Check for updates

1 Department of Health and Social Care, London, UK
2 Scottish Government, Edinburgh, UK
3 Department of Health, Belfast, UK
4 Welsh Government, Cardiff, UK
5 NHS England, London, UK
6 Academy of Medical Royal Colleges, London, UK

Correspondence to: C Whitty
Chris.whitty@dhsc.gov.uk

Cite this as: *BMJ* 2023;380:p201
http://dx.doi.org/10.1136/bmj.p201
Published: 01 February 2023

Restoring and extending secondary prevention

Comprehensive response is needed, across healthcare and beyond

Christopher J M Whitty, [1] Gregor Smith, [2] Michael McBride, [3] Frank Atherton, [4] Stephen H Powis, [5] Helen Stokes-Lampard[6]

The UK, like many European countries, is currently experiencing substantial excess mortality.[1 2] The reasons for this are likely to be multifactorial, including persisting direct and indirect effects of covid-19, surges in flu and respiratory infections, significant pressures on NHS acute services, and reductions in secondary prevention as an inevitable part of the response to covid-19.[3-5] At the start of the pandemic, as services swung necessarily towards the major new threat, it was predicted that the reduction in preventive care would probably cause subsequent indirect delayed mortality, but the immediate response to the pandemic was essential.[6] Studies finding reduced take up of interventions such as antihypertensive drugs in the initial stages of the pandemic are therefore unsurprising.[3]

Considerable efforts are being made to restore secondary prevention and many other areas of medicine, but we need to go further than simply reverting to where we were in 2019. In particular, we must extend the advantages of secondary prevention to groups that missed out even before the pandemic.[7]

Evidence that secondary prevention can substantially reduce disease incidence and progression is some of the strongest in medicine. The beneficial effects of secondary prevention of cardiovascular disease, including risk based advice and prescription of appropriate antihypertensive agents and statins, are profound and rapid.[8 9] Other clinician led interventions—for example, initiation of smoking cessation or obesity reduction programmes—also have important effects on risk of disease progression for multiple conditions, including many cancers.[10]

Wider engagement

Three sets of problems must now be solved, requiring engagement and action from all medical and allied professions, not just those in general practice or public health. The first is to ensure that people already making contact with all parts of the NHS get the secondary prevention that they need. Some of this is undoubtedly best done through general practice, but other opportunities also exist for effective risk assessment, advice, management, or referral for secondary prevention. Examples include antenatal care, routine outpatient appointments across multiple disciplines, community sexual and contraceptive health services, and perioperative assessments. Secondary prevention of cardiovascular disease, for example, should be seen as much a responsibility for obstetricians and anaesthetists as it is for general practitioners and cardiologists.

Secondly, prevention efforts need to be extended to population groups with historically low uptake. Disease prevalence is higher than average in many of these groups so the benefits of secondary prevention are likely to be even greater.[11] This will require creativity in the development and testing of various delivery models.[12] A single approach is unlikely to be successful across all groups, as shown during the rollout of covid-19 vaccines.

Initial identification of individuals at risk does not usually require a skilled healthcare professional, and directing more people into general practice for routine assessment would not be a good use of general practitioner skills or resources. The first diagnostic step could be done in many settings—for example, measuring blood pressure in workplaces or other places people go as part of their daily lives, and using existing health infrastructure such as pharmacies and optometrists. We should make it much easier and more attractive for people to come forward for assessment.

Thirdly, numerous areas of clinical practice still lack evidence based approaches to secondary prevention, including many associated with substantial morbidity or mortality such as mental health and musculoskeletal conditions. A comprehensive research agenda should be developed to fill these substantial knowledge gaps, with support from public funders such as the National Institute for Health and Care Research and the Medical Research Council.

We acknowledge the lively debate asking, "what is secondary prevention?" but here, we mean evidence based, preventive measures to help stop or delay disease, taken during an interaction between an individual patient and a clinician. These are distinct from primary prevention at a population level. Primary and secondary prevention are both important and mutually supportive.

