HEALTH AND SPORT COMMITTEE: TECHNOLOGY AND INNOVATION IN THE NHS - CALL FOR VIEWS

Submission from Roche Diagnostics Ltd
TABLE OF CONTENTS

1. SUBMISSION FROM ROCHE ......................................................................................................................... 3

2. ABOUT THIS RESPONSE .......................................................................................................................... 3

1. WHAT DO YOU CONSIDER HAVE BEEN THE MAIN SUCCESSES OF THE EXISTING SCOTTISH GOVERNMENT’S eHEALTH AND TELECARE/TELEHEALTH STRATEGIES AND WHY? ...................................................... 4

2. WHAT DO YOU CONSIDER HAVE BEEN THE MAIN FAILURES OF THE EXISTING SCOTTISH GOVERNMENT’S eHEALTH AND TELECARE/TELEHEALTH STRATEGIES AND WHY? ........................................................... 5


4. DO YOU THINK THERE ARE ANY SIGNIFICANT OMISSIONS IN THE SCOTTISH GOVERNMENT’S DRAFT DIGITAL HEALTH AND SOCIAL CARE VISION 2017-2022 .................................................................................................................. 7

5. WHAT KEY OPPORTUNITIES EXIST FOR THE USE OF TECHNOLOGY IN HEALTH AND SOCIAL CARE OVER THE NEXT 10 YEARS? .................................................................................................................. 7

6. WHAT ACTIONS ARE NEEDED TO IMPROVE THE ACCESSIBILITY AND SHARING OF THE ELECTRONIC PATIENT RECORD? .................................................................................................................. 7

7. WHAT ARE THE BARRIERS TO INNOVATION IN HEALTH AND SOCIAL CARE? ........................................... 9

REFERENCES ........................................................................................................................................................ 10
1. SUBMISSION FROM ROCHE

Thank you for the opportunity to respond to the Health and Sport Committee’s call for evidence into the use of technology and innovation in the NHS.

At Roche, our aim is to improve the health, quality of life and well-being of people around the world by providing an innovative range of diagnostic solutions and medicines. Roche is a global, research-focused healthcare company with Group Headquarters in Basel, Switzerland.

Our UK Diagnostics business, headquartered in Burgess Hill, West Sussex, employs approximately 500 highly skilled individuals. We provide the industry’s broadest range of diagnostics and monitoring products and services, spanning all sectors of the market: from small hand held devices used directly by patients or healthcare professionals, to large diagnostic instruments found in hospital laboratories.

Our handheld devices empower patients to monitor their own chronic conditions easily and accurately. In particular, Roche has developed innovative systems for people with diabetes and those receiving anticoagulation therapy.

For further information on the company, its people, portfolio and commitments, please visit https://www.roche.co.uk/home/company-portrait.html.

As manufacturers of handheld devices which give patients power over their own chronic conditions, we help them to self-manage these long-term conditions at home, in a homely setting, or as close to this as possible. Roche, believe we have a perspective to offer on the role of this type of innovation and technology in the use of eHealth for patients in Scotland, now and in the future. This submission addresses our experiences and offers some recommendations based on these experiences.

2. ABOUT THIS RESPONSE

We have structured our responses to the questions posed and have provided links to supporting materials and references.
1. What do you consider have been the main successes of the existing Scottish Government’s eHealth and tele care/tele health strategies and why?

Scotland has been seen as a leader in the development and implementation of eHealth strategies across Europe.¹ Much of this has stemmed from previous work looking to address issues of planning and delivering health to remote and rural settings.² This tradition in Scotland, often in more rural areas, of considering how information technology (IT) can be used for the benefit of patient care, has placed Scotland at the forefront of eHealth planning. National support, such as the Tele care Development Programme, which ran from 2006 – 2011, has increased access to tele care services for almost 44,000 people in Scotland.³ Evaluation showed around 2,500 hospital discharges were expedited as a result of the programme, while at the same time around 8,700 unplanned hospital admissions and over 3,800 care home admissions were also avoided.⁴

In addition, the Scottish Government has established the Digital Health Institute to foster and encourage the growth of digital healthcare in Scotland.⁵ Meanwhile, the Scottish Centre for Tele health and Tele care, within NHS 24, is working with a broad range of stakeholders to develop technology enabled models for redesigning health and care services ‘at scale’ (i.e. for tens of thousands of Scotland’s citizens) such as, Living it Up⁶, Smart Care and united4Health.
2. What do you consider have been the main failures of the existing Scottish Government’s eHealth and tele care/tele health strategies and why?

