The Committee will meet at 10.15 am in the Robert Burns Room (CR1).

1. **Subordinate legislation:** The Committee will consider the following negative instruments—

   - Sale of Tobacco and Nicotine Vapour Products by Persons Under 18 (Scotland) Regulations 2017 (SSI 2017/50)
   - Sale of Tobacco (Register of Tobacco Retailers) (Scotland) Amendment Regulations 2017 (SSI 2017/51)

2. **Preventative Agenda:** The Committee will take evidence from—

   - Neil Craig, Principal Public Health Advisor, NHS Health Scotland;
   - Dr Eleanor Hothersall, Consultant in Public Health and Honorary Senior Clinical Lecturer, NHS Tayside;
   - Professor David Bell, Professor of Economics, University of Stirling;
   - Dr Helene Irvine, Consultant in Public Health Medicine;
   - Professor Gerry McCartney, Consultant in Public Health, NHS Health Scotland;
   - Eibhlin McHugh, Chief Officer, and Mairi Simpson, Public Health Practitioner, Midlothian Integration Joint Board;
   - Fraser McKinlay, Director of Performance Audit, Audit Scotland.

3. **NHS Governance:** The Committee will discuss this morning's informal evidence session with NHS Scotland patients.
4. **Preventative Agenda (in private):** The Committee will consider the main themes arising from the oral evidence heard earlier in the meeting and in the written evidence received.

5. **Child protection in sport (in private):** The Committee will consider its approach to the findings of its work.

David Cullum
Clerk to the Health and Sport Committee
Room T3.60
The Scottish Parliament
Edinburgh
Tel: 0131 348 5210
Email: david.cullum@parliament.scot
The papers for this meeting are as follows—

**Agenda item 1**

Note by the clerk

**Agenda item 2**

PRIVATE PAPER

PRIVATE PAPER

Written submissions

**Agenda item 5**

PRIVATE PAPER
Health and Sport Committee
8th meeting, Tuesday 21 March 2017 (Session 5)
Subordinate legislation
Note by the clerk

Overview of instruments
1. There are two negative instrument for consideration at today’s meeting:
   - The Sale of Tobacco and Nicotine Vapour Products by Persons Under 18 (Scotland) Regulations 2017 (SSI 2017/50)
   - The Sale of Tobacco (Register of Tobacco Retailers) (Scotland) Amendment Regulations 2017 (SSI 2017/51)

The Sale of Tobacco and Nicotine Vapour Products by Persons Under 18 (Scotland) Regulations 2017 (SSI 2017/50)

Background
These Regulations are necessary to prescribe the form and content of authorisations to permit the sale of tobacco products, cigarettes papers or nicotine vapour products by persons under the age of 18 and the method of recording authorisations. The 2010 Act makes provision for the sale of such products by a person under 18 to be an offence. The Act allows for a defence whereby an offence will not be committed if the person under 18 has been authorised by the registered person for those premises to sell these products. The Policy note from the instrument is attached at Annexe A.

3. There has been no motion to annul this instrument.
4. The Committee needs to report by 17 April 2017.

Delegated Powers and Law Reform Committee consideration
5. The Delegated Powers and Law Reform Committee considered the instrument at its meeting on 7 March 2017. The Committee determined that it did not need to draw the attention of the Parliament to this instrument on any grounds within its remit.
The Sale of Tobacco (Register of Tobacco Retailers) (Scotland) Amendment Regulations 2017 (SSI 2017/51)

Background

The Sale of Tobacco (Register of Tobacco Retailers) (Scotland) Amendment Regulations 2017 (“the 2017 Regulations”) are necessary to help bring the changes made to the 2010 Act through the Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016 (“the 2016 Act”) fully into effect.

Section 10 of the 2010 Act requires a register of persons carrying on a tobacco business to be maintained. That requirement now extends to persons carrying on a nicotine vapour product business following the amendments made by the 2016 Act. Section 11 of the 2010 Act (as amended) prescribes the information that must be provided by retailers of tobacco or nicotine vapour products in their applications for registration and to add premises to existing entries in the register. Sections 15 to 19 of the 2010 Act make provision regarding the issue and application for banning orders which ban a person from carrying on a tobacco or nicotine vapour product business. Section 19 requires a notice to be displayed where premises have been specified in a banning order. The 2010 Act is amended by the 2016 Act so that banning orders may be made in respect of the carrying on of nicotine vapour product businesses. The Policy note from the instrument is attached at Annexe B.

6. An electronic copy of the instrument is available at:

7. There has been no motion to annul this instrument.

8. The Committee needs to report by 17 April 2017.

Delegated Powers and Law Reform Committee consideration

9. The Delegated Powers and Law Reform Committee considered the instrument at its meeting on 7 March 2017. The Committee determined that it did not need to draw the attention of the Parliament to this instrument on any grounds within its remit.
POLICY NOTE
THE SALE OF TOBACCO AND NICOTINE VAPOUR PRODUCTS BY PERSONS UNDER 18 (SCOTLAND) REGULATIONS 2017 (SSI 2017/50)

1. The above instrument is made by the Scottish Ministers in exercise of the powers conferred by section 4C(5)(a) of the Tobacco and Primary Medical Services (Scotland) Act 2010 (“the 2010 Act”). The instrument is subject to the negative procedure.

Policy Objectives
2. These Regulations are necessary to prescribe the form and content of authorisations to permit the sale of tobacco products, cigarettes papers or nicotine vapour products by persons under the age of 18 and the method of recording authorisations. The 2010 Act makes provision for the sale of such products by a person under 18 to be an offence. The Act allows for a defence whereby an offence will not be committed if the person under 18 has been authorised by the registered person for those premises to sell these products.

3. Section 4C(3)(a) of the 2010 Act allows the Scottish Ministers to prescribe the form and content of authorisations. These Regulations provide that an authorisation for the sale of tobacco or nicotine vapour products by persons under 18 must be signed by the responsible person and the person under the age of 18 who is to sell the tobacco or nicotine vapour product and; include:

- the name and date of birth of the person under the age of 18 who is to sell the tobacco or nicotine vapour product (“the staff member”);
- the name and address of the premises at which the tobacco or nicotine vapour product is to be sold;
- the name of the registered person; and
- a statement that the staff member is authorised by the responsible person to sell tobacco products, cigarette papers or a nicotine vapour product.

4. Guidance for retailers on the form and content of authorisations will be available on the Scottish Government website.

Consultation
5. A full public consultation was carried out prior to the introduction of the Bill which led to the Health (Tobacco, Nicotine etc. and Care) (Scotland) 2016 Act (“the 2016 Act”). Responses were received from academic, industry and public health groups as well as from concerned individuals, members of the public and retailers. An overwhelming majority of 87% across all respondent groups agreed that sales by under 18s should be authorised.

Impact Assessment
6. The Bill for the 2016 Act was subject to a full range of impact assessments, including a Business and Regulatory Impact Assessment. Those assessments concluded that these regulations will have a limited impact on retailers.
Financial Effects
7. Authorisations for sale of tobacco or nicotine vapour products by persons under 18 will be produced and carried out by retailers themselves and should not have financial implications. Penalties will apply to those retailers who do not comply with this policy and a fine of up to £200 could be imposed.

Elaine Mitchell
Directorate for Population Health
Health Improvement Division
0131 244 1707
Annexe B

POLICY NOTE
THE SALE OF TOBACCO (REGISTER OF TOBACCO RETAILERS) (SCOTLAND) AMENDMENT REGULATIONS 2017 (SSI 2017/51)

1. The above instrument is made by the Scottish Ministers in exercise of the powers conferred by sections 11(2)(d) and 19(5) of the Tobacco and Primary Medical Services (Scotland) Act 2010 (“the 2010 Act”). The instrument is subject to negative procedure.

