



# EARLI Pilot Study: Blueprint for Primary Care



Dr M O'Grady, C Sheehan, M Russell O'Brien, B McCarthy

MPHC, UCC, HSE

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## Introduction

The **Emergency Admission Likelihood Index**, was first piloted in the UK, by Lyons et al. 2007. Devised for Primary Care, the aim of EARLI was to assess the likelihood of a patient being admitted to hospital, and providing proactive annualized risk reduction for very high and high risk patients.

## Blueprint for Primary Care

The EARLI study would not have been possible without the support and commitment of the staff and management of MPHC, and the work the PHNs and community nurses. This collaboration will lead to better care and practice for the patients of MPHC.

Over the past year MPHC have provided a GP, access to their patients and vision to make the EARLI study a reality. The HSE have contributed greatly through the work of the PHN's and other services. This collaboration is a blueprint for the delivery of better Primary Care Practice

## Methods

In September, 2011 over 1,100 surveys were posted to patients over 70 years of age, and registered with Mallow Primary Healthcare Centre. 80% response rate, with 120 surveys void, leaving 760 valid surveys, of which with a total of 76 patients in the Very High Risk (n=21) and High Risk Groups (n=55) emerged and these groups were supported by the intervention team, from December, 2011-December, 2012. All patients are still receiving additional support if applicable, desired and warranted.

Oldest Patient- 93 years, Youngest Patient- 73 years  
Average- 75 years

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## Results

### Very High Risk Patients

There was a 50% reduction of hospital admissions. Comparing Sep, 2010-2011 (n=18) when compared to the intervention period, of Dec-April (n=4), (est n=9 for Dec, 2011-2012)

### High Risk Patients

Early review of the data suggests that there has been an 30% reduction in high risk category, when compared between Sep, 2010-2011, and April-December 2012.

### Very High and High Risk Patients

These results, suggest that EARLI pilot study will achieve an overall reduction of 30%-50% in emergency admissions for both the very high and high risk group, in effect, this patients could be considered now as **medium and low risk** as they receive significant and ongoing primary and community care.

## Risk Reduction and Savings through MPHC AND HSE COLLABORATION

Presently, there is approximately 400,000 persons over the age of 70, of which, **40,000 (10%) are Very High and High Risk of emergency hospitalisation**, and this figure will increase over the next 20-30 years. If the EARLI pilot was implemented throughout Ireland, it is possible savings of between **€60 million and €108 million** could be achieved **annually**. This is based on a reduction of hospital admission, with an average length of stay of 5 days, with a cost of €1,000, giving 60-108 million (30%-50% reduction). The €1,000 cost is for treatment in hospital cost, it does not include capital costs of the hospital, so this estimated figure could be significantly higher.

### Team

With no guide from the previous research, it was decided that a GP, would act as a liaison, and attend meetings on behalf of other GPs based at MPHC. This senior GP liaison also dealt with patient records, and was able to review cases, and provide direction. The assistant director of Public Health Nursing, and a PHN, also attended the meetings, as representatives and guides to patients needs from a public nursing perspective. The researcher acted as convener of meetings, and handled all research issues.

### Structure

Meetings were held every two weeks (depending on availability), all records were present prior to the meeting for review, and patients were discussed for a least two meetings. Review and recommendations were based on GP review and the surveillance of the PHN's, and all auxiliary records.

### Interventions

- PHN Surveillance and reports-
- GP Referral
- Auxiliary Services Referral , OT aids, Household tasks, Mobility, Exercise, Skin, Self-care, Continence, Nutrition Vision, Hearing Medication, compliance, medical history, Finance, social support, mental status, Communication , services (for example home help), day centre.

### Context, Older Adults, and the Future

- Over 51% of older adults have a chronic disease- 80% of GP consultations deal with a chronic disease
- 88% of older adults have a medical card- Over 50 % of older adults have limited mobility
- Older Adults are twice as likely to spend a night in hospital than working counterparts- By 2020, 73% of all deaths will be as result of chronic disease, and this will increase exponentially as the population ages
- GP in Public System 45.4 per 100,000- Consultant Geriatricians 1.13 per 100,000

**Limitation to pilot:** Limited to single site, and PCT is collocated. This pilot has shown to be effective in order to be implemented in other PCTs, in rural, urban, rural/urban, and virtual PCTs. Needs to be rolled out nationally, and annually to see overall benefits, to patients and providers.

### Conclusions

The potential for savings of between €60-108 million will only be realised if the pilot is implemented throughout Ireland. In this pilot we have proven the value of collaboration, and designed an intervention team structure. For primary care to achieve maximum utilisation, proactive annualised risk reduction is key, and as this collaborative pilot has shown, this is achievable, replicable and deliverable within increasingly vital primary care network.