Crowding in emergency departments (EDs) is a growing problem in Ireland and internationally, and coupled with long waiting times, affects health care outcomes and patient satisfaction. A new study from researchers at Trinity College Dublin and University of Limerick has examined the economic impact of adding a specific, appropriate, and dedicated team of professionals to the care already available for older patients. The researchers found that the potential cost savings are staggering, along with a significant increase in a patient's quality of life.

The study is published in *PLoS ONE*.

In 2023, researchers, led by Professor Dominic Trépel at Trinity College Dublin and Professor Rose Galvin at University of Limerick, conducted the OPTI-MEND trial, which looked at the impact of a novel service for older patients that introduced a dedicated ED team of health and social care professionals (HSCPs) to focus on timely assessment and intervention among people aged 65 years and over. The study of 353 older adults showed early assessment and intervention by the HSCP team reduced ED length of stay and the risk of hospital re-admissions, and improved patient satisfaction.

Using this new service would mean that low-acuity patients (e.g. patients who are less likely to have more serious disease or complications) would also routinely see a senior occupational therapist, a senior
physiotherapist and/or a senior medical social worker in addition to routine care in the ED.

Primary clinical findings from the OPTI-MEND trial suggested that several older adults could be safely discharged from the ED following early assessment and intervention by an HSCP team (avoiding costly inpatient stays in hospital). This motivated the hypothesis that there may also be significant economic benefits and led to the collaboration between University of Limerick and Trinity College Dublin.

After extensive scrutiny by the Trépel Lab (Trinity) of the trial data to determine changes in quality of life and estimate the direct cost of HSCP, as well as downstream costs to the Irish Health Service, this new study demonstrates that investing in adding HSCP teams to existing normal care in the ED increases a patient's quality of life and presents, according to researchers, a potential national saving of €2.4 billion.

These cost savings are largely driven by the timely discharge of older adults from the ED, meaning—if adopted nationally—the service would aim to get patients back in the comfort of home as soon as possible. This economic evaluation conducted alongside the OPTI-MEND trial provides definitive evidence that HSCP should be adopted as part of treatment as usual in Irish EDs, or put another way, not doing so results in overspending of €6,128 every time a low-acuity patient visits the ED.

Commenting on the findings, Professor Dominic Trépel, School of Medicine and Global Brain Health Institute (GBHI), Trinity, said, "Clinical trials have historically aimed to generate evidence that aids clinician decision. However, the OPTI-MEND trial is an excellent example of the power of including an economic perspective and a testament to the Health Research Board's drive to ensure studies they fund include patient and public perspectives and consider how our money is spent."
"As our health system must manage a limited budget, studies like this demonstrate that small investment in HSCP teams across Ireland's 27 Emergency Departments could free up to €2.4 billion for other services, while at the same time, significantly improving Health-Related Quality of Life."

Professor Rose Galvin, School of Allied Health, University of Limerick, added, "We expected there would be economic benefits, but have been shocked at how much money can be made available by simply deploying HSCP teams while significantly improving the health of older ED patients. Given what we have learned about the power of including economics in our clinical research, Prof. Trépel and I are now collaborating to explore the value of home-based comprehensive geriatric assessments. Like OPTI-MEND, we hope this new program of research will further demonstrate clinical and cost effectiveness of improvements to our service landscape and will help shape Irish health care for generations to come."


Provided by Trinity College Dublin
