Response to Consultation on 'Advancing
our health: prevention in the 2020s' Green Paper
October 2019

Introduction

The Academy of Medical Sciences promotes advances in medical science, and works to ensure that these are translated into healthcare benefits for society. Our elected Fellowship includes the UK's foremost medical science experts drawn from academia and industry. This submission is informed by the expertise of our Fellowship and our previous policy work in this area, including our recent report on 'Improving the health of the public by 2040'.[1,2,3]

1. From life span to health span

Which health and social care policies should be reviewed to improve the health of: people living in poorer communities, or excluded groups?

The Academy welcomes the Green Paper's strong stance on prevention, and the Government's drive to mitigate the growing inequalities in health and social care to improve quality of life for all. In particular, we welcome the Government's commitment for the UK to lead transformative change in prevention by underpinning it with world-class, cross-disciplinary and locally relevant research. However, the Academy of Medical Sciences agrees with others that the Green Paper falls short of achieving the objective of mitigating health inequalities by placing a large emphasis on individual-based interventions for prevention, which are likely to widen health inequalities.[4,5] Instead, the Academy recommends that **the Government works to ensure health and social care policies extend beyond individual-based policies, and embed prevention in system-wide measures targeted at the social and environmental determinants of health**.

However, given the complex health challenges of today, ensuring that individual- and population-interventions are well informed and context-specific will rely on robust evidence generated by multi-disciplinary research teams. Therefore, **the Government must encourage partnerships for multi-disciplinary research through supporting research collaborations**, which will aid the identification, evaluation and implementation of prevention strategies in health and social care systems and across Government. Research funders are already working together through the UK Strategic Co-ordinating Body for Health of the Public Research (SCHOPR) which resulted from the recommendations of our report on 'Improving the health of the public by 2040' to identify priorities and develop new approaches.[6,7]

Whilst the Academy endorses the nation-wide shift towards Integrated Care Systems to nurture partnerships between the NHS and Local Authorities, we feel that the additional collaborative integration of researchers is necessary to ensure interventions are based on robust local evidence.

[1] The Academy of Medical Sciences (2016). *Improving the health of the public by 2040*
https://acmedsci.ac.uk/file-download/41399-5807581429f81.pdf
[2] [2]The Academy of Medical Sciences (2018). *Multimorbidity: a priority for global health research*
https://acmedsci.ac.uk/file-download/82222577
[3] The Academy of Medial Sciences (2015). *Multiple morbidities as a global health challenge*
https://acmedsci.ac.uk/file-download/38330-567965102e84a.pdf
[4] https://www.localgov.co.uk/Prevention-green-paper-blasted-as-'shopping-list-of-half-complete-ideas'/47848
[5] https://www.kingsfund.org.uk/press/press-releases/open-consultation-prevention
[6] The Academy of Medical Sciences (2016). *Improving the health of the public by 2040*
https://acmedsci.ac.uk/file-download/41399-5807581429f81.pdf
[7] https://acmedsci.ac.uk/more/news/health-of-the-public-research-given-a-boost-as-new-coordinating-body-is-launched

In our 'Improving the health of the public by 2040' report, we suggested the **establishment of regional hubs of engagement** to catalyse fruitful partnerships between practitioners and researchers.[1]

For this to be a success, the Government **must acknowledge the requirement for additional funding and resources to support the vital role of Local Authorities and departments of public health** in leveraging local knowledge and expertise to tackle the social determinants of health from multiple angles.[8]

Additionally, we recommend a **'Health in All Policies' approach** to align multiple policies with common goals across Government, rather than specifically Health and Social Care policies. For example, interventions aimed at creating carbon-neutral environments will not only lead to economic and environmental benefits, but may also narrow inequalities and foster long-lasting improvements in quality of life.[9,10,11]

Together, these strategies can inform which interventions have the greatest potential to produce equitable benefits to public health. Moreover, due to the multifactorial nature of health inequalities, the beneficial effects are likely to extend across many individual risk factors for ill-health, including those alluded to in this Green Paper (**Questions 3 - 8**). Although the Academy is encouraged by the Government's motivation to tackle individual risk factors, **population-level evidence suggests that the greatest benefits will be achieved if prevention strategies are targeted at the wider determinants of health**.[12] Therefore, in our response to this Green Paper, we focus on questions relating to the successful implementation of system-level strategies.

