A National Telehealth and Telecare Delivery Plan for Scotland to 2015
Driving Improvement, Integration and Innovation
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Driving Improvement, Integration and Innovation

The Scottish Government, Edinburgh 2012
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FOREWORD

Scotland is an ambitious and caring nation, which is renowned for innovation. Whilst we strive to optimise our home-grown skills and opportunities, we also recognise the mutual benefits that can be derived from working in partnership with other experts, sectors and countries. Our approach to the use of technology within our health, care and support services is an excellent example of a successful partnership approach to innovation and one which has significant potential to increase choice and control for our citizens and support a necessary ‘step-change’ in our services.

Technology plays an increasing role in our everyday lives, with phenomenal growth levels in acceptability and usage – for example, the use of mobile phones by adults has gone from less than 50% of the population to over 90% in less than a decade. However, there are challenges to embedding such technological advancements within our health and care environment and we have embarked on a journey to systematically identify and overcome these in order to maximise benefits and impacts. In particular it is vital that the people of Scotland are comfortable and confident in using digital technologies - technologies that can and do enable individuals to become more directly involved in the design and management of their own health, care and wellbeing.

We firmly believe that telehealth and telecare contribute enormously to:

- the Scottish Government’s 2020 Vision for our health system – a vision where everyone is able to live longer, healthier lives at home or in a homely setting;
- integrated health and adult social care as a key policy and strategic priority;
- and to the European Commission’s ambition for 2020, where we aim to see an increase in the average healthy life years by two years.
The European Commission has already endorsed Scotland’s “true results, dynamism, inspiration and leadership” in this area, supporting our Cabinet Secretary for Health and Wellbeing Mr Alex Neil’s vision for telehealthcare as being “absolutely central to the future, not just of our health system, but to the future of the nation”.

Telecare and telehealth have already made an effective contribution to the early redesign of our health, social care, housing, third and independent sector services in Scotland - our challenge now is to continue to innovate and expand ‘technology-enabled’ service redesign at scale. This national delivery plan outlines Scotland’s ongoing commitment and investment in this area.

**Rory Mair**  
Chief Executive, Convention of Scottish Local Authorities

**Derek Feeley**  
Director General, Health and Social Care and Chief Executive, NHSScotland
The Changing Landscape

Scotland’s society is changing. Over the next 10 years the population aged over 75 years in Scotland will increase by over 25%, and by 2030 will increase by over 60%).¹ There will be growing numbers of adults who have multiple long-term conditions, many also challenged by mental illness. The ratio of people aged under 16 or over pensionable age to those of working age is projected to increase, resulting in fewer workers per dependents. Many of us are already taking on roles as unpaid carers for our families and friends whilst trying to sustain income levels, employment and quality of life. There are an estimated 657,300 carers in Scotland² and 23% of all carers are caring for 50 hours or more per week.³

Existing financial challenges within the public sector are already exerting significant pressure on health, care and support models. With the loss of several billion pounds from public sector budgets over the next few years, we simply cannot continue to deliver our services in the current way. We need new and different approaches to prevention, enablement and to supporting independence, wellbeing, self care and self management.

¹ Projected Population of Scotland (2010-based) – General Register Office for Scotland October 2011
² Scottish Household Survey (SHS) 2007-08
³ Census 2011
Technology plays an increasing role in our everyday lives. The eHealth Strategy for Scotland 2011-17 reaffirms the pivotal role of telehealth and telecare technologies to radically transform the way health and care for people of all ages is delivered across Scotland. Deployed thoughtfully and appropriately as part of service redesign, telehealth and telecare can:

- support people to have greater choice, control and confidence in their care and wellbeing;
- enable safer, effective and more personalised care and deliver better outcomes for the people who use our health, housing, care and support services;
- help generate efficiencies and add value through more flexible use of our workforce capacity and skill mix and by reducing wasteful processes, travel and minimising access delays.

"Telehealth provides an opportunity to treat patients in new ways and help manage rising costs and demand" and that "economic modelling work suggests that using telehealth to monitor patients with COPD at home has the potential to offer better value for money than conventional care."

(Audit Scotland: A Review of Telehealth in Scotland, Oct 2011)

Telehealth and telecare can be deployed in all sectors and across the breadth of our care pathways: within the home; in primary and community care; in supported housing, hospitals and care homes; and within our emergency care services. Access to these technologies and services should not be restricted by client grouping, point of care, or health condition as they assist in a very wide range of health, care and support situations from early years through to end of life.

However the technology itself is not a panacea. As global innovation produces ever smarter and more sophisticated technology, this will only be adopted if our care systems adapt to embed it through service redesign and new ways of working. We need to build public and professional awareness and confidence in how technology can make a difference to our lives, and ensure it is reliable and easy for all to use.

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Scotland’s current definitions of telehealth, telecare and telehealthcare are outlined in Appendix One
Scotland has already made good progress in the deployment of telehealth and telecare over the past few years, and is recognised by the European Commission as a leader in this field. It is essential to build on this progress, not only to fully capitalise on this investment, but to ensure that the potential for telehealth and telecare to support patients, carers and service users across Scotland in receiving the best care and support possible is realised. We will continue to raise awareness, spread good practice, challenge variation, and continue to innovate and to spread ‘technology-enabled’ service redesign and improvement at scale.

