



Meeting: HHSCC
Meeting date: 1 November 2023
Title: Technology Enabled Care Update
Responsible Executive/Non-Executive: Pam Cremin
Report Author: Tracy Ligema

1 Purpose

This is presented to the Board for:

- Assurance
- Awareness

This report relates to a:

- 5 Year Strategy, Together We Care, with you, for you.
- NHS Board/Integration Joint Board Strategy or Direction

This report will align to the following NHS Scotland quality ambition(s):

Safe, Effective and Person Centred

This report relates to the following Strategic Outcome(s)

Start Well	Thrive Well		Stay Well	X	Anchor Well	
Grow Well	Listen Well		Nurture Well		Plan Well	
Care Well	Live Well	X	Respond Well	X	Treat Well	
Journey Well	Age Well	X	End Well	X	Value Well	
Perform well	Progress well					

2 Report summary

2.1 Situation

This report and accompanying presentation provide an overview and update for the provision of Technology Enabled Care (TEC) in Highland.

TEC in Highland has historically operated as a hosted service not directly linked to the separate EHealth or RD&I functions. Increasingly TEC needs to be considered as part of a suite of integrated, innovative digital solutions to meeting

the needs of people in our hospitals and communities. Digital solutions applied thoughtfully and appropriately can help to:

- maintain individual independence for longer,
- expedite discharge from hospital,
- reduce the need for long term residential care,
- reduce the size and complexity of care at home packages,
- prevent development or exacerbation of long-term conditions,
- support patient activation and self-management and promote lifestyle and behaviour change which in turn reduces hospital admissions, reduces the need for GP appointments, reduces length of stay in hospital

Digital solutions can also be applied in an integrated way to support training, assessments, reviews, reablement etc in ways that Highland hasn't explored or implemented to date.

2.2 Background

Technology Enabled Care as delivered in Highland covers three main workstreams:

- **Telecare** – the provision of care services at a distance using a range of technologies; from simple personal alarms, devices and sensors in the home, through to more complex technologies 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.
- **Near Me** – provides the choice to attend health, care and other appointments via video call where appropriate. The platform however has potential to be used for much more than clinical consultations.
- **Connect Me** - name for a variety of services which may be offered as an option for people to interact and communicate with healthcare professionals. Some of these services were known by various names in recent years such as Remote Health Monitoring or Telehealth. The service uses a person's own simple devices and sometimes small basic medical equipment to enable individuals to share information with health care professionals and/or automated monitoring services. This helps them to safely self-manage their health needs from home or wherever is convenient for them. It enables people to have more choice and greater flexibility about how and where they manage their health and wellbeing.
- **Transforming Local Systems Pathfinder** – this extensive programme of work over three years focused on Respiratory Transformation in Highland acute and community services. It is part of a Scotland wide TEC programme that also includes work covering:

- Digital Mental Health
- Digital Lifelines
- Digital Social Care
- Housing
- Digital Inclusion
- Hospital at Home

2.3 Assessment

Telecare in NHS Highland currently has 2878 clients. This is 2% higher than September 2022 - the number of new clients has increased by 11% compared to the same period in 2022 and numbers of new Telecare referrals have increased by 2% in the same period.

However,

- Highland has fewer people receiving Telecare compared to the national average. The rate of Telecare users per 1,000 population in Scotland is 23.5, while in Highland it is only 14.6, (a 47% difference). Highland ranks 30th out of the 32 telecare service providers in Scotland on this.
- Highland is the most expensive Telecare provider in Scotland, with the provision costing the service user 9% more than the second most expensive provider. In provision of Telecare, Highland ranks 30th out of 32 providers across Scotland.
- Providers elsewhere in Scotland who demonstrate the highest numbers of service users charge either no fee for Telecare or a charge of less than £5 a week. In 2010, the ‘top 6’ providers charged less than £1.50 per week whilst in Highland users were charged £5 per week.
- Highland has 1750 people receiving Care at Home packages (13,670 hours of care per week), of these 695 (405) are receiving Telecare. How many of these packages/hours would still be needed if we had been able to support people better with Telecare/TEC?

Within Telecare nationally all providers are currently undertaking a transition from Analogue to Digital device provision. This is required because of BT moving all provision to digital by 2025. Highland has commenced implementation of Digital devices in September 2023, expected completion is Summer 2024.

