diverse locations and indivdiuals anonymously. A modified Delphi method was utilised consisting of 2 rounds of selfadminstered questionnaires completed electronically and a third round of a meeting where paper questionnaires were distributed to infection control and influenza leads from the 36 London Trusts represented in the room. Round 1 was devised using generic open-ended questions and responses were categorised qualitatively into themes. These themes were converted into statements for Round 2 and respondents were asked to indicate their degree of agreement/disagreement on a Likert scale. Median and mode responses were reviewed to determine if there was a trend towards strong (dis)agreement or (dis)agreement for each item on the Likert scale. Round 3 was devised exploring areas of most uncertainty from Round 2. Consensus was defined as where ≥75% of responses showed strong (dis)agreement/(dis)agreement on a Likert scale. Results There were 34, 33 and 24 responses to the rounds respectively. The most effective interventions in increasing uptake amongst HCWs across a wide-range of different Trusts across London were found to be:

- 1. The availability/accessibility of vaccination at work
- 2. Planned advertising/promotion/communications, including electronic communication
- 3. Peer vaccinators
- 4. Myth-busting; education and training
- 5. Strong, visible leadership and engagement.

Contrary to popular belief, update varied by teams rather than by health professional so targeting influencers in teams was deemed effective.

Conclusion The results of the delphi method were transformed into the '7 steps to success' campaign, which was implemented during winter 2019/20. The summative evaluation has shown that uptake amongst health care workers has increased significantly on last year.

## **Posters**



## POLYPHARMACY AS A RISK FACTOR FOR ALL-CAUSE MORTALITY AMONG OLDER PEOPLE IN ENGLAND

<sup>1</sup>YT Huang\*, <sup>2</sup>A Steptoe, <sup>3</sup>L Wei, <sup>1</sup>P Zaninotto. <sup>1</sup>Epidemiology and Public Health, University College London, London, UK; <sup>2</sup>Behavioral Science and Health, University College London, London, UK; <sup>3</sup>School of Pharmacy, University College London, London, UK

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Background Polypharmacy is a prevalent phenomenon in older people. Both positive and negative outcomes of polypharmacy have been reported, making the role of polypharmacy somewhat uncertain. Most previous studies have found polypharmacy is associated with increased mortality in older people, but the definition of polypharmacy varies widely. Therefore, we tested this relationship by using the most common definition of polypharmacy. This study aims to investigate the association between polypharmacy and all-cause mortality among older people.

Methods Participants were from the English Longitudinal Study of Ageing (ELSA), a nationally representative sample of people aged 50 and older. In 2012/2013, 7729 people participated in the nurse visits, of these, 7727 were

followed up for mortality until March 2018. Complete data were available from 6757 people. Polypharmacy was defined as taking five to nine long-term medications a day for chronic diseases or chronic symptoms, while using ten or more medications was categorised as heightened polypharmacy. The presence of illness was defined as either self-reporting conditions or taking specific medications for the condition. Cox proportional hazards model was used in this study.

Results The age- and sex-adjusted hazard ratios of polypharmacy and heightened polypharmacy were 2.35 and 4.24, respectively, and these effects on all-cause mortality were primarily attenuated when adjusting for chronic conditions such as diabetes, coronary heart diseases, lung diseases and cancer. The effects of polypharmacy and heightened polypharmacy on mortality were further attenuated after adjusting for disability and health behaviours but remained significant. After adjusting for demographics, existing chronic diseases, disability, health behaviours, cognitive function and high-risk medications, people reporting polypharmacy (n=1357) had 1.51 times higher risk of death (95% CI 1.05, 2.19) compared with people not taking any medications (n=1924). People reporting heightened polypharmacy (n=162) also had 2.12 times higher risk of death (95% CI 1.29, 3.50), by contrast, people taking one to four drugs no longer showed a higher risk of death after adjustments.

Conclusion People reporting polypharmacy and heightened polypharmacy had a higher risk of mortality than people who did not take any medications. The results imply the presence of polypharmacy or heightened polypharmacy could be an indicator of mortality for older people, highlighting the need to ensure the appropriateness of multiple medications.

P02

## IMPROVING THE EXPERIENCE OF CARE FOR PEOPLE WITH DEMENTIA IN HOSPITAL: DEVELOPING THE DEMENTIA CARE POINTERS FOR SERVICE CHANGE

<sup>1</sup>J Thompson Coon\*, <sup>1</sup>R Abbott, <sup>2</sup>I Lourida, <sup>2</sup>R Gweman-Jones, <sup>1</sup>M Rogers, <sup>3</sup>D Cheeseman, <sup>4</sup>D Moore, <sup>2</sup>C Green, <sup>2</sup>S Ball, <sup>2</sup>L Clare, <sup>2,5</sup>D Llewellyn, <sup>3</sup>A Hemsley, <sup>6</sup>J Burton, <sup>6</sup>S Lawrence, <sup>7</sup>M Rogers, <sup>8</sup>C Hussey, <sup>9</sup>G Coxon, <sup>8</sup>T Naldrett. <sup>1</sup>NIHR ARC South West Peninsula (PenARC), University of Exeter Medical School, Exeter, UK; <sup>2</sup>Institute of Health Research, University of Exeter Medical School, Exeter, UK; <sup>3</sup>Royal Devon and Exeter NHS Foundation Trust, Exeter, UK; <sup>4</sup>Graduate School of Education, University of Exeter, Exeter, UK; <sup>5</sup>Alan Turing Institute, London, UK; <sup>6</sup>Alzheimer's Society Research Network Volunteers, c/o University of Exeter Medical School, Exeter, UK; <sup>7</sup>AgeUK Exeter, Exeter, UK; <sup>8</sup>Hospicare, Exeter, UK; <sup>9</sup>South West Care Collaborative, Exeter, UK

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Background Being in hospital can be particularly confusing and challenging not only for people living with dementia, but also for their carers and the staff that care for them.

Methods We undertook three systematic reviews of quantitative and qualitative evidence according to best practice guidelines. The reviews explored: 1) experience of care in hospital; 2) experience of interventions to improve care in hospital; and 3) effectiveness and cost -effectiveness of interventions to improve the experience of care in hospital for people living with dementia, their carers and staff. Links between the findings from the three reviews were explicitly identified through the creation of a conceptual map. Working closely with key stakeholders we codeveloped 12 institutional and environment practices and