Technology Enabled Care (TEC) - Scale up and Adoption

Supporting Health and Social Care Transformation

Vision
The Future of Care in Scotland – Harnessing Technology to Support People in their Own Homes and Communities

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But what do we mean by TEC?

For the purposes of this programme Technology-Enabled Care is defined as**:**

where the quality of cost-effective care and support to improve outcomes for individuals in home or community settings is enhanced through the application of technology as an integral part of the care and support process.

- Including, but not limited to, the use of telecare, telehealth, video conferencing and mobile health & wellbeing.

Scottish Government
Riaghaltas na h-Alba
gov.scot

Scottish Context – System Drivers
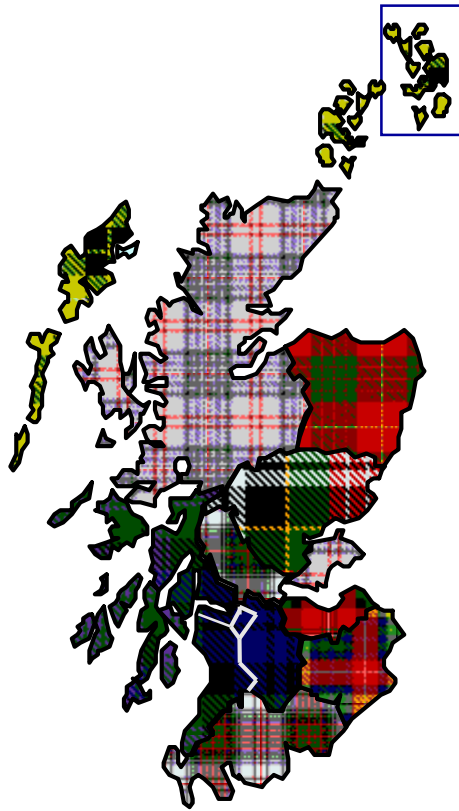
5.3 Million Population

Health Inequality	affordability
Workforce	Citizen expectations
Multiple & Chronic Conditions	Budget Pressures

TEC Aims and Objectives

To improve health & wellbeing outcomes for Scottish citizens

To embed TEC within strategic planning and service (re)design processes

To expand and integrate the effective use of TEC as a sustainable & cost effective component of our health, housing and care services;

To raise awareness and promote the digital agenda within health, housing & social care;

To promote greater use, integration and sharing of technologies across sectors and services;

To achieve sustainable and manageable growth in the number of individuals supported by TEC;

To routinely use measurement and evaluation for continuous improvement and service planning.

Technology-Enabled Care Programme – Launched in late 2014

- Designed to significantly extend the numbers of people directly benefiting from technology enabled care and support in Scotland:

- Benefits from an additional **€10.5 million a year** from 2015/16 with requirement to evidence positive, cost effective outcomes

- Demonstrate how technology enabled care contributes to supporting people to live well at home, avoiding unnecessary hospital admissions, reduces length of stay and prevents delayed discharges from hospitals in all locations across Scotland.