Policy Objectives
2. The Sale of Tobacco (Register of Tobacco Retailers) (Scotland) Amendment Regulations 2017 (“the 2017 Regulations”) are necessary to help bring the changes made to the 2010 Act through the Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016 (“the 2016 Act”) fully into effect. Section 10 of the 2010 Act requires a register of persons carrying on a tobacco business to be maintained. That requirement now extends to persons carrying on a nicotine vapour product business following the amendments made by the 2016 Act. Section 11 of the 2010 Act (as amended) prescribes the information that must be provided by retailers of tobacco or nicotine vapour products in their applications for registration and to add premises to existing entries in the register. Sections 15 to 19 of the 2010 Act make provision regarding the issue and application for banning orders which ban a person from carrying on a tobacco or nicotine vapour product business. Section 19 requires a notice to be displayed where premises have been specified in a banning order. The 2010 Act is amended by the 2016 Act so that banning orders may be made in respect of the carrying on of nicotine vapour product businesses.

3. The Sale of Tobacco (Register of Tobacco Retailers) Regulations 2010 (“the 2010 Regulations”) prescribe the additional information which must be provided in the application for registration under section 11 of the 2010 Act. The 2017 Regulations amend the 2010 Regulations to include nicotine vapour products as businesses selling those products which will be covered by the registration requirements in the 2010 Act.

4. The 2010 Regulations specify the requirements for a banning notice. These Regulations amend the 2010 Regulations to include reference to nicotine vapour product business in the wording of such notices.

Consultation
5. A full public consultation was carried out prior to the introduction of the Health (Tobacco, Nicotine etc. and Care) (Scotland) Bill. Responses were received from academic, industry and public health groups as well as from concerned individuals, members of the public and retailers. On the need to register premises of nicotine vapour product retailers, 65% of respondents agreed there was a need to register. On that basis it was decided to proceed with the proposals in the Bill.

Impact Assessment
6. The Bill for the 2016 Act was subject to a full range of impact assessments, including a Business and Regulation Impact Assessment. Those assessments concluded that this policy will have minimum impact on retailers.
Financial Effects
7. The regulations on the steps which a nicotine vapour product retailer should follow to be included on the new Register of Tobacco and Nicotine Vapour Products mirror those for retailers of tobacco products. As there is no cost to retailers for registration this policy will not add a financial burden on them. Additional resources have been made available to local authorities to enforce the new regulations.

Elaine Mitchell
Directorate for Population Health
Health Improvement Division
0131 244 1707
The following are proposed answers prepared by Dr Helene Irvine, Consultant in Public Health Medicine, NHS GG&C, and submitted 10 March 2017.

1 Which areas of preventative spending/ the preventative agenda would it be most useful for the Health and Sport Committee to investigate?

With the exception of the primary immunisation schedule in pre-school children, no area should be exempt from scrutiny or regarded as sacred and beyond thorough review, and subsequent downgrading, limiting (ie targeting) or even scrapping if justified by the evidence. Given the current financial pressures on the NHS and evidence that demand for health and social care is well exceeding supply, we now need to prioritise responding to the genuine needs of patients in real time (e.g provision of high quality health and social care to the elderly) over the theoretical potential to prevent problems in the future (most secondary prevention schemes and many health improvement initiatives), unless that preventive measure is highly cost effective (eg health protective policies such as the ban on smoking in public places, minimum alcohol pricing, etc). It is critical that we identify and scale back on, or abandon, areas of NHS activity that could be considered as conferring more harm than good, or poor value for money. These include areas of prevention with the larger budgets and with poorer evidence on their cost-effectiveness, which tend to be examples of secondary prevention (e.g. screening, both formal programmes and informal or ad hoc) and health improvement (e.g. smoking cessation and alcohol brief interventions), which should be reviewed in the first instance.

The Breast Screening Programme

A prime example of formal secondary prevention that warrants a thorough review is the national breast screening programme (in Scotland, the SBSP). Although it recently survived a UK wide review lead by Sir Michael Marmot, it may not survive future reviews as the case-fatality of breast cancer continues to improve with improving treatment and the risk benefit ratio of screen detection continues to fall as a result. Recent reviews of old and new evidence suggest that we pay a high price, in terms of false positives and unnecessary treatment\(^1\), for the small number of lives saved.

The national BSP targets asymptomatic women aged 50-70, and like most screening programmes, it is better taken up by affluent women. This means that it also contributes to inequalities in health and is the likely reason that hospital admission rates for elective oncology are considerably higher in GG&C in affluent than in socially deprived women even though cancer (overall) registration and death rates are considerably higher in the deprived. Until recently, the relevant information leaflets glossed over the harms of unnecessary investigation and treatment that may result which means that the BSP has enjoyed more than 20 years of unbalanced endorsement by leaflets that did not satisfy the need for informed consent.

The history of the national breast screening programme provides some important and unsettling clues that reveal why we have prioritised this ‘public health’ approach

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\(^1\) This includes lumpectomy, varying degrees of mastectomy, accompanied by radiation, chemotherapy, hormonal treatment, etc.
to prevention. It was introduced in 1988 by Margaret Thatcher following advice from Edwina Currie who is on the record for saying “In political terms, with elections no more than a few months away [breast screening] was also attractive”. Author and Glasgow GP Margaret McCartney asks the question: “Was the whole breast screening programme less about science and more about being a pink-ribboned vote winner?” Billions of pounds have been spent, hundreds of millions of women have been screened via an xray mammogram every three years and thousands of women have been identified as having ‘screen detected breast cancer’ since the programme was introduced. Unfortunately, three quarters of those women with ‘screen detected cancer’ have been needlessly subjected to disfiguring surgery and adjuvant treatment. Many women remain unaware of this aspect of screening, namely the fact that it is impossible to distinguish between a screen-identified ‘cancer’ that behaves in a malignant fashion and one that behaves in an indolent or even benign fashion.

Understandably, no government wants to be the one to scrap the programme when serious consideration now needs to be given to doing just that and replacing it with targeted screening for high risk women. But how can we justify the expenditure, given the poor value for money and the harm it causes, when finances are stretched and the workload it generates is part of the problem of excessive demand for health care?

Because of the objections, much of it originating from Northern European academics, to the exclusively positive slant of previous leaflets and website statements, the message on NHS Choices http://www.nhs.uk/Conditions/breast-cancer-screening/Pages/why-its-offered.aspx now reads as follows: “The main risk is that breast screening sometimes picks up cancers that may not have caused any symptoms or become life-threatening. You may end up having unnecessary extra tests and treatment.” In fact, the odds are three to one that if you are advised to have treatment, it will be unnecessary treatment, as demonstrated below and explained on the same NHS Choices website. Are women who are offered treatment for ‘breast cancer’ fully aware of this?

The section on the NHS Choices website on the pros and cons of breast screening http://www.nhs.uk/Conditions/breast-cancer-screening/Pages/why-its-offered.aspx explains it as follows:

A minimum of two hundred women have to be screened every three years to save one life from breast cancer\(^2\). Of these 200 women, three other women will have been diagnosed with ‘cancer’ that would never have been found without screening and would never have become life-threatening. This adds up to about 4,000 women each year in the UK who are offered treatment they did not need to save 1,333 lives from breast cancer.

Extrapolating for Scotland, which has ~7.8% of the UK population, this would amount to 313 women who had unnecessary treatment every year in order for 104 lives to be saved.

\(^2\) Some other published sources quote 400 screened women to save one life and given the political support for the programme it is possible that more favourable odds were selected for this website. In 2014, the Swiss Medical Board reported that it is more like 1,000 screened women to save one life.
These estimates for Scotland seem unduly small however. There were 744,000 women in Scotland aged 50-70 years of age in 2015. If we assume that uptake of the BSP is 75% and that they undergo screening every three years this would mean that 175,000 women aged 50-70 years underwent screening last year. If the “screened to life threatening pathology detected by screening” ratio is only 200:1 this would imply that 868 lives were saved in Scotland and 2,604 women underwent treatment they didn’t need last year. The numbers simply don’t add up, in fact they are off almost 10 fold, suggesting that the screening to significant pathology detected ratio is much higher than 200 to 1, or that the UK estimates (published on the NHS Choices website) used to predict the Scottish estimates are way off, or that these stats are well out of date, or a combination thereof. Which is it?