**National Delivery Plan for Scotland**

This National Delivery Plan responds to these challenges and sets out the vital contribution that telehealth and telecare will make to implement key health, care and housing strategies in Scotland over the next three years (2012-15).

This includes an increased focus on **prevention**, advocated in the Christie Commission’s report on the future delivery of public services, prioritising those services which help to reduce the likelihood of negative outcomes.

Renewing Scotland’s Public Services, the Scottish Government’s response to the Christie Commission: Telehealth and telecare are well aligned and are critical enablers for the four pillars of **public service reform – prevention, partnership, workforce development and performance** and the seven outcomes of successful public service reform – Assets based and co-production; Values driven; Person-centred outcomes; Prevention, reducing demand in the longer term; Integration and partnership; Workforce development and leadership; and Performance improvement. The response supports accelerated progress in building prevention into the design and delivery of public services and better utilisation of the talents, capabilities and potential of Scotland’s people and communities. It also identifies a crucial role for the third sector, due to its ability to engage with vulnerable groups and use of flexible and innovative approaches.

Reshaping Care for Older People and Early Years: These approaches are fundamental to supporting the redesign and development of our health, care and support services for these target population groups, and recognise the contributions that can be made from technological advances.

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5 [http://www.scotland.gov.uk/Publications/2011/06/27154527/0](http://www.scotland.gov.uk/Publications/2011/06/27154527/0)
Age, Home and Community: A Strategy for Housing for Scotland’s Older People 2012 – 2021: The first National Housing Strategy for Older People was published jointly with COSLA in November 2011, and encourages the development of technology as a key element in supporting more older people to live independently at home, and pledged to continue to develop and mainstream the use of telecare.

The Healthcare Quality Strategy for Scotland is the basis for NHSScotland, with its partners and the public, to deliver world-class, person-centred, safe and effective health and care services. It puts people at the heart of everything we do and aims to deliver measurable improvement in outcomes. Further development and adoption of telehealth and telecare will enable significant progress against all three Quality Ambitions for Safe, Effective and Person-centred care. The 2020 Vision provides the strategic narrative and context for taking forward the implementation of the Quality Strategy, and challenges us to embrace integration and adopt innovative models of care to deliver better outcomes and sustain a high quality health and care system – “Our vision is that by 2020 everyone is able to live longer healthier lives at home, or in a homely setting. We will have a healthcare system where we have integrated health and social care, a focus on prevention, anticipation and supported self management. When hospital treatment is required, and cannot be provided in a community setting, day case treatment will be the norm. Whatever the setting, care will be provided to the highest standards of quality and safety, with the person at the centre of all decisions. There will be a focus on ensuring that people get back into their home or community environment as soon as appropriate, with minimal risk of re-admission.”

Community Planning Partnerships: Designed to provide Best Value, Community Planning and the Power to Advance Wellbeing, tied into the Single Outcome Agreements. Community Planning is intended to provide “trust within a framework”, empowering Local Government, with its partners, to take ownership and drive forward improvement in local services which make a real difference to people's lives. A Statement of Ambition was agreed between the Scottish Government and CoSLA in March 2012 which places community planning “at the heart of public service reform as a key means to drive integration, encourage a focus on prevention and improve performance all with a view to achieving better outcomes for communities”.

7 [http://www.scotland.gov.uk/Publications/2011/12/16091323/0](http://www.scotland.gov.uk/Publications/2011/12/16091323/0)
9 [http://www.scotland.gov.uk/Publications/2010/05/10102307/0](http://www.scotland.gov.uk/Publications/2010/05/10102307/0)
We have made considerable progress in the last five years and Scotland is recognised internationally as a leader in the development and deployment of telehealth and telecare.

**Significant milestones:**

- The Joint Improvement Team’s (JIT) Telecare Development Programme (TDP) which invested just over £20 million over five years from 2006-2011.
- First National Telehealth Strategy (2010) and four national Telehealth programmes in Stroke, Paediatrics, Mental Health and Long Term Conditions plus developments in the technology infrastructure, education and training.
- A single integrated Scottish Centre for Telehealth and Telecare (SCTT) is now embedded within NHS 24, NHSScotland’s national, technology-enabled service provider, with excellent links and relationships with local authorities and other key stakeholders.
- A National Telehealth and Telecare Advisory Board (NTTAB) is established to inform and drive the strategic direction on Telehealth and Telecare.
• The Scottish Assisted Living Programme Board (SALPB) is in place which links to Scotland’s Life Sciences Advisory Board and Technology Advisory Group, secures and drives development and economic opportunities across a community of academia, industry, third sector organisations and health, housing and care practitioners.  

Key achievements:

This snapshot of recent progress illustrates the contribution made by telehealth and telecare to integrated care that improves quality and delivers better outcomes.

• **Around 44,000 people (including over 4,000 people with dementia) received a telecare service** as a result of the national Telecare Development Programme between 2006 and 2011, helping to expedite 2,500 hospital discharges and to avoid 8,700 emergency admissions to hospital and over 3,800 admissions to care homes. The external evaluation also highlighted the improved quality of life experienced by both service users and carers.

