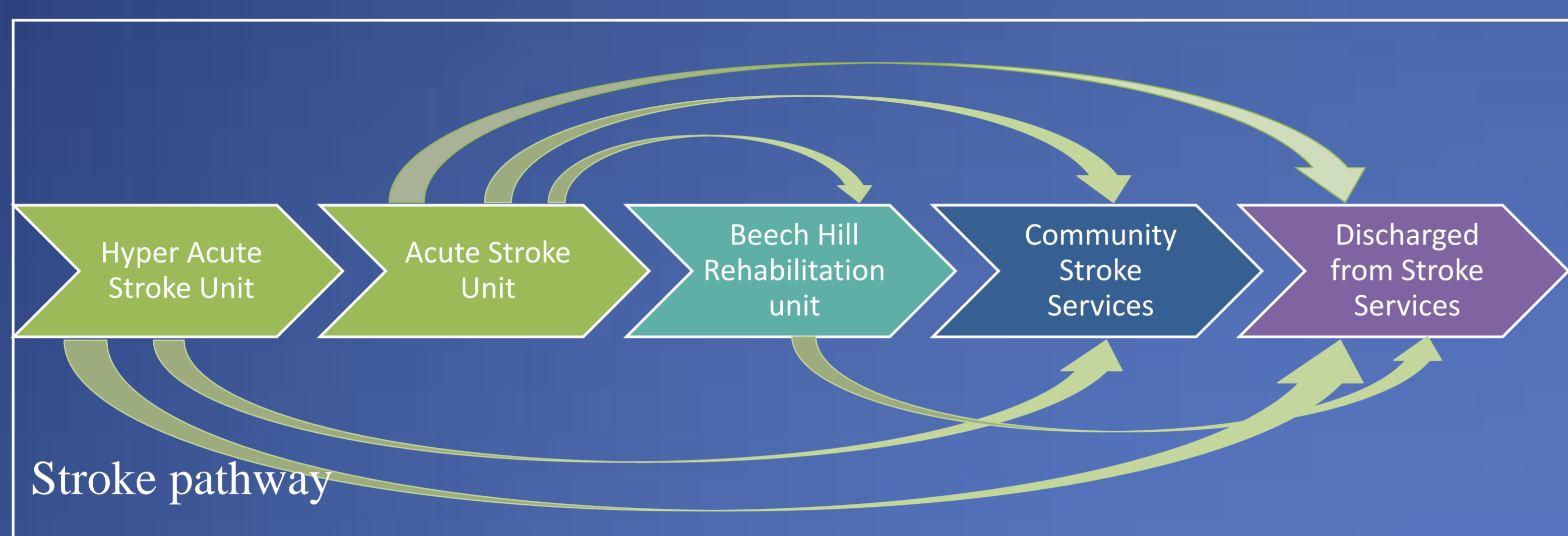
# DEVELOPMENT OF A STROKE PATHWAY PHARMACY TEAM TO SUPPORT REABLEMENT AND MEDICATION OPTIMISATION

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## Introduction

Patients on the stroke pathway within Sheffield Teaching Hospitals NHS Foundation Trust receive pharmaceutical care from admission to the acute hospital setting until discharge from the Community Stroke Service, which can be up to three months post event. In line with the latest NICE recommendations<sup>1</sup> and the updated British Association of Stroke Physicians' stroke standards<sup>2</sup>, patients who have had a stroke require pharmaceutical care as part of their multidisciplinary care throughout their time in the stroke pathway. Pharmacy teams in the acute unit and intermediate care services have inadequate resources to provide patient centred care resulting in delays or omissions in completing medicines reconciliation<sup>3</sup>, starting medicines reablement, optimising medication<sup>4</sup> and ensuring consistency in the admission and discharge processes. This project was designed to pilot a new collaborative way of working to demonstrate the hypothesis that the earlier in the stroke pathway patients are reviewed by a clinical pharmacist, and the earlier reablement with medicines can commence, the better the outcome for patients.



## Objectives for the project

- Measure improvement of medicines reconciliation rates in the acute setting
- Measure the impact of improved medicines optimisation for the patients
- Start the process of medicines reablement earlier in the pathway
- Measure the impact the above measures had on reducing medicines administration by carers in the community services and social care providers as part of optimisation of the care package
- To design processes for improved flow of information between secondary and primary care

## Method

- Study period 1<sup>st</sup> June – 31<sup>st</sup> July 2015



### Intervention group criteria:

- Any patient with the potential for reablement with their medications (e.g. were independent with their medications prior to the stroke), identified prospectively by the pathway pharmacist and followed up by pharmacy staff throughout their journey on the stroke pathway

### Control group criteria:

- Any patient on the stroke pathway who received "standard" pharmacy input – ie. no reablement assessment

### The Intervention group patients were followed through:

- Medicines reconciliation as early as possible
- Medicines reablement as early as possible
- Medicines optimisation

Both groups were assessed throughout their journey along the pathway for a reduction in care calls.

