

## Developments in official population statistics

Strand organizers: James Robards and Jim Newman (Office for National Statistics)

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### Developments in official population statistics – Tuesday 10 September, 9.00am

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#### **Methodology for estimating life expectancy by an occupation-based measure of socio-economic position**

*Scott Warr, Chris White*

*Health Analysis and Life Events, Office for National Statistics*

Health inequality and its reduction is an important policy priority for government and changes in life expectancy are indicators of health improvement. ONS has regularly produced estimates of life expectancy by a measure of socio-economic position that takes account of relative advantage in terms of employment conditions. Such a measure based on occupation and employment status is a convenient means to relate such characteristics to a simple health outcome.

This presentation aims to identify the trends in life expectancy at birth and at age 65 by socio-economic position using the ONS Longitudinal Study. There are many methodological decisions made during the process. For example, socio-economic class can be derived at each census at which the longitudinal study member (LSM) was present, and therefore, for a four-decade study, there are four time points at which a class can be assigned. In addition, there is the question of whose class to use to classify LSMs when they enter the study as children, or as adults without socio-economic information to derive a class at a census; the LSM could be classified at census or at birth by their father's or mother's NS-SEC, while for adults without occupational credentials, they could be classified according to their spouse's NS-SEC.

In this presentation, we will discuss the methodology used and how these questions were answered. We will also discuss some of the challenges that arise when using new tools such as 'R' to conduct analysis.

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#### **Subnational population projections for Wales**

*Stephanie Harries, Martin Parry*

*Population and Migration team, Welsh Government*

We present the results from the 2014-based subnational population projections for Wales, which were published in 2016, as well as providing information about what the next release for the 2017-based projections in the autumn will include. We will discuss the methodology used in the creation of the projections, as well as improvements that could be made to the model going forward.

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## Innovations in loneliness research

*Eleanor Rees and Georgina Martin*

*Social Analysis, Office for National Statistics*

The development of the National Indicators of Loneliness provided the Social Analysis Team at the Office for National Statistics with a unique opportunity to apply both qualitative and quantitative advanced modelling techniques to the problem of loneliness. Thematic interview analysis was used for the first time to assess loneliness between children (10–15) and young people (16–24) in England. This facilitated a greater understanding of the development and experience of loneliness across these age groups. Subsequent work built on these findings using The Children’s Society data, to explore loneliness using more advanced regression modelling.

Trends including social media use, the comparative isolation of urban and rural communities and the stages at which children are more at risk of developing loneliness, such as during the transition to secondary school, will be discussed, as will the factors that significantly predict loneliness in children. The application of this mixed methods approach helps us to understand more about the complex problem of loneliness. Although loneliness is often thought of as an older age problem, this work taps into how loneliness develops from an early age, the lived experiences of children and how it changes as young people progress.

This work has been run in partnership with Data Collection Methodology, the Department for Digital, Culture, Media and Sport, and The Children’s Society.

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## ONS Population and Migration Statistics Transformation – Wednesday 11 September, 9.00am

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*Fiona Aitchison, Hannah Donnarumma, Marcus Lewin, Emily Knipe, Rebecca Leeson*

*Office for National Statistics*

The Office for National Statistics (ONS) is transforming the way we produce population and migration statistics, with the ambition to deliver a fully transformed system that is admin data led by 2023. This session will provide an update on the progress towards this including:

- **Why are we transforming?** – What is the driver behind this transformation?
- **How do we get there** – Where is the research taking us and when will users start seeing the impact?
- **The latest update on our research** – How are we bringing together survey, admin and other non-survey data to transform population and migration statistics, including the impact and contribution of migrants?
- **External perspective on our progress** – What have our users told us so far – an update on the feedback we have received.
- **Interactive session to get your feedback** – What does this all mean to you? We have some questions we would like your input into; this is your chance to feed into the transformation.

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