

regarding the lived experience and personal meaning of using supportive technology during the cancer experience. The aim of the current study is to explore the psychosocial experiences of people with newly diagnosed colorectal cancer using eHealth symptom management technology and their family caregivers during chemotherapy in an outpatient setting in Ireland.

Methods This research adopted an innovative longitudinal and multi-perspective interpretative phenomenological study design. Participants with Stage I-III colorectal cancer in the European randomized controlled trial of the symptom management technology, The Advanced Symptom Management System (ASyMS), were recruited for study. Semi-structured interviews were conducted with participants at two time-points i.e. while using the device and after it was returned during their chemotherapy treatment. Participants with colorectal cancer (n=3) were asked to nominate a family caregiver (n=4) to participate in separate interviews at the same time-points. All interviews were audio-recorded, transcribed verbatim and analysed using interpretative phenomenological analysis.

Results eHealth symptom management technology can be an educational and reassuring tool which can promote self-efficacy and a sense of control amongst people with cancer. Similar benefits were evident amongst their family caregivers even though they did not personally use the eHealth technology. The longitudinal design highlighted how people with colorectal cancer and their family caregivers developed a strong personal attachment to eHealth technology and likened it to another person in their family. Despite initially feeling abandoned after the technology was returned, both participant groups recognised that it had prepared them to manage their symptoms independently.

Discussion While previous studies regarding eHealth technology in oncology have focused on achieving clinically meaningful outcomes, this study offers a psychological understanding of using supportive technology during the cancer experience. This research illustrates how eHealth technology can have psychosocial benefits for people with cancer, family caregivers and their dyadic relationship which surpass the intended health outcomes of the technology. This study offers a unique perspective of people's attachment to technology during cancer treatment which has not been adequately studied previously. Findings from this research can inform future technological design, enhance oncology practice and ultimately improve the health outcomes of its users in the future.

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PALLIATIVE CARE PROVISION IS ASSOCIATED WITH REDUCED PREVALENCE OF DEATH IN HOSPITAL: POPULATION-LEVEL PANEL DATA FROM 30 EUROPEAN COUNTRIES IN THE YEARS 2005–2017

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Background Studies of individual-level data report that palliative care (PC) availability is associated with lower risk of death in hospital.

Methods We compiled a cross-national longitudinal dataset to identify factors associated with hospital mortality rate in

Europe across the years 2005–2017. We sought place of death data from the national statistics offices of the 32 EU-EEA countries. Data on palliative care availability by country were collected from the European Association of Palliative Care (EAPC) Atlases. Our primary predictor of interest was binary: in a given nation in a given year, did the palliative care provision meet EAPC recommendations, controlling for population size and age distribution? We collected additional predictors hypothesised to be associated with outcome from Eurostat, OECD and WHO: indicators of national wealth, societal factors, population health, and other health system variables. Our final dataset included 30 countries, excluding Greece (no outcome data) and Liechtenstein (which does not have its own palliative care services). We used linear regression with panel-corrected standard errors to assess association between hospital mortality rate, palliative care availability and other factors. Sensitivity analyses were performed to check robustness to imputed data. We took $p < 0.05$ to represent statistical significance.

Results Average hospital mortality rate ranged from 27% to 67% over the observation period, with notable differences between Eastern, Southern and North(wester)ern nations both cross-sectionally and over time. The regression analysis found palliative care provision was significantly associated with lower hospital mortality rate: services in line with EAPC recommendations was associated with a 4.3% lower hospital mortality rate (95% CI: -2.8% to -0.3%; $p = 0.01$). With respect to the national economic indicators, low HDI countries groups were significantly associated with high hospital mortality, with south countries showing the highest hospital mortality rate. In the healthcare policy domain, government funding of long term care, and lack of assistance in functional issues were significantly associated with decreased hospital mortality. Avoidable death rate, total healthcare spending on ambulatory care, and home care provision were significantly negatively associated with hospital mortality. With respect to healthcare system, the number of total hospital beds and the percent of population with unmet need due to financial reasons were significantly associated with lower hospital mortality, while the mean hospital length of stay showed significant positive association with hospital mortality.

Conclusion Hospital mortality rates varied markedly between countries and were changing in different directions over time. Palliative care access increased in the observation period and was associated with lower hospital mortality rate. Additionally, significant associations between outcome and economic, societal, and health system factors were identified in our analysis.

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COST-BENEFIT ANALYSIS OF ADVANCE CARE PLANNING FOR THE END OF LIFE: A SOCIETAL PERSPECTIVE

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Background The aging population of the UK is associated with rising health and social care spending. The need for sustainable provision of end-of-life care is therefore a public health priority, with successive governmental strategies aiming to reduce the proportion of people dying in hospital. Advance care planning (ACP) supports patients to make and