**NHS England**

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From: Sir Bruce Keogh
To: Technology Enabled Care Services Stakeholder
Forum

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**Re: Technology Enable Care Services - Stakeholder Forum Update**

The challenges facing our NHS are well known. The combination of an increasing older population, together with better medicines and techniques and the expectations they bring, is imposing increasing pressure on our health services. By 2018 it is estimated that nearly three million people will be living with three or more long-term conditions.

While the demand for services rises, we know that the resources at our disposal cannot keep pace. We therefore have to do more with what we have. The question, then, is how can we ensure people continue to get high quality care for the future?

One opportunity lies in the fact that people increasingly want to own and control their own healthcare. By harnessing the power of digital technology we can help by empowering people to manage their care in a way that is right for them.

Our daily lives have been transformed by the widespread availability of digital devices, which continue to evolve and develop year on year. The power we now carry in our pockets lets us organise our travel and social lives and do our shopping and banking conveniently and securely.

Present and emerging technologies offer similar opportunities for us to transform the way we engage in, and control, our own healthcare.

Imagine the degree of personal control that could be afforded by a smart phone configured for medical applications, coupled with wearable biosensors and capable of sensing, analysing and displaying vital signs and alerting you and your clinicians to significant changes or deterioration wherever you are, rather than through check-ups at a hospital or GP practice. Any escalation in a condition could be identified and addressed in a timely and proactive way. It would lead to better health outcomes whilst being more convenient for the patient, their carer and their clinician.

This is the future of healthcare. Twenty years from now, we will use technology to access our health services as a matter of course. That future is fast approaching as technologies constantly evolve, adapt and improve.

As people around the globe increasingly embrace technology to deliver better, more convenient and more affordable healthcare, we must offer NHS patients the opportunity to benefit from these advances. Many localities have shown that technology enabled care services can deliver more efficient and convenient services of higher clinical quality.

We must also maintain the compassionate, human element of care and recognise that the starting point is the patient and their needs - and not the technology itself.

The 3millionlives programme went some way towards making a clear case for telehealth and telecare and there are now a number of examples of tele-interventions being used very successfully. In April 2013, NHS England undertook a review of the scope, delivery model and objectives of 3millionlives, which has led to a shift in strategic direction under the renamed 'Technology Enabled Care Services' (TECS) programme.

We recognise that the benefits of technology enabled care services have not always been presented in a way that is compelling to commissioners, clinicians or the public and that some of the results of trials have been inconclusive. We also recognise that there may have been too much focus on the technology itself rather than on the guidance and skills needed to successfully commission and re-design services to embed technologies within an end-to-end pathway.

The TECS programme has been re-focussed to address the demand from health and social care professionals for support and practical tools to commission, procure, implement and evaluate technology enabled care services. Our ambition is to create the right commissioning environment that supports and encourages the innovative use of technology to improve health outcomes, empower patients, and deliver more cost-effective services as part of a modern model of integrated care.

The TECS Stakeholder Forum's collective views and proposals on how to address the barriers to wider adoption now form the basis of the TECS Improvement Plan 2014-17.

I am eager to share the important proposals which you collectively identified as being key to delivering improved patient care and operational efficiency through TECS. I am confident that these proposals are the right way forward and will move us closer towards achieving the ambition to improve the lives of people with long term conditions through the use of TECS. The proposals within the TECS Improvement Plan are outlined in Appendix A and centre on five interconnected themes:

1. Raising awareness and driving behaviour change
2. Supporting high quality commissioning
3. Improving and simplifying procurement
4. Improving information governance
5. Developing robust measures and metrics

We recognise that the successful adoption of TECS will require a collaborative effort from across health, social care, housing, third sector and industry. To ensure continued progress, we have brought together a TECS Implementation Group consisting of experts and leaders from across these sectors whose remit is to support the strategic development and delivery of the proposals within the

Improvement Plan. In addition, we have formed the TECS Executive Steering Group which meets regularly to provide clinical, technological and strategic leadership for the programme at a director level in NHS England. The Executive Steering Group members are:

- John Stewart, Director, Quality Framework, Medical Directorate
- Dr Martin McShane, Director, Long Term Conditions, Medical Directorate
- Beverley Bryant Director, Strategic Systems and Technology, Patient and information Directorate
- Cathy Hassell, Deputy Director, Quality Programmes (incl. Technology Enabled Care Services)

I'd like to thank the members of the TECS Stakeholder Forum for your time, expertise and contribution to the TECS programme to date. We are now focussed on taking forward the proposals within the TECS Improvement Plan which represent a first step in creating the right environment for the wider adoption of technology enabled care services to deliver benefits to our health, social care and the wider economy. I believe that by embracing this sort of technology, we can empower millions of patients to own their own care and transform the way we plan and deliver services to create a sustainable NHS for the future.