And yet, despite what might be considered unhelpful odds, no matter how you look at it, the NHS Choices UK website still states that “Most experts agree that regular breast screening is beneficial in identifying breast cancer early. The earlier the condition is found, the better the chances of surviving it.” But at what cost, financial and in terms of unnecessary investigation and treatment, with the immeasurable stresses involved to women who could never be expected to fully understand the science underpinning breast screening. Is the BSP worth continuing with? Isn’t a reasonable alternative relying on investigating and treating real lumps in women of all ages when they appear rather than proactively pursuing three quarters of a million women in that age group to undergo a procedure every three years that is unpleasant and exposes them to unnecessary radiation, for a handful of ‘wins’ that creates a large false positive rate?

It might help policy makers in Scotland to know that in 2014, the Swiss Medical Board, an independent health technology assessment initiative, was asked to prepare a review of mammography screening. The team of experts included a medical ethicist, a clinical epidemiologist, a pharmacologist, an oncologic surgeon, a nurse scientist, a lawyer, and a health economist. After a year of reviewing the available evidence and its implications, they noted they became “increasingly concerned” about what they were finding. The “evidence” simply did not back up the global consensus of other experts in the field suggesting that mammograms were safe and capable of saving lives. On the contrary, mammography appeared to be preventing only one death for every 1,000 women screened, while causing harm to many more.

Two members of the Swiss Medical Board’s expert panel went on to expand on their research and the reasons which led to their conclusion in an article the New England Journal of Medicine article signposted in the footnote discussing three major factors:

1. Outdated clinical trials.
2. Benefits did not outweigh the harms.

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3 The Swiss medical board found that for every breast cancer death prevented in US women over a 10-year course of annual screening beginning at 50 years of age:
   * 490 to 670 women are likely to have a false positive mammogram with repeat examination.
   * 70 to 100 forced to undergo an unnecessary biopsy.
   * 3 to 14 women have an over-diagnosed breast cancer that would never have become clinically apparent and present no danger.
3. Women’s perceptions of mammography benefits are not mirrored in the reality.

Their thorough review “left them no choice but to recommend that no new systematic mammography screening programs be introduced, and that a time limit should be placed on existing programs”. The medical establishment in Switzerland has provided the opposition to abolishing the programme but it is widely expected for systematic breast screening in asymptomatic women to be done away with in Switzerland, given the overwhelming evidence that is accumulating, much of it summarised by the BMJ’s own Too Much Medicine Campaign and presented at a series of annual international conferences on Overdiagnosis and Overtreatment organised jointly by the University of Oxford’s Centre for Evidence Based Medicine and the BMJ.

“Be Clear on Cancer”

Also requiring scrutiny is the policy of encouraging the public to seek medical attention for a variety of signs, symptoms and other reasons, to request ad hoc screening in the absence of an evidence base for efficacy or cost-effectiveness. This is an unwelcome development of government policy at the same time they are cutting back on the resources required to deal with the demand it raises, namely general practitioners. Governments of all political hues have been in the unfortunate habit of unilaterally announcing non evidence based ‘campaigns’ that drive people to their GP or hospital consultant asking for tests that are unlikely to help them personally in terms of extending their life span but are likely to drive up unnecessary investigation and costs.

One obvious example is the “Be Clear on Cancer” campaign promoted via NHS Choices and on wall posters delivered to GP practices where the headline advice is “If you’ve been coughing for 3 weeks or more, tell your doctor.” This campaign, which was aimed at improving lung cancer survival rates in the UK, can be seen at https://www.nhs.uk/be-clear-on-cancer/symptoms/lung-cancer#efjUfOLRqDdHBemL.97. On inspection, this website may seem innocent and helpful. However, the large increase in CXRs and chest CT scans that is has generated with the extremely low yield in terms of identifying new disease has to be considered when evaluating such campaigns. Furthermore, the increased workload it poses for GPs has to be assessed in the context of the steady disinvestment in general practice since 2006. Given the longer waits to see a GP, it should not surprise us that lung cancer survival stubbornly resists such initiatives.

Another example of an initiative that originated from central government: encouraging men with a family history of prostatic cancer to visit their GP to request a PSA level when there is no evidence that this is in the patient’s interest or a cost effective health intervention. Denying patients this test provides a real conundrum for the diminishing numbers of GPs who are facing a rising consultation rate over the same time period.

Screening for depression and dementia are other poorly studied interventions that have yet to be shown to be cost-effective and yet central government has been promoting these along with Health Checks. It is likely that the high prescribing rate for anti-depressants and the apparently high prevalence of depression in the general
population are fuelled by initiatives that aim to proactively seek out depression in patients who come to their general practice complaining about something entirely different. These misguided policies are bound to create illness and label people when we need to encourage resilience and self-reliance and promote other novel concepts such as the idea that some degree of loneliness and depression are a normal part of being human, and that the government is not responsible for all of society’s ills.

By excessively singing the praises of such initiatives, which are underpinned by either no evidence or a dubious evidence base, under the popular guise of ‘prevention’, we risk compromising the entire NHS, which then fails to adequately respond to genuine illness.

Even Alcohol Brief Interventions (ABIs), which are widely regarded ‘as a good thing’ have recently been subject to welcome scrutiny in the BMJ which, suggests that, like so many other public health initiatives, the benefits may be small. An even more recent publication in the BMJ suggests that we need to rethink ABI in general practice because the existing evidence, the limitations of which have received too little attention, should be interpreted as demonstrating efficacy at best, and not effectiveness, nor cost effectiveness. In addition, they state that “the pace of development of alcohol interventions has been disappointing, perhaps because it is not sufficiently led or championed by generalist clinicians” suggesting that we should tackle the underlying inability of our GPs to work synergistically with such add-on initiatives. Perhaps our GPs would not need these add-on initiatives if we employed enough of them and allowed them the time per patient required to make a difference as demonstrated by the SHIP Project in 4 practices in Govan Health Centre.

This raises the concern that a wide range of cause-specific services and professional groups have been spawned in recent years, at great overall combined cost, to tackle, individually, what are a range of symptoms resulting from a common cause, specifically inequality in opportunity and access to wealth and income. Wilkinson and Pickett remind us again, as recently as February 2017, that the prevalence rates of most public health problems correlate with the degree of income and wealth divide in developed countries. Instead of addressing the root cause of our problems, which is inequality in opportunity and wealth/income, we have created multiple silos of public health initiatives that attempt to tackle smoking (via smoking cessation schemes), excess alcohol consumption (ABIs), obesity (fitness classes, weight reduction schemes), etc. etc. We should consider funding a high quality GP service

4 The study by Platt et al can be found at: http://bmjopen.bmj.com/content/bmjopen/6/8/e011473.full.pdf
5 The analysis By McCambridge and Saitz can be found at: http://www.bmj.com/content/bmj/356/bmj.j116.full.pdf

Intervention studies can be placed on a continuum, with a progression from efficacy trials to effectiveness trials. Efficacy can be defined as the performance of an intervention under ideal and controlled circumstances, whereas effectiveness refers to its performance under ‘real-world’ conditions. If an activity is cost-effective, which is a much higher level of requirement, it is good value for the amount of money paid.

6 An editorial by Kate Pickett and Richard Wilkinson can be found on page 223 of the 11 February issue of the British Medical Journal: http://www.bmj.com/bmj/section-pdf/938609?path=/bmj/356/8092/This_Week.full.pdf
with continuity as the aim rather than disable general practice and then hope to solve the many problems that are inevitable in a divided society by adding a series of fragmented problem-specific programmes aimed at patching up the inadequate primary care service that results.

Finally, the relatively large sums that are currently spent on public health programmes (Appendix) should be reviewed as part of a comprehensive review of the outputs of such programmes.

2 How can health boards and integrative authorities overcome the (financial and political) pressures that lead to reactive spending/ a focus on fulfilling only statutory duties and targets, to initiate and maintain preventative spend?

As part of a sensible wider review of all statutory duties and targets, the SG needs to urgently review and downgrade targets such as the 4 hour A&E target and judge the A&E on the basis of complaints and visual inspection of corridors and crowdedness and other measures of performance and quality, including the views of clinical staff and patient satisfaction. For example, does it matter if the target is breached if the clinical and public environment appeared under control on the same day? This may seem controversial but is actually a reasonable approach, particularly if combined with an emphasis on redirection policies that keep trivial presentations out of the A&E.