Increasing the uptake of telecare and expanding the range of telecare services and supporting structures could:

- Increase C@H and care home workforce capacity (carer time)
- Reduce delayed hospital discharges (bed capacity)
- Reduce cost of long-term/complex care and care packages (carer time)
- Reduce numbers and size of complex/large care packages (carer time)

- Prevent admissions to hospital/long term care settings by maintaining people's independence for longer (bed capacity)
- Speed up hospital discharge – return to independence sooner (bed capacity)
- Provide more effective response services for individuals including overnight response with benefits being available beyond just telecare users (bed capacity)
- Support people receiving Hospital at Home services (bed capacity, carer time)

Initial actions to support this with minimal investment could include:

- Significantly increasing the use of Medication Prompt (and other simple, commonly used elsewhere) devices.
- Set up TEC demo sites to support staff and service users.
- Adopt use of TEC Backpacks to better support staff to seek and implement Digital First solutions.
- Ensure that Digital First is embedded in Discharge and Care Planning through DMT standard operating procedures and having TEC representation at MDTs and DMTs to promote Telecare and digital solutions
- Expand the use of simple video calling devices and conduct a report on their benefits.

Near Me remote consultations commenced in Highland earlier than elsewhere and progressed faster in our highly rural geography reaching a significant peak in 2020 because of the Covid19 Pandemic.

However,

- Highland is now has one of the lowest utilisations of Near Me and remote consulting, numbers declined in most areas from mid-2021 as 'normal service' resumed post pandemic and whilst there is still an increased use of Near Me compared to pre-pandemic in Outpatients and Mental Health, the potential for use of Near Me is not being fully realised either for remote consultations or for other purposes.

Highland has so far not taken the opportunities to scale up Near Me as has happened elsewhere, and some simple actions would have potential for system wide benefits e.g.,

- building Near Me/remote consulting into standard patient pathways for more specialties,
- routinely offering people the opportunity for a remote consultation,
- setting out a framework/principles for routine provision of remote consultation

- providing options for remote consultation on all appointment bookings
- identifying Near Me as a method to tackle clinical staff shortages or address waiting list backlogs.

Connect Me began in 2015 with the implementation of the FLORENCE text message based service. Highland had significant uptake of this with 70 different protocols being developed across 10 services and around 6,500 patients. The cost of Florence text messages was charged directly to services. This, and the development of other solutions (e.g., Badgernet for maternity services) resulted in the initial uptake reducing between 2018 and 2020. Nationally in 2020 the Inhealthcare system was procured to support Covid patients. It was then expanded in 2021 to provide a wider range of clinically led national remote health monitoring pathways on a once for Scotland basis at no cost to health boards under the branding of Connect Me. Highland has adopted Asthma, Blood Pressure, COPD, Covid and Heart Failure monitoring pathways plus referrals pathways for chronic pain, gastroenterology and lymphoedema. Other services being piloted are mental health, Inflammatory Bowel Disease, Irritable Bowel, Prostate Cancer.

In Scotland, 1.2 million appointments in 2018 were taken up solely for Blood Pressure checks, despite the evidence:

- that basic home monitoring is a better predictor of long-term outcomes than office measurement and
- that remote health monitoring (which engages clinicians in reviewing readings taken by patients and submitted over the internet) results in much larger clinically significant reductions in Blood Pressure and is cost-effective.

Evidence also shows that remote monitoring for hypertension can be implemented into routine primary care at scale with little impact on clinician workload and results in reductions in Blood Pressure similar to those in large UK trials.

However...

Out of 92 GP practices across Highland, 48 practices have taken up the training and moved patient patients to Inhealthcare for remote monitoring but only around half of those are actively using the system to support patients. Reasons cited by practices include:

- Too busy
- Staffing shortages
- Have decided against it
- Find it difficult to use
- Enrolling patients is too time consuming

The challenge for Highland in scaling up initiatives such as this is identifying the future benefits to be gained and supporting services to implement digital solutions despite the immediate hurdles in order to realise long term gains for individuals, services and the organisation. In the Blood Pressure example what's required is to move away from single person leadership of implementation to a team-based transformation project with:

- Organisation decision to move to a remote monitoring model
- Primary care team involvement in supporting adherence to implementation
- EHealth – primary care facilitators support for training and setting systems up locally
- Administrative support to enrol patients.