12. Creating healthy spaces

What could the Government do to help people live more healthily:
- *In homes and neighbourhoods:*
- *When going somewhere:*
- *In workplaces:*
- *In communities:*

The Academy endorses the Government's ambitions to alter the environment for improved quality of life of the public. In particular, the Academy is supportive of the Government's Clean Air Strategy and the ambition to move towards a carbon-neutral environment. These changes will likely result in many long-term health co-benefits through a number of direct and indirect

---

[8] Department of Health (2012). *The new public health role of local authorities* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/213009/Public-health-role-of-local-authorities-factsheet.pdf

[9] UK National Ecosystem Assessment (2011). *Technical Report Chapter 23: Health Values from Ecosystems.* http://uknea.unep-wcmc.org/LinkClick.aspx?fileticket=S901pJcQm%2fQ%3d&tabid=82

[10] HM Government (2018). *A green future: Our 25 year plan to improve the environment* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

[11] Committee on Climate Change (2017). *UK Climate change risk assessment 2017* https://www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Synthesis-Report-Committee-on-Climate-Change.pdf

[12] Marteau TM *et al.* (2019). *Increasing Healthy Life Expectancy Equitably in England by 5 Years by 2035: Could It Be Achieved?* The Lancet **393(10191):**2571-2573

mechanisms, helping people to enjoy healthier lives as well as narrowing inequalities.[13] But with increasing urbanisation, more evidence is required on the physical designs and policies of cities that bring about health gains at the local level. Given many cities suffer from the effects of ageing infrastructure, which are unlikely to be resolved soon, we need a greater understanding of the likely medium-term impact on health.

Due to the complex and inter-connected nature of environmental influences on health, identifying and evaluating the cost effectiveness of 'healthy spaces' interventions will **require a diverse team of transdisciplinary researchers and close collaboration with health and social care practitioners**. The Academy welcomes the Government's commitments to prioritising multi-disciplinary prevention research, including the commitment to support a collaborative research group to investigate the effects of air pollution on health. However, there is a need for research into topics beyond just healthy spaces in the context of air pollution. Key additional areas for research and intervention include building design, indoor air quality, transport, integrating green space and food systems. In our 'Improving the health of the public by 2040' report, the **Academy recommended the establishment of a mechanism for strategic coordination of research funding which has now been established through SCHOPR,[14] as well as partnerships between researchers, local Government and policymakers** to generate robust evidence for environmental interventions at the local level.[15] Whilst the expansion of the Integrated Care Systems are a step in the right direction, there was little acknowledgement in the Green Paper of the importance of collaborating with the research community, which also plays a critical role in informing policy-interventions for health.

Incorporating these recommendations into the Green Paper will enable the UK Government to support healthy living for all citizens based on a robust understanding of interventions to create healthy spaces.

13. Active ageing

What is your priority for making England the best country in the world to grow old in, alongside the work of Public Health England and national partner organisations?
- *Support people with staying in work*
- *Support people with training to change careers in later life*
- *Support people with caring for a loved one*
- *Improve homes to meet the needs of older people*
- *Improve neighbourhoods to meet the needs of older people*
- *Other. If other, please specify*
  Please expand on the reasons for your choice

The Academy is supportive of the Government's ideas around altering the environment to enhance active ageing. However, in anticipation of the proposed consensus report on active ageing outlined

---

[13] Department for Environment, Food & Rural Affairs (2019). *Clean air strategy 2019* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf
[14] SCHOPR: UK Strategic Co-ordinating Body for Health of the Public Research
[15] The Academy of Medical Sciences (2016). *Improving the health of the public by 2040* https://acmedsci.ac.uk/file-download/41399-5807581429f81.pdf

in the Green Paper, the Academy has specific recommendations derived from a number of reports on healthy ageing and multimorbidity.[16,17]

Firstly, the Academy would like to extend the Government's ambitions for active and healthy ageing to include an additional mandate to **improve health and social care services to meet the needs of older people**. Importantly, older age is strongly correlated with increasing multimorbidity, roughly defined as an increase in the diagnosis of multiple chronic conditions. The current siloed approach to the treatment of disease in clinical guidelines frequently leads to polypharmacy, subsequent adverse drug interactions and ultimately higher costs.[11]

However, as individual-based interventions are more likely to reach affluent members of society, **the Academy also emphasises the importance of population-level prevention interventions in addition to individual strategies**. This approach will require an evidence base to inform which system-wide population-level interventions will lead to the greatest benefits equally across the older UK population. These interventions are also likely to reduce age-related stigma and stereotyping. Novel approaches are required to integrate health and social care in order to optimise healthy ageing and independent living. Integrated Care Systems provide an important opportunity to achieve better health and social care outcomes for the elderly.