The 4 hour target served a useful purpose in 2007 when it was introduced, attracting attention and resources to the A&E department which meant services were much improved and more staff employed. However, the chronic failure to comply since 2010 seen throughout the UK, including in many health boards in Scotland, and most conspicuously in Greater Glasgow and Clyde, highlights the fact that the main determinants of this compliance failure lie upstream and downstream from the A&E itself. We need to target the root causes of the problems rather than constantly react to the poor statistics by hiring more A&E staff and developing A&E pressure valves such as acute assessment units adjacent to the A&E. The latter provide a backdoor to the hospital, thereby increasing short and longer emergency stays, and a place patients can languish with no clock ticking. Current approaches, including the fixation on the 4 hr compliance, help to suck resources into secondary unscheduled care rather than target primary care (including general practice and district nursing) and community care, including the ability of social care of the elderly to keep the very elderly in the community and find accommodation/packages of care for them once they are ready to leave hospital.

However, the question is worded in such a way as to make it an unhelpfully leading question; it implies that reactive spend is bad and should be reduced and that preventive spend is good and should be increased. The truth is that our first obligation as a national health service is to react effectively to the genuine need in front of us in real time and that has to be prioritised over a theoretical ability to prevent problems in the future. Furthermore, employing more district nurses and GPs is necessary to enable them to react to genuine need in the community so as to minimise unnecessary reliance on secondary and tertiary care in the future. That is not preventative medicine as we think of it in public health terms. That is just intelligent, cost-effective health service planning because an early GP consultation is
inexpensive and a stay in hospital, when the problem is more advanced, so much more costly. The decision to reduce the percentage of NHS expenditure on general practice in 2006 and continue doing so until the present in 2017, in all four countries of the UK, was misguided but it was deliberate; it was not forced upon the English, Scottish, Irish and Welsh governments, because of statutory duties and targets, as coined in the question. It was inspired by a belief that the NHS could gradually transfer responsibility for community health services to a wide range of other multidisciplinary staff managed by integrated health and social care partnerships whilst minimising the role of GPs, who had gone out of fashion. That strategy however is doomed because it failed to grasp the need for the biomedical knowledge of the GP in:

1) deciding who can safely stay in the community and who needs to be admitted for hospital care; ie robust triage in primary care to avoid unnecessary deaths in the community and unnecessary admission to hospital.
2) Identifying unmet need in the socially deprived and responding to it with a view to reducing their dependency on A&E and emergency inpatient admission.
3) Preventing unnecessary investigation, diagnosis and treatment in the worried well, which only a skilled and experienced GP can be relied on to do on a consistent basis.
4) Responding to acute illness in the very elderly at an early stage with a view to preventing unnecessary reliance on unscheduled care. (This can only be done with adequate support from district nursing and social care of the elderly.)

My view, as a public health doctor, is that we are obsessively interested in prevention, almost to the point where we want to screen all patients for everything, and this is undesirable, unaffordable and unnecessary. Life expectancy is still rising and this is largely because of better nutrition, better housing, better employment law, more protective health and safely legislation, cleaner water, and other structural determinants of health. The falling prevalence of smoking is perhaps the most major relevant life style factor contributing to the fall, highlighting the importance of the ban on smoking in public places and ongoing attempts to introduce more public health protective policy in the area of tobacco (eg point of sales visibility of cigarettes, packaging, pricing etc).

The introduction of the QOF in 2004 increased the micromanagement of coronary artery disease many fold but did not change the already falling mortality rate of coronary artery disease, implying that the falling trajectory was pre-determined and the result of all these other factors. The lack of impact of QOF also suggests that the strict regulation of GP activity towards screening and prevention, perhaps counter-intuitively, is not the answer. Employing more GPs in deprived areas and allowing them the time they need to respond to genuine unmet need would make a huge positive difference. This is why investment in general practice generally, followed by the creation of a steeper funding formula for general practice (via the Scottish Allocation Formula), followed by deregulation of general practice is so important. The recent abolition of the requirement to link funding with QOF data collection was an important step in the right direction.
In conclusion, the SG needs to remember that the most important genuinely preventative strategy is to reduce the opportunity and income/wealth gap between the rich and the poor with a view to reducing inequalities in health, which will benefit all of Scottish society. Raising income tax in Scotland, which the devolved administration has had the power to do since 1999, is an important way to redistribute wealth and opportunities. Its failure to do so suggests a lack of conviction when it comes to actually applying its socially progressive principles. The SG should resist the temptation to blame the requirement to comply with statutory duties and targets for its current problems and avoid creating a false dichotomy between reactive and preventive spend in the context of the health service.

3 How could spend that is deemed to be preventative be identified and tracked more effectively? What is required in terms of data, evidence and evaluation to test interventions for producing ‘best value for money’?

The implication in the question is that there are wonderful initiatives out there that prevent ill health and premature death but we simply can’t measure their cost-effectiveness and we need to try harder to demonstrate their existence and their value for money. The truth is that the wonderful initiative is staring us in the face: equalise opportunity and reduce the income/wealth gap. Use existing powers to do so.

The other implication in the question is that we are still short of data and evidence when many believe that we are drowning in both. We now have enough routinely collected data, available online, to evaluate many risk factors and interventions without having to leave our offices. What we are short of, are the skilled and numerate people who know how to interpret that data and evidence, despite the large numbers of staff employed by the NHS who have no contact with patients.

There are large sums currently being spent, and wasted, given the evidence above on the breast screening programme, to name just one preventative programme, that are not at all difficult to quantify and we need to start with these initiatives and limit their use, for example in the form of targeted screening, thereby liberating resources that have been needlessly tied up in national untargeted screening programmes that were ill conceived from the beginning.

On a positive note, the costs and benefits involved with the primary vaccination schedule for children are fairly well measured. The cost-effectiveness of other vaccination programmes, including the promotion of the flu vaccine for all NHS clinical staff is harder to fully evaluate but published attempts have been made and the programme is intuitively sensible. But is it worth collecting realms more data and spending hundreds of hours to fully measure its benefits?

And finally, given that the most important preventative strategy is to equalise opportunity, including by reducing the income/wealth gap between rich and poor, the identification and tracking of that ‘preventive spend’ would be relatively easy to do. Measuring the impact of a rise in taxation is straightforward. The reason the task of quantifying preventive spend to achieve best value for money, as implied by the question, has become so apparently overwhelming and onerous is because we have been determined to substitute the right solution (what is needed and ethically
justified which is reducing the opportunity/income/wealth gap) with a very wide and expanding range of alternative solutions that provide a suboptimal return on our investment.

4 How can the shift of spending from reactive/acute services to primary/preventative services be speeded up and/or incentivised?

Again, this leading question makes the assumption that spending yet more resource on prevention is going to solve our problems when what is required is an intelligent review of what we are already potentially wasting on large public health programmes.

Bearing in mind the responses to the first three questions, it is obvious that one of the first things we need to do is downgrade targets (eg 4 hr target in unscheduled care) and review all national and ad hoc screening programmes with a view to seriously considering abolishing cost-ineffective programmes that do more harm than good. This would free up considerable financial resource which is essential given the fiscal pressures that will only get worse over the next 10 years.

However, it needs to be borne in mind that huge resource is still, despite recent improvements, tied up in hospitals in the form of unnecessary emergency admission including delayed discharges, particularly for the elderly. Some health professionals at the coal face also believe that far too much resource is needlessly tied up in community hospitals and nursing homes because patients enter these too soon in the natural history of their deterioration, because of inadequacy of community based services.

Extracting these resources will be difficult for obvious reasons. Consideration should be made to providing a bridging loan to kick start GPs, (and district nursing and SCoE) on the grounds that general practice has already demonstrated itself to be a highly cost-effective service and GPs the only professional group that could be expected to lead a community based health and social care service. Again, bearing in mind the response to the previous question, it is important to remember that primary care services need to be adequately funded to react to genuine need in the community and that is precisely what was disabled by the introduction of the QOF payment system in 2004 via the GP Contract and the subsequent clawing back of GP funding from 2006 onwards. GPs need to be trusted to apply the art of medicine to the individual patient in front of them and temptation to micromanage them resisted, particularly as no other medical group has been subjected to this level of control.