• The North of Scotland Planning Group is now implementing **a Single Point of Contact for paediatric unscheduled care**. Paediatric Consultants will provide critical decision support via video link to Rural General Hospitals who do not have 24/7 paediatric clinicians. It is anticipated that this will reduce the amount of emergency transfers of children between hospitals, allowing them to be supported locally.

• **People living within 11 out of 14 territorial Health Board areas in Scotland now have access to 24/7 stroke thrombolysis treatment** through Telestroke networks that provide access to immediate stroke specialist decision support using video conferencing and digital imaging. Approximately 80% of strokes are caused by a blockage of blood supply to part of the brain. Thrombolysis is the use of clot-busting drugs to open up these blocked arteries. However, to be effective, thrombolysis treatment for stroke must be given within 4.5 hours from the onset of symptoms. Based on the national stroke audit figures for 2011, Board areas who had implemented telestroke had a **147% increase in treatment rates** compared to a 23% increase in treatment rates for Boards not using (or not requiring) telestroke during the same timescale.

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11 Appendix Two outlines the governance and reporting structure of NTTAB and SALPB.
- **£10 million funding has been successfully secured** as part of the UK-wide Technology Strategy Board’s Delivering Assisted Living Lifestyles At Scale (dallas) competition. The ‘Living It Up’ Project aims to provide improvements in health, wellbeing and lifestyles for over 55,000 people (10,000 with long-term health and care issues) living in five geographic areas across Scotland over a three year period, and to support economic benefits.

- Scotland Excel, in collaboration with 32 Local Authorities, Hanover and Bield Housing Associations and the JIT published a **national framework agreement for the procurement of telecare equipment and other services**. This aims to provide cost efficiencies of approximately £300,000 *per annum* and improvements in interoperability between different suppliers’ equipment. The framework was published in January 2012, with estimated average savings of 8.8% evidenced over the first six months. Scotland Excel has ensured this framework is also open to NHS purchasers.

- Around 77% of CH(C)Ps have developed or are progressing **pathways between community alarm/telecare services and falls prevention, assessment and rehabilitation services**; and 60% of CH(C)Ps access data from community alarm/telecare services in order to **provide early interventions which reduce risk of harm for older people who have fallen**.

- NHS National Services Scotland, the North of Scotland Planning Group and the SCTT have **improved the infrastructure for internet based video conferencing across the N3 network**. This has resulted in a single service, enabling staff to contact each other across the whole of NHSScotland. The service supports one-to-ones and group conferences, with six or more locations possible. There are now over 660 video conferencing units as part of the service, covering all NHSScotland Boards, averaging over 100 conferences per day and saving around 1,000 tonnes of CO₂ per quarter. Feedback from Health Boards shows video conferencing is now increasingly being used for clinical consultations and has improved the quality of patient care in rural areas, where patients can attend a local clinic with the consultation taking place via video conference.

- **Early adoption of Video Conferencing between Mental Health units and two Scottish Prisons** is delivering specialist mental health services to the prison population; in addition, Psychiatry of Old Age teams are also prototyping video conferencing to provide specialist advice to staff in care homes in order to optimise care and prescribing for people with dementia.
By the end of March 2012, 179 people in Dumfries and Galloway, Lothian and Tayside had participated in video conference/telelinked pulmonary rehabilitation classes that enable more people from across Scotland to access support for self management and enablement.

New competency frameworks for telehealthcare now support staff, professionals and those working in informatics and can be accessed through an integrated Telehealthcare portal on the NES Knowledge Network.

A validated Professional Development Award (PDA) in Telehealthcare supported by a consortium of SQA Approved Centres who are developing assessment exemplars and learning support materials for the integrated workforce in the absence of existing accredited and recognised qualifications and learning materials.

Integrated Telehealth and Telecare Learning Network provides monthly webcasts (viewed by approx 200 people) and hosts annual national conference events to exchange learning, highlight recent activities and advances in Telehealth and Telecare, and share lessons learned.
3.0 NEW OPPORTUNITIES

Investing in our Digital Infrastructure

Scotland’s Digital Future – Infrastructure Action Plan sets out plans for delivering a world-class and future-proofed digital infrastructure by 2020. The Step Change 2015 programme\(^\text{12}\) will enable more people across Scotland to access the internet and use telehealth and telecare. The Plan will support the increase in take-up, stimulate demand for digital access, and help the population to be at ease with digital technologies accessible through next generation broadband infrastructure (NGBi) and 3/4G mobile coverage.

Through the Choose Digital First programme we are working with a broad range of public, private and third sector partners to ensure that everyone has access to and can make best use of digital technologies. The efforts on demand stimulation will help improve the commercial case for investment in our digital infrastructure. Working with Scottish Enterprise, Highlands and Islands Enterprise and Business Gateway to provide business support and ICT advisory services to upskill staff and encourage businesses to make better use of broadband services is also a core component of Choose Digital First.