- **5** Key Workstreams identified for funding and national support

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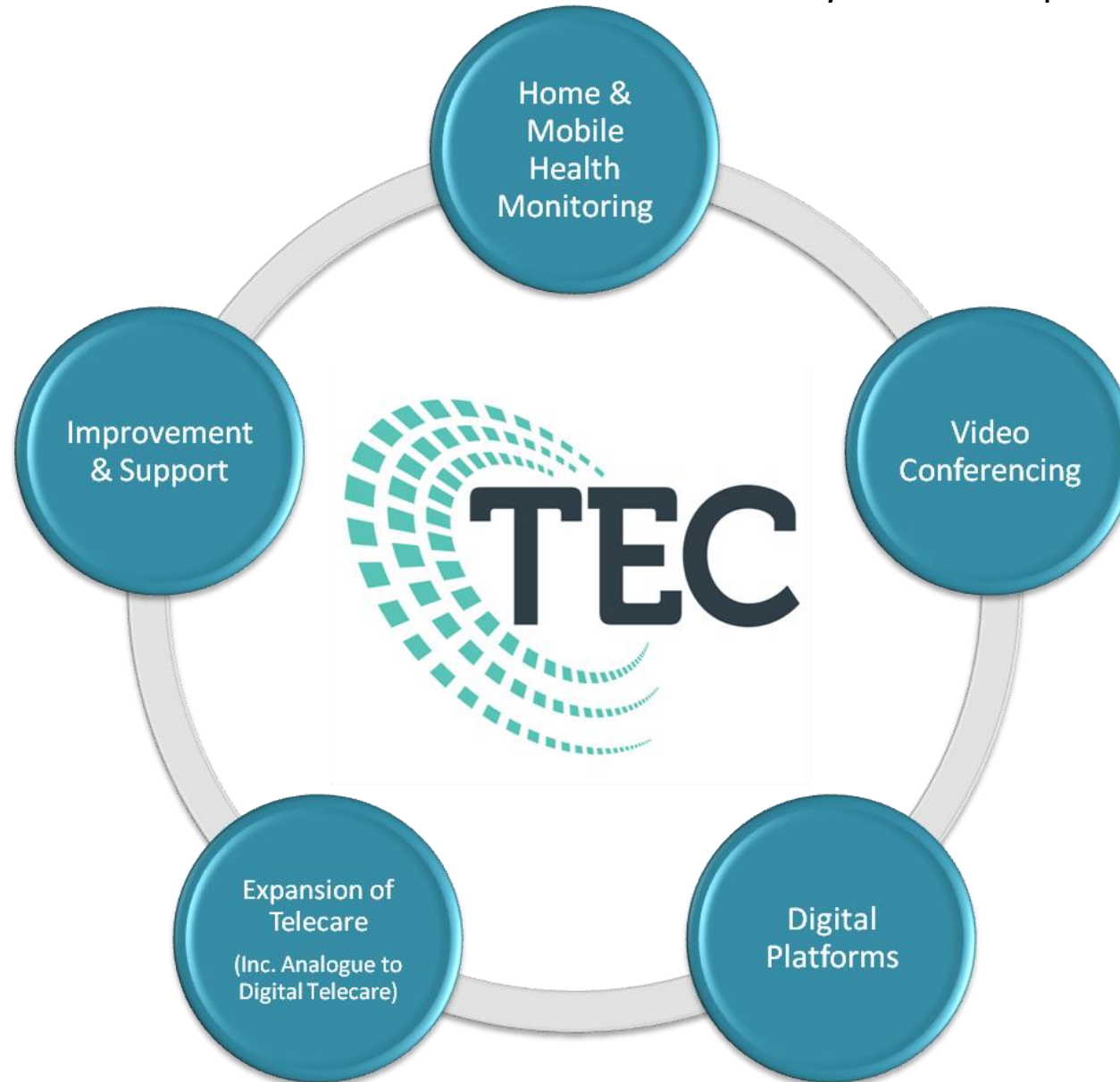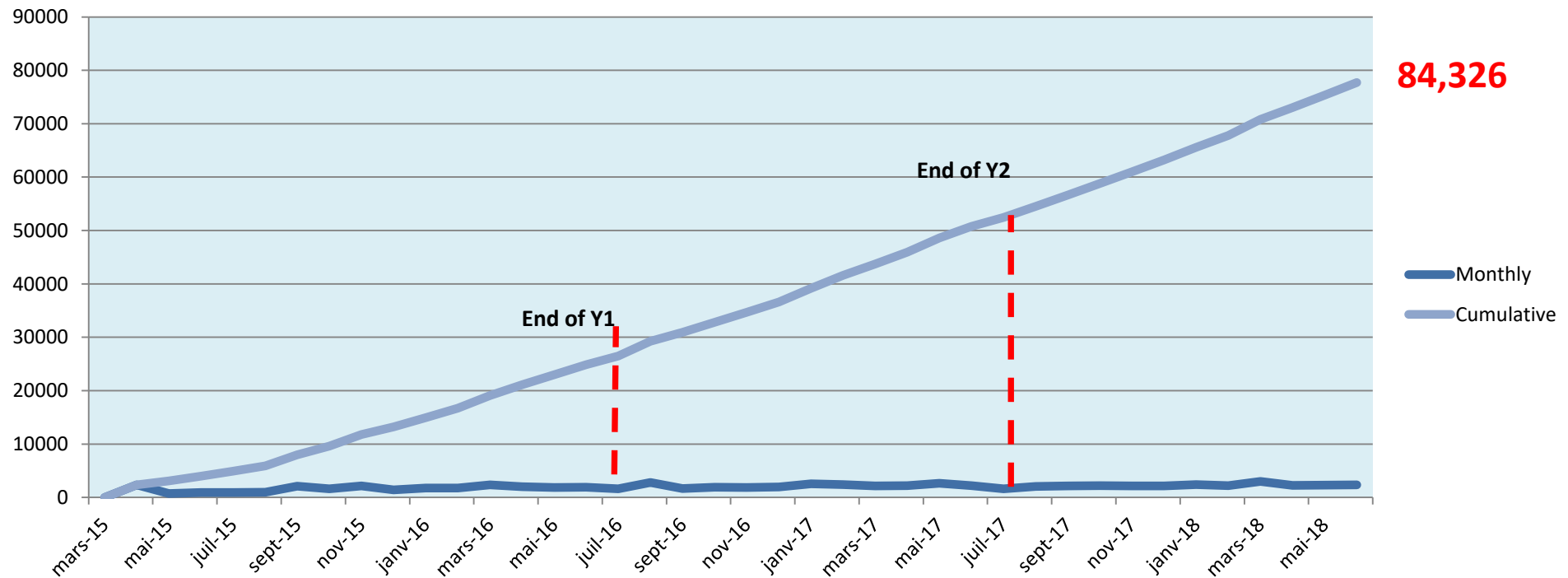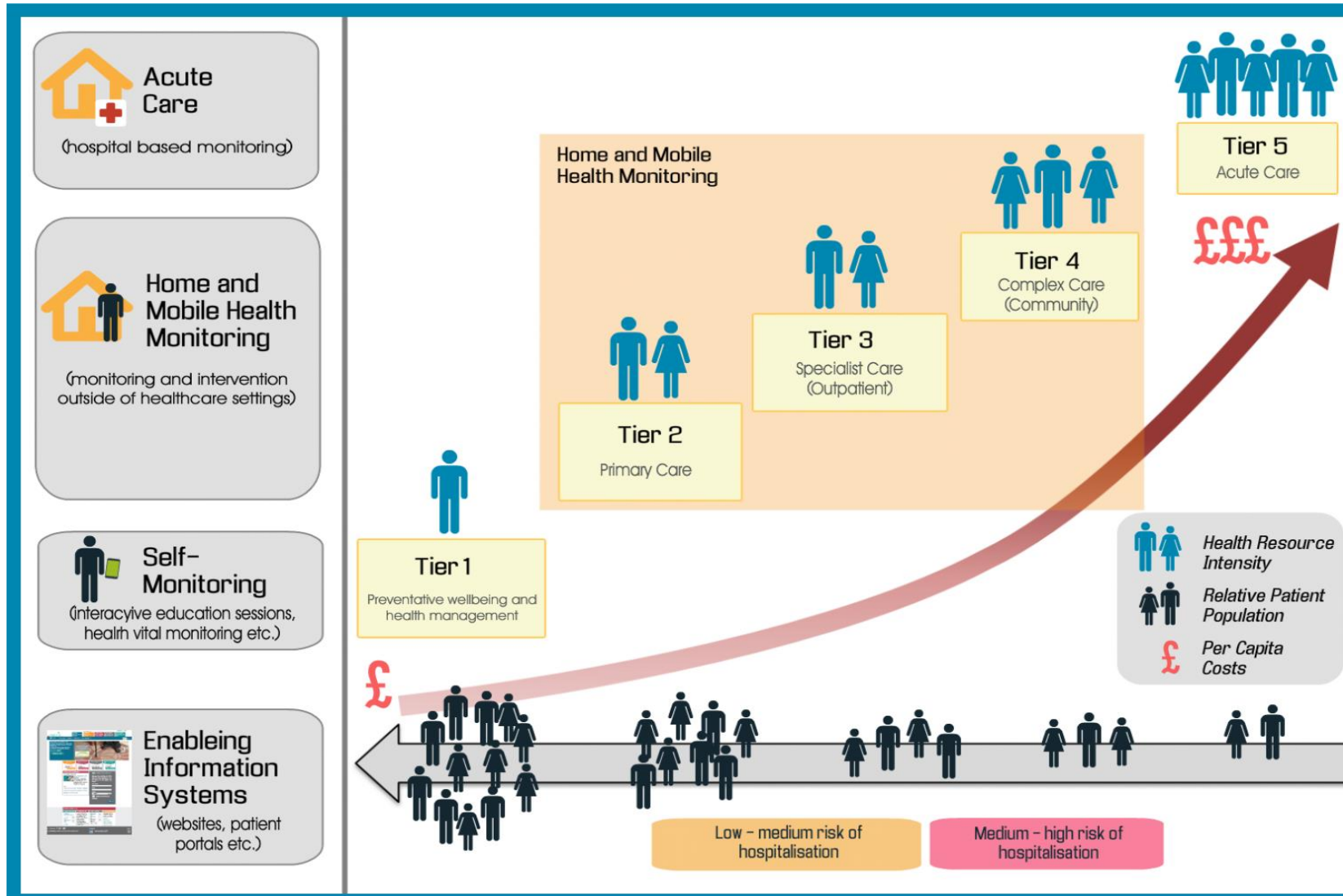
Citizens Enabled through TEC