The SG has already promised similar types of funding for IJBs to enable them to shift the balance of care from acute hospitals to community settings. Whether they will be able to use this resource, as efficiently as GPs would, remains to be seen.

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7 This includes initiatives that do not qualify as national screening programmes but have a similar impact, including those that reduce the threshold at which the public are subject to unnecessary tests. An obvious example is the policy from central government to encourage the public to visit a GP and seek a diagnostic imaging test if they have been coughing for more than three weeks.

8 Based on discussions with Dr Alastair Noble, retired GP and proponent of community hospitals and GP-led locality planning.
Appendix: Extract from Chapter 4 Health and Wellbeing expenditure for two recent fiscal years available at: http://www.gov.scot/Publications/2014/10/2706/7

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<td>Early Detection of Cancer</td>
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NHS Health Scotland is a national Health Board working with public, private and third sector organisations to reduce health inequalities and improve health. Our strategy A Fairer Healthier Scotland\(^1\) sets out our vision of a Scotland in which all of our people and communities have a fairer share of the opportunities, resources and confidence to live longer, healthier lives. Our primary role is to work with others to produce, share and implement knowledge of what works to improve the health of the people in an equitable way, thereby reducing health inequalities.

NHS Health Scotland welcomes the Health and Sport Committee’s inquiry into preventative spend. Prevention is often proposed as the best way to help manage financial pressures on the health and social care systems (as well as other areas of public expenditure) whilst improving health outcomes and tackling persistent inequalities in health. However, the debate is sometimes confused and confusing, and it is timely for the Committee to try and address some of the reasons for this to ensure that the second part of the inquiry is as clear and useful as possible.

NHS Health Scotland has argued in previous reports\(^2\)\(^3\) that prevention can:

- Improve health in a cost-effective way
- Help reduce health inequalities

The reports cited evidence that the most cost-effective forms of prevention and the most likely to reduce health inequalities are:

- measures tackling the social and economic determinants of health, such as programmes that ensure adequate incomes, reduce poverty and reduce income inequalities
- measures that use fiscal, regulatory or legislative levers to encourage behaviour change, such as minimum unit pricing or tobacco taxation.

1. NHS Health Scotland (2012) A Fairer Healthier Scotland
It also made the point that prevention has the potential to help reduce demand for services arising from poor health and other social outcomes but that the ‘savings’ arising from this are less certain. In light of the emphasis on savings sought from investing in prevention, it would be useful for the inquiry to explore this in more detail and address some of the challenges that arise from adopting this perspective. We enlarge on this below in response to the specific questions posed by the committee.

1. Which areas of preventative spending/the preventative agenda would it be most useful for the Health and Sport Committee to investigate?

First of all, we think it is important that the Committee clearly defines the scope of prevention. Our perception is that different stakeholders define prevention in different ways. Some define it in terms of measures to prevent admission to, or prevent unnecessary use of, hospital and other health care facilities through provision of alternative forms of care. This is clearly important to help manage pressures on the acute sector and to ensure people are looked after in the most appropriate settings, but it is primarily a debate about how to meet established needs.

We would encourage the Committee to adopt a more public health focus on primary or secondary prevention that identifies ways of pre-empting the need for treatment and care in the first place by preventing the onset or development of disease. This requires measures within or beyond the health sector, intervening early to improve health, well-being and economic outcomes.

Our second point is related to the first. The focus on the role of prevention in reducing demand for and cost of public services is understandable in the current climate, but poses risks for prevention because the potential savings from prevention may be overstated.

In the shorter term, savings are limited by the scope to ‘strip out’ resources to make financial savings. Useful ‘time releasing’ savings may be possible by easing demand and therefore reducing capacity pressures. However, the overall change in financial cost will depend on what is done with the staff, beds, etc. ‘freed up’ by effective prevention.

Longer term, improving life expectancy can lead to additional pressures on the health and social care system as people age and experience the diseases and social care
needs associated with ageing.\textsuperscript{4} To offset this, it is important that prevention increases \textit{healthy} life expectancy so that the length of time people spend in poor health as they age doesn’t increase.

Although it is challenging to make savings from prevention, this is not an argument to cut investment in prevention. Prevention seems to us (and others\textsuperscript{5}) to be unique in having to justify itself in terms of savings. We do not expect heart surgery or social care to demonstrate they save money. We invest in them because they improve health and well-being. Some services generate more health and well-being in relation to their cost than others (i.e. they are more cost-effective) and there is ample evidence, much of it summarised in NHS Health Scotland’s previous reports on the economics of prevention, that prevention is often (but not always) cost-effective. We would urge the Committee to focus on cost-effectiveness rather than cost savings, to use evidence to identify the most cost-effective preventative services and to encourage health boards and local authorities to prioritise these.\textsuperscript{6}

2. How can health boards and integrative authorities overcome the (financial and political) pressures that lead to reactive spending/ a focus on fulfilling only statutory duties and targets, to initiate and maintain preventative spend?

We would suggest this is partly about changing or supplementing current targets and performance management processes more generally. The current review of performance measures is relevant here. Many of the National Indicators in the National Performance Indicators make sense in terms of encouraging investment in prevention but some of the Local Delivery Plan (LDP) standards to which local boards are held to account encourage further investment in hospital or other health service-based activity to meet existing needs. Whilst this is clearly important to current patients, it also limits room for manoeuvre in trying to invest in more preventative approaches. Statutory duties and targets need to be more in line with what we want to achieve with respect to prevention and a shift in the balance of care and we suggest that this would be a useful area for the Committee to explore.

Political will is also important in shifting towards prevention. Realising substantial savings for reinvestment in prevention is likely to require scaling back of some hospital or other healthcare facilities, in order to ‘free up’ resources to invest in preventative services. There are obvious political challenges in effecting such changes, but there is also evidence from the National Conversation on a Healthier Scotland that the public has an appetite for more preventative approaches to promoting health and for changes in how care is delivered. Responses called for “more focus on preventing illness rather than just curing it … the need to tackle the underlying causes of ill-health, many of which fall outside the traditional boundaries of health and social care, … There was general recognition that the current system of health and social care is under financial pressure, that change is necessary, and that clear priorities need to be set. The need to shift the balance of care from the hospital setting to the local community was highlighted.”

There is also some evidence that involving people in tough decisions, including explicit comparisons of options and opportunity costs (what you forego if you decide to maintain existing services) makes people more willing to accept the outcome of the process even if they don’t agree with it. The Committee might usefully reflect on how the public can be further engaged in this debate in order to create and inform a political climate in support of prevention and the actions required to promote it.

3. How could spend that is deemed to be preventative be identified and tracked more effectively? What is required in terms of data, evidence and evaluation to test interventions for producing ‘best value for money’?

More precise measurement of current spend on prevention would be a good thing in principle but challenging in practice. Much of the spending on preventative activities is not categorised as such because, for example, it takes place in routine primary and secondary care or because the primary goal is not prevention, in particular for services outwith the health sector. For example, housing is not primarily a preventative activity but to the extent that good housing is part of ensuring children have a good start in life, it helps to prevent some of the negative health, social and consequences associated with growing up in poor environments. NHSHS believes that the scope of prevention should be defined widely. However, this means that a lot of time and energy could be taken up trying to define and measure preventative spend when it is not really feasible to do so and without moving us forward in terms of understanding what we should do about it.

We would suggest that the emphasis should be on using data and evidence to identify what we think are the drivers of (inequalities in) preventable mortality and morbidity, many of which we already know well enough, and then use evidence and evaluation to identify the most effective and cost-effective ways of tackling these.

To identify interventions that represent good value for money, rigorous economic evaluation is required and we need to make more effective use of the evidence generated by economic evaluation. The NHS Health Scotland publications mentioned earlier summarise some of the best available evidence.

This is particularly important to guide investment in prevention because it is often claimed that ‘prevention is better than cure’ and that prevention saves money. However, the results of rigorous economic evaluations are more nuanced than that. For example, a review of the economic evaluations carried out to inform the Public Health Guidance published by the National Institute of Health and Care Excellence (NICE) looked at 200 public health interventions such as workplace interventions to stop smoking, school based mental health and wellbeing interventions etc. Only 30 were estimated to be cost-saving, including NHS and workplace based smoking cessation services. The vast majority (but not all) were cost-effective, in particular those aimed at the population as a whole, such as legislation to reduce young people’s access to cigarettes. A few were very costly in relation to the health improvement they achieved and there were even some that were more costly and less effective than the alternatives against which they were compared. Similar results were found in perhaps the most extensive assessment of the cost-effectiveness of prevention carried out in Australia.

