## <u>Title:</u>

# Using Experience-based Co-design with family carers of individuals living with Dementia and healthcare staff to improve experiences of attending the Emergency Department

# Supervisory Team:

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# <u>Aim:</u>

To use Experience-based Co-Design (EBCD) to identify concerns and solutions to improve the experiences of individuals living with dementia and their family carers attending the Emergency Department (ED) from a Nursing Home or own home.

# Objectives:

- 1. To investigate the experiences and perceptions of individuals living with dementia (with cognitive ability), and their family carers on attending the ED
- 2. To investigate the experiences and perceptions of ED staff in proving care and support for individuals living with dementia and their family carers attending the ED
- 3. To identify improvement priorities and solutions for ED based dementia services through codesign

# Background:

Dementia is term representing a range of brain disorders that affect cognitive reasoning and the capability to function independently<sup>1</sup>. It is progressive and palliative, significantly affecting the quality of life of the individual living with dementia but also their family carers<sup>2</sup>. With improved healthcare standards and increasing longevity the number of people living with dementia is increasing, a figure was estimated at 47million in 2015 and projected to double every 20years; in Northern Ireland the figure is approximately 19,000, predicted to rise to 60,000 by 2051<sup>3,4</sup>. Therefore, a large proportion of global society will be affected by either having dementia themselves, or by providing informal care. In the United Kingdom almost half of unplanned hospital admissions of people over 70 years old have dementia<sup>5</sup>. Attending the Emergency Department (ED) can be a very stressful and disorientating experience for an individual living with dementia, extending stress to their family carers and can also be very challenging for ED staff, due to the complexity of their health profiles<sup>6,7</sup>. For individuals living with dementia attending an ED and for acute care can lead to further cognitive and physical deterioration, nonetheless ED attendance remains common, with some studies showing an increase in attendance increasing at end-of-life<sup>8,9,10</sup>.

An approach not previously implemented is collaborative working between family carers of individuals living with dementia, the individual with dementia (with cognitive ability), and healthcare staff in designing ED based dementia services. This would allow investigation of the needs and experiences of family carers, patients and ED staff to inform quality improvement endeavours.

### Methods:

EBCD is a form of participatory action research that endeavours to gather and understand how individuals actually experience a process or a service<sup>11,12</sup>. Through the EBCD process experiential narrative data will be collected utilizing audio and filmed individual interviews, with ED staff and family carers/patients respectively. This will identify and explore the emotional key moments on the care journey for the individual living with dementia and their family carer, and of the experience of ED staff in providing care and support, with a view to improving these experiences. Non-participant observation will also be conducted within the ED recording field notes of the family carer/patients' experiences focusing on functional and relational aspects of carer/patient/staff interactions, helping to contextualise and understand experiences from all perspectives. A facilitated co-design event will then allow feedback and discussion of the findings, enabling staff to highlight their priorities for carer support provision and allowing family carers/patients to reflect on the emotional impact of key experiences. In collaboration, all participants will select shared improvement priorities and together redesign relevant elements of the ED service to improve the identified areas.

#### Timeline & Key tasks:

Year 1. Systematic review – "Experiences of carers and individuals living with dementia attending the Emergency Department"

Ethics application preparation and submission

- Year 2. Data collection and analysis
- Year 3. Thesis write-up

#### Study Timeline

ACTIVITY	YEAR 1						YEAR 2						YEAR 3					
Systematic review																		
Protocol development																		
Ethics application and submission																		
Data collection & analysis																		
EBCD Stage 1 – Staff interviews, non-																		
participant observation, family																		
carer/patient interviews																		
EBCD Stage 2 – staff feedback																		
EBCD Stage 3 – family carer/patient																		
feedback																		
EBCD stage 4 – co-design event																		
EBCD stage 5- co-design working groups																		
Thesis write-up																		

# References:

- 1. Parke B, Hunter K, Strain L, Marck PB, Waugh ER., McClelland, AJ. Facilitators and barriers to safe emergency department transitions for community dwelling older people with dementia and their caregivers: a social ecological study. Int J Nurs Stud. 2013;50(9):1206-1218.
- Parke, B. and Hunter, K.F. (2017) The dementia-friednly emergency department: An innovation to reducing incompatibilities at the local level. Healthcare Management Forum 30(1), 26-31
- 3. Alzheimer's Disease International 2016. World Alzheimer Report 2016: Improving healthcare for people living with dementia coverage, Quality and costs now and In the future
- 4. Department Of Health Social Services And Public Safety Northern Ireland 2011. Improving Dementia Services in Northern Ireland: A Regional Strategy.
- 5. Sampson, E (2009) Dementia in the acute hospital: prospective cohort study of prevalence and mortality published in The British Journal of Psychiatry 195 (1) 61-66
- Salvi F, Morichi V, Grilli A, Giorgi R, De Tommaso G, Dessi-Fulgheri P. The elderly in the emergency department: a critical review of problems and solutions. Intern Emerg Med. 2007;2(4):292-301.
- 7. Samaras N, Chevalley T, Samaras D, Gold G. Older patients in the emergency department: a review. Ann Emerg Med. 2010;56(3);261-269.
- Dening KH, GreenishW, Jones L, Mandal U, Sampson EL. Barriers to providing end-of-life care for people with dementia: a whole-system qualitative study. BMJ Support Palliat Care 2012;2:103–7.
- 9. LaMantia MA, Stump TE, Messina FC, Miller DK, Callahan CM. Emergency Department use among older adults with dementia. Alzheimer Dis Assoc Disord 2016;30:35–40.
- Feng Z, Coots LA, Kaganova Y, Wiener JM. Hospital and ED use among Medicare beneficiaries with dementia varies by setting and proximity to death. Health Aff (Millwood) 2014;33:683–90.
- Robert, G., Cornwell, J., Locock, L., Purushotham, A., Sturmey, G. and Gager, M. (2015)
   'Patients and staff as codesigners of healthcare services', British Medical Journal, 350, g7714.
- 12. Robert, G. B. (2016) 'Developing person-centred services: the contribution of Experiencebased Co-design to high quality nursing care' In Tee, S., ed. Person-centred approaches in healthcare: a handbook for nurses and midwives. Buckingham: Open University Press.