The Technology Enabled Care Programme's overall aim has been to increase the number of people benefitting from technology to support their health and well-being

TEC Programme Recruitment – March 2015 to June 2018

National Service Model - HMHM

Tier 2
Primary Care & Community Services

Low – medium risk of hospitalisation

- Aid Diagnosis & assessment of treatment
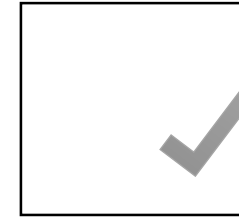
- Stabilise/re stabilse symptom control

- Health coaching to self manage via SMS Text

- Interventions to promote behavioural change/compliance lifestyle, diet, self care

- Promote anticipatory care for newly diagnosed LTC
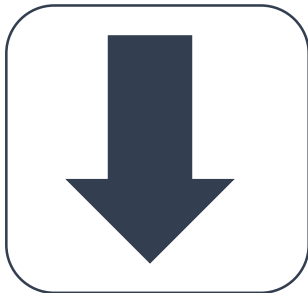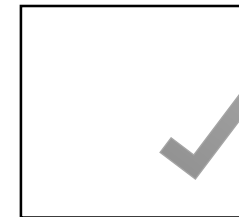
Home & mobile monitoring AT scale
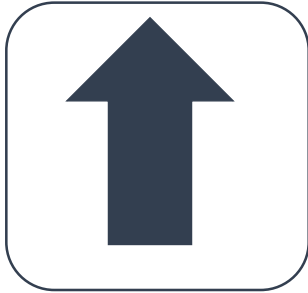
Capacity
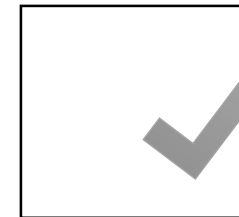- through efficiency gains ☑
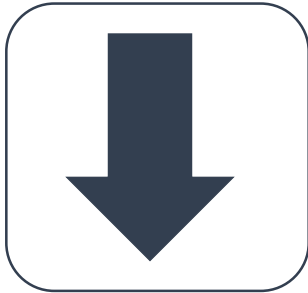
Demand
- through prevention activities ☑

Consumption
- during care ☑

Scaling up -
Home & Mobile Health Monitoring

Home &Mobile Health Monitoring Citizens Enabled
April 2015 to June 2018

17,708

Cumulative Total
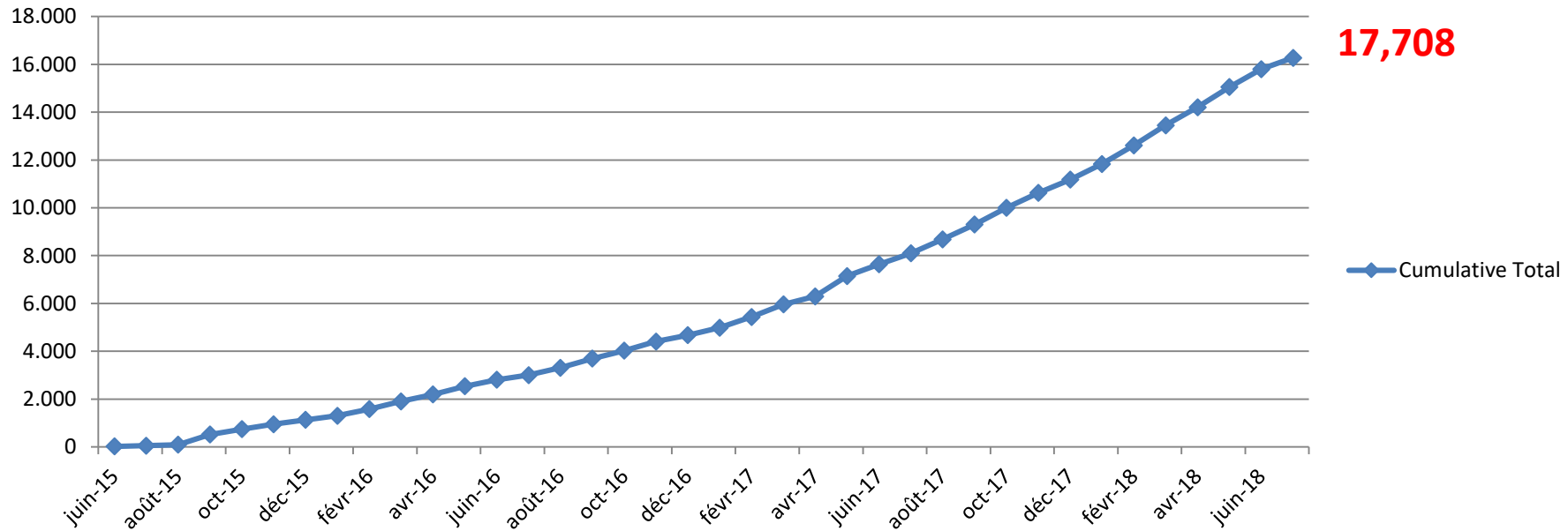
Average Recruitment a month across all partnerships = 540 citizens

- Measuring Blood Pressure (BP) is the third commonest reason for attending Primary Care appointments

