New care models for older adults seeking emergency care

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Professors Katie Robinson and Rose Galvin from the Ageing Research Centre at the University of Limerick describe research on new models of care for older adults seeking emergency care

One in four people attending the Emergency Department (ED) is over 65, and this number is set to grow in the coming decades as the population ages. ED crowding leads to long waiting times, treatment delays, increased costs, staff burnout and reduced patient satisfaction.

The ED is not an ideal environment to offer high-quality care to older adults with complex needs. Older adults consistently report negative experiences in the ED related to long waiting times, an uncomfortable and inaccessible physical environment and inadequate support from ED staff. Our research has found that older adults want models of care in the ED that promote positive staff/patient communication, active patient involvement in the care process and the feeling that they are in 'good hands'.(1)

Finding new ways to help older adults seeking emergency care

The problem of ED crowding is multifaceted and complex, and no magic bullet will resolve the issue. Research at the Ageing Research Centre UL is exploring how new modes of care for older adults seeking emergency care can improve their overall care experience and clinical outcomes while reducing unscheduled care use. We know that older adults attend the ED for various reasons, and some presentations may be better suited to alternative out-of-hospital pathways. To this end, there is an opportunity to provide timely specialist assessment and intervention to some older adults seeking emergency care to reduce the risk of long ED waiting times and avoidable hospital admissions.

Health and Social Care Professions (HSCPs) include social work, physiotherapy, occupational therapy and dietetics. HSCPs comprise a large proportion of the healthcare workforce but are often overlooked in policy debates. We are developing an evidence base (2) to inform HSCP-led models of care for older adults seeking emergency care.

The OPTIMEND randomised controlled trial

The OPTIMEND randomised controlled trial (RCT) (3) evaluated the impact of early assessment and intervention by a dedicated team of HSCPs in the ED on the quality, safety, and clinical effectiveness of care for older adults.

This single-site RCT included 353 patients aged 65 years or older who presented with lower urgency complaints to the ED. Older adults in the intervention group received early assessment and intervention from a dedicated HSCP team comprising a senior medical

social worker, senior occupational therapist, and senior physiotherapist.

Older adults in the intervention group (n = 176) experienced a significantly shorter stay in the ED than the control group (n = 177) (6.4 versus 12.1 median hours, $p < 0.001$), lower rates of hospital admissions from the ED (19.3% versus 55.9%, $p < 0.001$), higher levels of satisfaction with the ED visit ($p = 0.008$), better function at 30-day ($p = 0.01$) and six-month follow-up ($p = 0.03$), better mobility ($p = 0.02$ at 30 days), and better self-care ($p = 0.03$ at 30 days; $p = 0.009$ at six months). Our process evaluation(3) highlighted the importance of establishing a team of HSCPs with a solid interdisciplinary ethos to ensure buy-in and integration within the busy ED environment.

OPTIMEND was also economically evaluated and resulted in staggering cost savings compared to treatment as usual (approx. €6k per patient). The reduced incidence of hospital admission in the HSCP group largely drove this cost-saving. Still, it provides convincing evidence that dedicated HSCP teams should be adopted as part of treatment as usual for lower urgency older adults in Irish EDs.

Despite these benefits, OPTIMEND found no differences at follow-up between the two groups in terms of unscheduled ED re-presentation or hospital admission. After an ED visit, older adults are very much at risk of adverse outcomes (e.g., death, hospitalisation) as they encounter a period of increased vulnerability. This ties in with subsequent research where we have identified that the transition home from the ED is particularly problematic for older adults. Older adults often report unresolved symptoms on discharge from the ED, which negatively affects their return to daily life and is a major driver of ED re-attendance. Furthermore, older adults often experience discharge from the ED as unplanned and rushed with fragmented care at the point of transition home which causes difficulty coping.

Our ED PLUS pilot trial (5) focused on addressing these gaps in the care transition from the ED to the community by exploring the feasibility of a new interdisciplinary HSCP-led model of care to enhance the transition of care out of the ED for older adults.

The ED PLUS pilot trial

The ED PLUS pilot (5) feasibility RCT was conducted in the ED of a hospital in the Mid-West region of Ireland. Older adults presenting to the ED with undifferentiated medical complaints and discharged within 72 hours of an index visit were eligible for the study. Those who were randomly assigned to ED PLUS received early assessment and intervention by a dedicated HSCP team in the ED (OPTIMEND), proactive case management from a senior physiotherapist, and a multidisciplinary intervention to bridge the gap between the ED and the community.

The physiotherapist saw the older adults in the ED and visited them at home within 24 hours of discharge from the ED. On discharge, older adults received a six- week multidisciplinary, patient-centred self-management support and exercise programme. In addition, the same doctor who saw the older adult in the ED telephoned the older adult in week two to check medications. A dietitian and occupational therapist telephoned the

older adults to check nutritional intake and if any aids were needed in the home. Findings indicate that it was feasible to deliver ED PLUS, and older adults were satisfied with the intervention. All older adults in the ED PLUS group had improved quality of life and mobility and did not need to return to the hospital or ED at six weeks and six months, unlike treatment as usual.

Future work at the University of Limerick plans to establish what outcomes should be evaluated in ED studies with older adults, develop standards of care for frail older adults attending the ED and a larger-scale evaluation of ED PLUS is also planned.

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