Finance Committee

Prevention

Submission from NESTA

Response

Nesta is an innovation charity with a mission to help people and organisations bring great ideas to life. We believe that promoting a focus on innovation in public services and beyond is vital. Innovation in public services has an obvious alignment with prevention – and one recognised in interventions like the Scottish Government’s Change Fund for Health and Social Care, which required funded projects to show innovation. We share the Finance Committee’s enthusiasm for creating a culture of innovation as a way of delivering prevention, and welcome the opportunity to respond to this request for evidence.

There are a number of ways in which we believe an innovation approach to prevention could enhance the delivery of public services.

A Government Innovation Lab

The Welsh Government has set up a Government Innovation lab called Y Lab. This is in partnership with Nesta and Cardiff University. This makes it possible to get the best ideas from both within and outwith Wales and to fit them to a Welsh context. During the referendum we heard a lot about how the Scandinavian countries do things in interesting ways. There are fascinating lessons to be learnt from Latin America on democracy. But these need to be adapted to a Scottish context. A Government Innovation Lab would help do that. It could take ideas that work on a small scale and examine how they could be used throughout the system, or perhaps in a slightly different area of public policy.

The Y Lab’s aims are to:

- Generate new knowledge on successful public service innovation;
- Develop and test new solutions to major public service challenges;
- Build innovation capacity within the Welsh public sector by modelling and demonstrating different methods in action;
- Apply learning from elsewhere in Wales.
By drawing together partners from government, academia and more broadly, the Lab will help to identify opportunities for innovation and the best solutions. A similar institution in Scotland could be given a specific remit for prevention.

It sits alongside and complements the Public Policy Institute for Wales, a What Works Centre. A Scottish Innovation Lab could have a similar relationship with What Works Scotland.

**A focus on social innovation**

Much of the work to date on prevention has been based on structural change, such as the creation of Health and Social Care Partnerships. This is important in allowing budget savings to be realised by those who spend money on prevention (there was a perception that previously Local Authorities spent money on things – like Meals on Wheels – that saved the NHS money, but saw none of those savings). We need to move to a position where prevention is about catalysing social innovation to help people. Some of this needs to harness developments in technology, but much of it can be done on the basis of community action and supporting those with the best ideas.

To give an example from the Nesta report “The NHS in 2030”, demonstrating the value of health volunteers:

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Health volunteers tangibly improve the experience and care provided in hospital, clinics and other formal health settings. They are involved in every stage of a patient journey. In hospital and clinical settings, volunteers perform new roles that are now seen as essential. They provide a combination of pastoral and practical care for patients and help people to use digital technologies. They accompany them before and after operations, help people to use new assistive health devices and organise self-management plans.

Outside of formal health services, volunteers and non-clinical paid staff support people to take control of improving their health, such as losing weight or doing more exercise, or to make new friends in their own neighbourhood. Expert patients and carers play a semi-professional role as coaches, therapists and leaders of groups with similar medical experiences or care needs, alongside voluntary or social enterprise sector professionals or clinicians. This adds a new dimension to healthcare by creating networks of volunteers and non–clinical professionals that support people to take control of their health, maintain healthy behaviours and stay on top of their health conditions on a day–to–day basis.

Many neighbourhoods now have networks of first aid responders who can attend to some emergencies before ambulances, and can deal with some situations which do not require hospitalisation. It is normal to participate in schemes like Shared Lives Plus, providing family–based care and support for people who would otherwise be in specialist health and care settings. There are tailored volunteer packages to enable people to settle well at home after an extended stay in hospital, where transition is foreseen as potentially difficult.
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Use the data opportunities

The opportunities afforded by Big Data and Predictive Analytics are enormous. Scotland has world leading health data, and the integration of Health and Social Care gives huge opportunities for use of Big Data in predicting areas of future need. This will allow the targeting of resources to individuals and situations that have not yet reached acute. There are, of course, significant issues around data security – but solving these problems is in itself an opportunity for Scotland. Programmes like Dementia Citizens point to the role for citizens in driving data collation.

The “NHS in 2030” Report gives a vision of how the future could look like with good data:

Diverse forms of data and knowledge will be used in clinical medical settings. There is better understanding of the multiple factors at play in a single person’s condition. Depending on the kind of condition and possible treatment options, a clinician may look for some combination of the following:

Genetics. Most people have had at least some of their genes sequenced during their life. Individual genetic profiles are correlated with different reactions to a given drug. Responsiveness to cancer treatments is related to specific cell mutations. The likelihood of developing certain conditions has a known genetic basis.

Transcripts and proteins. These biological markers are signals of how genetics are expressed in a particular person. Complete sets of this phenomics data, would be part of a biologically–precise picture of human health. There is likely to be more conclusive understanding of epigenetic factors: when the physical environment or lifestyle of previous generations affect a person’s gene expression.

Molecular information on disease. Sequencing and other pathology tests are also applied to molecules of infections. It will be easy and quick to profile infections or screen for disease.

Imposed environmental variables. Sensors checking things like air quality, light and noise levels are everywhere. There is more knowledge of how these factors affect human health. Local air quality or lack of open space are already known to affect health.

Comorbidity and polypharmacy. Profiles of patients will make the interrelated effects of multiple diseases and drug regimes clearer.

Lifestyle and diet. These factors interact with treatment and can heighten specific risks.

Better assessment of the impact of new programmes

Scottish Government has started the innovation process with a commitment to prevention through Change Funds. The largest was to pave the way for Health and
Social Care Integration. These funds were used to support innovative programmes that could start to deliver on prevention. They have been successful in funding a wide range of innovative programmes, but often the evaluation takes too long. Too often the effectiveness of a programme is assessed on the basis of years of experience. When innovative change is required there should be a confidence about being experimental and prototyping new approaches. This will require more tolerance of failure – but unless we are willing to try new ways of doing things we will find prevention difficult to deliver. An Innovation Lab could be tasked with the job of assessing the impact of new programmes.

**Conclusion**

There are huge opportunities to transform our public services so that they have prevention at their heart. An innovation approach will allow this to be accelerated. By focusing on learning from other countries, spreading learning from one area of public services to another and adopting a rapid prototyping approach we can begin to make prevention a reality. This needs good data, and a place where work on this can be focused. A Government Innovation Lab would be transformative in delivering this.

The move from an approach that focuses on structures, to one that allows us to unleash the power of social innovation is vital. By giving people and communities more power over decisions we can move public services to co-production, enhancing their ability to be preventative and allowing us to create more effective outcomes.

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