Third UK wide workshop on trends in mortality

Hosted by Public Health England

Thursday 20th June 2019, 10am to 4pm,
Marlin Hotel, 111 Westminster Bridge Road**,** London SE1 7HR

Attendees:

Justine Fitzpatrick – PHE – Chair
John Newton – PHE
Peter Bradley – PHE
Brian Ferguson – PHE
Jonathan Knight - PHE
Abbygail Jaccard – PHE
Nick Jones - PHE
Allan Baker – PHE
Faith Ege – PHE
Katie Owens - PHE
Robel Feleke – PHE

Adele Graham - Public Health Agency, Northern Ireland
Bill Stewart – Department of Health, Northern Ireland
Caolan Laverty - Department of Health, Northern Ireland

Simon Cottrell – Public Health Wales
Llion Davies – Public Health Wales
Ciarán Humphreys (phone) - Public Health Wales
Kirsty Little (phone) – Public Health Wales

Gerard McCartney, NHS Health Scotland
Jon Minton – NHS Health Scotland
Christina Wraw – NHS Health Scotland
Arlene Reynolds – Health Protection Scotland

Cristina Sanchez – Department of Health and Social Care
Scott Warr – Office for National Statistics

1. Welcome, introductions and background - Justine Fitzpatrick

Justine gave a recap on the main issues: the change in trend in mortality and life expectancy trends from around 2011 in all four UK countries, and in many other high income countries (but not Ireland).

In England there has been a slowdown in mortality improvement in most age groups, and an increase in rates in some. Analysis by cause of death has

shown that a slowdown in improvement in cardiovascular mortality has had a large impact on the trend. There was also a large increase in the number of deaths in several recent winters.

We need to have an understanding of the causes and the evidence base to inform future public health action on this, and to collaborate and co-ordinate where appropriate. There have been two workshops thus far bringing together colleagues working in this area across the UK nations (in Edinburgh and Cardiff).

The specific aims of this workshop were to:

1. Refine the approach to testing hypotheses on flu, health & social care pressures, and austerity.
2. Share new work.
3. Develop a shared narrative for policymakers and the media.

2. Testing the Influenza hypothesis – update and discussion

- **Arlene Reynolds**

Data on the 2018/19 flu season in Scotland were presented, along with recent trends for GP activity and excess deaths from EuroMoMo.

Difficulty of estimating flu deaths was discussed, as were immunisation rates, particularly for at risk groups. After highest ever rates in 2017/18, most countries had a fall in rates in 2018/19, back to similar levels in 2016/17.

Issues were identified with current flu data, which are common across the UK:

- We do not have accurate estimates for flu deaths each year
- We need a method to assess the impact of flu deaths on mortality trends
- Also need a means of assessing impact of winter peaks on deaths later in the year.

Actions:

- **Simon** to raise these issues with the five-nation flu group which next meets on 28 June.
- A follow up skype meeting to be arranged with the flu group and interested members of this group. **Justine** to arrange.
- **Justine** to contact Mike Murphy (commissioned by The Health Foundation) to discuss his analysis of the impact of winter deaths on mortality trends.

3. Testing the service pressures hypothesis – update and discussion

- **Christina Wraw**

A protocol for a proposed study in Scotland was presented, which will look at changes in spending for health care in Health Boards and social care in local authorities, and their association with changes in age and sex-specific mortality rates.

Potential limitations were discussed, including difficulty of looking at changes in service demand, lack of data for private health care, and possibility that resource allocation may not reflect actual spend. Also acknowledged that if the model shows an association, the question of causation will remain. Noted, however, that the study may reveal that protecting some types of spending is particularly important.

Actions:

- **Christina W, Gerry and colleagues** to proceed with the proposed study for Scotland. They should confirm intention to look at absolute or relative difference in spend.
- **Gerry and Brian** to discuss the availability of data for the UK, and consider potential for developing a multi-level model for the UK.
- **Gerry and Brian** to also discuss if there are potential natural experiments which could be explored (and all to propose any natural experiments which they might be aware of).
- **Gerry** to consider if some qualitative work would be useful to inform understanding of how changes in spending may be affecting delivery and quality of care.