- 1.2 million appointments in Scotland for nothing but BP

- Measurements taken in surgeries are
  - Less accurate compared with ABPM and home monitoring

- Around 15-20% white coat phenomenon

SCALE UP PROGRESS

- **8 out of 14 Health Boards using** Florence 'simple telehealth' SMS solution – integrating into Routine Care

- Developing a digitally enabled pathway for Hypertension

- Supporting **4100** citizens

- Reached over **20%** of Primary Care Practice in Scotland – with some health boards *reporting over 50% of practices* using HMHM

- Published Research which confirms improved BP Control & Reduced workload

Video Conferencing

The VC Programme continues to have a focus on the provision of VC mediated services to care homes. With the introduction of Attend Anywhere, partnership areas now have a choice in technology depending on their requirements

This allows low cost devices to be registered to the National VC network, allowing them to make and received calls from any other device or user.

To support the rollout of VC connections to third party providers such as care homes, sheltered housing complexes and third Sector providers, the national VC infrastructure was extended to provide a remote access connection.

Attend Anywhere

- In its first year (2017), there were over **700 consultations** (interaction between patient and clinician)

- In the first 3 months of 2018, we recorded over **600 consultations**, demonstrating a vast increase and popularity of the system across a wide range of services
  - including cancer support, nutrition, respiratory, sexual health, general practice, diabetes, dermatology

Telecare Feasibility Study

Deloitte.

Telecare Feasibility Study
Feasibility study for the provision of universal telecare services for the over 75s

The Scottish Government and COSLA commissioned a feasibility study to examine a national approach to the delivery of Telecare services.

Based on the analysis, it is estimated Scottish Local Authorities spend around **£39m per annum** to provide telecare to **20% of people** within the **+75 cohort nationally.**

Deloitte estimate this **generate** benefits of around **£99m per annum** to the Scottish Public Sector

Analogue to Digital Telecare

- TEC Programme commissioned a feasibility study to scope the benefits of switching the current Telecare provision from an analogue based system to a digital service. Reports published along with an International Landscape Review in 2015/2016

- A2DT programme has progressed significantly in the past year and Digital Roadmap 2018 now published

- 17 partnerships signed up as participants and have now moved from strategic planning to implementation

- The first digital Telecare services are now planned to launch end of 2018

- 6 partnerships live in clustered models with 1000 digital users by end of March 2019

Telecare

127,000 statutory users of telecare – 80% of all recipients of social care services, and around 20% of the entire over 75 population in Scotland.
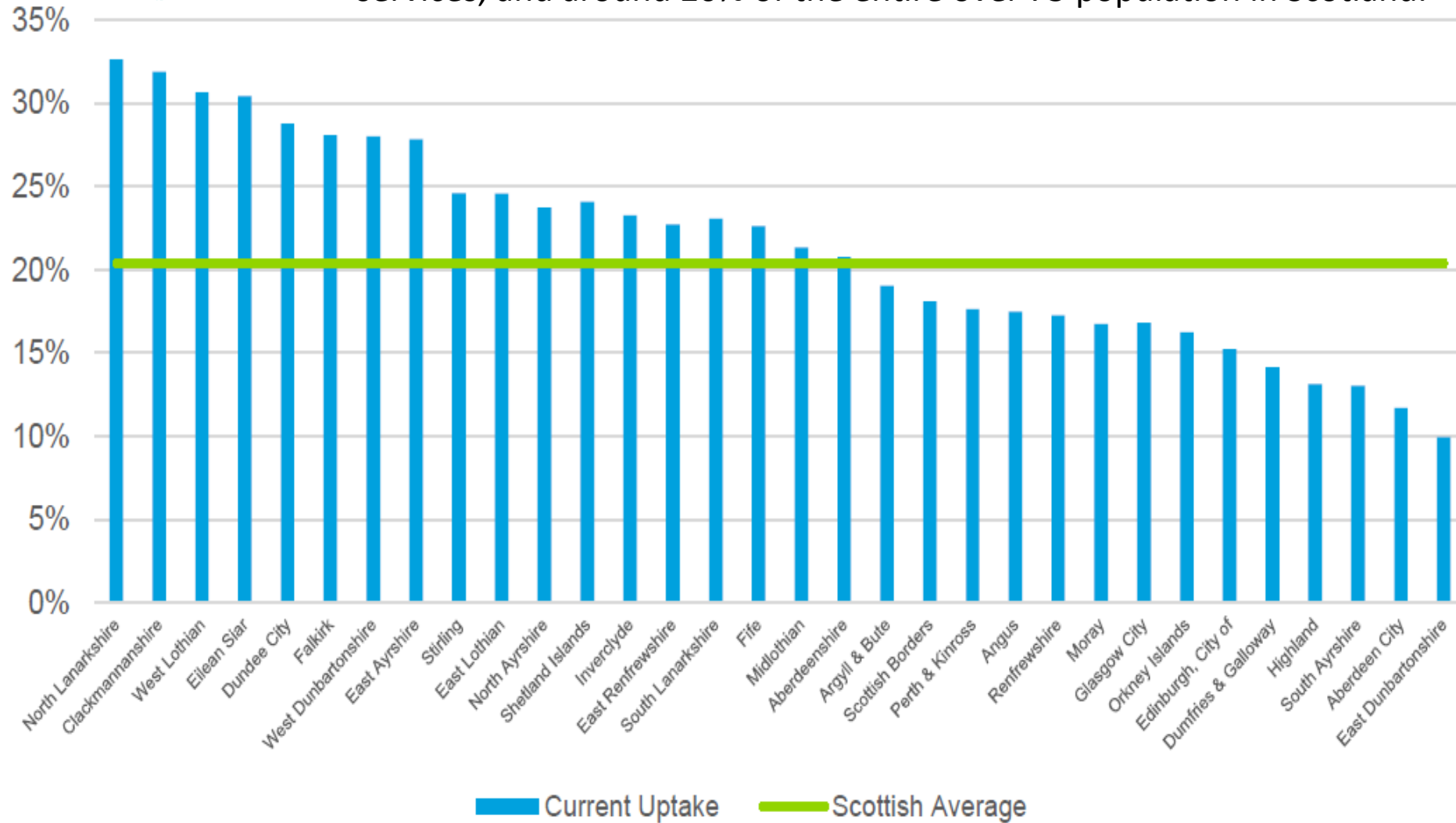
Figure 3: Telecare uptake across Scotland by Local Authority for the 75+ cohort (October 2016)