Scotland, as in other parts of the world, faces a number of demographic challenges; population growth, increased longevity and more chronic conditions are increasing healthcare demands. People with long term conditions use a significant proportion of healthcare services (50 per cent of all GP appointments and 70 per cent of days spent in hospital beds), and their care absorbs 70 per cent of hospital and primary care budgets.

In April 2014, the EC published a green paper on mobile health and launched a broad stakeholder consultation on barriers to mobile health deployment and the actions needed to unlock its potential.

Analysis of the responses identified a number of barriers, including:

- inequality in patient and carer access to technology
- cultural resistance from HCPs.

The actions suggested to address these barriers included:

- gather evidence on the economic benefits and involve HCPs, patients and carers in co-designing solutions
- develop new business models, as most mobile technology services are not reimbursed in many EU countries nor is there a specific budget for it

In 2015, the Deloitte Centre for Health Solutions published the report Connected health: How digital technology is transforming health and social care which demonstrated the benefits to health care providers and to patients/carers in the use of health technology in the management long term conditions
The Scottish Government’s 2020 Vision\textsuperscript{xiii} is that ‘by 2020 everyone is able to live longer healthier lives at home, or in a homely setting and, that there will be a healthcare system where there is a focus on prevention, anticipation and supported self-management and, whatever the setting, care will be provided to the highest standards of quality and safety, with the person at the centre of all decisions.’

However, despite the aims and objectives of the Scottish Government and in line with the findings of the EC green paper and those of the Deloitte report, there remains a cultural reluctance on the part of HCPs in Scotland to embrace technology and innovation to support and facilitate those patients who wish to use technological enhanced care (TEC) to self-manage their long-term conditions.\textsuperscript{xiv}

These findings are reflected in the work of Roche\textsuperscript{xv} and others when addressing the specific issue of self-testing/self-management for people receiving long-term vitamin K antagonist (warfarin) therapy. Examples of patient self-testing/self-management have shown improvements in clinical outcomes, as well as high levels of patient satisfaction and compliance with treatment.\textsuperscript{xvi} Yet despite the evidence to support patient satisfaction and cost-effectiveness, Scotland remains behind most other European counties in the use of self-test/self-management for anti-coagulation therapy.

Work done by the Health Economics Research Unit (HERU) of the University of Aberdeen highlighted that the use of point-of-care testing devices by patients to self-monitor was safe, cost effective and was associated with a significant reduction in thromboembolic events.\textsuperscript{xvii} Similar findings were found when the Durham and Darlington Foundation Trust introduced their digital health screening service for over
350 people across the county to monitor their INR (international normalised ratio) a measure of how quickly blood clots, from home.\textsuperscript{viii}

In 2015, a public petition was put to the Scottish Parliament\textsuperscript{xvi} ‘Calling on the Scottish Parliament to urge the Scottish Government to implement a National Service Delivery Model to ensure that all NHS boards have the resources to assess warfarin patients who request (i.e. self-present) for self-testing and/or self-management their condition.’ Work undertaken to support the petitioners demonstrated that 10-11 Health Boards either did not know how many people self-tested in their authority, or had self-testing rates of less than 1% for those using warfarin.\textsuperscript{xx} The Briefing for the Public Petitions Committee by SPICe\textsuperscript{xxi} draws attention to a Round Table meeting held in the Scottish Parliament on the issue of anticoagulation therapy. Recommendations made from this session included ‘a learning needs-assessment for medical and healthcare professionals’\textsuperscript{xxii} to address the issue of a perceived lack of HCP understating and confidence in self-testing/self-management to support those patients wishing to do so.\textsuperscript{xxiii}

The experiences of those patients wishing to use TEC to self-test/self-manage their anti-coagulation treatment has been that it is difficult to gain clinical support and this is also reflected in many other areas of health service delivery, as highlighted in the Deloitte Report. If the Scottish Government strategy for eHealth is to be a success, for the service and for patients, there will require to be a cultural change to fully engage the clinicians and other healthcare professionals who are often the roadblocks to change.

These perceived patrician views of clinicians are seen by patients as barriers to taking responsibility for their own health in line with Vision 2020; to service redesign allowing reallocation of scare NHS resources and to dynamic professional development of their professions.

3. How well does the Scottish Government’s draft Digital Health and Social Care Vision 2017-2022 address the future requirements of the NHS and social care sector?