Both studies, and a large body of other evidence, provide a very strong economic case for prevention, but the case needs to be based on careful interpretation of the evidence and specific recommendations about the best forms of prevention in which to invest. This raises a more technical point about the need to be clear what the evidence tells us. One of the main reasons studies make different claims about the cost-effectiveness and cost-savings arising from prevention is that they use different methods. For example, ideally, studies should measure costs and benefits that fall on

services and beneficiaries beyond the health system, but this is not always possible and it is not always done. Some people argue that we should include the costs of treating people for the illnesses they experience because they live longer as a result of successful prevention. In general the effect of this is to reduce the estimated cost savings (if any) from prevention, but if we don’t consider them we are ignoring the financial consequences of greater longevity arising from successful prevention due to the increasing prevalence and cost of diseases associated with old age. We would encourage the Committee to use the opportunity afforded by the inquiry to get a greater shared understanding:

- of what we should be measuring regarding the economics of prevention
- of what has been measured when evidence is cited for or against more investment in prevention.

4. How can the shift of spending from reactive/acute services to primary/preventative services be speeded up and/or incentivised?

Many of the comments in response to question 2 are relevant here. The only additional point we would wish to make is that there is a need for ways of funding prevention that break the current cycle of high pressures on hospital and other public services that make it hard to find the resources to invest in prevention that would in turn help reduce some those pressures. The phrase ‘double running costs’ is sometimes used to capture the idea that we need to invest upfront in prevention whilst current services continue to meet existing needs. The longer term aspiration is, of course, that the preventative services will ease pressures on acute services such that resources can be shifted from acute into additional preventative services and create a virtuous circle revolving around a more prevention-focused system.

Scottish Government has created transformation funds to achieve this and different approaches have been tried elsewhere.10 11 12 We suggest that the Committee should focus on learning from these experiences to replicate or expand those that work and amend or avoid those that don’t.

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The areas of preventative spending/the preventative agenda which NHS Tayside would find it most useful for the Health and Sport Committee to investigate include early intervention in the early years, obesity, physical activity, nutrition, mental health and well-being, substance misuse (including tobacco) and health literacy. We would want all of these to target a reduction in health inequalities and the promotion of health equity.

To overcome the perverse pressures and incentives that lead to reactive spending/a focus on fulfilling only statutory duties and targets, NHS Tayside and other public bodies need to experience the same sanctions if they fail to deliver on the priorities outlined above as they would if they fail to deliver on, for example, waiting times, treatment times and delayed discharges.

Some of the preventative spend is relatively easily identified and tracked, for example the outcomes framework bundle and funding of directorates of public health/health improvement/population health intelligence. However, the majority of preventative work is undertaken by professionals other than specialists as part of the wider public health content of their work, and this would be very difficult to identify and track. In terms of the production of data, evidence and evaluation to test interventions for producing best value for money, NHS Tayside particularly welcomes the creation of a national public health agency, which will be ideally placed to use the rich sources of data, evidence and evaluation capacity which exists in public sector and academic institutions nationally and locally.

A shift of spending from reactive/acute services to primary/preventative services can be speeded up and/or incentivised by adopting the sanctions referred to in bullet point 2 above. In addition, the promised Public Health Strategy for Scotland will facilitate more joined up working between national and local agencies around a common prioritised agenda and a pooling of resources and capacity across the country. Also, NHS Tayside and its partners need to adopt the principles outlined in Realistic Medicine, to include a focus on people (formerly known as patients) engaging with public and third sector agencies in co-producing solutions to health and well-being challenges, and to addressing the currently imbalanced balance of care.
The Preventative Agenda in Health and Social Care: A Paper for the Scottish Parliament’s Health and Sport Committee

David Bell and Elaine Douglas
Division of Economics
Stirling Management School
University of Stirling

March 2017
Key Messages
1. Prevention strategies are good in principle but very difficult to implement successfully
2. There is a clear need to develop research capacity to support a prevention agenda in health and social care. Two actions that would help:
   a. More Scottish Government support for academic social care research
   b. Establishment of a Scottish longitudinal study of ageing

Introduction
Investing in preventative spending seems like a no-brainer. If we know that improved diet during pregnancy improves children’s health outcomes, why not subsidise healthy eating for pregnant women? Scotland’s policymakers often claim that they are following a “preventative agenda”, but the cases where Scottish Government policies have clearly demonstrated a preventative effect are rare.

This paper reviews the difficulties of successfully implementing preventative strategies, particularly in health and social care. It then examines the structure of research in these areas: high quality research is essential to provide the evidence both for the introduction of preventative policies and for establishing their success or failure. Finally, we make the case for the introduction of a longitudinal study of ageing in Scotland to provide a foundation for evidence relating to a wide range of preventative policies.

Barriers to Effective Prevention Policy
Successful interventions to prevent negative outcomes, such as a frail elderly person falling, requires: (1) understanding why the negative outcome occurs, (2) understanding how a policy intervention can prevent its occurrence and (3) successful implementation of the policy. Each of these stages is necessary, but for many applications is highly complex. We discuss these in the remainder of this section.

Understanding why negative outcomes occur
The UK has a distinguished history in the use of evidence to prevent adverse health outcomes. One example is William Farr’s statistical evidence which exposed the causes of cholera in London. His data and analysis helped identify the source of this disease (London’s water supply), which in turn led to successful water purification policies. Careful analysis of data saved thousands of lives because:

1. a decision was taken to collect relevant data (which was based on a theory, or hunch, connecting cause and effect),
2. careful statistical interpretation of these data was carried out, and
3. the policies indicated by the analysis were implemented.

There are other examples in public health where data has been effectively deployed to help prevent illness and disease. However, for some problems, the collection of evidence is not straightforward because the processes leading to the negative outcome (e.g. obesity) are not fully understood, and/or are contested. This is particularly true where the sources of disease or chronic conditions may be social and/or economic. In these circumstances, the policy analyst has several challenges:

- Does the evidence being collected address the underlying problem? Social and economic processes are inherently complex. Without an understanding of their structure, it may not be clear what evidence to collect.

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1. Related analysis of the use of evidence in policy by Professor Paul Cairney is available [here](#) and [here](#).
2. William Farr is recognised as the father of medical statistics and his contribution has recently been recognised through the creation of the Farr Institute, whose Scottish hub is at the University of Dundee.
Is the source of the evidence unbiased or self-serving? Evidence from bodies wishing to use evidence for their own advantage should always be treated with caution.3

How accurate is the evidence? Information can be collected in different ways. Personal or household surveys are among the most common sources.4 Accuracy increases with sample size, but there will always be a margin of error. There is always a risk that the collected sample is not representative of the population. Even with a correctly designed survey, the link between policy cause and social or economic effect cannot be known with certainty. Risk-averse politicians may therefore lose their enthusiasm for preventative interventions.

How general is the evidence? If the intention is to apply preventative policy to the whole of Scotland, then the evidence should represent all of Scotland’s population. This may be challenging, given the diversity of Scotland’s physical, social and economic geography.

Does the evidence correctly identify cause and effect? Imagine that one collected a survey which found that recently retired individuals were unhealthy. Does this imply that their poor health caused them to retire or that retirement had an adverse effect on their health? The policy implications are quite different. There are a variety of statistical methods that can be used to distinguish cause and effect. We describe one of these below.

For how long has the data been collected? One way to aid identification of cause and effect is to establish which occurred first. Cause should be observed before effect. But sometimes the gap between cause and effect can be long. For example, exposure to an occupational hazard may take years, or even decades, before it affects individual health. The adverse health effects of exposure to asbestos can take decades to occur. Linking cause and effect for someone exposed to asbestos therefore implies a need to collect data on individuals over long periods of time. Studies that collect data on the same individuals over time are described as longitudinal. In the final section of this paper we make the case for collecting a longitudinal survey of ageing in Scotland to better understand the policy challenges that the nation faces in relation to population ageing.

