Anticipatory Care Planning (ACP)

An intervention for older adults at risk of functional decline: A Primary Care Feasibility Study, led by Professor Kevin Brazil.

Why did we conduct this trial?

As the population of older adults increases, the complexity of care required to support those who choose to remain in the community amplifies. There is an *existing evidence base* that Anticipatory Care Planning (ACP), through earlier identification of healthcare needs, can improve quality of life, decrease aggressive interventions, and prolong life.

What did we do?

As this is a feasibility trial (*where the piloting stages are determined through delivery of a trial*), the study's main objective (*the research question*) was to determine the feasibility of a cluster randomised trial to evaluate the implementation and outcomes of ACP in primary care to assist older adults identified as at risk for functional decline by developing a personalized support plan.

To facilitate the main objective of conducting this feasibility trial, detailed aims were to:
1) Determine the optimal mechanisms for intervention delivery;
2) Assess patients, their family carers and health care providers perception of the appropriateness, benefits and convenience of the ACP intervention;
3) Determine recruitment/retention rates and outcome variability to inform sample size calculations for a full trial;
4) Identify optimal recruitment strategies for general practices and patients for a full trial;
5) Determine outcome measures and economic assessment strategies for a full trial; and
6) To determine optimal procedures for conducting a cluster randomised trial.

By way of methodology (*detailed in full in the study's published* ***protocol paper***), the study delivery team examined the feasibility of an ACP intervention in a trans-jurisdictional feasibility cluster randomized controlled trial consisting of home visits by research nurses who assessed participants' health, discussed their health goals and devised an anticipatory care plan following consultation with participants' GPs and adjunct clinical pharmacist.

Eight primary care practices (four in Northern Ireland, United Kingdom and four in the Republic of Ireland) were randomly assigned to either intervention or control arm. Eligible patients were those identified in each practice as 70 years of age or older and assessed as at risk of functional decline. Study participants (intervention n=34, control n=31) and research staff were not blinded to group assignment.

A conceptual framework (RE-AIM) guided the assessment on the potential impact of the ACP intervention on patient quality of life, mental health, healthcare utilisation, costs, perception of person-centred care, and reduction of potentially inappropriate prescribing. Data were collected at baseline and at 10 weeks and six months following delivery of the intervention.

In addition (as part of the *process evaluation*), intervention participants were interviewed (n=34), as were implementing stakeholders (n=12) about their experience with the intervention, and key health professionals (n=16) about their experience with ACP, views of the ACP intervention, and expert opinion on the feasibility and sustainability of the intervention in the health systems on the island of Ireland.

What answer did we get?

The studies published ***protocol paper*** provides a detailed account of the intervention on trial, as well as a standard report of the evaluation methods, and when combined with the studies four published outcomes papers. The collective provides a standard report of the findings which serves

to enable replication studies and decisions to be drawn on next steps (towards wider scale implementation).

Collectively the outcome papers report that patients were unanimous in the acceptance of the ACP intervention. Health care providers viewed the ACP intervention as feasible to implement in routine clinical practice with attending community supports. While there were no significant differences on the primary outcomes and most secondary measures, ancillary analysis on social support showed responsiveness to the intervention. Incremental cost analysis revealed a mean reduction in costs of €320 per patient for intervention relative to the control.

Patient acceptability of this primary care-based ACP intervention was high, with nurses' home visits, GP anchorage, multidisciplinary working, personalized approach, and active listening regarded as beneficial. Appropriate timing, and patient health education emerged as vital.

Implementing stakeholder, i.e., collaborating health professionals who facilitated and supported the study (GPs, practice managers, study pharmacist, and research nurses) have identified strengths of the implementation process on which to build, and recognised limitations which can now be addressed to ensure improved efficiency and effectiveness in future trials.

The key health professionals perceived the ACP intervention as highly beneficial to patients, with significant potential to prevent or avoid functional decline and hospital admissions. They suggested that successful implementation of this primary care based, whole-person approach would involve integrated and multi-disciplinary working, GP buy- in, patient health education, and ACP nurse training. The findings have potential implications for a full trial, and patient care and health policy.

What should be done now?

This trial successfully assessed the feasibility of implementing the ACP intervention in primary care settings with high levels of stakeholder acceptability. The ACP intervention deserves further testing in a definitive trial to determine whether its implementation would lead to better outcomes or reduced costs.

Dissemination efforts to date include the published papers referred to above.

In an effort to strengthen a future bid for full trial the study team went on to secure funding (downstream impact and a return on the INTERREGVA investment in CHITIN) from the ESRC Impact Acceleration account to conduct an impact study employing Theory of Change (ToC) to inform service and research development from the anticipatory care planning intervention for older adults at risk of functional decline. Synthesising the findings from the CHITIN ACP feasibility trial, and guided by an initial conceptual ToC map the study team conducted workshops with stakeholders in the Republic of Ireland and in Northern Ireland, both presenting and validating the synthesis of findings from the ACP study.

The study delivery team met the objectives of the impact acceleration exercise in developing and strengthening cross-border partnerships with external organisations; building consensus about the intended impact of the ACP approach; identifying preconditions and how the ACP approach can be embedded into the context of age-care services for optimal implementation; co-design and agree a ToC for each jurisdiction, and refine the ACP approach for a full trial to provide a frame for future evidence generation.

The impact acceleration exercise was invaluable in carving out the changes required to intervention components and processes, and the departments, individual professions, and collaborations required to facilitate the ACP approach (a full report is annexed).