The South of Scotland Alliance (SoSA) is a strategic partnership between Dumfries & Galloway Council, Scottish Borders, NHS Borders, NHS Dumfries & Galloway, and Scottish Enterprise. SoSA have produced a South of Scotland Local Broadband Plan (LBP) which aims to reach at least 90% of the population across the South of Scotland by 2015. “The rural nature of the Borders with some towns located a considerable distance from health and care premises make the use of Telecare and Telehealth equipment vital for many service users but is dependant upon the right infrastructure being in place.”

Scottish Borders Council

Reshaping Care and Integration

Our Reshaping Care for Older People Programme and the related Change Fund, which is one of the Scottish Government’s key preventative spend funds (£300 million of the overall £500 million preventative spend budget), drive the transformation of service design needed to achieve the vision that public services must increasingly be built around the assets and potential of our people and communities rather than being dictated by organisational structures and boundaries.

The Change Fund represents the start of a fundamental shift away from reactive, institutional care and toward more preventative and anticipatory care that enables older people to remain safe and well in their own homes. It actively encourages the local Change Fund Partnerships - consisting of NHS Boards, Local Authorities and Third and Independent Sector representatives across the 32 community planning partnerships - to redesign health and social care services to support older people to remain independent in their own homes, thereby reducing hospital admissions, aiding discharge after a crisis and promoting the concepts of community capacity building and co-production of services between providers and users. It provides a catalyst for the development of innovative new service models that deliver treatment at home or in the community for even the most challenging of situations in a true local partnership. There are clear opportunities to utilise technology as a transformational change agent within this wider agenda.
Home Care statistical data from March 2011 estimated that 162,000 people in Scotland received a telecare service but illustrates significant variation in provision across Scotland. While local circumstances should be taken into account, analysis to understand the drivers and extent of variation in practice and in service provision should be an area of shared focus for commissioners, practitioners and providers. The JIT and SCTT are supporting partnerships to redesign local pathways of care and to use their Change Fund and the Integrated Resource Framework to shift investment towards community and preventative interventions, including telehealth and telecare.

Self Directed Support (SDS) and Self Management

The principle of individuals having a greater say in how public resources are used – including how services are provided – is central to public service reform, and the Christie Commission recognised self-directed support as a means to achieving this.

Self-directed support represents a step change in the provision of social care in Scotland for the benefit of people who receive social care and support and their carers. Our Bill, which is currently before Parliament, will enshrine in law for the first time the principle of the right to choose for everyone eligible for social care.

The Bill sets out the full spectrum of options from which people can choose and, critically, it provides that the choices people make must be given effect to by local authorities. It empowers individuals to be the commissioners and lead partner in managing their care and support. Telecare and telehealth can, and should, be at the heart of both SDS and self management approaches. Emerging good practice in early adopters of SDS will be captured and shared. The Health and Social Care Alliance administer and report on the impact of the Self Management Fund for Scotland.
Case Study: Lochalsh and Skye Housing Association’s Care and Repair Service

Lochalsh and Skye Housing Association’s Care and Repair Service is working in partnership with NHS Highland and Highland Council to deliver telecare and telehealth monitoring devices cost-effectively to older people and disabled people in their homes. Telehealth devices are most commonly used to monitor long-term conditions such as Chronic Obstructive Pulmonary Disease, heart disease and certain mental health conditions. Daily test results are automatically sent to the Highland Hub Call Monitoring Centre, which generates an alert if any abnormality is identified. This increased monitoring reduces travel time for people in remote rural areas to and from hospital and has a corresponding reduction in stress levels. The Handyperson Service has also set up a demo/assessment room within Portree Hospital, which acts as a training facility for home carers, clients and community nurses to better understand the use and benefits of the devices.

Co-Production

People invariably have skills, talents and capabilities and are often looking for opportunities to ‘contribute’. We need to support people to draw on these strengths and to support them to have more control over their own health and care, and in caring for others. “Co-production recognises that people have ‘assets’ such as knowledge, skills, characteristics, experience, friends, family, colleagues and communities. These assets can be brought to bear to support their health and wellbeing”. Co-production in Health and Social Care: Loeffler, Power, Bovaird and Hine-Hughes (JIT July 2012) We require to make both cultural and organisational shifts to embed asset-based approaches and co-production but it is clear this is a key driver for person-centred health and care and effective service delivery.

The ‘Living it Up’ Project in Forth Valley, Moray, Highland, Lothian and Western Isles is using co-production to shape the way that new technologies facilitate services, products, and information to support people to manage their Long Term Conditions and wellbeing. Community engagement work, led by Glasgow School of Art, the Health and Social Care Alliance and Carers Scotland brings together all partners to ‘co-design’ solutions by sharing their experience, skills and different perspectives. Partners include individuals, carers, local communities, third sector organisations, industry, enterprise and health, housing and care practitioners. This is all part of an ‘at scale’ initiative funded jointly by the Scottish Government and the Technology Strategy Board.
Innovation

Scotland has a long-established reputation and appetite for invention and innovation. Innovation, in all its forms, is already playing a key role in rethinking and changing the way we organise, finance, and deliver health, housing and care services. Our Statement of Intent for Innovation in Health aims to develop close working relationships with companies and NHSScotland to focus on future needs for technology and related products in health and healthcare.