Implementing Preventative Policy

The implementing of preventative policy is also challenging. Some of the difficulties include:

Assessing when the benefits from the policy will occur.
Some policies may take a long time to bear fruit. Early years interventions may reduce unemployment and crime rates after children become adults. Such timelines extend well beyond the electoral cycle, meaning that the politicians who introduce preventative policies are unlikely to still be in office when the benefits of the policy are realised.

Establishing costs and benefits for other stakeholders
Suppose that the policy intervention is correctly identified, but its implementation involves imposing changes on local government and/or health boards. Unless such change can be negotiated amicably, the Scottish Government must trade off the costs of damaged inter-governmental relations against the benefits arising from preventing adverse outcomes.

In the next section, we examine existing arrangements for researching health and social care in Scotland. This will help identify likely sources for evidence to support the preventative agenda. In the final section, as mentioned above, we argue the case for establishing a longitudinal survey of ageing in Scotland to provide a wide-ranging source of suitable evidence to underpin the preventative agenda in relation to health and social care.

3 The UK Statistics Authority exists to support the “statutory objective of promoting and safeguarding the production and publication of official statistics” - in other words to ensure that users of official statistics have confidence that they have not been meddled with. It reports directly to the Scottish Parliament.
4 Though there are other forms of evidence that can be collected, we focus on surveys as the most reliable way to collect unbiased information on Scotland’s entire population.
Research in health and social care in Scotland

The Scottish Government’s Health & Social Care Directorate is responsible for strategic leadership for public health, NHS Scotland and social care. Health research is supported by the Chief Scientists Office (CSO). The CSO funds 6 research units across Scotland: Health Services Research Unit (HSRU) and Health Economics Research Unit (HERU) both at the University of Aberdeen; Social Public Health Sciences (SPHSU) at the University of Glasgow, Nursing and Allied Health Professions (NMAHP RU) at Glasgow Caledonian and University of Stirling and the Scottish Collaboration for Public Health Research Policy (SCPHRP) at the University of Edinburgh. Social care research is commissioned and conducted by the Health Analytical Services Division, Scottish Government. Its role is to provide research-based evidence for health and social care policy development, with the Information Services Division (ISD) of the NHS National Services Scotland providing statistical support.

Thus policy-focused health research in Scotland is carried out in academic research units across a range of specialisms. Social care research, conducted by the SG Health Analytical Services Division (HASD), has no academic home. This contrasts with England and Wales, where both health and social care research are provided by specialist academic researchers.

In Wales, the National Institute for Social Care and Health Research (NISCHR) develops strategy and policy for research. Its research infrastructure is designed to increase research capacity for current and emerging research areas. The School for Social Care Research, based in Swansea University (in collaboration with Cardiff University and Bangor University) aims to increase the capacity of social care research to develop evidence-informed policies and services across Wales. Health research is distributed across several centres (Centre for Ageing & Dementia Research, National Centre for Mental Health, National Centre for Population Health & Wellbeing, Primary & Emergency Care (PRIME), and the Wales Cancer Research Centre) and Research Units (BRAIN, diabetes and kidney research units).

In England, the Department of Health (DH) funds health and social care research via the National Institute for Health Research (NIHR). The NIHR works across six broad themes to encompass the funding of research and the training of researchers and leaders. Three national schools were established covering Primary Care (SPCR), Public Health (SPHR) and a dedicated Social Care Research (SSCR) unit. Each school is a collaboration of academic centres. SPCR involves 9 institutions, the SPHR 8 institutions and the SSCR 5 institutions.

The DH also funds specific policy development through its Policy Research Programmes such as the Policy Research Unit in Cancer Awareness, Screening and Early Diagnosis.

England and Wales fund academic research centres to support the health and care policy debate, while Scotland supports academic research for health but not social care. Given the importance of the social care agenda in Scotland, this seems to be a major gap in Scotland’s research infrastructure. The Scottish Government social care analysts provide a great deal of useful information, but are constrained by their other commitments. The Schools for Social Care Research in both England and Wales are charged with identifying and prioritising social care research activity and to support knowledge translation into practice.

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5 See [www.sehd.scot.nhs.uk/aboutus.html](http://www.sehd.scot.nhs.uk/aboutus.html)
6 See [www.cso.scot.nhs.uk/research-units/](http://www.cso.scot.nhs.uk/research-units/)
8 See [www.swansea.ac.uk/media-centre/latest-news/thewalesschoolforsocialcareresearchofficiallylaunches.php](http://www.swansea.ac.uk/media-centre/latest-news/thewalesschoolforsocialcareresearchofficiallylaunches.php)
10 University of Bristol, University of Cambridge, Keele University, University of Manchester, Newcastle University, University of Nottingham, University of Oxford, University of Southampton, University College London
11 University of Sheffield, University College London, University of Cambridge, LiLaC collaboration between the University of Liverpool and the University of Lancaster, Fuse, Centre for Translational Research in Public Health: a collaboration of Newcastle, Northumbria, Sunderland and Teesside universities, Peninsula College of Medicine & Dentistry and the London School of Hygiene and Tropical Medicine
12 London School of Economics, University of Bristol, University of Kent, University of Manchester, University of York
13 See [www.wolfson.qmul.ac.uk/centres/ccp/pru](http://www.wolfson.qmul.ac.uk/centres/ccp/pru)
through links with social care service providers. Social care research in Scotland is inadequate, given the challenges that the nation faces.

If Scotland is to address prevention issues to identify cause and effect, then the type of study undertaken is of key significance. Cross-sectional (snapshot) studies, such as the Scottish Health Survey and Scottish Household Survey, are effective in monitoring trends in population health over time. They are of little value in identifying cause and effect. Only longitudinal studies, where the same people are followed over time, can identify the sequence of events (and their association with other factors) that helps distinguish cause and effect.

The Scottish Government currently supports two longitudinal surveys: Growing Up in Scotland and the Scottish Longitudinal Study. Growing Up in Scotland is focussed on childhood. The Scottish Longitudinal Study (SLS) pulls together administrative and statistical data sources to produce a large-scale linked data resource. Administrative data linkage is not unique to Scotland, but Scotland’s capacity to link data across a range of administrative sources is one of our world class assets. SLS links census data, vital events (births, deaths and marriages), population (immigration and emigration) and health data (cancer registrations and hospital episodes) for around 5% of the Scottish population (approx. 274,000 individuals).

While SLS is a useful resource, it cannot address key issues of cause and effect in our ageing population because the administrative data do not capture key lifecourse events such as employment, retirement planning, income and wealth, cognition, health behaviours and attitudes - the type of data collected by longitudinal surveys. Were appropriate survey data available to be linked to administrative data, then we could have the best of both worlds. Given Scotland’s almost unmatched capacity for administrative data linkage, we now explain how a longitudinal survey could be used to design and evaluate preventative spend policies for relating to health and care provision among Scotland’s ageing population?

The Gateway to Global Ageing is a platform for harmonised longitudinal ageing studies across the world. It began in 1992 with the Health and Retirement Study (HRS) in the USA. This study has followed over 30,000 individuals aged over 50. Similar studies were subsequently set up in Brazil, Mexico, Korea, India, Japan and China and closer to home, in Europe (20+ European countries plus Israel), in the Republic of Ireland, in Northern Ireland and in England. Together, these studies have had a massive effect on policy relating to ageing.

The English Longitudinal Study of Ageing (ELSA), has been running since 2002 and has completed 7 waves (i.e. the survey has been repeated seven times with the same group of people). In addition to demographic and health data, these studies collect information on issues such as retirement planning, financial literacy, well-being, social isolation, income and wealth and cognitive decline. A group of questions are asked in each country. Comparative data provides another powerful tool for collecting evidence. Are older Americans more likely to suffer chronic conditions than those in Scotland? What aspects of their past behaviours, circumstances or experience explain health differences between Scotland and the USA?