As a profession, we must take urgent steps to reverse the current shortfall in effective secondary prevention that inevitably occurred during the pandemic and extend it to population groups that had lower uptake before the pandemic. The remarkable improvements in health over recent decades have rested heavily on the effectiveness of secondary prevention, and renewed and sustained attention to this issue is essential if we wish to continue those improvements.

Competing interests: We have read and understood BMJ policy on declaration of interests and have no relevant interests to declare.

Provenance and peer review: Commissioned; externally peer reviewed.

1 Office for National Statistics. Deaths registered weekly in England and Wales, provisional. 2023. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths

BMJ: first published as 10.1136/bmj.p201 on 1 February 2023. Downloaded from http://www.bmj.com/ on 20 April 2024 by guest. Protected by copyright.

2 Office for National Statistics. Comparisons of all-cause mortality between European countries and regions: 28 December 2019 to week ending 1 July 2022. 2022. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/comparisonsofallcausemortalitybetweeneuropeancountriesandregions/28december2019toweekending1july2022

3 Dale CE, Takhar R, Carragher R, etalCVD-COVID-UK Consortium. The impact of the COVID-19 pandemic on cardiovascular disease prevention and management. *Nat Med* 2023;29:-25. doi: 10.1038/s41591-022-02158-7. pmid: 36658423

4 Office for Health Improvement and Disparities. Excess mortality in England. 2020. https://www.gov.uk/government/statistics/excess-mortality-in-england-and-english-regions

5 British Heart Foundation. Tipping point: Why heart care must be prioritised now. 2022. https://www.bhf.org.uk/

6 Scientific Advisory Group for Emergencies. DHSC/ONS/GAD/HO: Direct and indirect impacts of COVID-19 on excess deaths and morbidity, 15 July 2020. 2020. https://www.gov.uk/government/publications/dhsconsgadho-direct-and-indirect-impacts-of-covid-19-on-excess-deaths-and-morbidity-15-july-2020

7 Patel R, Barnard S, Thompson K, etal. Evaluation of the uptake and delivery of the NHS Health Check programme in England, using primary care data from 9.5 million people: a cross-sectional study. *BMJ Open* 2020;10:-042963. doi: 10.1136/bmjopen-2020-042963 pmid: 33154064

8 Partners UCL. Size of the prize—preventing heart attacks and strokes at scale. 2022. https://uclpartners.com/project/size-of-the-prize-for-preventing-heart-attacks-and-strokes-at-scale/

9 Zhou D, Xi B, Zhao M, Wang L, Veeranki SP. Uncontrolled hypertension increases risk of all-cause and cardiovascular disease mortality in US adults: the NHANES III Linked Mortality Study. *Sci Rep* 2018;8:-2. doi: 10.1038/s41598-018-27377-2 pmid: 29925884

10 Rigotti NA, Kruse GR, Livingstone-Banks J, Hartmann-Boyce J. Treatment of tobacco smoking: a review. *JAMA* 2022;327:-77. doi: 10.1001/jama.2022.0395. pmid: 35133411

11 Lawson CA, Zaccardi F, Squire I, etal. Risk factors for heart failure: 20-year population-based trends by sex, socioeconomic status, and ethnicity. *Circ Heart Fail* 2020;13:e006472. doi: 10.1161/CIRCHEARTFAILURE.119.006472. pmid: 32059630

12 Blood AJ, Cannon CP, Gordon WJ, etal. Results of a remotely delivered hypertension and lipid program in more than 10 000 patients across a diverse health care network. *JAMA Cardiol* 2023;8:-21. doi: 10.1001/jamacardio.2022.4018 pmid: 36350612

BMJ: first published as 10.1136/bmj.p201 on 1 February 2023. Downloaded from http://www.bmj.com/ on 20 April 2024 by guest. Protected by copyright.