The Academy has recently completed a programme of public dialogue on 'death and dying', the preliminary findings of which suggest that access to quality end-of-life care and hospice services are currently inequitable amongst many UK groups. The various advocacy groups, care organisations and members of the public with whom we consulted thought end-of-life care could be improved by developing a deeper understanding of patient groups not receiving hospice care and support for local hospices to better gauge the needs of their local catchment areas. Better support and a stronger evidence base is also required for end-of-life care at home and in social care.[18]

Given these requirements for research, the UK Government should consider investment and support of research collaborations which prioritise multimorbidity and healthy ageing research across a wide range of perspectives from biological mechanisms to healthcare systems. These could take the form of **trans-disciplinary research teams and regional hubs of engagement,** discussed further in our response to **questions 1, 12, 14, 16 & 18.**[19]

14. Prevention in wider policies

What Government policies (outside of health and social care) do you think have the biggest impact on people's mental and physical health? Please describe a top 3
1) Transport policy?
2) Food regulation policy?
3) Marketing policies?

---

[16] The Academy of Medial Sciences (2015). *Multiple morbidities as a global health challenge* https://acmedsci.ac.uk/file-download/38330-567965102e84a.pdf
[17] The Academy of Medical Sciences (2018). *Multimorbidity: a priority for global health research* https://acmedsci.ac.uk/file-download/82222577
[18] The Academy recently conducted public engagement on end of life care, the report of which will be published shortly at https://acmedsci.ac.uk/policy/policy-projects/the-departure-lounge
[19] The Academy of Medical Sciences (2016). *Improving the health of the public by 2040* https://acmedsci.ac.uk/file-download/41399-5807581429f81.pdf

The Academy is encouraged by the Government's ambitions to widen system-level policy changes across Government sectors, particularly as there is growing evidence that behaviour is influenced by the physical, economic, social, and commercial environments in which people live to a greater extent than the individual factors and immediate internal drivers that are targeted by personalised approaches.[20,21]

A recent comment in The Lancet highlights the **need for a population-level approach** to mitigate health inequity for the greatest improvement in public health, and describes a set of policies with the potential to make major contributions to a prevention strategy in the UK.[22] However, it is important to note that the effectiveness of wider policy interventions are not as effective when applied in isolation. Therefore, instead of describing a top three, the Academy **calls for the implementation of multiple system-wide policy interventions**, as their cumulative health benefits are likely to be far greater when applied in combination.[23] Additionally, we encourage **a further expansion of cross-Government sectors involved in discussions around policy changes for prevention** – including, but not limited to, Education, Environment, Food & Rural Affairs, Business, Energy & Industrial Strategy departments, among others – all of which can contribute to improved health and social care in the UK.

To achieve this, **we recommend that each Government department reviews how it obtains evidence and advice on health and health equity**, in order to ensure that impact on health and health equity is incorporated in the development of all relevant policies within departments and across Government.[24] Common goals can be established between different Government departments.

15. Value for money

How can we make better use of existing assets - across both the public and private sectors - to promote the prevention agenda? [NOTE: Existing assets could be buildings, community groups, businesses and other people living in the community]

The Academy of Medical Sciences supports the Government's drive to channel investment into prevention of ill-health in the UK. The UK spends 60% of public funding for healthcare on cure and rehabilitation, and only 5% on prevention. The Academy agrees that prevention should be a higher priority, and with growing evidence for cost-effectiveness, we recommend the use of system-wide, population-level prevention strategies.[25,26]

---

[20] Hollands GJ *et al.* (2016). *The impact of communicating genetic risks of disease on risk-reducing health behaviour: systematic review with meta-analysis.* BMJ **352**

[21] French DP *et al.* (2017). *Can communicating personalised disease risk promote healthy behaviour change? A systematic review of systematic reviews.* Ann Behav Med **51(5):**718-729