Scotland and Wales are the only parts of the EU not to have a longitudinal survey of ageing. Yet Scotland’s mortality and morbidity rates are significantly worse than most parts of the EU, even though on most economic indicators, it performs close to the EU average. It has considerable autonomy to set policy for older people in general, for their health and their social care. And its new welfare powers have more impact on older people than the young because they principally target disability. Given these differences, preventative policy lessons from elsewhere will not necessarily transfer to Scotland. A Scottish longitudinal

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15 See //g2aging.org/index.php?section=homepage
16 Longitudinal studies follow the same people over time but will always lose some participants along the way, either because they no longer want to take part, cannot be contacted or may have died. Each new wave will therefore recruit new participants to replace those lost and to bring on board those who have since become eligible to take part.
study of ageing could be an effective tool for providing the evidence base for preventative health and social care policy.

A feasibility study for Scotland’s first longitudinal ageing study, called Healthy Ageing in Scotland (HAGIS) is underway\textsuperscript{17}. It is funded by the National Institute of Aging in the USA and by the Nuffield Foundation. These bodies are particularly interested in comparisons between Scotland’s older people and those in the USA and England. The feasibility study is also harmonised with similar studies in Ireland, Northern Ireland and Europe.

Conclusion

This paper has discussed obstacles to the implementation of a successful preventative agenda in health and social care. It has also reviewed the research environment which should help to identify the evidence needed to support such a preventative agenda. It has also noted the weakness of academic links to research on social care in Scotland, arguing that this will be to the detriment of Scottish Government policy. Finally, it has made the case that longitudinal studies provide a rich source of evidence for the preventative agenda and that Scotland should join other parts of the UK, Europe and the world in establishing such a survey.

\textsuperscript{17} Professor David Bell is the principle investigator of HAGIS and Dr Elaine Douglas is the Research Fellow/Project Manager on the study.
Introduction

Midlothian IJB welcomes the Committee’s interest in the prevention agenda. Prevention is an attractive notion. For instance, during October and November 2016 Midlothian Council ran a survey called *Choices for Change* and received 484 responses. Nearly 84% of respondents agreed that we should reduce the demand on social care by developing preventative approaches within communities, to support people to live independently for as long as possible.\(^1\)

The *Midlothian Strategic Plan 2016-19* outlines the direction of travel for the development of health and social care services in Midlothian. This document outlines the challenges Midlothian faces and our key priorities.

1. **Which areas of preventative spending/the preventative agenda would it be most useful for the Health and Sport Committee to investigate?**

This is a difficult question to answer from our perspective. It might be valuable to explore how coherent the approach to this agenda is across organisations. Has the use of allocations that are ‘badged’ explicitly as prevention (ringfenced) such as elements of the Outcomes Framework enabled a focus on prevention? Have the use of transition funds also contributed to this change in focus? One key question that lurks behind a lot of health and social care work is how far organisations like Health and Social Care Partnerships prevent the social determinants of ill health and inequality. A focus on behaviours that lead to ill health alone is widely regarded as a trap to be avoided. We need evidence based smoking cessation services for instance, but we cannot rely on such services to singlehandedly wind back the health inequalities within and between our communities.

2. **How can health boards and integration authorities overcome the (financial and political) pressures that lead to reactive spending/a focus on fulfilling only statutory duties and targets, to initiate and maintain preventative spend?**

One of the pressures that maintains the current level of reactive spending is simply the weight of history. Large parts of many services have a preventative side (whether primary, secondary or tertiary prevention) but in most cases the model has been reactive, to await patients or clients turning up or being referred. The prevailing view used perhaps to see prevention as a discrete activity, separate from the general response to expressed need. Increasingly people view it more as a spectrum with all activities having or potentially having some preventative element. There is a perception that even within the short lifetime of the Health and Care Partnership there has been a shift in mindset. If you take the definition of preventative spend as being “public spending over the

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\(^1\) *Shaping our future choices for change paper A: summary findings of the public consultation on service changes and savings options 2016* [www.midlothian.gov.uk/shapingourfuture](http://www.midlothian.gov.uk/shapingourfuture)
long term that aims to prevent rather than deal with negative social outcomes” (SPICe 2010: 10/57) it is likely that a large proportion of the IJB spend is not preventative. The challenge for IJBs is to deal with current pressures in a way that prevents further problems. The recovery focus for people experiencing mental ill-health and/or problems with substances is a good example of this. These services are looking to provide services through an easy access ‘hub’ that addresses people’s current health and social issues but with an ethos of hope and aspiration.

In terms of financial pressures, there is a clear imperative to spend less. Midlothian IJB inherited a budget deficit/ overspend in parts of the budget that are not easily amenable to quick reduction. The ability to shift funding has been difficult due to the need to simply save money to breakeven. So the question arises as to whether to cut spending that is not seen as directly delivering a service in response to need. However, Midlothian has protected a number of services.

To tackle the pressure on general practice ML IJB/ H&SCP has developed the CHIT team and the Wellbeing team. Currently this is not funded from the core budget but has been maintained by the final year of Keep Well funding and money from other areas within the Outcomes framework. However, the team is central to the vision of the IJB and needs to be put on a more secure footing.

In Midlothian we have sought to use external funding to put more explicitly preventative initiatives in place. For instance in the field of learning disabilities we have been looking to provide training via an online game to promote personal safety. The need was seen as those with borderline learning disabilities putting themselves at inadvertent risk online. Midlothian received funding from health inequality funds from NHS and some grant funding for the development of a game that would ultimately deliver social media training for people with learning disabilities to reduce their vulnerability.

Midlothian IJB is looking to use the Directions it issues to both the Health Board and the Local Authority to shift the balance of care with a particular emphasis on seeking to address inequalities. The Midlothian Strategic Plan 2016-19 outlines the direction of travel for the development of health and social care services in Midlothian i.e. to reduce reliance on Acute Hospitals and Care Homes through strengthening Primary Care and Care at Home services. There has been considerable work done on the redesign of redesign of care at home and the development of the MERRIT/ Hospital at home service.

**3. How could spend that is deemed to be preventative be identified and tracked more effectively? What is required in terms of data, evidence and evaluation to test interventions for producing ‘best value for money’?**

Others will have a more expert view of these issues, but it is clear to the Partnership that a shared definition of prevention (or preventative elements) is required as well as continued investment in evaluation and improvement science. As the documents that the Committee reference in its call for evidence outline very well, prevention can be characterised many ways but it would be a pity if it was then viewed as meaningless. It is likely that if staff were asked what prevention meant to them, there would be a variety of views: the importance of a good start in life, preventing illness or further ill-health (primary, secondary and tertiary prevention), promoting mental wellbeing and recovery
from mental ill health or substance misuse, and preventing inefficient and poor quality service use such as emergency admissions or delayed discharges. These are all visions of prevention that are being pursued as strategic aims.

Midlothian Health and Social Care Partnership has recently begun working on improving the efficiency of services using the Institute for Healthcare Improvement’s model for improvement as a basis. Prevention is one of the themes of this work. The Institute’s Triple Aim is a framework that is being used within NHS Lothian’s quality improvement programme.²

The Scottish Government currently gives Health Boards funding for the Outcomes Framework which includes more clearly preventative programmes such as smoking cessation and child healthy weight. Last year this was subject to a 7% efficiency saving by the Scottish government as the price of being able to be more flexible with the funding between different programmes within the framework. Previously NHS Lothian Finance had imposed a 10% efficiency cut on some of these allocations as part of their financial plan for breakeven. So the advantage of clearly labelled extra funds is that they are easy to track, but it may still not make them that easily defendable in the face of financial pressures.

4. **How can the shift of spending from reactive/acute services to primary/preventative services be speeded up and/or incentivised?**

There is something of a false distinction in the question. Acute services can be preventative and many primary care services are reactive. Put simply the only way we can speed this up is with large scale investment in the community, while at the same time tackling overreliance on acute reactive care. Midlothian IJB has given serious consideration to its directions to the Health Board and Local Authority with this in mind as mentioned above.

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² The IHI Triple Aim is a framework developed by the Institute for Healthcare Improvement in the United States that describes an approach to optimizing health system performance. IHI argues that health systems need to develop along three dimensions, which they call the “Triple Aim”:

* Improving the patient experience of care (including quality and satisfaction);
* Improving the health of populations; and
* Reducing the per capita cost of health care.