There are considerable opportunities for academia, SME companies, third sector and global technology partners to be involved in testing, developing and implementing solutions to transform the design and delivery of health, care and wellbeing support in Scotland. Aligning and channelling these industry and academic resources and expertise appropriately could have a positive economic impact.

Case Study: A Digital Health & Care Innovation Centre

Scotland has outstanding resources in Digital Health and Care: world-leading medical research; world-leading Informatics research; outstanding health databases; recognised leadership in the delivery of telehealth and telecare; centres of excellence in design, organisational science, psychology, and evaluation of health systems. Partners from the Scottish Assisted Living Programme Board are seeking to establish a Digital Health and Care Innovation Centre to provide additional capacity to further develop the existing virtual network on digital health and care, and support integration.

This ambitious proposal has the potential to provide a focus for concerted action within an already vibrant digital health and care community. It would bring together academics, communities, practitioners and businesses, to focus and consolidate Scotland's leading position in Digital Health and Care innovation. It will enable 'Team Scotland' to challenge and transform health and care delivery and stimulate the creation of new products and services backed by experience and expertise from our expert communities.

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14 Invention is the creation of a new idea, tool or process. Innovation is the application of an invention which generates benefit.
Europe

Scotland is widely regarded in Europe as a country that has a mature approach to integrating telehealth and telecare in the delivery of services. The Scottish Centre for Telehealth and Telecare now represents Scotland in a range of European-funded projects aimed at realising the benefits from telehealth and telecare.

The European Commission is a powerful advocate for the use of information and communications technologies. It promotes their pivotal role in delivering a Triple Win for Europe:

- Improving health and quality of life;
- Supporting the long-term sustainability of health and social care systems;
- Growing and expanding opportunities for industry and the economy.

The Commission launched its European Innovation Partnership for Active and Healthy Ageing (EIP AHA) in 2011. This is a flagship development and has clear synergies with Scotland's priorities for 2020. The Scottish Government, as one of the leaders in Europe in this field, has been working directly with the Commission in the development and design of EIPAHA. This engagement offers mutually beneficial opportunities through knowledge exchange with other regions and access to funding opportunities in support of this high profile and transformational agenda.

The European Innovation Partnership (EIP) aims to increase by two the average number of healthy life years in the EU by 2020, by securing a triple win for Europe:

- Improving the health status and quality of life for European citizens, with a particular focus on older people;
- Supporting the long-term sustainability and efficiency of health and social care systems; and
- Enhancing the competitiveness of EU industry through an improved business environment providing the foundations for growth and expansion of new markets.

The EIP Steering Group has structured the programme around three pillars which reflect the life stages and the care pathway for the older person: Prevention, Screening & Early Diagnosis; Care and Cure; and Active Ageing and Independent Living.

Strategic implementation plan for EIP on Active and Healthy Ageing, Nov 2011
4.0 TOWARDS 2020

This national delivery plan focuses on the period up to 2015; however, it has been set within our longer-term ambitions to 2020. This aligns with timescales established within complementary programmes within Scotland and Europe.

Our Triple Win by 2020, from delivering the use of telehealth and telecare at scale in Scotland, will be:

- Enhanced wellbeing and quality of life.
- Improved sustainability of care.
- Increased economic growth in Scotland.

As a milestone towards 2020 our ambitions for March 2015 are that:

- Telehealth and telecare will enable choice and control in health, care and wellbeing services for an additional **300,000 people**.
- People who use our health and care services, and the staff working within them, will **proactively demand** the use of telehealth and telecare as positive options.
- There is a **flourishing Innovation Centre** where an interacting community of academics, care professionals, service providers and industry innovate to meet future challenges and provide benefits for Scotland’s health, wellbeing and wealth.
- Scotland has an **international reputation** as a centre for the research, development, prototyping and delivering of innovative telehealth and telecare services and products at scale.
Principles

To achieve this we will:

♢ Support individuals, users and patients to actively participate in the management and delivery of their own health and care;

♢ Facilitate flexible solutions that support the management of disease and wellbeing and also provide information, products and services which expand choice, control, coverage and accessibility through a range of familiar channels, e.g. Digital TV, phones, web;

♢ Build on existing and increasingly familiar technologies and favour the adoption of simple, low-cost approaches which can be tailored to the individual, utilising users' own technologies where and when practical to do so;

♢ Support service redesign to integrate new ways of working into mainstream service provision and pathways; and

♢ Work across all sectors of Government to drive efficiency and realise best value. By using innovative procurement methods we will build collaborative relationships with our technology suppliers to benefit our citizens and maintain Scotland's position as a leader in this field.

This Delivery Plan sets out six workstreams, each with specific actions to be delivered by 2015. We know that we require long-term, sustainable progress to fully embed telehealth and telecare within an integrated system. Therefore we will review and refresh this Delivery Plan and related actions with the next Scottish Spending Review to take us forward towards 2020.

