

# **Data Linkage Service User and Carer Advisory Group**

### **Newsletter**

### Issue 29 February 2020

### News

#### **Project Update**

You may remember a previous presentation from Dr Margaret Heslin regarding a project looking to understand the relationship between Severe Mental Illness (SMI) and the Human Immunodeficiency Virus (HIV). This project involves linking mental health data from CRIS with information on HIV from the HIV and AIDS Reporting System (HARS), held by Public Health England (PHE). I am pleased to let you know that the project has now received Section 251 approval — this is the legal approval required to conduct the data linkage. Now that the legal and ethical approvals are in place, the next step will be to work with PHE to get approval from their Office for Data Release. We will invite Dr Heslin back to give an update once the linkage has been conducted and she has completed her initial analysis.

# **Research Spotlight**

In each newsletter we will highlight recent research that has been conducted using linked data, if you would like to know more about any particular piece of work please let us know.

Predictors of Mortality in People with Late-Life Depression: A Retrospective Cohort Study Wa Cai, Christoph Mueller, Hitesh Shetty, Gayan Perera, and Robert Stewart.

Depressive disorder is common in adults aged 65 and older. Late-life depression is associated with negative outcomes including a higher risk for dementia and cognitive impairment. Recent studies have reported an increased risk of mortality in older adults with late-life depression who live in the community. Previous research has shown that older adults with depression are less likely to accept preventive health care or follow medication prescriptions which can increase the risk of mortality from common causes.

Previously studies have attempted to investigate the factors that may predict mortality in people with late-life depression, however, results have been inconsistent and there has been little examination of the association between specific depressive symptoms and mortality. Therefore, a team at the Maudsley Biomedical Research Centre (BRC) decided to conduct a study to investigate what factors are predictive of mortality using information on mental health from CRIS linked to cause of death data from the Office for National Statistics (ONS) Mortality dataset.

The team used CRIS to identify all patients aged 65 years or older who had received a diagnosis of depressive disorder between 1<sup>st</sup> January 2008 and 31<sup>st</sup> March 2017. Factors which may be predictive of mortality were extracted from CRIS, these included age, gender, ethnicity, marital status, and cognitive impairment. Additionally, information on specific depressive symptoms (such as helplessness, poor motivation, tearfulness, and agitation) were extracted from free text (including reports and letters) using Natural Language Processing – a technique for extracting specific information automatically from large amounts of text.

In total 4,243 patients were included in the study. Using the linkage to ONS Mortality data the team found that during the follow-up period 2,327 individuals died. In statistical analysis they found that older age, memory problems, physical illness/disability, activities of daily living problems, apathy, reduced appetite, and a prescription for mirtazapine were all associated with an increased risk of mortality. Whereas, female gender, non-white ethnicity, guilt feelings, tearfulness, impaired concentration, disturbed sleep, and delusions were associated with a lower mortality risk. Furthermore, the team found no evidence that depression severity or antipsychotic prescription were associated with mortality.

It was concluded that in clinical practice, elderly patients who present with the specific depressive symptoms which have been found to be associated with a higher risk for mortality should be examined and followed more closely.

If you would like to read the article in full, it is available <u>here</u>.

## **Upcoming**

#### **Next Meeting**

The next meeting will be held on **Thursday 5<sup>th</sup> March**, from **4-6pm**, in the BRC Nucleus Meeting Room. We look forward to seeing you then!

#### **Future Newsletters**

If there is anything that you would like to see in future newsletters or if you would like more information about something mentioned in a newsletter, you can contact Amelia or Megan via email: <a href="mailto:amelia.jewell@slam.nhs.uk">amelia.jewell@slam.nhs.uk</a> / <a href="mailto:megan.pritchard@kcl.ac.uk">megan.pritchard@kcl.ac.uk</a>, or phone: 020 3228 8554.