A successful model of transformation could be replicated service by service where remote monitoring would be of benefit.

2.4 Proposed level of Assurance

This report proposes the following level of assurance:

Substantial	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>
Limited	<input type="checkbox"/>	None	<input type="checkbox"/>

Comment on the level of assurance

A description of the current position is provided with discussion of the opportunities available organisationally to expand the use of Technology Enabled Care and digital solutions to better support individuals and services to deliver more efficiently and cost-effectively. Increased assurance requires implementation of the available opportunities, requiring investment in time and financial resources.

3 Impact Analysis

3.1 Quality/ Patient Care

Expansion of TEC solutions supports improved responsiveness to individual needs, actions to improve provision and uptake of TEC and adopt a Digital First approach to care planning would ensure that people have greater opportunities for being and remaining independent in their community, that care packages are less person dependent and more resilient.

3.2 Workforce

Workforce resource capacity and demand is better matched as person dependent demand is shifted towards being supported by TEC. Staff feel under less pressure as people have a wider range of approaches to provision and the support being deployed.

3.3 Financial

The need for large, complex care packages is reduced, cost of people delayed in hospital is reduced. An enhanced approach to Telecare and Digital Solutions provision reducing demand for direct care would support a review of the workforce required to support people at home with potential reduction in staffing costs. Increased use of Near Me could reduce and better manage waiting lists, free up clinical time spent in non-clinical activities, potentially reduce locum costs. Implementation of pathways for Remote Health Monitoring would free up clinical time, reduce appointments required, improve long term health outcomes thus avoiding future care and clinical costs for long term conditions.

3.4 Risk Assessment/Management

Describe relevant risk assessment/mitigations. Please provide read across to the relevant risk register if appropriate.

3.5 Data Protection

Requirements already in place for systems in use.

3.6 Equality and Diversity, including health inequalities

Impact assessments in place locally and nationally.

3.7 Other impacts

3.8 Communication, involvement, engagement and consultation

3.9 Route to the Meeting

4 Recommendation

- Assurance
- Discussion

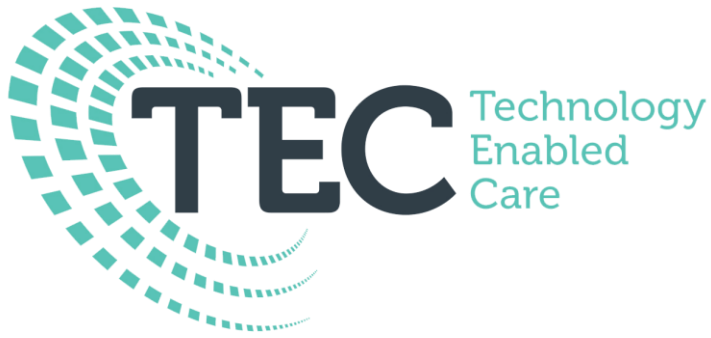
It is recommended that HHSCC consider the current position for TEC and the challenges posed for expanding/scaling up implementation to realise the full range of benefits available including how the partnership can:

- Move to having integrated Digital/Technology/Innovation structures directly linked with operational delivery for Digital Transformation
- Develop our annual delivery plans with a Digital First approach – not bolting on digital afterwards
- Think 10, 15, 20 years ahead and plan now for then.

4.1 List of appendices

The following appendices are included with this report:

Appendix No 1: HHSCC presentation - [HHSCC - updatedTL.pptx](#)



Contents

- Operational Telecare
- Digital Telecare
- Near Me
- Connect Me
- Respiratory Transformation



Operational Telecare

April 2023 to September 2023



Telecare numbers:

2,878	Total number of Telecare clients in Highland at the end of September 2023 A 2% increase compared to September 2022
395	Total number of new clients receiving telecare between April 2023 and September 2023 An 11% increase compared to the same period in 2022
435	Total number of new telecare referrals received between April 2023 and September 2023 A 12% increase compared to the same period in 2022
6	Just Checking installs (a web-based activity monitoring system) A 200% increase compared to the same period in 2022
14,107	Total number of alarm calls sent to the Highland Hub between April 2023 and September 2023. (test calls are not included in the count) A 4% increase compared to the same period in 2022



