(p=0.008). Among the adult patients, approximately a third were given a same day appointment with their GP, and a half were offered an appointment within 48 hours. However, 11.5% were told they would have to wait more than a week, ranging between 9.6% and 16.0% (p=0.009). 86.3% of children were given same day appointments. 62.5% were aware of an alternative service that could treat their urgent health need; almost half cited their GP, yet only 33% attempted to contact them. MIUs were also cited as an alternative option; over half of respondents across the four EDs attended due to an injury. Only a fifth of respondents sought advice from a health website, while half had a long term health condition.

Conclusion The study indicates that attendance by a proportion of patients could be avoided. The convenience and relatively short wait associated with attendance at A&E is recognised by the public. Inability to access GPs in a timely manner is an issue, as is the perceived role of GPs. The large proportion of people attending with injuries suggests underutilisation of, or a need for more, MIUs. Health websites should be promoted, especially to those with long term conditions.

OP46 COMPARISON OF SEPSIS RECORDING IN PRIMARY CARE ELECTRONIC HEALTH RECORDS AND LINKED HOSPITAL EPISODES AND MORTALITY DATA: POPULATION-BASED COHORT STUDY IN ENGLAND

E Rezel-Potts*, M Gulliford. *School of Population Health and Environmental Sciences, King's College London, London, UK*

10.1136/jech-2020-SSMabstracts.46

Background Sepsis is a life-threatening condition resulting from systemic infection. Hospital admissions and recorded deaths for sepsis appear to be increasing nationally, heightening the need for epidemiological studies of sepsis based on accurate and complete data recording across linked records.We aimed to compare the recording of fatal and non-fatal sepsis across primary care electronic health records, hospital episodes and death registrations in England.

Methods A cohort study was conducted including patients registered with the Clinical Practice Research Datalink (CPRD). We analysed linked data for 378 general practices with 1,183,594 patient-years of follow-up and 21,426 first episodes of sepsis from 2002–2017. We searched linked HES admitted patient care records for sepsis events in the 30 days before and after first CPRD diagnosis. We searched the linked ONS death data for patients with sepsis recorded as any cause of death then identified if these patients had sepsis events recorded in the CPRD and HES in the 30 days preceding date of death. We calculated incidence rates and trends in age-standardised incidence in each of the linked records.

Results Among the 21,426 patients with a first episode of sepsis in the CPRD, 4,482 (21%) had a sepsis event in HES in the 30 days before or after. There were 4,872 patients with sepsis listed as any cause of death in the ONS death data; 2,564 (53%) had a sepsis event recorded in the CPRD in the 30 days before the ONS date of death compared to 1,187 (24%) in HES. The incidence of new episodes of sepsis was 18.10 per 1000 patient-years (10.75 – 28.57) in the CPRD and 7.02 (2.83 – 14.45) in HES. The mortality rate was 4.12 per 1000 patient-years (1.15 – 10.41) in the ONS death data. ONS records had peaks in sepsis mortality in 2006 and 2015 which were not reflected in the CPRD and HES records which had similar trends from low to high incidence and steep rates of increase from 2012 to 2017.

Conclusion There was a lack of agreement across data sources for both fatal and non-fatal sepsis events, indicating that relying on singular sources could lead to biased estimates of incidence. Linked electronic health records from primary care, hospital care, and death certificates should be used where possible to increase the accuracy and completeness of epidemiological findings.

Thursday 10 September

Life Course: Early Life

OP47 ADVERSE CHILDHOOD EXPERIENCES AND ADULT INFLAMMATION IN THE 1958 BRITISH BIRTH COHORT: COMPARING SINGLE ADVERSITY, CUMULATIVE RISK AND LATENT CLASS APPROACHES

[1]RE Lacey*, [1]SM Pinto Pereira, [2]L Li, [3,4,5]A Danese. *[1]Research Department of Epidemiology and Public Health, UCL, London, UK; [2]Population, Policy and Practice Research and Teaching Department, UCL Great Ormond Street Institute of Child Health, London, UK; [3]Social, Genetic and Developmental Psychiatry Centre, KCL, London, UK; [4]Department of Child and Adolescent Psychiatry, KCL, London, UK; [5]National and Specialist CAMHS Clinic for Trauma, Anxiety and Depression, South London and Maudesley NHS Foundation Trust, London, UK*

10.1136/jech-2020-SSMabstracts.47

Background Adverse childhood experiences (ACEs) have been related to poorer health across the life course. Previous studies typically relied on cumulative risk scores or individual adversities measured through retrospective self-reports. However these approaches have important limitations. Cumulative risk scores assume equal weighting of adversities and the single adversity approach ignores the high probability that adversities co-occur. In contrast, latent class analysis (LCA) offers an alternative approach to operationalise ACEs that respects the clustering of adversities and may identify specific patterns of ACEs important for health outcomes. Furthermore, prospective and retrospective reports of ACEs show poor agreement. Therefore, it is important to compare findings based on prospective and retrospective measures in the same individuals. The aim of this study was to compare LCA, single adversity and cumulative risk approaches to operationalising ACEs with inflammation in mid-life, comparing prospectively and retrospectively-reported ACEs data.

Methods Using data on 8,810 members of the 1958 British birth cohort we investigated 12 ACEs – physical, psychological and sexual abuse, physical and emotional neglect, parental mental health problems, witnessing abuse, parental conflict, parental divorce, parental offending, parental substance misuse and parental death. LCA was applied to explore the clustering of prospectively and retrospectively reported ACEs separately. Associations between latent classes, cumulative risk scores and individual adversities with three inflammatory markers (C-Reactive Protein, fibrinogen and von Willebrand Factor) were tested using linear regression.