

Introduction of a novel polypharmacy care pathway: preliminary results

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Background

Polypharmacy is common in older adults and is associated with an increased risk of inappropriate prescribing, underuse of effective treatment, inferior medication compliance, drug interactions and adverse drug events. The geriatric department has therefore started a three-year-project to implement a polypharmacy care pathway into the standard-of-care. Two pharmacists, combining a 0.8 full-time equivalent, are integrated in the multidisciplinary team on the acute geriatric wards. They provide medication reconciliation, medication review at 3 time points (on admission, during hospitalization and at discharge) and education of patients and their relatives. Medication is reevaluated within 1 month after discharge. All patients, admitted to the geriatric department are included in the program, taking into account time constraints. Pharmaceutical recommendations are communicated to the clinicians and documented in the medical file.

Aims

The goal of this pathway is to reduce polypharmacy and to improve medication use in the geriatric patient.

Polypharmacy care pathway process



Methods

A retrospective chart-based study was performed. Pharmaceutical recommendations from the first 7 weeks were extracted from the medical files. The number and type of recommendations were determined.

Results

In the first 7 weeks, 47 out of 253 hospitalised geriatric patients were included in the preliminary care pathway. A total of 343 therapy adjustments were recommended. The distribution according to time point is demonstrated in Figure 1. Cardiovascular drugs were most often subject of the recommendations (see Figure 2). Medication cessation was advised in the majority of cases and the therapeutic classes for which this advice applied the most are displayed in Figure 3.