If you have any queries or would like to be more closely involved in the development of this work, please contact Cathy Hassell at cathyhassell@nhs.net or Annie Thompson, TECS Programme Lead, at anniethompson@nhs.net.

Yours sincerely,

**Professor Sir Bruce Keogh**
**National Medical Director**
**NHS England**

**Appendix A - Technology Enabled Care Services Implementation Proposals**

1. **Raising awareness and driving behaviour change**

Technology can play a much bigger part in enabling more convenient, accessible, and better care for individuals, just as it has transformed the way customers access and service their bank accounts or book their holidays. However, in a fragmented and complex health and social care landscape, we should be mindful of the immense transformational shift this will require. To create the right environment for technology enabled care services to become mainstream, the TECS Rapid Design groups' broader proposals are:

- **Drive a system-wide cultural shift to raise awareness** among health and care professionals of the benefits technology enabled care services can bring to quality, safety, patient experience and efficiency.

- **Create a network of technology enabled care services champions** who can demonstrate how they have successfully commissioned and implemented services, and how they have improved outcomes. Champions could include patients and carers.

- **Gain leadership support and advocacy across the system** to embed technology enabled care services as a core component of service improvement. Clinical, operational and financial leaders from across the health and social care system should be provided with the case for change so that they can become advocates for technology enabled care services.

- **Develop a central repository of technology enabled care services good practice** to collate and share case studies, guidelines and standards.

- **Create a technology enabled care services implementation group** to drive delivery of the proposals within this plan at a national and local level.

2. **Supporting high quality commissioning**

It should become easier to make technology enabled care services a viable and credible consideration for all commissioners whether they are clinicians, social care professionals or individuals. We need to support commissioners with the leadership, technical skills and transformational capability to deliver technology enabled care services. These proposals are relevant to all prospective commissioners of technology enabled care services (including NHS England as commissioners of primary care and specialised services, and NHS and social care commissioners). The groups' proposals to improve commissioning of technology enabled care services are:

- **Commission for outcomes, not for technology.** Technology should be seen as an enabler for improvement of health and social care services. However, too often there is a focus on commissioning technology. Health and social care staff could be supported to make technology enabled care services a normal part of the assessment and care planning processes. Commissioners could consider taking a flexible approach to commissioning the end-to-end solution and service redesign where appropriate. This would involve working closely with clinicians or commissioning clinicians, starting from the initial stages and continuing throughout

the project, to deliver the service redesign and integration. Commissioners could be provided with independent support for service redesign and de-commissioning of legacy services. Consistency and quality could be built into the commissioning approach through adherence to multiple quality standards.

- **Consider giving individuals a technology enabled care services assessment.** In much the same way as people receive regular health screenings, individuals with a long-term condition (or at risk of developing one) could be offered a technology enabled care services assessment. The assessment could take a holistic view of an individual's health and social care needs and suitability for technology enabled care services, with the aim of giving people as much control as they want to take over the management of their condition.

- **Build technology enabled care services into Health and Social Care planning.** Technology enabled care services could be built into commissioning culture to become a fundamental consideration within any long-term condition care pathway. Health and social care commissioners could consider where technology fits into CCG strategic and joint planning processes, and how to commission technology enabled care services to deliver better outcomes and support integration and collaboration between health and social care.

- **Build technology enabled care services commissioning into health and social care into curricula** and continuing professional development to prepare the workforce for the change in working patterns and interactions with patients. This would give the workforce early exposure to technology enabled care services within their training and support them to better understand the needs and wants of their patients and the opportunities afforded by technology enabled care services.