Workstream One – Improve and integrate health and social care by:

- Helping people with long-term conditions to live independently at home by supporting them to manage their own health and care;
- Embedding telehealth and telecare within whole system pathway redesign to enable people to move smoothly through transitions between services;
- Using telehealth and telecare within preventative approaches;
- Ensuring appropriate synergies with the technical architecture of the eHealth Strategy, including standards, principles and access to enabling technologies.
Workstream Two – Enhance wellbeing by:

- Expanding innovative service models for community-based support and wellbeing;
- Supporting people to be active participants in the design and delivery of their technology-enabled services.

Workstream Three – Empower people by:

- Raising awareness, evidencing and sharing benefits for individuals and carers;
- Recognise the crucial role provided by unpaid carers and develop solutions to meet their needs and wellbeing.

Workstream Four – Improve sustainability and value by:

- Establishing a baseline, and developing consistent outcome measures and indicators to track impact of telehealth and telecare on working practices, productivity and resource use;
- Realising greater efficiencies in procurement, contact centre/responder services, and specialist advisory resources through ‘at scale’ deployment.

Workstream Five – Support economic growth by:

- Strengthening partnerships between users, practitioners, service providers, industry and academia to meet the needs and aspirations of our citizens and help grow the economy through targeted innovation and development.

Workstream Six – Exchange learning, develop and embed good practice by:

- Recognising and meeting the needs of health, housing, social care, independent and third sector providers for new skills, education and training;
- Supporting leadership capacity and capability;
- Raising awareness, publishing and promoting innovative approaches, good practice and illustrative user/patient experiences.

Supporting and measuring improvement

We will ask the Scottish Centre for Telehealth and Telecare, working in collaboration with the Joint Improvement Team to continue to engage with all key stakeholders and to provide improvement support and challenge in delivering the actions in the National Delivery Plan.
We will ask the National Telehealth and Telecare Advisory Board to review and report on an annual basis the progress made by NHS Boards, Local Authorities and other partners in progressing the Delivery Plan actions.

To increase the pace of improvement and to drive and track progress we will work with NHS Boards, Local Authorities and other key stakeholders to develop quality outcome indicators for telehealth and telecare. These will align with Single Outcome Agreements, support our Quality Measurement Framework and contribute to the suite of outcome indicators for the integration of adult health and social care.
5.0 NATIONAL DELIVERY PLAN: ACTIONS TO 2015