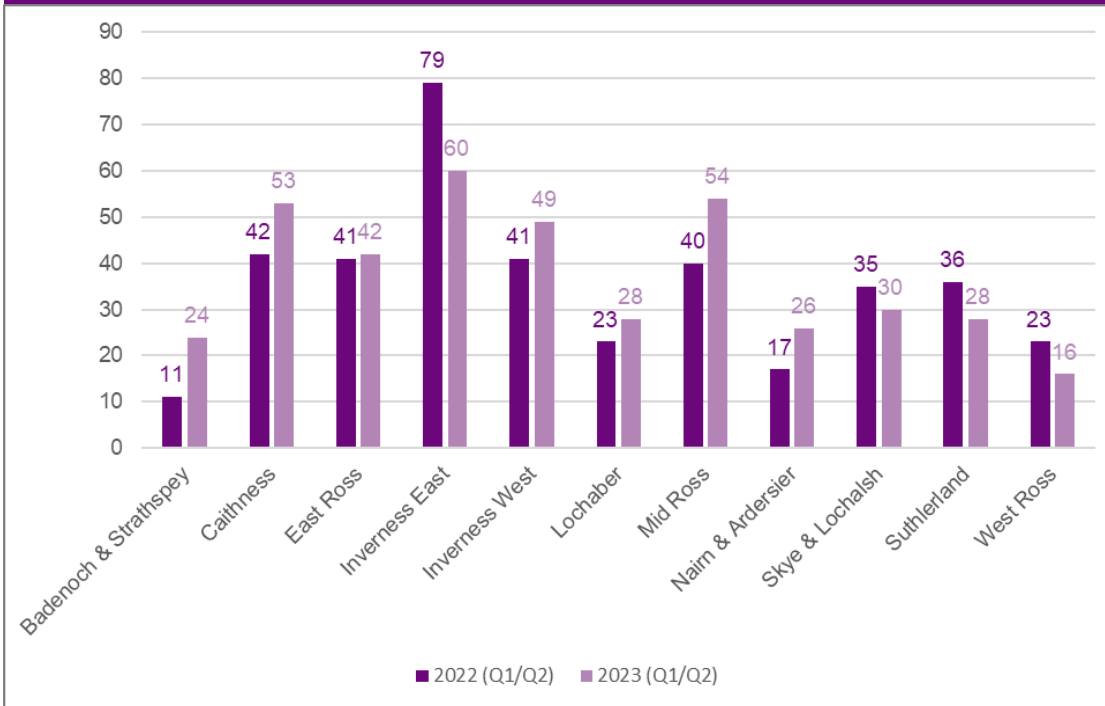
Operational Telecare

April 2023 to September 2023



The number of new referrals received between Q1 & Q2 has increased by 6% compared to Q1 & Q2 in 2022.

Breakdown of new referrals by subarea:



Percentage change in referrals received between 2022 (Q1/Q2) and 2023 (Q1/Q2) by subarea

Badenoch & Strathspey	118%
Caithness	26%
East Ross	2%
Inverness East	-24%
Inverness West	20%
Lochaber	22%
Mid Ross	35%
Nairn & Ardersier	53%
Skye & Lochalsh	-14%
Sutherland	-22%
West Ross	-30%

Figures do not include referrals relating to clients transitioning from The Highland Council managed Telecare system to NHS Highland Telecare Services.



Operational telecare

Key activities & updates (2020-2023)



- We digitised online telecare referrals and introduced self-referrals for the public, reducing the workload for health and social care professionals.
- Launched assistive technology training, a comprehensive telecare session that delves into consumer technology. Over 100 staff have attended so far. We're experiencing a high no-show rate, with 42% of those registered not attending.
- Continuing to engage with the community through events, talks and promotional materials. Our box of tricks enables us to demonstrate telecare and consumer technology like Alexa.
- In April 2023, TEC hosted the Spring Tech Event, showcasing digital technologies that help people remain safe, happy and healthy at home. We had 25 exhibitors and over 100 attendees, we received very positive feedback.
- Created a simple video calling guide and a high street technology guide to help readers explore devices that are available on the market to support them.
- Adopted a new logo and service colours. As a result, our leaflets, webpage, intranet page and letters have been updated.
- Collaborated with TEC Scotland and NHS Education to develop an e-learning module – Assessment and Support Planning Telecare.
- Offering 4-week trials of Epi-care, a wrist worn sensor that detects seizures. The sensor can be worn anywhere, bringing mobility, freedom and autonomy to people with epilepsy.
- Secured short-term funding for Alcove Video Carephone (video calling device) trials to support informal carers. Currently available in Skye & Lochalsh, and Nairn. The Carephone can be used in crisis or as a try-before-you-buy opportunity.
- Run a monthly TEC clinic, a digital health and wellbeing drop-in collaboration with Alzheimer Scotland. We have plans to expand to other areas.
- Sheltered housing schemes managed by the Highland council are transitioning to our services, with only 8 of 39 remaining to be transferred.
- First digital telecare units have been deployed, these units will make telecare accessible to people with no telephone line.
- Joined Twitter and Facebook to reach more people about our services.