- **Develop a technology enabled care services commissioning toolkit.** Building on the best practice components of the existing telehealth and care commissioning toolkits, the toolkit should be aligned with the national commissioning approach, and a process for continuous improvement of the toolkit should be established. Commissioning of technology enabled care services could take into consideration how to deliver paper-light services. The toolkit should consider clinical governance structures to define responsibilities and governance within multidisciplinary teams and across multiple providers. It should consider how to commission for prevention to support the long-term sustainability of health and social care services.

- **Create a technology enabled care services pathway** as a national exemplar for an end-to-end pathway, which demonstrates where technology enabled care services could be commissioned to add value at appropriate points. The pathway should allow for local flexibility and adaptation.

- Align national strategic priorities and use system levers to encourage the spread of technology enabled care services. This could include influencing amendments to tariff, encouraging use of personalised health budgets to generate consumer demand, and development of quality standards to provide assurance to commissioners.

3. **Improving and simplifying procurement**

Procurement of technology enabled care services should be streamlined and focus on obtaining the best outcomes for patients and the whole health economy. These proposals are relevant to all procurement professionals intending to purchase technology enabled care services (including NHS England, NHS, and social care procurement staff). Specifically, the stakeholder proposals are:

- **Simplify the procurement processes.** There is a need to support the development of simplified contracts and standardised models, and terms and conditions to reduce the cost of sale for all partners and stimulate the market. Suppliers and procurers could work together to develop templates with clear descriptions of services in order to make the procurement more meaningful for both parties.

- **Support localities to develop a clear articulation of the long-term strategic need** for health outcomes and how technology enabled care services could support this. This would empower buyers and commissioners to stimulate a market that is responsive to their needs. Early engagement should be encouraged, including a clear articulation of the win-win relationship between buyers and suppliers.

- **Build interoperability, benefits measurement and information governance into technology enabled care services contracts.** Building interoperability, flexibility and longevity into the procurement approach is key to enable procurement services to adapt to innovation, a rapidly changing market and the continuous emergence of new technologies. Data needs, data sharing and benefits measurement on efficacy could be built into contracts for providers in order to generate and share operational data on the use of technology enabled care services. The adoption of information governance standards could be encouraged by linking them into contracts and procurement decisions.

- **Support the NHS and social care to develop a better understanding of risk in relation to technology enabled care services.** To promote wider adoption and better procurement of technology enabled care services, better data needs to be made available to assess the financial, legislative and reputational risks.

- **Support collaboration between commissioning and procurement professionals.** We recognise that procurement is a core component within commissioning. However, both functions are frequently delivered by different teams or individuals. Therefore, it is important to encourage professionals from the two disciplines to work collaboratively and ensure a clear understanding of the need and the new opportunities afforded by technology enabled care services.

- **Encourage and support opportunities for small and medium-sized enterprises (SMEs) to participate in and stimulate the technology enabled care services market.**

4. **Improving information governance**

Information governance should be an enabler for the most appropriate interventions for an individual at the point of care. It should be easier for everyone involved in the care pathway to share information. The groups' proposals aim to improve information governance by reducing the technical and regulatory barriers to information sharing. The proposals are:

- **Develop a technology enabled care services information governance "quality kitemark".** Identifying standards which set out quality objectives and best practice for collection and management of healthcare information will ensure that better quality information is collected. This will drive better analysis and decision-making, and in turn improve commissioning and procurement.

- **Establish an Information Governance standard for technology enabled care services.** Technology enabled care services information governance should be broadened to cover the whole care community (health, housing, social, public and mental health care). Appropriate existing standards should be identified or further developed where necessary.

- **Collect data once.** Where multiple agencies or professionals are required to input information about the same individual, they should leverage recently collected information from other sources where possible. Completing data entry should be standard practice. This will eliminate duplication of data entry by care staff, reduce the time taken for data collection, reduce inconvenience for patients, and increase the time available for care.

- **Make information governance an enabler – not a sticking block.** Relevant workforces and the public should be better informed about the benefits of sharing and the responsibility to safeguard data. Information governance should be seen as a facilitator to sharing data and not the reason for not doing it. Policy and communication examples as well as professional standards could be provided to demystify data sharing across the whole care pathway.