Specific objectives and actions have been aligned with the six workstreams to achieve focus and traction over the next three years.
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<th>NATIONAL WORKSTREAMS</th>
<th>Objective</th>
<th>Priority Activities</th>
<th>Recommended Action Areas/Timescales</th>
<th>Lead Role</th>
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<tr>
<td><strong>1.</strong> IMPROVE AND INTEGRATE HEALTH AND SOCIAL CARE</td>
<td>1.1 Help people with long-term conditions to live independently at home, by supporting them to manage their own health and care</td>
<td>Implement European United4Health Project to support the management of Long Term Health Conditions (CHF, COPD and diabetes)</td>
<td>Complete implementation by December 2015</td>
<td>SCTT/JIT with local health and social care partnerships (location to be confirmed)</td>
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<td>Expand Home Health Monitoring solutions across Scotland</td>
<td>Identify a minimum of three priority areas for service redesign, Implement and review by end March 2015</td>
<td>Health Boards</td>
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<td>Identify at least two further ‘at scale’ programmes of activity</td>
<td>Identify focus of scaleable programmes and funding opportunities - Dec 2013</td>
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<td>1.2 Embed telehealth and telecare within whole system pathway redesign to enable people to move smoothly through transitions between services</td>
<td>Participate in EIPAHA Action Groups to inform transformational care service redesign in Scotland, and develop opportunities for industry</td>
<td>Complete Action Plans - Oct 2012</td>
<td>SG/SCTT/JIT</td>
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<td>Action Plans with formal sign off by European Commission - Nov 2012</td>
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<td>Identify specific programme opportunities and engage with Scottish stakeholders - May 2013</td>
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<td>Implement the ‘at scale’ European SmartCare Project to support the redesign of integrated care pathways</td>
<td>An additional 10,000 people supported by Dec 2015 as outlined in European submission</td>
<td>SCTT/JIT with health and social care partnerships in Lanarkshire, Ayrshire &amp; Arran, East &amp; Renfrewshire</td>
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<td>NATIONAL WORKSTREAMS</td>
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<tr>
<td>1. IMPROVE AND INTEGRATE HEALTH AND SOCIAL CARE</td>
<td>Maximise and increase the use of telehealth and telecare to improve access for citizens to planned and unplanned care</td>
<td>Paediatric Unscheduled Care/ Critical Decision Support in North of Scotland – Study evaluated April 2013</td>
<td>Grampian, Orkney, Highland, Western Isles and Shetland Health Boards</td>
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<td>Expand 24/7 access to Stroke Thrombolysis Decision Support by Feb 2013</td>
<td>Highland and Grampian Health Boards</td>
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<td>Embed telehealthcare social care assessment, care planning and review processes for all client groups and ages by end Mar 2014</td>
<td>All Local Authorities</td>
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<td>1.3</td>
<td>Use telehealth and telecare within preventative care approaches</td>
<td>Implement Commitment 6 of the Mental Health Strategy for Scotland 2012-15</td>
<td>By March 2015:</td>
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<td>Improve access to psychological therapies and specialist child and adolescent services</td>
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<td>Improve first contact services</td>
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<td>Improve public mental health as well as delivering treatment and support services</td>
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<td>SG, SCTT and Health Boards</td>
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<tr>
<td>1. IMPROVE AND INTEGRATE HEALTH AND SOCIAL CARE</td>
<td>1.4 Ensure appropriate synergies with the technical architecture identified within the national eHealth Strategy, including standards, principles and access to enabling technologies</td>
<td>Expand use of telehealthcare within Dementia Care &amp; Falls Prevention in the community</td>
<td>Expand by a minimum of 10% the use of technology within integrated care approaches to effectively support people to remain at home and avoid the need for unplanned emergency hospital and care home admission.</td>
<td>Health and social care partnerships, Housing Associations</td>
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<td>Maximise and expand the use of improved video conferencing facilities</td>
<td>Develop and implement sustainable business model to provide shared services such as technical support, multi-site bridging, and central infrastructure management</td>
<td>NSS and Health Boards</td>
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<td>Develop an infrastructure that supports outbound dialling to both external organisations and the service user’s home by Dec 2012</td>
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<td>Develop scalable and cost-effective platform developed to provide secure video and service links between health, social care, the third sector, and service users’ homes by September 2013</td>
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<td>Establish robust and regular progress meetings between the telehealthcare and eHealth communities to identify and develop opportunities for effective collaboration e.g. data integration and analysis.</td>
<td>By March 2013</td>
<td>SG &amp; SCTT</td>
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<td><strong>2.</strong> ENHANCE WELLBEING</td>
<td><strong>2.1</strong> Expand innovative service models for community-based support and wellbeing</td>
<td>Develop and implement the Scottish Government and Technology Strategy Board’s DALLAS Programme in Scotland ‘Living it Up’</td>
<td>Deliver a community of 55,000 people who are able (and motivated) to look after and improve their health and wellbeing by May 2015 as outlined within Technology Strategy Board competition process</td>
<td>NHS 24/SCTT/JIT with health and social care partnerships in Forth Valley, Grampian, Highland, Lothian and Western Isles</td>
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<td>Engage more effectively with the housing and care home community to expand the use of telehealthcare for tenants and residents</td>
<td>Housing and Care Home providers to review and extend their use of telehealthcare as part of service development, redesign and new build opportunities</td>
<td>Local Authorities, Housing Associations, Third and Independent sector providers, JIT</td>
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<td><strong>2.2</strong> Support people to be active participants in the design and delivery of their technology-enabled services</td>
<td>Co-design and co-produce telehealth and telecare solutions with users, patients and carers which enable access to information, support, products and services</td>
<td>Undertake Community Engagement in all key projects and programmes. Ensure telehealthcare services can be accessed and made available via Self Directed Support</td>
<td>Project and programme leads Health and social care partnerships</td>
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| **3. EMPOWER PEOPLE** | **3.1** Raise awareness, evidence and share benefits for users and patients | Develop tools and materials which enable people with disabilities and long-term health and care issues to comfortably and confidently use telehealthcare to support their lifestyles | Development of a range of user- and patient-focused information sources by end Mar 2015
Refresh definitions/terminology and undertake national media coverage to improve understanding, potential and take up | SG, SCTT |
<p>| | <strong>3.2</strong> Recognise the crucial role provided by unpaid carers and develop solutions to meet their needs and wellbeing | Identify sustainable delivery mechanisms to ensure that carers have ready access to appropriate, up-to-date information about telehealthcare services and support | Work with national Carer Organisations to develop and implement carers support/telehealthcare annual work plan by end Mar each year | SCTT and Carer Organisations |</p>