Figure 1: Percentage of recommendations according to time

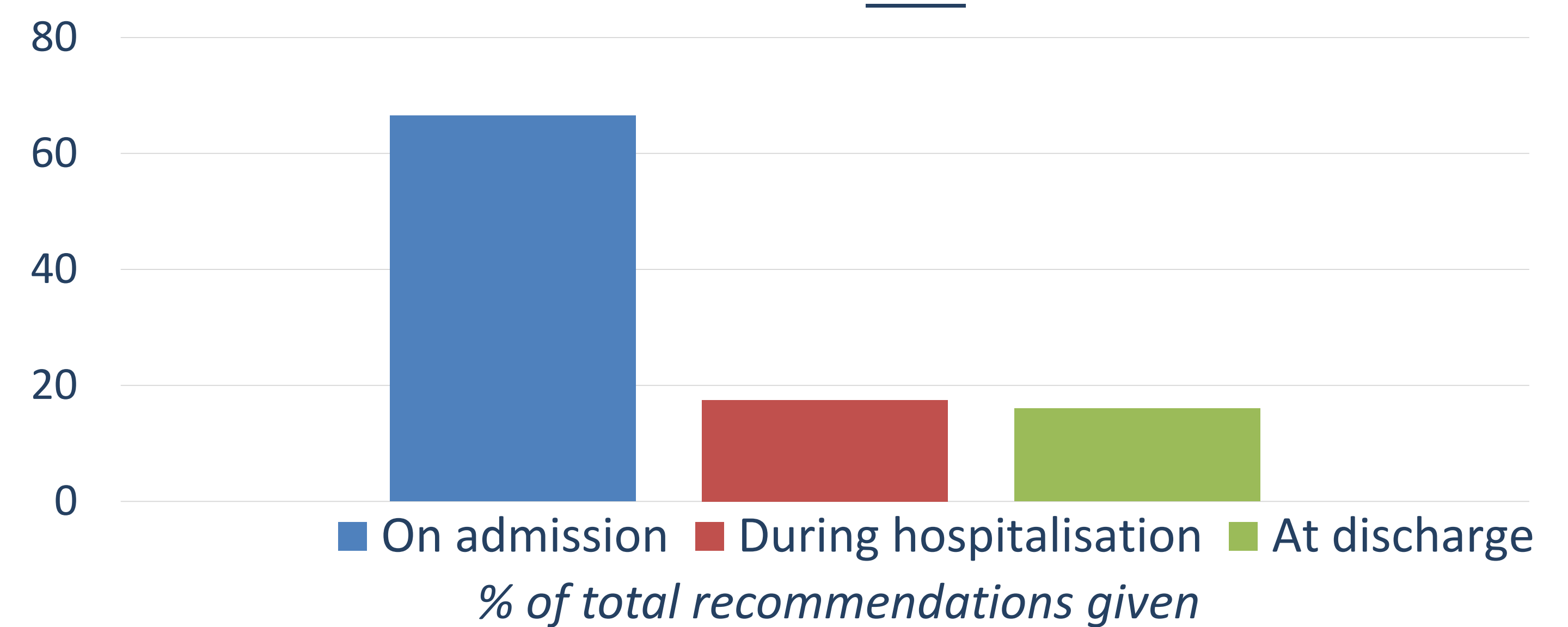


Figure 2: Recommendations according to therapeutic class

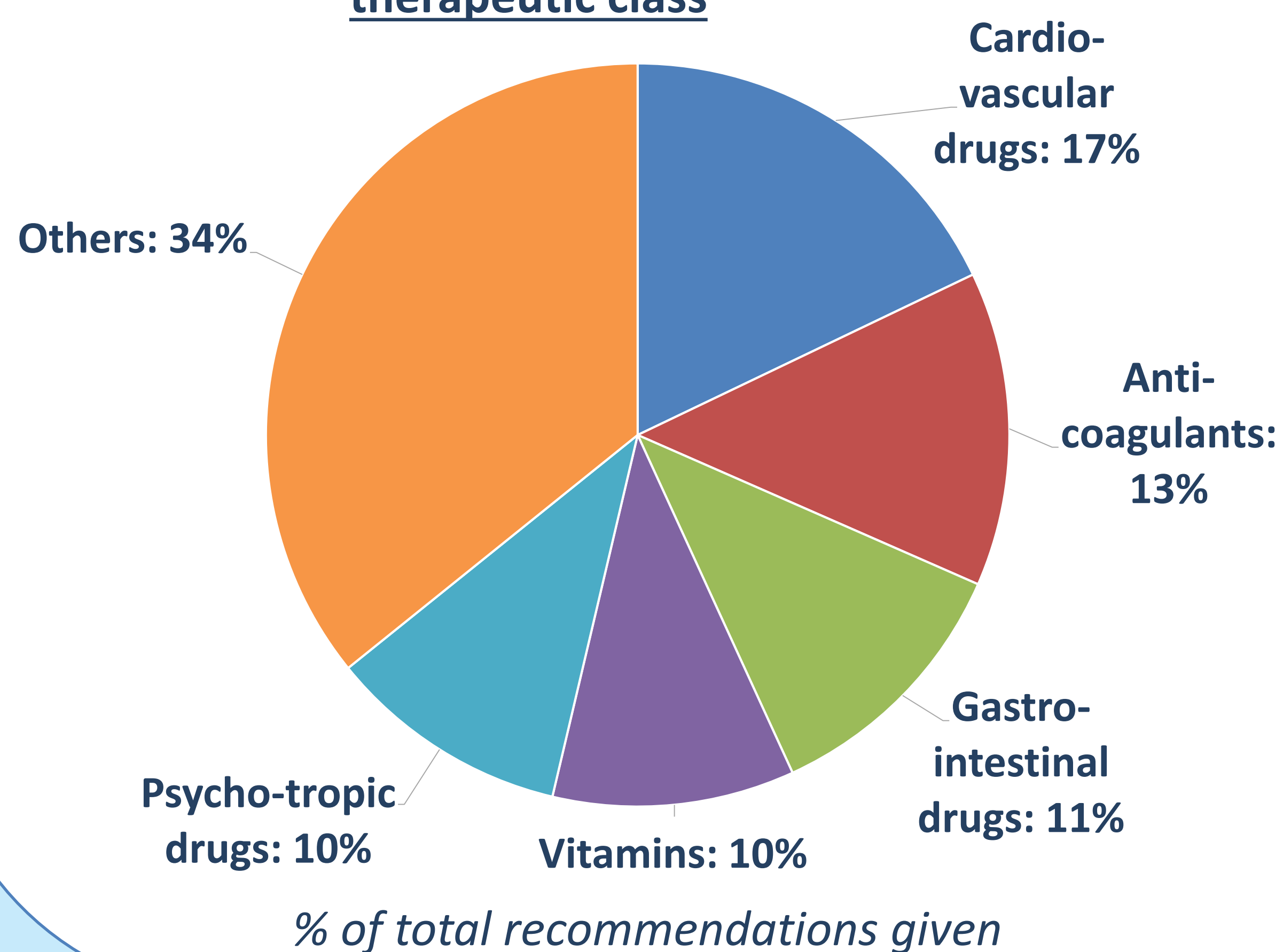
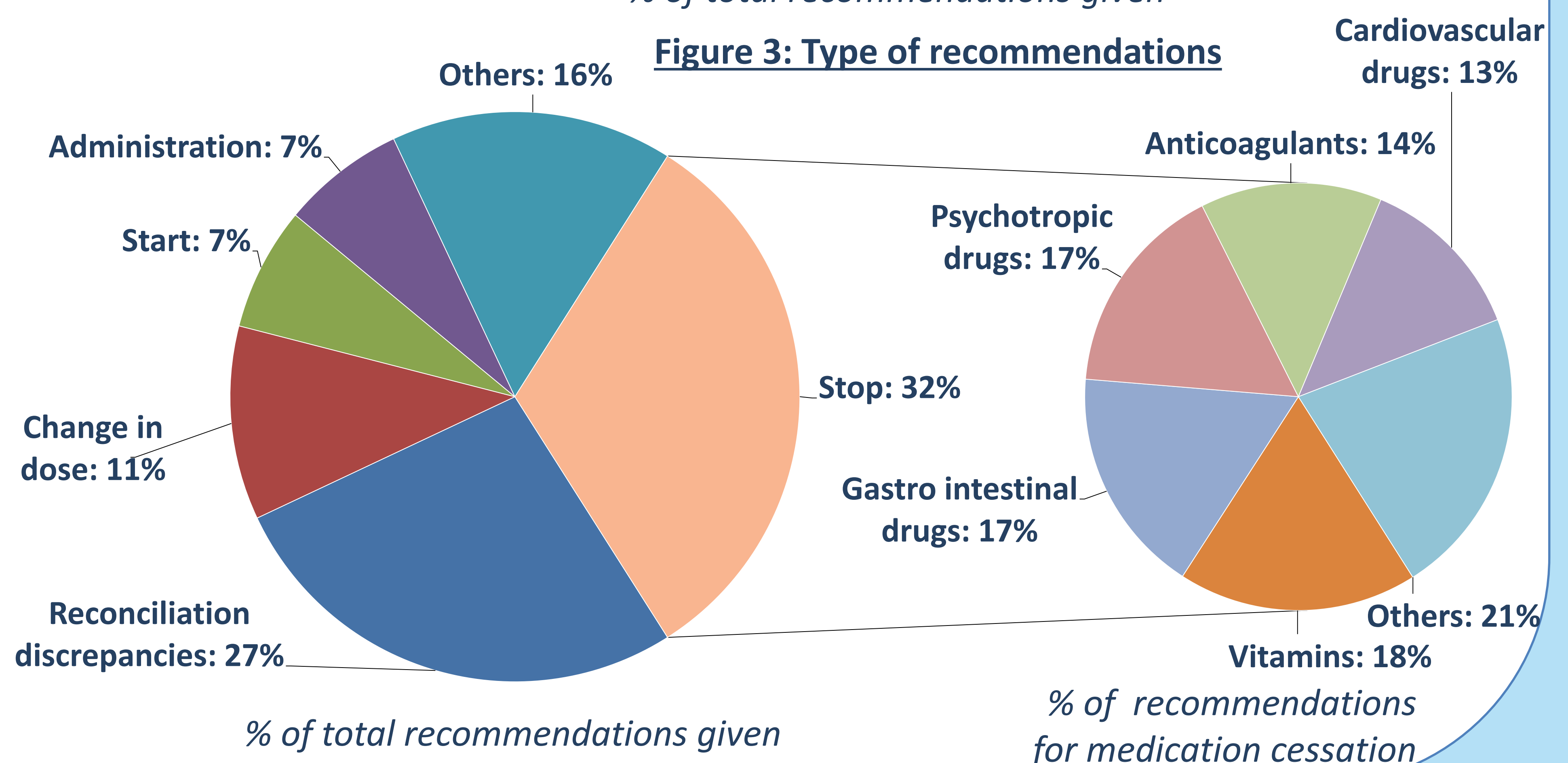


Figure 3: Type of recommendations



Conclusion

Preliminary results indicate that pharmacists provide an added value to a multidisciplinary geriatric team. Reduction of polypharmacy is to be expected as medication cessation was advised the most frequently. Further research is needed however to confirm the latter.

These results can help to improve the capture rate of the care pathway. For example, they indicate that the majority of the recommendations are given on admission so in case of time constraints focus should be on this step in the process. Regular evaluation of the efficiency of the pathway remains important. In the future, acceptance rate as well as patient outcomes such as number of drugs after discharge and hospital readmissions should be taken into account to establish the clinical benefit of this project for the individual patient.