



Phase 1: Frail and older people

Betsi Cadwaladr University Health Board

Aim

To provide increased access to specialist opinion as close as home to possible for frail and older patients in rural north Wales through the use of telemedicine.

Outline

Known as the CARTREF project – CARE delivered with Telemedicine to support Rural Elderly and Frail patients – the Betsi team set out to:

- 1 allow patients to have outpatient follow-up consultations closer to their home, reducing the need for patient travel and the burden on Welsh ambulance services
- 2 facilitate improved chronic disease management in primary care through access to specialist support, resulting in increased patient satisfaction
- 3 reduce waiting times in other outpatient clinics through releasing review appointment slots for specialty patients
- 4 ensure acceptability of telemedicine service model through co-production with patients and carers.

Key messages

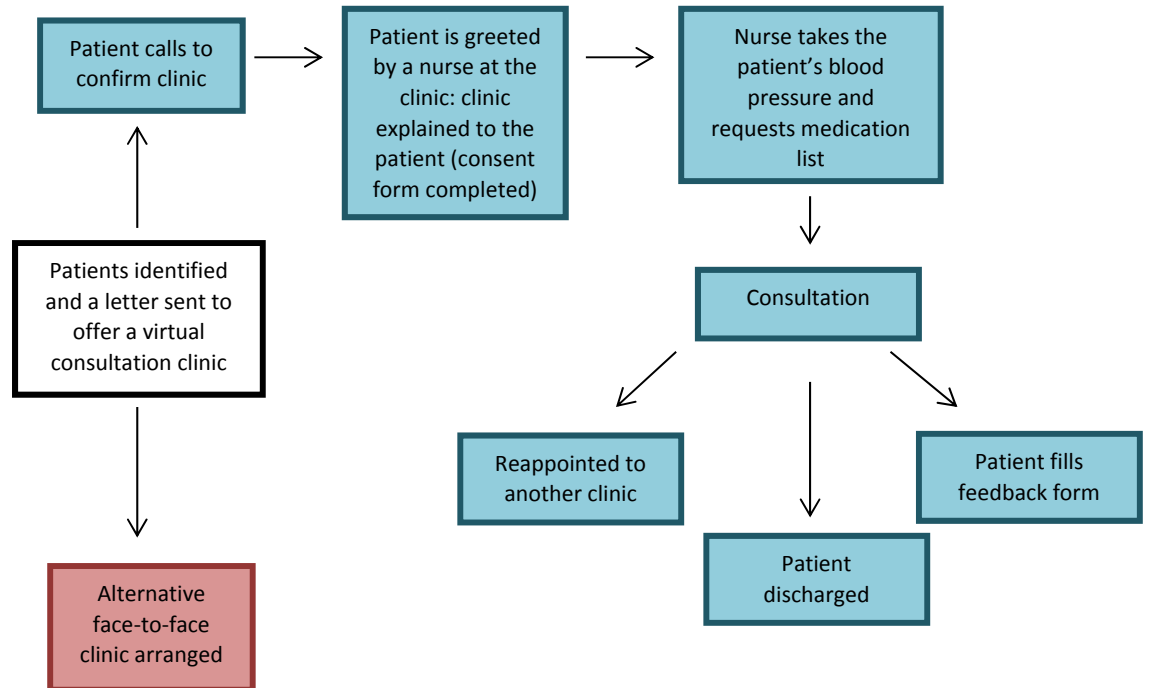
- **Co-production** is essential – virtual clinics have received positive feedback, which has been an enlightening experience for staff and has driven change.
- **Telemedicine** is a viable option for outpatient consultations in frail older individuals.
- **Patient stories** are powerful tools in diffusing clinician anxiety regarding adopting digital technology.
- **Organisational buy-in** and support are essential for delivery and success of a quality improvement project.
- **Supporting staff through change** is essential – coaching and mentoring help to build resilient teams.
- Relationship building and **sharing ideas** among the eight Future Hospital development sites have been powerful motivators to strive for excellence.

Methods

In order to provide increased access to specialist opinion as close to home as possible for frail and older patients in rural north Wales, the Future Hospital project team set up a range of telemedicine services.

1. Telemedicine clinic

Bimonthly virtual general medicine consultation clinics are facilitated by a consultant in the community hospital Ysbyty Bryn Beryl.



2. Engagement with primary care and community – digital inclusion officer role

The digital inclusion officer (DIO) provided essential patient advocacy and support throughout the project rollout, helping to inform the patients what the consultations entailed and the benefits, which in turn improved the patient experience. The DIO collected patient feedback via a patient questionnaire during this period.

3. Telemedicine clinics across other specialties

- Rheumatology consultations and Parkinson's clinics established between Ysbyty Llandudno and the community hospitals Ysbyty Bryn Beryl and Ysbyty Dolgellau.
- Gastroenterology services set up a telemedicine service.
- Neuroscience network are adopting telemedicine.
- The majority of specialties at Wrexham Maelor Hospital have elected to do telemedicine consultation follow-ups at HMP Berwyn – a prison with 2,000 men.

