Groundswell: Community & Data Led Systems Transformation of Urban Green & Blue Spaces for Population Health

We propose a new partnership: researchers, clinicians, practitioners (such as urban designers) and policymakers all working with local citizens who have the most to benefit from better access to and use of quality spaces. We will work collaboratively to identify poor quality and underused spaces through citizen-led approaches. We will then work with them to develop and/or modify outdoor spaces so that they are high quality and fit for purpose. These actions can be as small as window boxes in schools, or as large as the development of new greenways or reshaping policies regarding land use to protect our green spaces. We will also work to identify ways in which we can promote such spaces for everyone, ensuring that no community is excluded form benefit. The important aspect is that local communities are fully involved in decisions about what they want, and what they will use, thus becoming central to the decision-making process. They will also be involved in the evaluation of these actions, enabling them to directly see how the process has benefited their communities. An important part of putting actions and solutions in place is understanding if they work (or not). Data plays an important part in measuring success, particularly if the same data can be collected consistently across the different actions. Another part of the partnership will be establishing a way of bringing multiple sources of data together so we can effectively determine what works across multiple projects and settings. So, whilst citizens can be involved in collecting data about whether the space has improved their health and wellbeing (through a bespoke app), we can also use other data on health, wellbeing and the environment that is routinely collected by local councils and governments. The main research will take place in three different cities - Edinburgh, Belfast and Liverpool - all with some similar features (such as large urban areas with lower income communities) and distinct features (such as geography and culture). Each city already has policies and programmes in place to improve green and blue space, but there is much room for improvement. Working with the local citizens we will test a range of different methods and approaches and be able to collect a large amount of data. This data can then be used to understand what works for whom and why across the cities. We can then use this knowledge to predict what could be effective over a much wider area, and also what does not work. We can also make some decisions around what is good value for money, and what is not. We also understand that individual small actions within local communities (or even within cities) are not going to solve the problem, which is why we are also going to focus on how our research can help inform future policies and programmes. Our programme of work will take a whole life course approach which will ensure inclusive environments for all; working with our youngest citizens in particular will ensure early cultural change levers are activated, empowering a new generation with lifelong health and wellbeing.

Development of a learning system to optimise anticholinergic medication prescribing for older people living with frailty

This project will develop the Anticholinergic Medication Index (ACMI) tool to calculate AC medication burden for older people in a summary score, stratified by frailty. The tool will be developed using prognostic modelling techniques and tested using anonymised routine data from the Connected Bradford dataset of over 180,000 people aged 65 years and older to see how well the score predicts being admitted to hospital with confusion or a fall. This score will run in a computer-based system designed with pharmacists and doctors to help them review patients’ medicines and reduce harm from ACs. The ACMI will be developed into a software tool with additional decision support resources and piloted in general practices in Bradford, before being offered for broader national use. The overall aim is to improve quality of life and clinical outcomes, and save NHS and social care costs.