

Modelling the true cost of home care in Northern Ireland

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The term ‘social care crisis’ is widely used in all parts of the UK, where each country has its own approaches to the challenges of looking after an ageing population with dignity, given severe funding constraints. Home care staff are in many ways the beating heart of the sector, and yet their pay is low, and working conditions can be insecure, scandalously so sometimes given the key contribution they make. The challenge is how to make the existing service sustainable whilst exploring user-led service redesign.

The Northern Ireland Social Care Council, along with the NI Health Department and its Health and Social Care Board, commissioned a System Dynamics model, exploring ‘what is the true cost of care?’ A wide range of stakeholders engaged in the modelling process: service users, carers, senior civil servants, commissioners, procurement & contracting experts, workforce development & regulation experts, service managers from public & independent sectors, statisticians & analysts, and service designers.

The resulting model puts service users at the top, and the care workforce as the foundation and enables a wide range of scenarios to be explored. The model shows how every part of the whole system is connected: if we improve pay and conditions, we can recruit staff more readily, turnover will slow down, we can provide more care, people will spend less time waiting, delayed discharges will be lower. Improved social care will cost more, but that might be more affordable than the current arrangements.

Douglas McKelvie works with Symmetric. After working as a social worker in Edinburgh, and then in social care workforce development and planning at UK level, Douglas discovered System Dynamics. Working closely with Eric Wolstenholme, for the past eighteen years he has used (mostly System Dynamics) modelling to explore a wide range of issues in health and social care, and other human services. His approach combines participative group model-building with a commitment to constructing running (quantified) models. Eric Wolstenholme and Douglas have recently written *The Dynamics of Care* (Springer, 2019), an account of a wide range of modelling projects in the UK care sector.

Sarah is the system dynamics lead in the Data Analytics Research & Exploitation (DARE) unit at the Northern Ireland Strategic Investment Board (SIB). The DARE unit in SIB was established in 2017 as a centre of expertise in data science and advanced data analytics. Sarah is a system dynamics modeler with a theoretical background in economics and in organizational sociology. Her modelling experience ranges across a variety of sectors including construction, international trade and finance, renewable energy, resettlement, and health and social care. She has previously worked in the Northern Ireland Department of Finance, and in other roles supporting various governments.

Donald Scott has worked with Douglas McKelvie on System Dynamic modelling projects for the last four years. He had previously managed a range of local authority social work services, encountering many of the typical challenges which would have been illuminated by a model.