[22] Marteau TM *et al.* (2019). *Increasing Healthy Life Expectancy Equitably in England by 5 Years by 2035: Could It Be Achieved?* The Lancet **393(10191):**2571-2573

[23] Rutter H *et al.* (2017). *The need for a complex systems model of evidence for public health.* The Lancet **390(10112):**2602-2604,

[24] The Academy of Medical Sciences (2016). *Improving the health of the public by 2040* https://acmedsci.ac.uk/file-download/41399-5807581429f81.pdf

[25] World Health Organization (2017). *"Best buys" and other recommended interventions for the prevention and control of noncommunicable diseases.* https://www.who.int/ncds/management/WHO_Appendix_BestBuys.pdf

[26] Bloomberg MR et al. (2019). *Health taxes to save lives: employing effective excise taxes on tobacco, alcohol, and sugary beverages: the Task Force on Fiscal Policy for Health.* https://www.drugsandalcohol.ie/30450/1/Health-Taxes-to-Save-Lives-Report.pdf

However, there is a clear need to develop robust evidence for the cost-effectiveness of key interventions for prevention which also have lasting impacts on the wider determinants of health across the UK, such as socio-economic deprivation, education and housing conditions. The Academy recognises the importance of personalised approaches to prevention outlined in the Green Paper on the use of interventions to address modifiable risk factors of individuals, such as smoking, diet and environmental exposures at scale. However, additional research is required to answer the following questions: *i)* At which individuals, groups or demographics should interventions be targeted?; *ii)* When should we intervene at the health and social care level using existing assets such as social prescribing facilities?; and *iii)* Are there areas of the UK where individual-level interventions would be more effective owing to health inequalities, demographics or healthcare service capacity?

With each UK region presenting different healthcare needs, operating systems and capacity for change, research into making cost-effective prevention decisions should be tailored regionally. Delivering the correct interventions using the appropriate amount of locally available resources will require drawing on the knowledge and experience of Local Authorities. However, **enabling Local Authorities to deliver services and interventions to enhance population health gain will require additional funding and resources and a stronger evidence base to define cost effective actions.** An important recommendation from our recent report on 'Improving the health of the public by 2040' which will be central to achieving the above research objectives is the **establishment of regional partnerships between practitioners and researchers,** discussed in greater depth in responses to **questions 1, 12, 13, 16 & 18**.[26] This will allow for a combination of local knowledge and research expertise to inform which interventions to implement, how to implement them and how to evaluate their cost-effectiveness at the local level.

16. Local action

What more can we do to help local authorities and NHS bodies work well together?

The physical environment which influences our health is in part created, governed, managed, and maintained by local Governments. Therefore, the Academy welcomes the Government's proposed shift towards Integrated Care Systems, to enhance collaborative partnerships between local authorities and NHS bodies with an overarching goal to tackle the wider determinants of health through education, town planning, housing and other sectors. We are confident that this strategy will lead to the greatest impact on prevention, as discussed in **Questions 1, 13, 14, 16 & 18**.

However, the Academy feels that more should be done to bring researchers into this collaborative partnership, whose contributions will inform the design, evaluation and implementation of robust evidence of Local Authority interventions which best promote healthy active lifestyles in each region. Outputs from the successful collaboration of NHS, Local Authorities and researchers may include a set of strategies and corresponding measurements or indicators that local Governments can use to plan, implement, and monitor policy and environmental initiatives to prevent disease. Similar approaches have been successfully applied in the United States for obesity prevention at the local Government level.[27]

---

[27] Keener D *et al.* (2009). *Recommended community strategies and measurements to prevent obesity in the United States: Implementation and measurement guide.*
https://www.cdc.gov/obesity/downloads/community_strategies_guide.pdf

Importantly, local Government has sustained disproportionately large reductions in Government funding over the past decade in comparison to other parts of the public sector.[28] Given the central role that local Government plays in the success of Integrated Care Systems in securing the health of the public, it is important that **the Government outlines a clear and achievable funding settlement for local Government in future Spending Reviews.**

17. Sexual and reproductive health

Sexual health services are core to prevention. Good progress has been made in a number of areas. Most significantly, we have seen new diagnoses of HIV reduce by 28% since 2015 and teenage pregnancy rates at an all-time low. The UK was one of the first countries to meet the UN's global goals on HIV and we are already committed to going further and achieving zero infections by 2030 as announced by the Secretary of State in January this year.
We are considering how we move to mainstream commissioning of HIV Pre-Exposure Prophylaxis.
More challenging are 2018 data published by Public Health England, which shows that rates of some sexually transmitted infections, most notably gonorrhoea, are increasing. This underlines the need to continue to promote condom use and ensure that those at risk can rapidly access services, including online testing.
What are the top 3 things you'd like to see covered in a future strategy on sexual and reproductive health?