Milestones

- May 2014: Welsh Government Health Technology and Telehealth fund awarded.
- Sep 2014: Appointed as an FHP development site.
- Jan 2015: Video hardware installed. Trial consultations undertaken.
- Jun 2015: Betsi Cadwaladr University Health Board placed in special measures.
- Jul 2015: Virtual consultations are fully operational at Ysbyty Bryn Beryl community hospital.
- Jul 2015: Host learning event for phase 1 sites.
- Dec 2015: Local patient representative moves away – role unfilled.
- Feb 2016: Rheumatology consultations and Parkinson’s clinics begin between Ysbyty Llandudno and the community hospitals Ysbyty Bryn Beryl and Ysbyty Dolgellau.
- Mar 2016: New patient representative joins the team.
- Jul 2016: Drop in number of virtual clinics due to fewer eligible patients
- Sep 2016: Telemedicine working group established.
- Nov 2016: New patient experience questionnaires are developed in collaboration with patient representatives.
- Mar 2017: Vaughan Gethin, Welsh cabinet secretary for health, visits Cartref team.

Outcomes

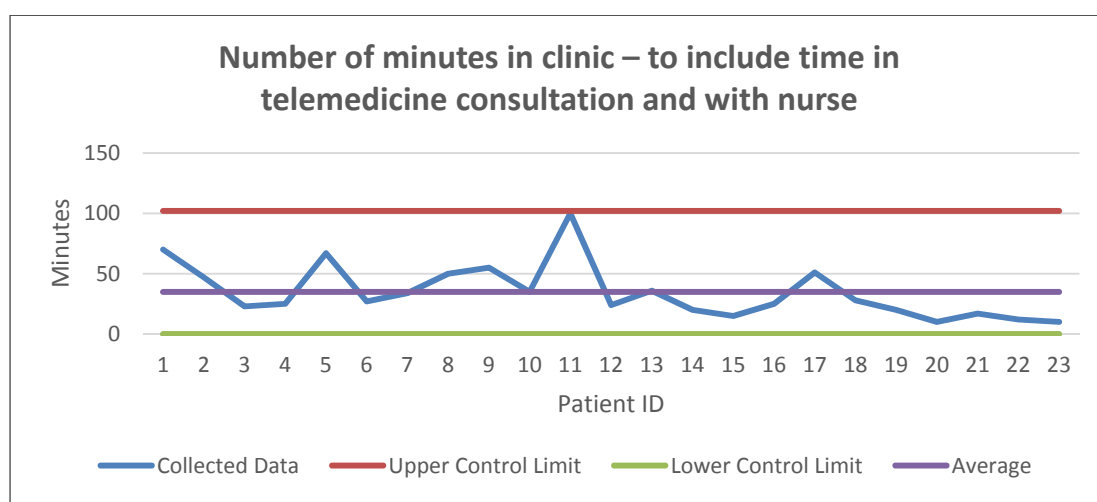
1. Impact on travel time and costs

Telemedicine clinics reduced travel, number of consultations per patient, movement of patient notes, and travel time for patients with associated costs saving. The service converted 20% of outpatient department follow-up contacts to telemedicine; a completely new way of working.

The impact on consultants was also significant. One reduced their travel time by 1.5 hours per clinic and mileage by 80 miles per clinic. This equates to £1,411 saving per annum (based on travel expenses being remunerated at 42p per mile).

2. Duration of consultations

Telemedicine clinics were associated with a shorter duration of consultation. The chart below shows the total amount of time spent in the clinic with doctors and nurses for 23 consecutive patients. At the outset, the allocated time with a consultant was 30 minutes, however, with growing confidence in the system, the time was reduced to, on average, 14 minutes compared with a conventional outpatient consultation of 20 minutes.



3. Patient experience

Detailed patient experience questionnaires were collected in a sample of 55 consecutive patients for 2015/16 and 33 for 2016/17. The age of patients ranged from 75 to 104 years.

- **88.6% (78/88) of patients would recommend the virtual consultations** to family and friends.
- **100% stated that they would prefer the telemedicine clinic** in comparison with travelling to the hospital clinic.

Successes and challenges

Successes

- ✓ Positive patient feedback.
- ✓ Maintaining staff wellbeing and resilience despite significant organisational pressures.
- ✓ Excellent support from patient representatives.
- ✓ Spread of telemedicine to additional specialties.
- ✓ Time and cost savings for patients and consultant staff.
- ✓ Significant forecasted savings could be made with scale-up of virtual outpatient services.
- ✓ 'Highly commended' for an HSJ Value Award 2016, category: telemedicine.
- ✓ Support from the cabinet secretary for health for Wales.

Challenges

- Project team changes due to the health board restructuring.
- Changes in the team led to a lack of continuity.
- Decrease in number of patients eligible for telemedicine.
- Unable to appoint a DIO after the initial set-up phase of project.
- Limitations around quantitative data collection to support qualitative data.

Read the full report from Betsi Cadwaldr's development site team at www.rcplondon.ac.uk/delivering-the-future-hospital

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