

Clinical Outcomes & Cost Analysis of a Brief Intervention for the Prevention of Falls in the Emergency Department

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Introduction

- 30% of the CCT in ED are patients presenting with a fall
- Conflicting evidence on how to reduce secondary falls and cost effectiveness
- Brief interventions demonstrated success in changing behaviours

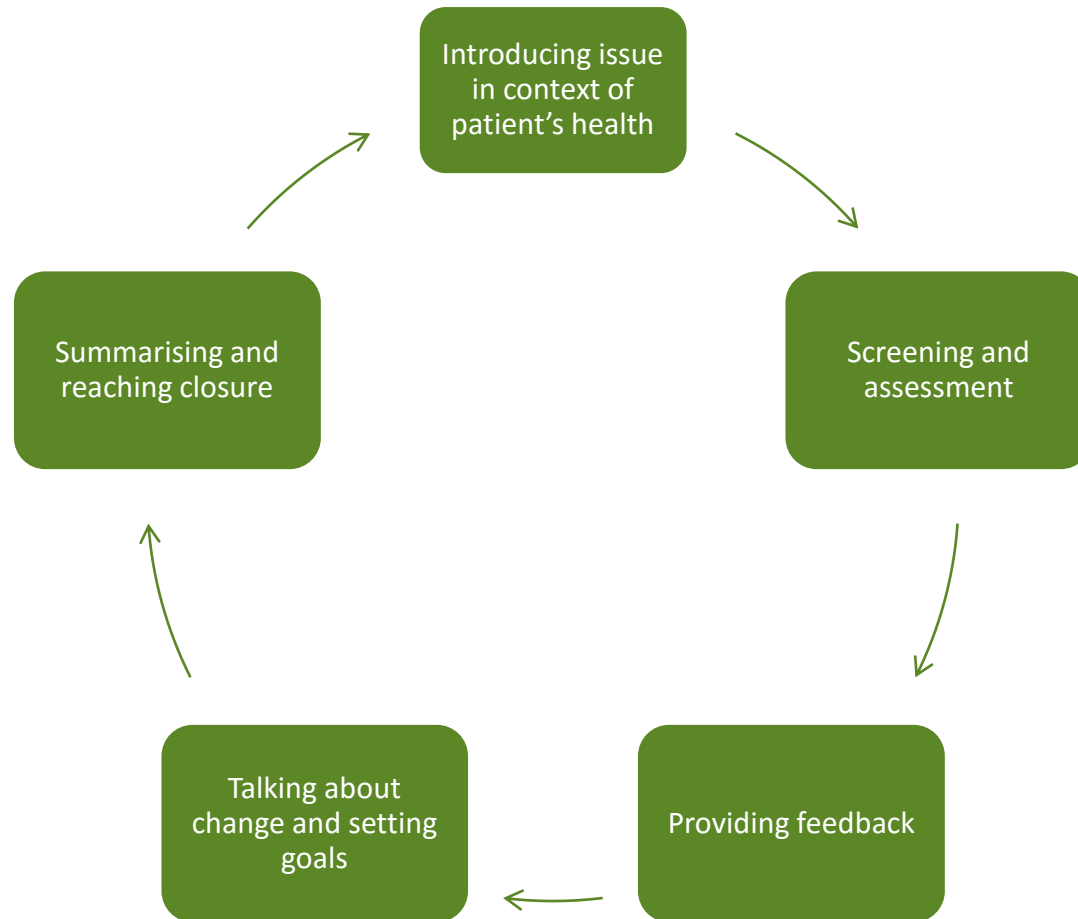


Research Project

Aim: To establish the clinical and cost effectiveness of a brief intervention to prevent falls in older patients presenting to the ED post discharge.

- Prospective controlled clinical trial with net cost analysis
- Recruited in the ED
- Baseline assessment – FROP Com Screen, Two Item Screening Tool, FIM/FAM

Brief Intervention



Control

STANDARD CARE

Initial Assessment
Functional & Mobility
Equipment/Aids
Written Education
Outpatient Referrals

Intervention

STANDARD CARE

Initial Assessment
Functional & Mobility
Equipment/Aids
Written Education
Outpatient Referrals

BRIEF INTERVENTION

Future Risk of Falling
Educational Message

Two Item Screening Tool

- Falls
- Medications



0= 16% chance of having a fall in the next 6/12
1= 28% chance of having a fall in the next 6/12
2= 44% chance of having a fall in the next 6/12
3= 61% chance of having a fall in the next 6/12

Brief Intervention

SCRIPT (score 2/3 or 3/3)

Well over half of these falls will result in injuries, let that be bruises, cuts, sprains and strains or broken bones. Falls can be reduced or prevented and you have a significant chance of having another fall in the next 6-months. I strongly urge you to take action and make changes to decrease your chances of a fall.

Results

- **Reported falls**

1.23 time greater in the control group

- **Falls with fractures**

4 vs 12 ($p=0.03$)



- **Hospital admission**

Significantly less in intervention group ($p=0.003$)

- **Functional decline**

Less functional decline in intervention group even after 6 months ($p=0.005$)

Results

- **Intervention Program Cost** \$3,288
- **Total population (n=412)**
 - \$1,576,496 vs \$1,292,130
(\$7,749 vs \$6,187, $p=0.68$)  \$1,580
- **Falls presentations (n=166)**
 - \$708,995 vs \$512,874
(\$10,326 vs \$5,343, $p=0.33$)  \$4,624

Total Health Costs Stratified by Health Service Area

	<u>Control</u> (n=201)	<u>Intervention</u> (n=211)
Emergency Department	\$72,804	\$35,564
Inpatient Hospital	\$1,233,104	\$983,103
Outpatient Hospital	\$180,509	\$210,862
Community Care (General Practitioner and Ambulance Use Costs)	\$90,079	\$62,601
Total	\$1,576,496	\$1,292,130

Conclusion

- Positive clinical outcomes
- More cost effective in older people presenting with a fall
- Comparable to other research
- Low cost
- Process evaluation
- Replication in other settings

Falls
Risk
Older
Care
Education
Emergency
Management
Prevention
Coordination
Department
Team People
Brief

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Any Questions?

- Harper KJ, Barton AD, Arendts G, Edwards DG, Petta AC, Celenza A. Controlled clinical trial exploring the impact of a brief intervention for prevention of falls in an Emergency Department. *Emerg Med Australas*. 2017; 29(5): 524-30.
- Harper KJ, Arendts G, Geelhoed EA, Barton AD, Celenza A. Cost analysis of a brief intervention for the prevention of falls after discharge from an Emergency Department. *J Eval Clin Pract*. 2018; 1-7. <https://doi.org/10.1111/jep.13041>

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