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<td><strong>4.</strong> IMPROVE SUSTAINABILITY AND VALUE</td>
<td>4.1 Establish a baseline, and develop consistent impact and outcomes measures on efficient working practices, productivity and resource use</td>
<td>Establish a robust baseline of existing projects and service provision</td>
<td>Identify a single point of contact with strategic responsibility for telehealth and telecare service development by December 2012. Develop a national database of telehealth and telecare services in Scotland to map progress, effectively share learning and identify shared service opportunities by May 2013.</td>
<td>SCTT, Health Boards and Local Authorities</td>
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<td>SCTT</td>
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<td>4.2 Realise greater efficiencies in procurement, contact centre/responder services, and specialist advisory resources</td>
<td>Procurement</td>
<td>Expand existing Scotland Excel procurement framework to support improvements in efficiency, quality and integration of Telehealth and Telecare data, equipment and services</td>
<td>Scotland Excel/ NSS</td>
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<td>4. IMPROVE SUSTAINABILITY AND VALUE</td>
<td>Contact Centre/Responder Services</td>
<td>Where a contact centre service is required for new Long Term Conditions monitoring services, NHS 24 should be considered as an option to realise economies of scale and care consistency</td>
<td>Local areas to identify opportunities for appropriate shared service provision for ARCs for telecare/community alarms to rationalise provision, maximise efficiencies and improve standards</td>
<td>Health Boards</td>
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<td>Local areas should explore with third and independent sector if capacity to provide local ‘on the ground’ response services in areas with poor coverage</td>
<td>Local Authorities and Housing Associations</td>
<td>Local Authorities</td>
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<td><strong>5.1</strong> Strengthening partnerships between users, practitioners, service providers, industry and academia to meet the needs and aspirations of our citizens and help grow the economy through targeted innovation and development</td>
<td>Develop a 10-year work plan which identifies a roadmap for innovation and development within digital health, enabling technologies and telehealthcare. This will also articulate understanding of the main ways in which such innovation can contribute to sustainable economic development in Scotland</td>
<td>SALPB work plan in place by July 2013; Review remit of SALPB and consider transformation into Health Innovation Partnership model by Feb 2013</td>
<td>SALPB</td>
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<td><strong>5.</strong> SUPPORT ECONOMIC GROWTH</td>
<td>Establish a Digital Health and Care Innovation Centre in support of technology-enabled integrated care</td>
<td>Centre established by March 2015</td>
<td>Scottish Science Advisory Council/ SCTT/Scottish Enterprise/ Highlands &amp; Islands Enterprise</td>
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<td>Enhancing our work on the Step Change 2015 Broadband Infrastructure Project by ensuring the full benefits for health and social care are realised</td>
<td>Identify solutions for the delivery of telehealth and telecare services to people who live in areas with limited or no mobile or broadband connectivity by 2015</td>
<td>SCTT</td>
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| 6. EXCHANGE LEARNING, DEVELOP AND EMBED GOOD PRACTICE | **6.1** Recognise and meet the needs of health, housing, social care, independent and third sector providers for new skills, education and training | Work with HEIs and professional bodies to embed telehealth and telecare competencies  
Work with HEIs to embed Telehealth and Telecare into health, care and housing undergraduate curriculum, and develop accredited CPD modules for qualified staff  
Work with key stakeholders to ensure that Education and Training opportunities and areas of good practice are accessible for health, care and housing workforce | Progress UK-wide ‘Supporting Employers with the Workforce Implications of Assistive Technologies’ Project and associated implementation plan  
Define national strategic roadmap for remote delivery of education (Tele-education), technical skills, intra professional communication, education and clinical support  
Work with the SQA to develop new accredited awards in telehealth and telecare, and provide support to SQA approved centres to deliver and assess | SSSC/NES/SQA/SCTT |
| | **6.2** Support leadership capacity and capability | NTTAB with NES and SSSC how best to build Leadership for Innovation into their activity  
Link with academic leaders in telehealth and telecare research and evaluation to develop the evidence around the effectiveness, efficiency and acceptability of interventions in telehealth and telecare | By May 2013  
Round table discussions by end May 2013 | NTTAB |
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<td><strong>6.</strong> EXCHANGE LEARNING, DEVELOP AND EMBED GOOD PRACTICE</td>
<td><strong>6.3</strong> Raise awareness, independently publish and promote innovative approaches, good practice and illustrative user/patient experiences</td>
<td>Organise and deliver an annual programme of Learning Network activities to support workforce development, knowledge transfer and shared learning of good practice from Scotland, UK and beyond. Identify and develop a range of web-based resources to support awareness raising, good practice and education activities</td>
<td>Programme for each year to be developed and published by end March, with evaluation of previous year. Review potential for further good practice guidelines in: Use of technology to support medication management; Pulmonary Rehabilitation; Home Access for care, support and emergency response services.</td>
<td>SCTT/JIT</td>
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<td>Develop guidelines, standards and integrated protocols between telecare services and national emergency services, e.g. Scottish Ambulance Service, NHS 24</td>
<td>Telecare Services Association, SAS, NHS 24</td>
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<td>Develop guidelines and standards for asset management – including storage, maintenance/repair, battery replacement</td>
<td>SCTT, Local Authorities</td>
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“Telehealth” is the provision of health services at a distance using a range of digital and mobile technologies. This includes the capture and relay of physiological measurements from the home/community for clinical review and early intervention, often in support of self management; and “teleconsultations” where technology such as email, telephone, telemetry, video conferencing, digital imaging, web and digital television are used to support consultations between professional to professional, clinicians and patients, or between groups of clinicians.

“Telecare” is the provision of care services at a distance using a range of analogue, digital and mobile technologies. These range from simple personal alarms, devices and sensors in the home, through to more complex technologies such as those which monitor daily activity patterns, home care activity, enable ‘safer walking’ in the community for people with cognitive impairments/physical frailties, detect falls and epilepsy seizures, facilitate medication prompting, and provide enhanced environmental safety.

“Telehealthcare” is used as an overarching term to describe both telehealth and telecare together.
APPENDIX TWO: NTTAB AND SALPB
GOVERNANCE AND REPORTING

Life Sciences Advisory Board (LiSAB)
Co Chair: Cab Sec H&WB

Scottish Government Health and Social Care Directorate

NHS 24

Scottish Centre for Telehealth and Telecare

Scottish Assisted Living Programme Board (SALPB)
- Provide Strategic Direction and Support Implementation of the Scottish Assisted Living Programme
- Develop Telehealthcare activities on behalf of LiSAB

National Telehealth and Telecare Advisory Board (NTTAB)

Governance and Reporting
Advice and Collaboration