Progression of cCBT in Scotland
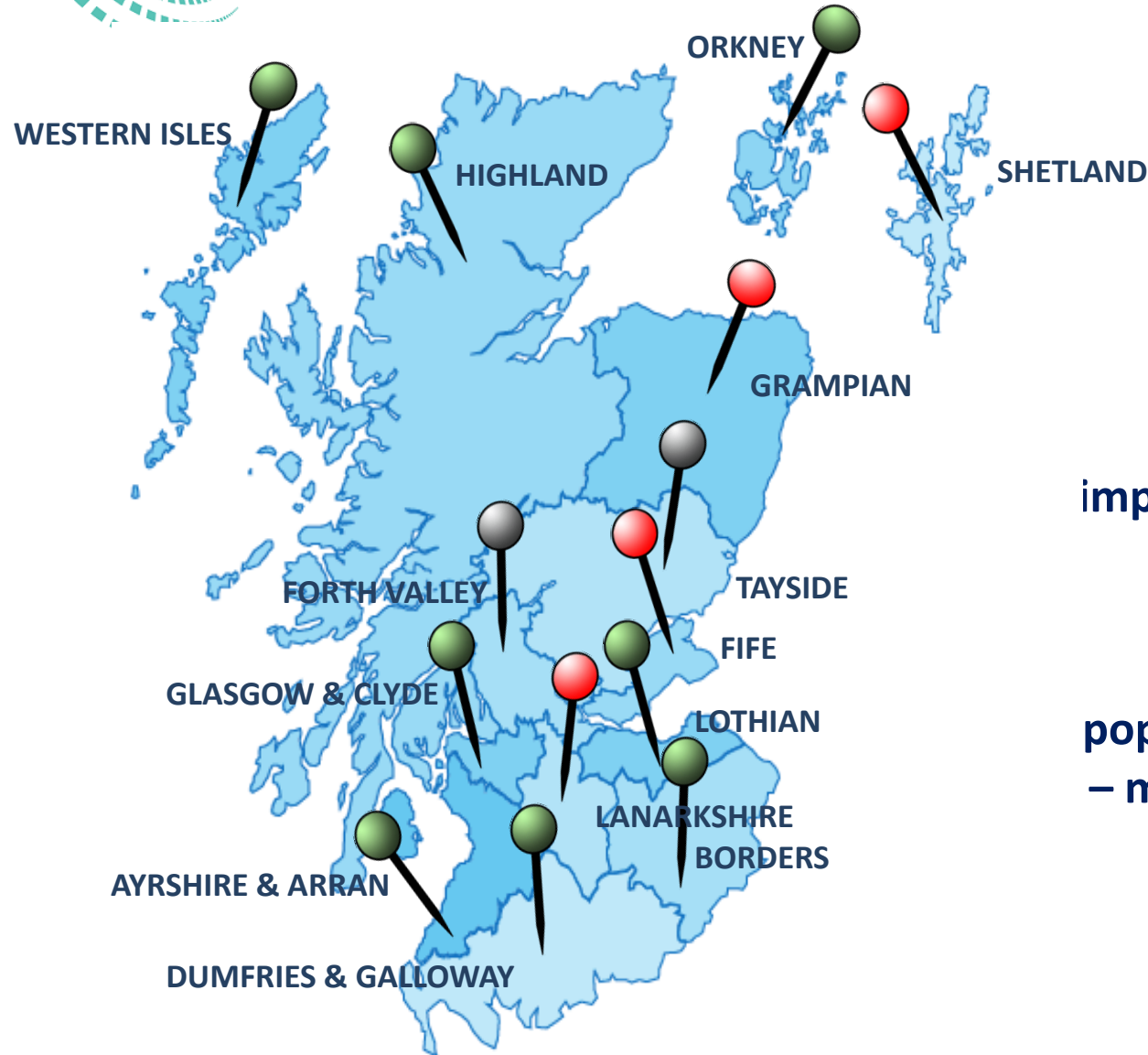
2007: 11% of national population