Telecare Digital Switch Project

- Project Manager to be extended until summer 2024
- Funding secured
- Equipment order going through procurement
- Equipment delivery lead times now at 28 weeks (down from a peak of 48 weeks)
- Discovery Phase completed
- Testing phase commencing

High Level Plan

PHASE

Phase 0: Start-Up

Phase 1: Discovery

Phase 2: Testing

Phase 3.1: Implementation

Phase 3.2: Continued support/Contingency

Phase 4: Project Closure

ENDING

November 2022

November 2022

April 2023

April 2024

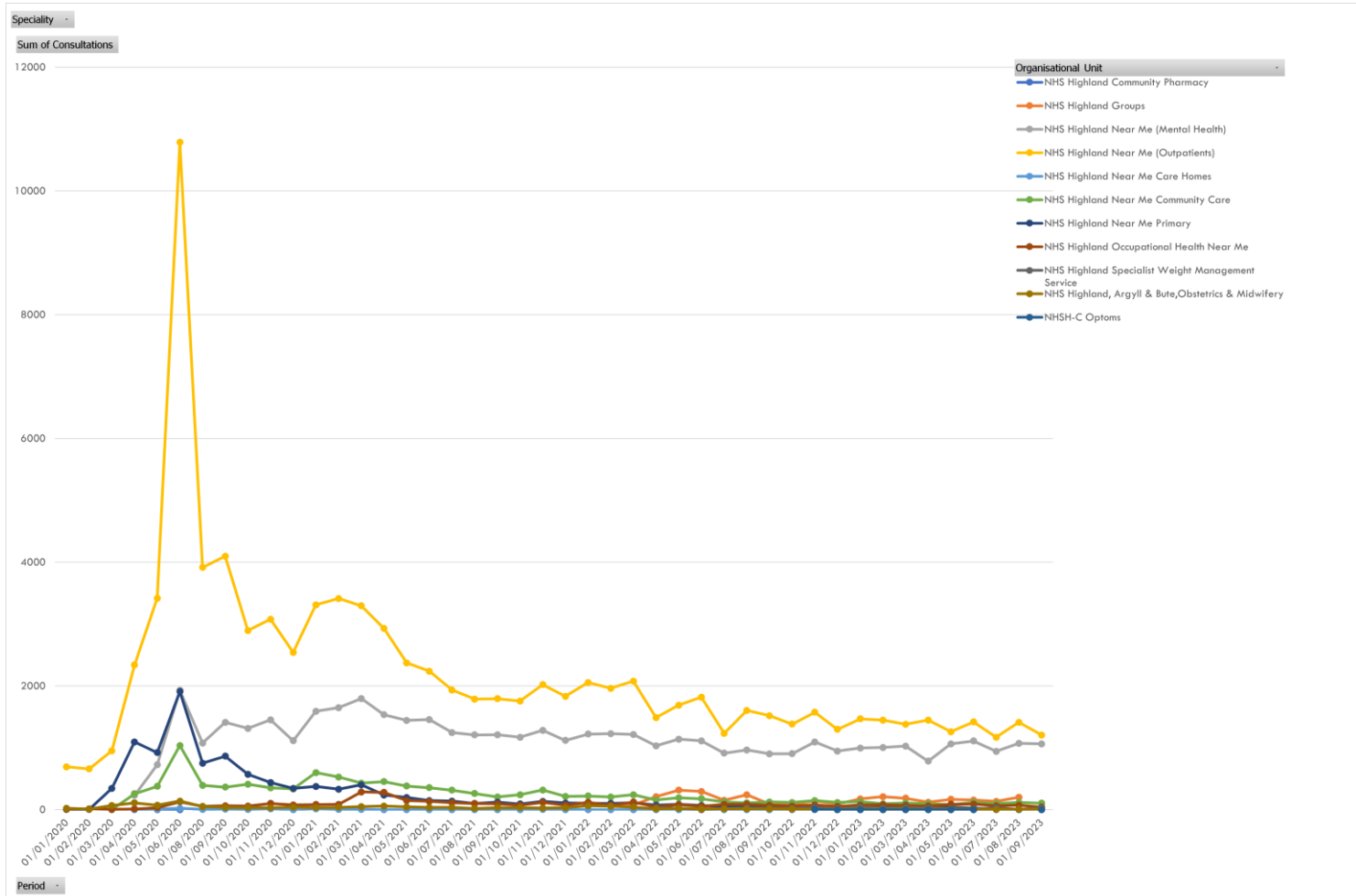
May 2024

May 2024



Near Me Update to 30/9/23

174,326 Consultations between 1/1/20 and 30/9/23

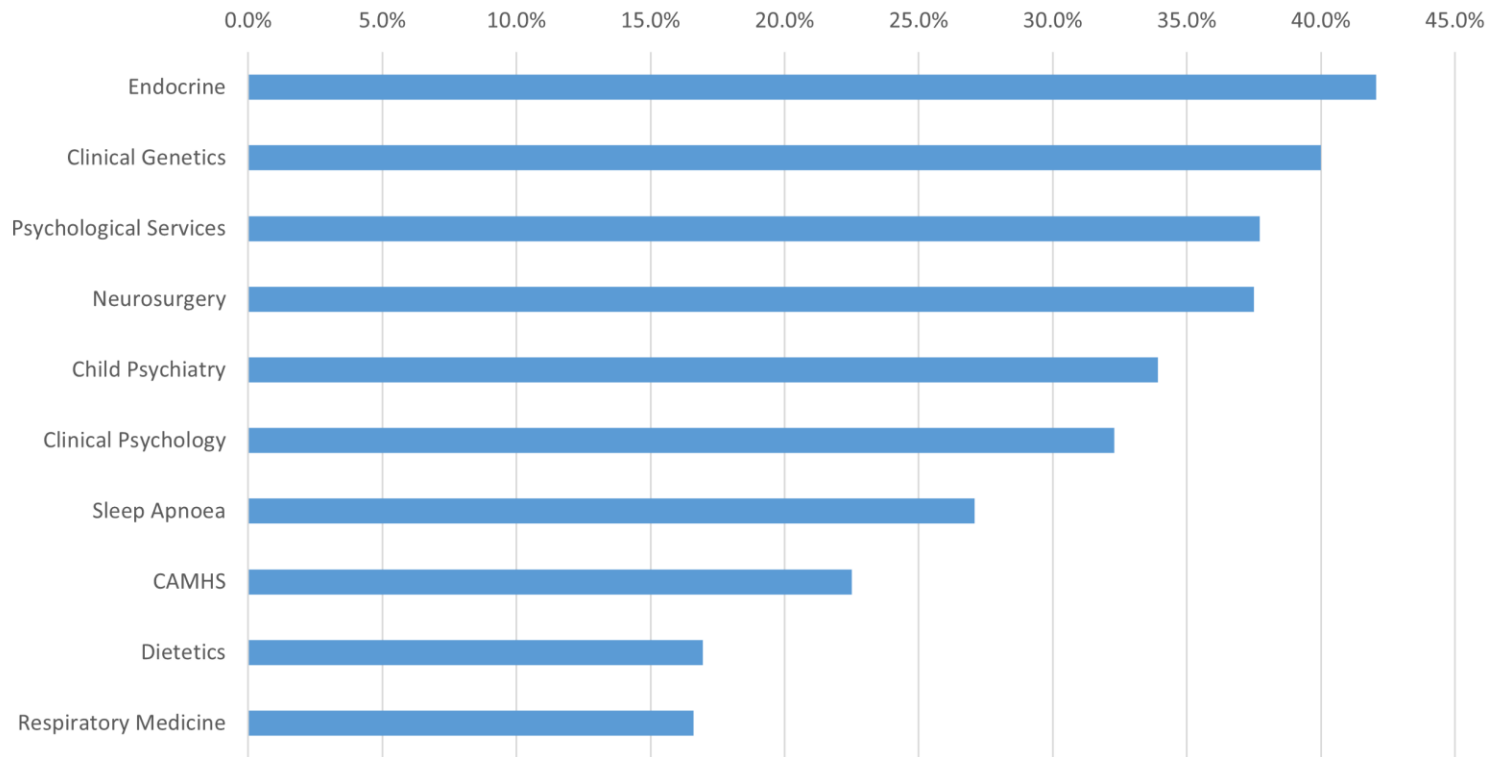




Near Me – Consultations per waiting area



Top 10 providers of NHS Near Me: Aug 23





% of Outpatient Appointments by Patient Home Location

(Services using PMS Trak)