4. Testing the austerity hypothesis – update and discussion

- **Gerry McCartney**

Gerry summarised results from a review of papers which have looked at association between austerity and mortality. Many studies use low quality designs and are subject to risks of selection bias, standardisation problems, etc. However, three papers have been identified which are more robust and show strong evidence of an association, although they do not cover most recent time periods. These are the papers by Rajmil, Toffoluttia, and van der Wel.

Gerry then presented proposal for a study to measure the contribution of austerity policies to the change in trend in mortality rates after 2008 across high income countries, and within the UK. This will cover recent periods, look sub-nationally within the UK, and consider mediating factors. Aim will be to provide policymakers with consistent messages that reflect the available evidence.

Colleagues in Wales will collaborate on the study with colleagues in Scotland. PHE could potentially collaborate on analytical elements of the project.

Data linkage, particularly with DWP data, could inform future analysis and provide additional insight.

Actions:

- **Gerry** to circulate list of references which he has reviewed.
- **Gerry** to finalise and share the protocol.
- **PHE** to consider their potential to collaborate on analysis.
- **All** to consider how they can assist with analysis, systematic review of the literature, and with evidence synthesis and coding the evidence for quality.
- **Justine** to talk with ONS about options for linkage with DWP data through the Digital Economy Act.

5. Consideration of developing drugs/CVD/inequalities hypotheses that can be tested.

Further analysis of life expectancy and CVD trends by deprivation

- **Allan Baker**

This presentation showed that understanding trends in circulatory disease mortality could help to explain not only the overall slowdown, but the widening inequality. A number of potential reasons were put forward for discussion.

Scotland are looking at modelling impact of obesity on CVD deaths, but work at a very early stage at moment.

Actions:

- **Justine and Allan** to scope a proposal for using linked HES-mortality data to look at trends in CVD deaths by previous hospital admissions.

Trends in drug related deaths in England

- **Jonathan Knight**

Analysis of the increase in opiate-related deaths in England was presented. For deaths of drug users in treatment, 80% are from causes other than drug-related causes, with circulatory disease being the biggest cause. It is not clear how much drug-related CVD deaths may be contributing to the slowdown in improvement in CVD mortality. Also need to understand how many premature deaths are drug-related - data linkage may provide further evidence.

Trends in drug related deaths in Scotland – age, period and cohort effects

- **Gerry McCartney**

There is a cohort effect in drug-related deaths in Scotland, one of a series of cohort effects identified in Scottish mortality data.

Wales and Northern Ireland have also seen increases in numbers of drug-related deaths. In Northern Ireland there has been particular growth in drug-related deaths being assigned to 'undetermined intent' (which are therefore then included in the suicide figures).

Actions:

- **Jonathan and Gerry (and potentially others)** to consider mechanisms for linking up for more effective advocacy, including need to protect budgets for services.
- **PHE (Jonathan)** to scope development of a set of attributable fractions for drug-related deaths, and to discuss this with Justine and Allan, and with colleagues in Scotland.
- Jonathan, Justine and Allan to discuss what further analysis PHE could do using the linked NDTMS-mortality file.
- **Jon M** to share app for looking at cohort effects.

6. Developing a shared narrative – proposal and discussion

- **Gerry McCartney**

Presentation discussed different ways of framing the narrative on recent trends.

What the narrative will be is still open: could be an internal document, a shared understanding or strategy, or something else.

Noted that there is a risk of mixing up evidence and advocacy in a narrative, and that working on the evidence and what this tells us is more straightforward than agreeing a shared narrative around advocacy. Different organisations could however use different elements of the evidence to inform their own advocacy.

Economic arguments could help inform the narrative and influence decision makers.

Actions:

- **The group** should work through the sequence proposed by Gerry to develop a shared understanding of:
    - the nature of the trends
    - causes of the trends
    - appropriate responses
- **Gerry** to lead on an engagement strategy and to offer a first draft of a potential narrative to allow the group to comment.

Additional actions:

John N (as Vice President of the Faculty of Public Health) to consider arranging a sponsored workshop with the FPH.

Justine to arrange for slides to be shared (**presenters** to confirm they are happy for this to happen).

Next meeting

The next meeting will be held in Northern Ireland in 3-4 months time.