A database was designed to improve the transfer of information between secondary and primary care.

## Conclusion

Earlier reablement reduced the number of patients discharged from the service with the need for full care with medication.

The pathway approach allowed the pharmacy team to review and reable more patients compared to what was achieved by each group in isolation. Proactive reablement screening must therefore be an essential function of the team, as this offers the flexibility required to respond to the changing needs of stroke patients.

Communication between care settings was improved by a specifically designed database.

## References

1. Nice. 2015. Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes.
2. British Association of Stroke Physicians, 3.14. Updated 2014, accessed online 25/9/15
3. Laker, S. et al. Patient Safety in Medicines Management Medicines Reablement in Intermediate Health and Social Care Services.
4. Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes NICE guidelines [NG5] Published date: March 2015. Accessed online 25/9/15.

## Results

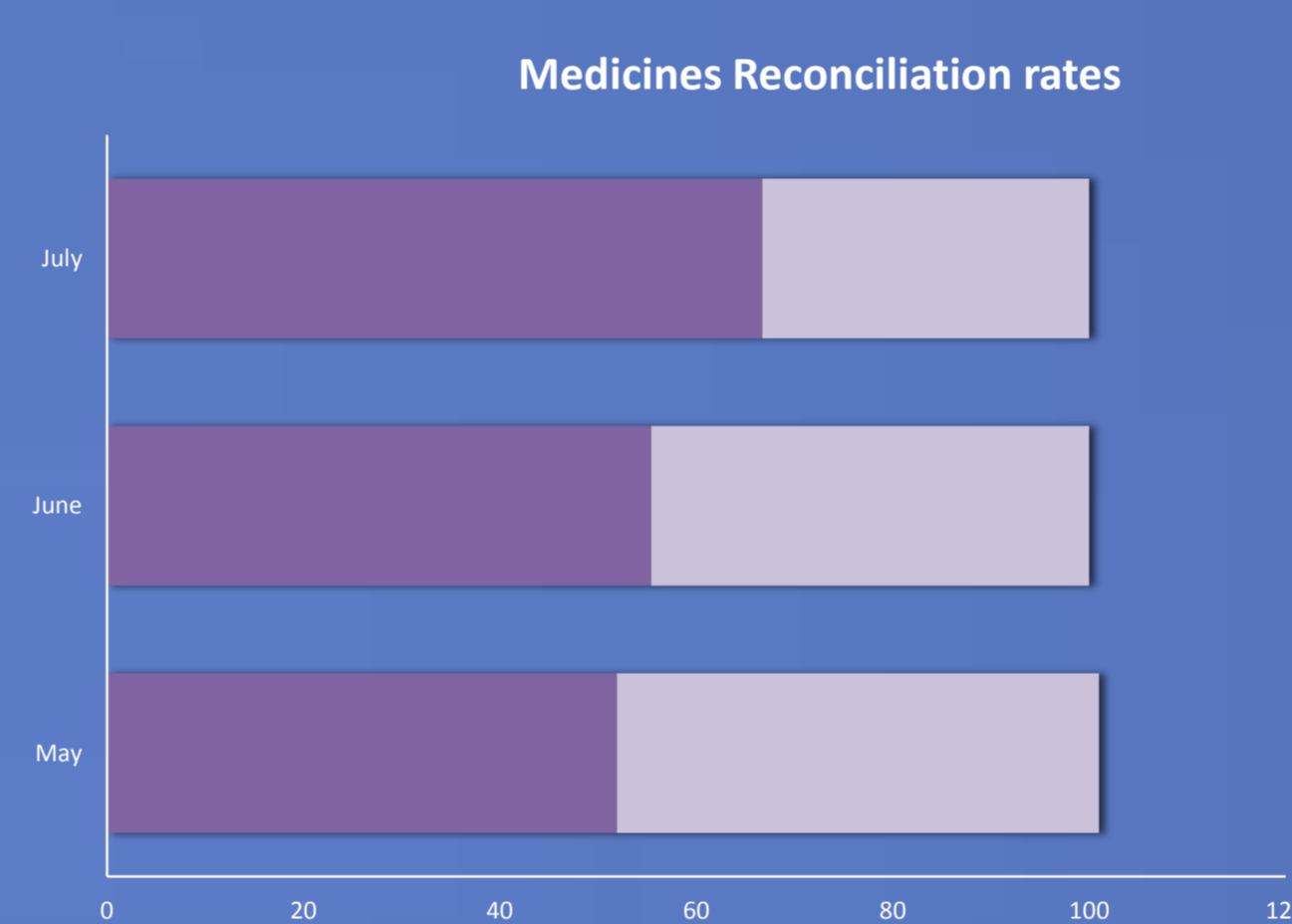


Figure 1 – Medication reconciliation

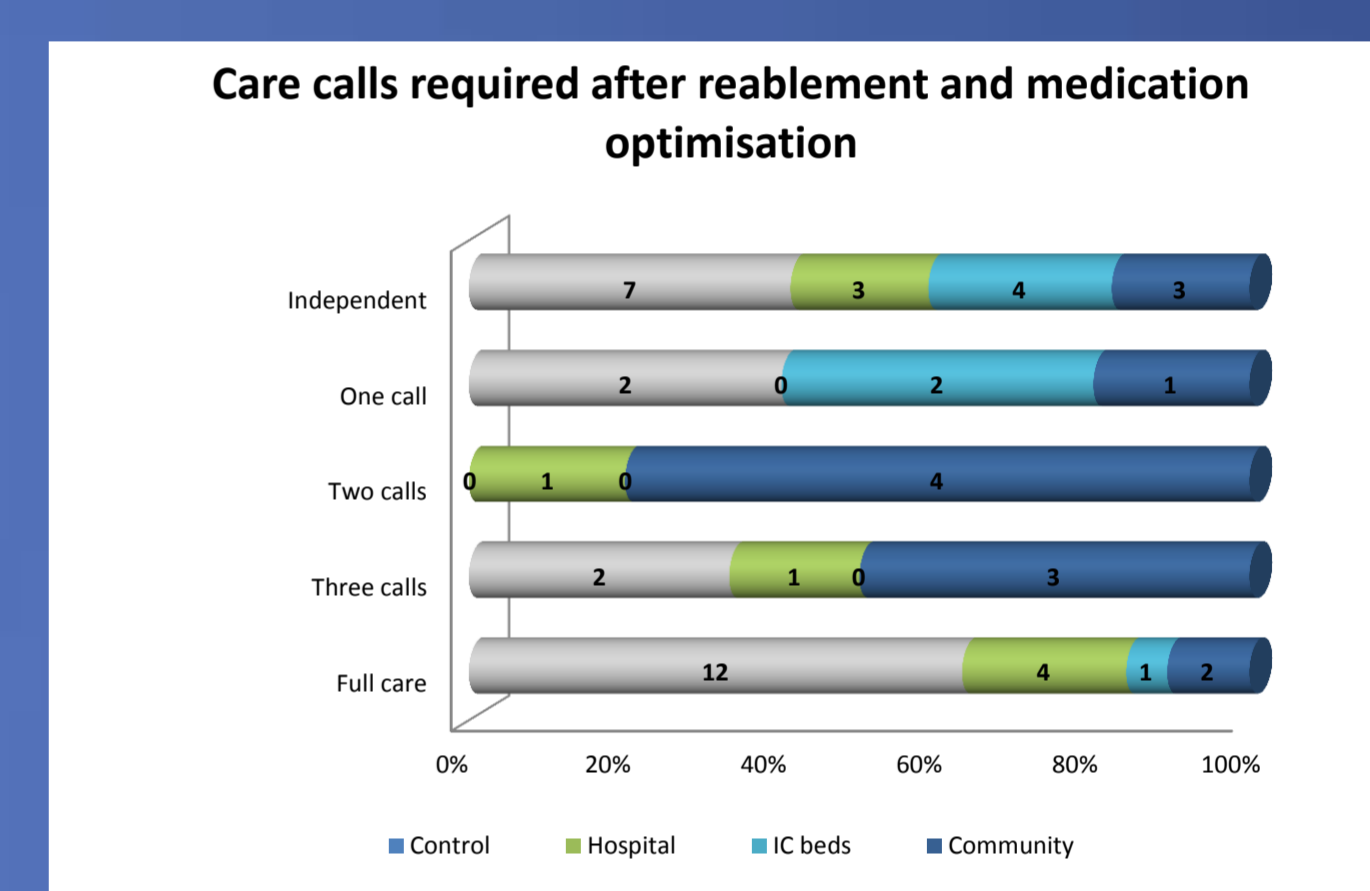


Figure 2 – Medication and care calls optimisation

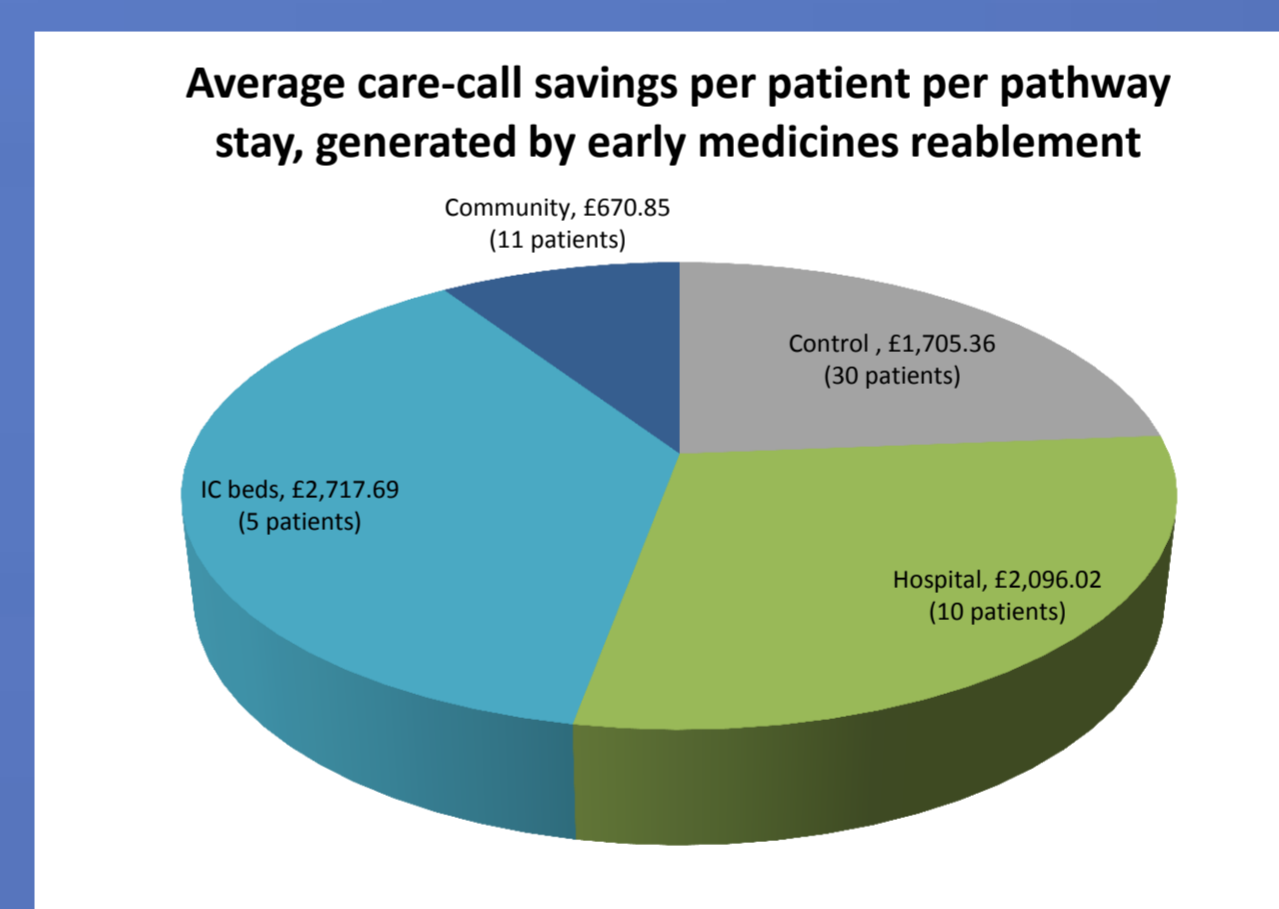


Figure 3 – Average care call savings per patient

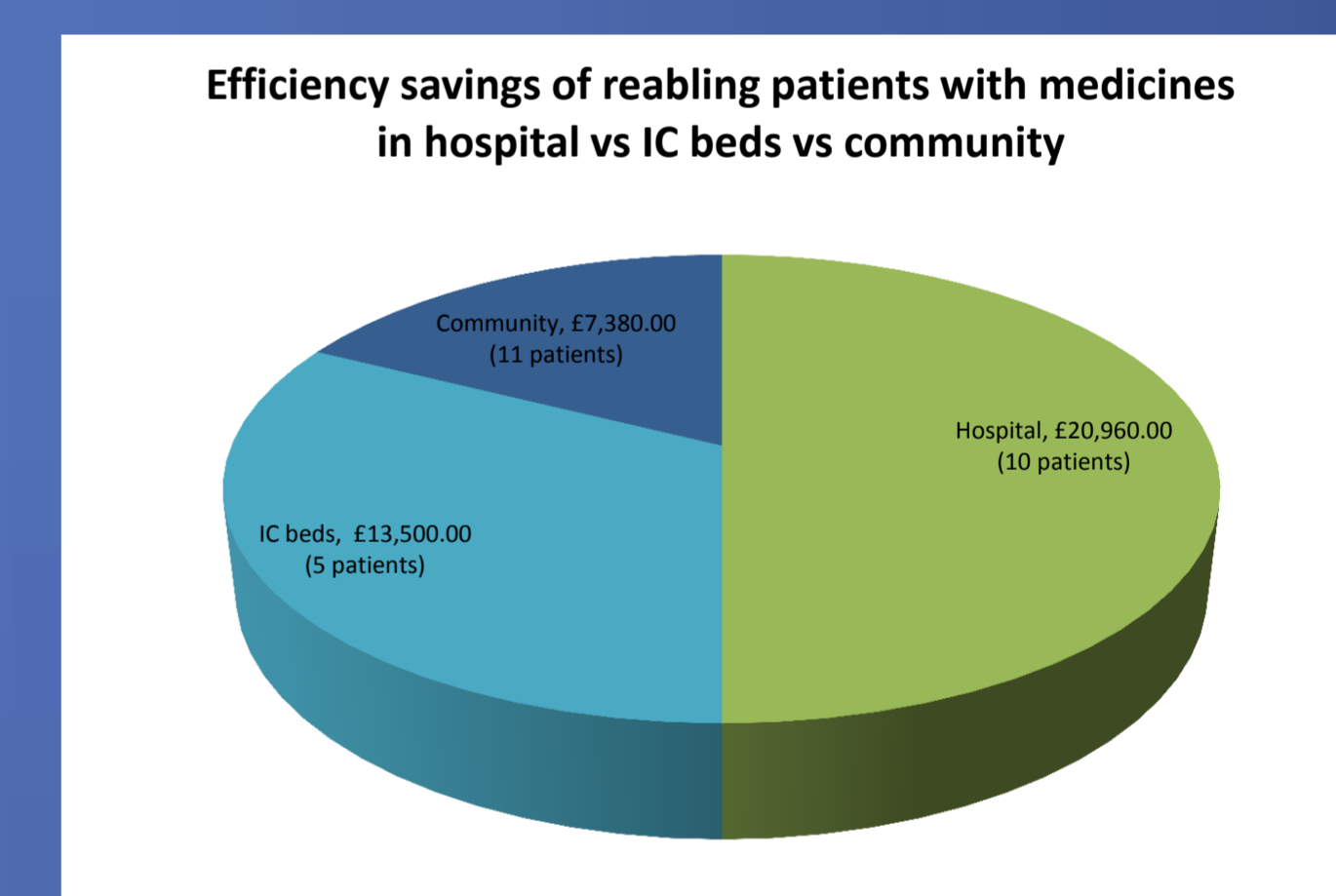


Figure 4 – Total savings generated by early reablement

## Discussion

NICE<sup>4</sup> states that medicines reconciliation should be completed at each interface of care, ideally within 24 hours of arrival. The pathway project improved these figures significantly. 100% of patients had their medicines reconciled during the project period – two-thirds of which were completed within 24 hours of admission (Fig 1).

For patients requiring some support with medication, the pathway approach was more responsive to optimise medication and tailor a care package with less need for calls involving medication administration (Fig 2). Two-thirds of patients in the study had medicines administration cut from care calls following pathway pharmacist intervention; 17 patients (31%) had medicines administration eliminated from their care packages, which reduces length of stay and addresses the incidence of patients inappropriately allocated to the different parts of the stroke pathway due to delays.

Although care calls are not always required exclusively to manage medication, the proportional amount of the call which did include medicines administration was calculated at about 1/3 of the time of the call (at least 10 minutes). This would mean that for every four patients that had medicines administration removed, the pathway pharmacy team would be reducing the length of stay of one patient in the acute trust.

For patients in the intervention group the savings were significantly higher when reablement was possible in the hospital or intermediate care beds compared to those reabled in the community because of the additional cost of travelling (Fig 3). Similarly, when comparing the total savings generated by the pathway, interventions in the hospital and intermediate care beds have the potential for substantial savings (Fig 4).