2015: 44% of national population, funded implementation programme (EU MasterMind Project)

2017: 100% of national population (change programme – mental health commitment – funded by TEC)

Map labels:
- WESTERN ISLES
- HIGHLAND
- ORKNEY
- SHETLAND
- GRAMPIAN
- FORTH VALLEY
- TAYSIDE
- FIFE
- GLASGOW & CLYDE
- LOTHIAN
- LANARKSHIRE
- BORDERS
- AYRSHIRE & ARRAN
- DUMFRIES & GALLOWAY

TEC Technology Enabled Care

My Diabetes My Way

Interactive website for people with diabetes and their families and friends to help find diabetes information and resources. People can upload their readings on a regular basis and view their data to actively self-manage their diabetes.

Increasing prevalence of Diabetes in Scotland *(291,981 or 5.4% of the population)*

15,574 people accessing their record and readings from MDMW Portal *(48% increase from 2016)*
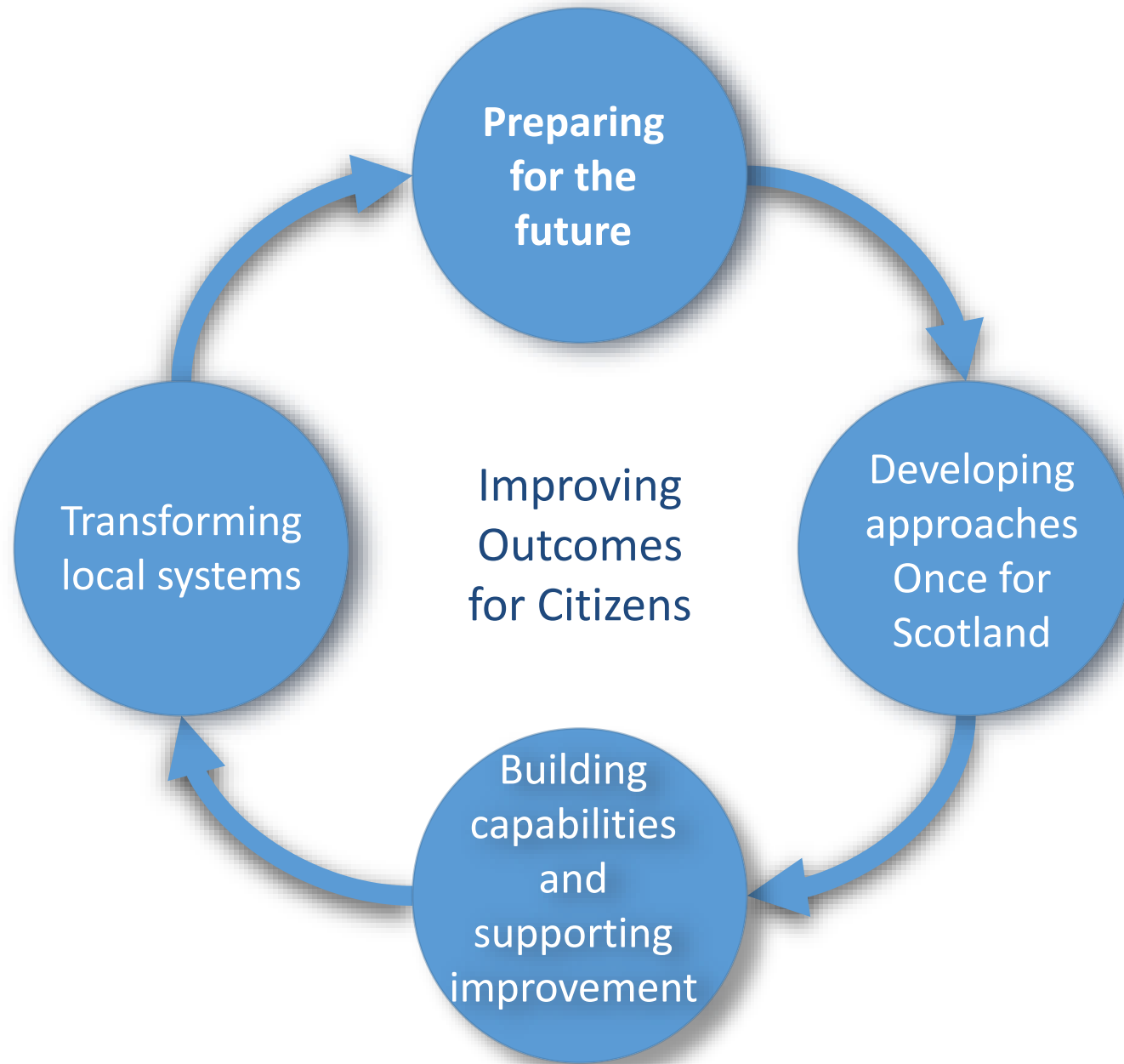
Won 5 national awards and 2 commendations received for self-care and quality services

