

Social Care

Looking Forward: Making Use of Population Projections to Understand Future Need in Edinburgh

Edinburgh Health and Social Care Partnership and Public Health Scotland

Background

Edinburgh Health and Social Care Partnership has been using population projections as part of its wider joint strategic needs assessment approach to understand current and future need across the city. This work sits within a broader programme of publicly available topic-based analysis covering areas such as population and demographics, unpaid carers, dementia, mental health, and population health inequalities. The approach is collaborative, involving partners from across Edinburgh, including local government, NHS public health, Public Health Scotland and other services, with the aim of creating a shared evidence base for planning and decision-making.

Within this wider approach, the population and demographics work has become one of the most frequently used sources of evidence. Edinburgh HSCP brings together national datasets such as census information, small area population estimates, household estimates and sub-national population projections to provide a picture of who lives in Edinburgh and how the population is changing. This information is used by services to better understand the populations they support and to inform work such as business cases and board papers. The analysis has also been updated using revised National Records of Scotland projections based on a 2022 baseline.

The projections point to a city with a growing population overall, but with particularly rapid growth in older age groups, especially among people aged 85 and over. At the same time, some younger age groups are projected to decline, while the 18 to 44 population is expected to grow in this latest round of projections. For Edinburgh HSCP, this creates a clear need to go beyond describing demographic change and to use projections more directly to think about future service need and planning.

Key Activities

1. Building a practical projections tool

Edinburgh HSCP worked with Public Health Scotland to develop an interactive workbook that links population projections to service activity. The purpose was to make demographic change more useful for service planning by enabling teams to apply projected population change to their own activity data. Using National Records of Scotland projection figures by age and sex, the workbook allows a service to enter its current activity levels and estimate how these might change over time if demand changes in line with the projected population.

The tool was designed to be simple and adaptable. Although the underlying population data is available by single year of age, activity can be grouped into broader age bands to suit different

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services. The workbook also includes an option to model additional changes that are not driven purely by demographics, such as expected changes in service delivery, funding or capacity. Its outputs include charts and tables showing overall change, as well as breakdowns by age and sex. Variant projections can also be selected where different demographic scenarios are useful to consider.

2. Applying projections to learning disabilities

Edinburgh HSCP has agreed that learning disabilities will be the next topic in its joint strategic needs assessment programme. The purpose of this work is to provide a clearer picture of the needs of people with learning disabilities in Edinburgh and to map service need, demand and provision against population projections in order to understand future implications for key services.

A particular area of focus is the transition from children's to adult services. In Edinburgh, children's services are not delegated to the integration body, so adult services begin at age 18. As a result, Edinburgh HSCP wants to strengthen its understanding of the needs of children with learning disabilities as they move into adulthood, and to consider what this means for future service demand. The work is expected to draw on both local information and wider evidence where more detailed local data is not currently available.

3. Estimating future dementia need

Edinburgh HSCP has already applied a similar method in its dementia work. In that case, the aim was to estimate how many people in Edinburgh were likely to be living with dementia at present and how that number might change over time. To do this, prevalence rates identified through a literature review were applied to the Edinburgh population and then projected forward using current and future population estimates. Where local prevalence data was not available, national-level rates were used as the best available evidence.

This approach allowed Edinburgh HSCP to estimate future dementia need on the basis of two clear assumptions: that prevalence rates remain stable and that population change follows projected demographic trends. The resulting analysis has been used to inform planning around dementia and related services, helping teams think ahead about the likely effect of demographic change on future demand.

Benefits and impact

More useful evidence for planning

A key benefit of this work is that it makes population projections more directly useful for service planning. Rather than sitting separately as background information, demographic evidence is translated into estimates of what future activity or need might look like for particular services or conditions. This gives the HSCP a more practical way of using population data when considering future demand, especially in the context of a growing older population.

Clearer understanding of service pressures

The approach also supports a more detailed understanding of how pressure may change across services over time. By allowing activity to be considered by age and sex, and by showing projected change across future years, the analysis helps identify where demand may increase most and where the effects of demographic change are likely to be most significant. This is particularly helpful in a system where older age groups are expected to grow more quickly than the population as a whole.

A practical tool for services

Another benefit is that the workbook has been designed in a way that is accessible to services. The HSCP was clear that it wanted a tool that was straightforward to understand and use, rather than something technically complex but difficult to apply in practice. This means the outputs can support planning discussions among service leads and managers as well as analysts. Even where the results are not exact forecasts, they provide a useful basis for informed discussion and for considering the scale and direction of future change.

Better focus on transitions and specific needs

The work on learning disabilities and dementia shows how population projections can be used in a way that is relevant to specific groups and pathways. In learning disabilities, the focus on transition into adult services reflects a practical planning issue for Edinburgh HSCP and creates an opportunity to better understand future demand at a key point in the pathway. In dementia, applying prevalence rates to projected population change provides a way of estimating future need where direct local counts are not available. In both cases, the method helps connect broader demographic trends to more specific service questions.

A stronger shared evidence base

As this work is developed through a joint approach, it contributes to a shared understanding across partners. Edinburgh HSCP's wider needs assessment process involves collaboration across local government, NHS public health, Public Health Scotland and other services. Using population projections in this way supports a more consistent conversation about need and future demand, which is valuable when planning depends on more than one organisation or part of the system.

Learning and reflections

Simplicity has real value

One of the clearest learning points is that a simple model can still be very useful when it is built on transparent assumptions and grounded in real service data. The HSCP and Public Health Scotland recognised that the workbook was not intended to provide precise predictions; rather, its primary purpose was to support informed consideration of potential future demand. Its value lies in helping services think ahead in a structured way, providing a practical foundation for assessing how demographic change may affect future activity.

Assumptions need to be explicit

A further reflection is the importance of being clear about assumptions, particularly where local data is limited. In the dementia work, national prevalence rates were used in the absence of more appropriate local data. In the planned learning disabilities work, the HSCP expects that some information will be available for Edinburgh while other aspects may rely on national or UK evidence. Being open about those limitations helps ensure that the analysis is interpreted carefully and used appropriately.

Demography is important but not sufficient on its own

The workbook also reflects a helpful recognition that future demand is shaped by more than population change alone. Demography is a major influence, but service use can also be affected by local decisions about funding, service models, eligibility and capacity. By including an option to model

additional change on top of projected demographic trends, the approach gives services room to combine projection data with local knowledge and judgement.

Topic-based work supports practical application

Using this approach within topic-based needs assessment appears to be particularly helpful. It allows Edinburgh HSCP to apply a common analytical method to different areas of work while keeping a clear focus on practical service questions. The examples of learning disabilities and dementia suggest that projections are most useful when they are linked to specific populations, conditions or transition points, rather than treated only as general background information.

Collaboration strengthens development

Finally, the work shows the value of collaboration between Edinburgh HSCP and Public Health Scotland. The workbook has been developed through a combination of local service planning expertise and broader analytical support, with the next step being to test the model with a service in order to assess its practical application. This measured and iterative approach reflects a focus on developing something that is both credible and practical within real planning contexts.

Edinburgh HSCP's work with Public Health Scotland shows how population projections can be used in a practical and constructive way to inform future planning. By combining collaborative working with clear and accessible analysis, Edinburgh HSCP and Public Health Scotland have developed an approach that supports forward planning for services. Overall, this provides a positive example of how evidence can support evidence-based planning for future need.

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