% of total outpatient appointments delivered by Near Me (by patient home location)

	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Inverness	3.7%	4.0%	3.5%	4.1%	3.5%	3.7%
Caithness	6.1%	7.5%	6.3%	6.4%	6.8%	6.8%
Lochaber	4.8%	4.7%	4.8%	4.9%	5.3%	5.1%
Skye & Lochalsh	9.5%	8.8%	9.0%	9.0%	9.3%	7.3%
East Sutherland	5.3%	7.8%	4.7%	3.8%	4.9%	4.6%
East Ross	4.2%	4.7%	3.9%	4.3%	4.4%	4.0%
West Ross	8.7%	7.0%	5.6%	5.6%	6.2%	6.9%
West Sutherland	5.8%	5.3%	6.5%	7.2%	7.3%	9.8%
Badenoch & Nairn	5.9%	5.3%	4.9%	5.4%	4.9%	4.9%



Updates and Ongoing Plans



- Near Me training and refreshers continue
- Events arranged for the public alongside Connecting Carers, Libraries and My Self Management throughout 2023
- Low/Non Users of Near Me targeted with 'Did You Know' information and updates
- Working with Diabetes Service and Libraries to establish more Hubs for people without wifi or a suitable device and lending service
- Provide commercial premises with Posters and Postcards for notice boards and provide demonstrations of Near Me to staff
- Contact with Community Councils and other groups to promote the Service
- Our contact details inserted on literature, NHS website and where suitable, appointment letters



Autumn and Winter 2023 Plans



- 'Saving Carbon' Summer and ongoing campaign in conjunction with Comms team
- Worked with National Near Me team to develop updated modules for Turas and students at the UHI
- Annual Patient Feedback report to be sent to individual Users within each waiting area before end of 2023
- Continue Auditing Waiting Areas throughout the year
- Campaign commenced October 2023 to promote Virtual Visiting to reduce travel and during periods of COVID / Norovirus. Posters to be provided to all NHS Highland Hospitals and posted on library web sites
- Refresher training to Ward staff to enable virtual visiting
- Use reduction in car park capacity in 2023 at Raigmore Hospital to promote use of Near Me



Remote Health Monitoring



Florence

Background

- Florence – an automated text message service
- In use in Highland from 2015 to 2023
- 70 different Florence "protocols" developed with clinicians
- Key Florence protocols:

Protocol	Patients	Protocol	Patients
Asthma	364	BP	4839
COPD	126	Foetal movements	255
Healthy weight	164	Heart failure	61
IBS	123	Lymphoedema	61
Mental health (various)	306	Pain management	167

Use of Florence cost around £45k per year (licence and messages)



Remote Health Monitoring



Florence

Many Florence protocols went out of use between 2018 and 2020 due to:

- The cost of text messages – which were recharged to teams/departments from 2019
- Availability of other services/apps eg: Badgernet, myCOPD
- Low uptake by patients/negative feedback
- Concerns about the accuracy of readings (e.g. blood glucose)
- The difficulty of assessing real impact
- Staff changes
- The COVID-19 pandemic



Remote Health Monitoring



inhealthcare

Background

- 2020: Emergency procurement of Inhealthcare as a national platform – for monitoring Covid patients
- 2021: national contract with Inhealthcare negotiated (3+1+1)
 - Connect Me branding adopted
 - All costs covered at a national level – no cost to NHSH
 - All services to be "once-for-Scotland"
 - All services developed with a clinical advisory group ;(CAG) with representatives from several health boards
- 2023: All development to be undertaken at a national level
 - No scope for local development of services