4. Do you think there are any significant omissions in the Scottish Government’s draft Digital Health and Social Care vision 2017-2022.

5. What key opportunities exist for the use of technology in health and social care over the next 10 years?

6. What actions are needed to improve the accessibility and sharing of the electronic patient record?

It has been reported that the new digital strategy aims to:
• Move from organisational-centred developments and architecture to placing the citizen at the centre;
• Make better use of data – both health & social care and citizen-generated – for decision support, service delivery, planning and research;
• Start to develop digital ecosystems around the individual, home & place;
• Create a permissive culture through improved leadership, workforce development and rebalancing our approach to risk;
• Foster a fertile environment for innovation and economic growth;
• Contribute to social care reform and supporting delivery of health & social care integration;
• Build on what we have, and spreading what works;
• Use guiding principles such as Citizen-centred; Data-Driven; Flexible; Familiar; Facilitative; Innovative; Safe & Efficient; Open.

In order that the Scottish Government meets the objective of placing the citizen at the centre of decision making around their care and in line with Vision 2020, there will be a need to address those perceived barriers to patients being able to use TEC for the management of their own long-term condition. The experience of those petitioners involved in the aforementioned public petition was of a clinician controlled approach to health care delivery, focused around hospital based clinic settings. More care is expected to be delivered in or near home and TEC should be a facilitator to this, but it requires HCPs to adopt a supportive role in achieving this.

Much of the strategy is based around the sharing of health and social care records with much less emphasis on the role of hand-held, patient operated point-of-care TEC devices which play a part in keeping patients out of the ‘organisational-centred developments and architecture settings’, as suggested in the Deloitte report.

As highlighted previously in this document, we have an increasingly ageing population living longer with more chronic conditions, placing ever increasing demands on the NHS. In line with this, the demand for INR testing is increasing and anticoagulation clinics are becoming more and busier. Part of the eHealth strategy is to improve the service for patients, at or close to home, while freeing up capacity in both secondary clinics and in general practice, enabling more time for HCPs to see patients with acute needs. INR self-testing/self-management has been shown to achieve this.

Roche would like to see more inclusion around the use of patient operated TEC devices to facilitate improved health outcomes.

In addition, and in line with the findings of the EC green paper, there should be greater dialogue between Scottish Government, the NHS and the manufacturers and suppliers of patient held TEC devices. Only by such ongoing discussions will it be possible to ensure that new and innovative TEC devices can be integrated into service planning and development and not seen as an inconvenient ‘add on’.

Since these hand-held devices were first available they have undergone a series of improvements and developments and are now being provided in association with INR tele health monitoring software.
However, as has been reported previously, there is an inconsistency in access to clinical support for these devices and to date, the monitoring software has not been available in Scotland.

7. What are the barriers to innovation in health and social care?

Roche can only provide an opinion as it relates to our specific area and in this regard, there is an inequality in patient and carer access to technology, both in terms of geography and in respect of therapeutic diseases; for example, the provision of hand-held devices for diabetes monitoring as opposed to INR monitoring.

There are currently around 3,200 insulin pumps in use in Scotland – an increase of more than 400 per cent since 2010 thanks to a £7.5 million Scottish Government programme.\textsuperscript{xvii} This was supported by a CEL letter\textsuperscript{xviii} and in 2016; the Scottish Government announced a £10m fund to provide more insulin pumps and to fund more continuous glucose monitoring equipment. Part of a five-year package of funding announced by the Scottish government to help improve care for people with the condition in the country.\textsuperscript{xxix}

We would suggest that one of the barriers to the use of innovative patient operated and/or hand held TEC devices is a lack of horizon scanning and associated service and financial planning in relation to developing new models of care. This results in reactive, ad hoc implementation of TEC devices with decisions being made in response to, often concerted, patient/public campaigns. As has been mentioned, there has been significant funding made available for TEC in relation to diabetes and this has been as a consequence of high profile campaigning by patient groups. However, this level of campaigning remains unprecedented.

People with diabetes already have access to a range of TEC devices, with further funding announced to extend this. However, there has not been the same degree of ‘noise’ in relation to hand held devices and other forms of innovation for anticoagulation therapy, leading to an inequity in funding for the support and provision of such TEC devices.

We would suggest the \textbf{development of new business models, as most mobile technology services are not reimbursed here in Scotland, nor is there a specific budget for it.}
3. REFERENCES


4. ibid
10. ibid
13. ibid
22. ibid – page 5