Following the Health and Social Care Act 2012, the commissioning of sexual health services was moved to local authorities through their public health budget, which has subsequently been reduced. A strategy could review the impact of these changes on access, quality and public health function. Research capacity of sexual health services could also be assessed to better understand the underlying causes of rising rates of sexually transmitted infections (STIs) and the effectiveness of preventative interventions. This could include the evaluation of contracting out services and of the impact of HIV Prep provision on access to routine STI services.

Research is producing new technologies and interventions that can improve the delivery of sexual health services. These include enhanced diagnostic testing, surveillance of anti-microbial resistance, and digital health services linked to pharmacies to improve prescribing and incidence monitoring. A strategy could examine new innovations and determine how they might be evaluated and adopted by services.

A strategy could also review the public health role of sexual health services, beyond their function of treating STIs. This amongst other topics could review national guidelines for sexual and reproductive health education in schools, condom provision, guidance on partner notification and outbreak management.

18. Next steps
What other areas (in addition to those set out in this Green Paper) would you like future Government policy on prevention to cover?

---

[28] Local Government Association (2018). *Local government funding: Moving the conversation on* https://www.local.gov.uk/sites/default/files/documents/5.40_01_Finance%20publication_WEB_0.pdf

The Academy of Medical Sciences commends the UK Government on the ambitious targets for improving the UK's public health in the 2020s and the Green Paper's strong focus on science, research and innovation. The Academy welcomes this commitment from Government, and agrees with the notion that the UK is in the position to lead the way in prevention research. However, incorporating a number of the recommendations stated in our 'Improving the health of the public by 2040' report will help to achieve the ambitious targets mentioned above. If applied, these strategies will help to narrow health inequalities to ensure sustained improvements in public health and wellbeing.[29]

Whilst the Academy supports plans to expand the personalised approaches to prevention outlined in the Green Paper, with mounting evidence that changes in individual behaviour can be achieved through a combination of societal, organisational, and individual efforts, the Academy recommends that **greater emphasis should be put on the population-level interventions required to tackle the wider determinants of health**, such as living conditions, education, deprivation, social isolation and poor quality of the environment, as well as legal and fiscal interventions. Given the need to alter many aspects of the environment and engage multiple sectors to effect social change and achieve health impact, the Academy is concerned that **the report falls short of outlining strategies to establish the multi-disciplinary collaborations which will be central to achieving these stated targets**.

The success of interventions will rely on **robust research to inform the identification, adoption and evaluation of effective interventions at the individual- and system-level.** We therefore welcome the Government's commitment to make the UK the world leader in public health and prevention research. We look forward to seeing greater detail of the Government's plan to invest in and deliver this ambition. One of our main concerns is that the Green Paper does not sufficiently address the role of Local Authorities in shaping health and social care systems and participating in research and innovation to improve quality of life across all levels of society. The Academy recommends that **infrastructure and funding systems are developed to enable practitioners and researchers to work together on the production of high-quality evidence through collaborative partnerships.** Additionally, given the importance of local Government in shaping the environment for health, the Academy recommends that the **Government specifies a commitment to secure funding and resources to Local Authorities and associated public health departments in order to deliver on its ambitions for prevention, healthier lives and healthier environments.**

This response was prepared by Debbie Malden, Policy Intern, and informed by members of the Academy's Fellowship and our previous policy work in this area. For further information, please contact: Dr James Squires (james.squires@acmedsci.ac.uk; 020 3141 3227).

Academy of Medical Sciences
41 Portland Place
London, W1B 1QH
+44(0)20 3141 3205
info@acmedsci.ac.uk
Registered Charity No. 1070618 Registered Company No. 35202

---

[29] The Academy of Medical Sciences (2016). *Improving the health of the public by 2040* https://acmedsci.ac.uk/file-download/41399-5807581429f81.pdf