Use of Inhealthcare is completely free of charge to NHSH



Remote Health Monitoring



inhealthcare

Remote health monitoring services developed 2020-21

- Asthma, BP, COPD, Covid and Heart Failure

Questionnaires developed 2022-23

- Referrals for chronic pain, gastroenterology & lymphoedema
- Annual review for multiple long term conditions

Other services being piloted - 2023

- Digital mental health
- IBD
- IBS
- Prostate cancer



Uptake of RHM in Highland



inhealthcare

Asthma Monitoring and Management to Sept'23

- 98 asthma patients have been enrolled on Inhealthcare
- 83 (85%) have registered for use
- 58 (59%) are actively using the system
- A survey asking for feedback about non-use of the system resulted in only 3 responses
- Awaiting deployment of a new version of the service, originally discussed in February'23



Uptake of RHM in Highland



inhealthcare

BP Monitoring and Management to Sept'23

- 48 GP practices have been trained to use Inhealthcare and/or have had patients moved to Inhealthcare from Florence
- 25 GP practices (56% of those trained) enrolled patients during September
- Over 2500 patients have been enrolled on Inhealthcare for BP monitoring since Mar'22 , and over 1,700 are currently active
- GP practices which are not actively using Inhealthcare for BP monitoring were contacted in September, to encourage uptake



Remote Health Monitoring Other Services



Service	Status in NESH	Notes
Chronic pain	Live – 134 enrolled	New version expected in October
Covid	In use from 2020-2021	No longer in use
COPD	In use from 2021-2022	Respiratory nurses did not feel the service worked for them and now use Lenus instead
Heart failure	Live – 11 enrolled, 1 active user	HF nurse does not feel the service works for her or her patients
Lymphoedema	Pilot in progress – 6 patients added to date	Review & evaluation underway
Long term conditions – annual reviews	Pilot planned to include Highland	Awaiting deployment of service into Live



What next?

inhealthcare



Nationally

- National review of TEC and Connect Me
- TEC to be "debranded"
 - TEC logo to go out of use at a national level
 - Email addresses, websites and job titles to change
 - TEC to be merged into Digital Health and Care
- Staffing of Connect Me team has been reduced
- A review of all Connect Me services is underway
- Report due by end November 2023

Locally

- Continued use and promotion of existing Connect Me services pending the results of the review



Respiratory Transformation Pathfinder Project



- Nationally funded project from May'19 to Oct'22
- Visit www.bit.ly/RespiratoryPathfinder for more info about the project and its outcomes
- Ongoing admin work being undertaken by TEC team
 - Respiratory Resource Hub for patients & carers
 - Online learning sessions – Your Breathing Matters
- Visit: bit.ly/RRH-new & bit.ly/RRH-YBM to find out more

Other workstreams from this project are being taken forward by the Respiratory Service, eHealth and others

Technology Enabled Care: where outcomes for individuals in home or community are improved through application of technology as an integral part of quality, cost effective care and support.

Where could we be?

- Real digital transformation –
 - data insights predicting risks, preventing escalation/admissions
 - Proactive response to increased need – personalised higher dependency support
 - Prevent/delay move to long term care
 - Digital solution led packages of care
- Virtual Care -
 - Intermediate care provision - technology enabled to minimise staffing resource requirements
 - Long Term Conditions - consultations & monitoring - activity, symptoms, lifestyle, behavioural interventions for cost savings
 - Home as a site of care/hospital @ home - diagnostic, analytic and monitoring devices, integrated records – cost savings
 - Prevention - Long Term Conditions, falls, frailty, social isolation 'connecting' people to prevent them entering the system at all – cost savings

Digital Solutions: The distant future is NOW. Define almost any problem – there is a digital/TEC solution.

What do we need to get there?

- **Imagination -**
 - Development of innovation beyond current provision
- **Vision -**
 - Strategy for future delivery of digitally enabled health & care 5-10 year horizon.
- **Mainstream -**
 - Delivery through Apps, Internet of Things, TEC for alerts, reminders, monitoring, Virtual Reality
- **Integration -**

- Ehealth - Digital Delivery Plan
- RD& I - Innovation Strategy
- TEC - Vision & Strategy
- Annual Delivery Plan objectives



**DIGITAL
TRANSFORMATION**

Challenges – how do we...

- Move to having integrated Digital/Technology/Innovation – Digital Transformation
- Develop delivery plans with a Digital First approach
- Think 10, 15, 20 years ahead and plan NOW for THEN.