- **Encourage interoperable standards as open and standard practice.** Wherever possible, interoperability should be standard practice for data exchange, authentication, encryption, security and information governance standards, and all technology enabled care services equipment. This could help open up the market, reduce implementation costs, enable connectivity, and enable automation of processes and audit trails. This could involve providing commissioners with the support to develop appropriate contracts in which the terms and conditions clearly set out all the interoperability requirements and liability responsibilities. New standards could be developed where they do not already exist to enable information sharing.

- **Deliver an interoperability roadmap both at a tactical local level and a strategic national level.** This could involve supporting national and regional commissioning teams to develop and deliver interoperability plans which set out future plans. This would enable organisations to plan strategically, ensuring interoperability is taken into consideration within contracts.

- **Inform patients about the proposed use of their data and intentions to enable access to their own records.** Stakeholders felt that there is low awareness of the right for individuals to access their own care records and share them with health and social care professionals. As part of encouraging people to take responsibility for their own care, support could be provided to develop wider awareness of how their care records can be accessed and shared.

- **Enable better cross-organisational discharge planning**. The direct sharing of information electronically with health and social care partners could ensure better continuation and coordination of patient care in the community and better outcomes.

5. **Developing robust measures and metrics**

Measures and metrics must demonstrate the value of technology enabled care services to patients, commissioners, the NHS, social care, industry, and the economy. Traditionally, measurement has been based on activity – but we must now ensure that we can measure 'inactivity', i.e. the effect that technology enabled care services can have on preventing people from requiring and using services. It is important to measure the impact on patient journeys and the effect of technology enabled care services at all levels of the Kaiser triangle. Measures could also focus on how technology enabled care services support individuals to achieve their personal health-related goals.

It is vital to the coherence, communications and uptake of technology enabled care services that commissioners agree a small number of programme-level measures that are:

- meaningful indicators of the value added by technology enabled care services;
- relevant and applicable across different sectors including the NHS, local authorities, public health and the third sector;
- relevant and applicable at different levels of need, as illustrated by the 'Kaiser Triangle';
- relevant and applicable across telehealth, telecare, telemedicine, telecoaching and self-care apps;
- relevant and applicable to all stakeholders, including commissioners, providers, suppliers, patients, and carers;
- relevant and applicable across different geographies;
- aligned with commissionable outcomes;
- suitable as a basis for standardised reporting on the impact of technology enabled care services across the programme;
- appropriate for local use and adaptable to a wide range of contexts, and
- easily collectable with minimal administration, and, where possible, aligned with existing data capture regimes.

Stakeholders recommended that the following core measures should be applied consistently by all users of technology enabled care services. Building on existing measures and good practice, these generally represent aggregations of existing measures, rather than new metrics.

1. **Generalised "Goal Attainment Score" (GAS).** This measures how technology enabled care services can support individuals' goal attainment (within the context of their long term condition). Goals are set by the individual patient or informal carer in consultation with their healthcare professional or social worker. Specific goals could include lowering blood pressure, being able to walk in the park, or return to work, for example. The Goal Attainment Score will test the premise that the appropriate use of technology enabled care services will empower patients and improve lives. The National Voices' narrative for patient-centred, integrated care could be adapted at a local level to set out what good looks like from the user perspective.

2. **Key risk indicator.** This could measure the effectiveness of technology enabled care services in slowing the progression of illness, frailty, the loss of independence or accelerating rehabilitation, self-management or re-ablement. This measure will test the premise that appropriate use of technology enabled care services could help reduce dependence on and use of primary and secondary services by people with long term conditions or frailty.

3. **Service utilisation metric.** This could measure the effectiveness of technology enabled care services to reduce avoidable or unplanned service activity by evaluating the cost avoided and capacity released as a result of these technologies. This would demonstrate the increase in efficiency of service delivery and the net-positive cost impact on a local health economy.

4. **Patient experience metric.** This could measure the impact that technology enabled care services have on patient experience and satisfaction levels.

5. **Social impact metric.** This could demonstrate the wider societal impact of technology enabled care services, for example by measuring level of social contact or the increased participation in employment by patients and informal carers using these technologies.

6. **Economic impact metric.** This could demonstrate the contribution to the UK economy made by technology enabled care services by measuring the commercial value of the sector within commissioned services in England, including benchmarking against other countries.