TECHNOLOGY ENABLED CARE
Strategic Priorities 2018 – 2021

Preparing for the future

Developing approaches Once for Scotland

Building capabilities and supporting improvement

Transforming local systems

Improving Outcomes for Citizens

High Level Deliverables

Preparing for the future

• A clear pipeline of innovative solutions, products and approaches and an associated implementation model are in place for translation into mainstream at scale services and pathways across health and social care

• Further health and social care challenge competitions and feasibility studies where digital innovation can deliver improvements that are effective and can be adopted at scale have been undertaken

• The market has been sufficiently stimulated into providing suitable 'next generation' technologies, particularly for the shift to digital telecare and in the integration of telecare and telehealth

• Further UK and international funding collaborations have been established, bringing inward investment in support of further improvements and innovations in technology enabled care.

High Level Deliverables

Developing Approaches Once for Scotland

- cCBT and digitally enabled hypertension services have moved into sustainable business as usual

- Technology enabled pathways for diabetes and at least one other long term condition are being embedded

- Citizens can routinely access appointments remotely, and TEC has contributed to a significant reduction in outpatient appointments

- An integrated service delivery model for remote monitoring and response for health and care needs has been developed

- Digital telecare has been proven and a national replacement programme for analogue telecare is well underway

- A recognised 'at scale' implementation model is in place, and barriers to local service transformation and scale up that require action at national level have been identified and addressed on a continuing basis.

CRITICAL SUCCESS FACTORS

- Transformation First – come from new ways of working/ models of care not technology

- Culture Change is critical - shared vision and invest in Champions

- Targeted Funding plus investing in local Strategic & Clinical Leadership

- Balance – top down strategic direction and bottom up local ownership

- Invest in evaluation, data & analytics to support business change – reporting –supports adoption

- At scale is only achievable Integrate use of Low cost , mobile technology , customisable to" bring your own device" & support interoperability

- Power of Communications & Marketing Strategy

- Prepare for Multiple iterations and build in continuous learning

Evaluation

PURPOSE - Understand the quality, relevance and key findings from existing data and evidence, identify key information gaps and assess options for longer term monitoring and evaluation.

Findings :

- The TEC programme is **already applying** many established implementation strategies that are consistent with international best practice.

- Based on stakeholder engagement the TEC programme is **highly valued**

- **Strong commitment** to measurement and evaluation and its role in supporting continuous improvement of the TEC programme.

- **Variability in the robustness** of existing evaluation studies (including economic evaluations)

- **Develop** programme guidance and resources to support measurement and evaluation as well as in-house expertise.

- **Challenges** inherent in evaluating technology enabled care interventions which mean that standard methods of conducting health evaluation, such as randomised controlled trials, are often not appropriate

Evaluation
Recommendations :

- Formally adopt the RRRP (Rapid, Relevant, Research Process) as a framework for future measurement and evaluation activities.
- Prioritise evaluation activity on implementation and the impact of the TEC programme specifically:
  - **Scoping research on implementation needs and the effectiveness of existing strategies;**
  - **Identification of an Implementation Science framework for future TEC rollouts;**
  - **Evaluating the success of the implementation framework.**
- Conduct a review of monitoring data capture and use evaluation to address gaps in the logic models
- Adopt a more consistent approach to evaluation, especially economic evaluation.
- Develop guidance, in-house skills and a microsite for the TEC programme
- **Conduct more multi-stakeholder research and further research on future benefits, sustainability and mainstreaming research on some secondary outcomes (**quality of life/well-being impacts and health inequalities).

Thank you!

TW: @TECScotland #TEC Scot
 www.digihealthcare.scot