

# Design, implementation, and evaluation of a medication counselling service provided by pharmacists using teach-back at hospital discharge

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## Background and Importance

- Pharmacists can utilise teach-back as a method to enhance patients' understanding of medication counselling at hospital discharge.
- However, the evidence regarding its impact on patient outcomes is inconsistent, and there is no standardised approach in the literature to implement pharmacist-led discharge medication counselling, with limited descriptions of pharmacist training reported.

## Aim and Objectives

- To develop and implement a standardised discharge medication counselling service utilising teach-back in an acute university teaching hospital, and to evaluate feedback from patients and pharmacists regarding the service.

## Materials and Methods

- This was a prospective feasibility study conducted at a 600-bed acute university teaching hospital in Dublin, Ireland.
- **Figure 1** outlines the study processes of designing the intervention procedure and materials, training provision, pharmacists conducting the intervention, and attaining feedback from the pharmacists and patients involved.
- The open-ended feedback survey questions were analysed using thematic analysis.

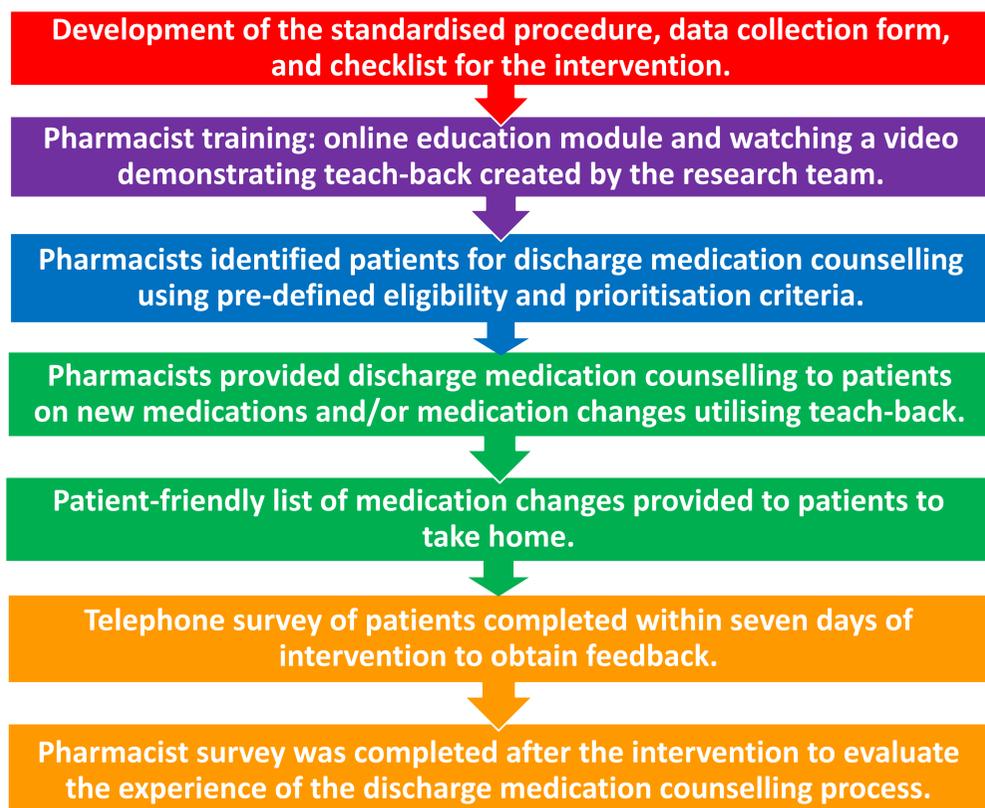


Figure 1: Outline of study methods

## Results

- 32 patients participated (mean age of 57 years; range 19-91) and mean Charlson Comorbidity Index score of 3 (range: 0-8).
- 9 pharmacists counselled on 94 medications (mean 3/patient; range 1-9), most of which were new ( $n=79$ ; 84%), with the remainder involving medication changes ( $n=15$ ; 16%).
- Two thirds of patients received counselling on antithrombotics.
- The mean counselling time was 24 minutes (range: 7-60).

### Patient Survey

- All patients responded to the survey, whereby:
  - 94% had **increased confidence** with medication knowledge,
  - 91% **understood** what potential **side effects** to be aware of, and
  - 94% were **satisfied overall** with the discharge medication counselling experience and the information provided.
- In the open comments, patients valued the **clarity of information** and recognised the value of teach-back and repeating instructions.
- Too close to discharge may not be the most suitable time for information provision, but patients found the **written information useful** as a point of reference at home.

*"I was given crystal clear instructions on how to take my new tablet..." [Patient 11]*

*"I can't remember much of the pharmacist talking to me as I was a bit upside down in hospital..." [Patient 20]*

*"The form acted as a reminder how to take my tablets when I went home. I think everybody should get written information..." [Patient 5]*

### Pharmacist Survey

- All respondents ( $n=8$ ) agreed they were given adequate training for the intervention, that teach-back was **feasible to apply in practice**, and that it is an **important and effective communication method** to help ensure patients understand their medication.
- Pharmacists **enjoyed the extra contact time with patients**, but noted the added workload burden. The need for accompanying **discharge medication reconciliation** was also emphasised.

## Conclusion and Relevance

- This is the first study to evaluate patients' perspectives on teach-back medication counselling by pharmacists.
- Despite the small sample size, the included patients were diverse in terms of age and comorbidities, and most patients experienced **positive outcomes from the discharge medication counselling**.
- With this study's standardised approach and **comprehensive description of the training**, larger-scale multi-centre randomised controlled trials can use this research in future to guide the development of discharge medication counselling services using teach-back.

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### Disclosures:

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