

# Telehealthcare in Remote and Rural areas – possible or probable?

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# NHS Highland

- NHS Highland comprises the largest and most sparsely populated part of the UK. The area covers 32,512 km<sup>2</sup> (12,507 square miles) which represents approximately 41% of the land mass of Scotland.
- NHS Highland serves a population of over 310,000 residents
- The proportion of older people is slightly above the Scottish average, and the proportion of children under 15 years is lower than the Scottish average.
- Split into 4 CHP's, Argyll and Bute alone has 25 inhabited islands.

# So are we Rural?

## Definition of Rural Scotland:

- Rural Scotland is defined as **settlements with a population of less than 3,000.**

By analysing drive times to larger settlements we can divide rural Scotland into:

- **Accessible rural:** those with a less than 30 minute drive time to the nearest settlement with a population of 10,000 or more;
- **Remote rural:** those with a greater than 30 minute drive time to the nearest settlement with a population of 10,000 or more.

These definitions form part of the **Scottish Government's urban rural classification**

# What does that look like?

## **Scottish Government** **6-Fold Urban Rural Classification**

- Large urban areas (with a population of over 125,000)
- Other urban areas (with a population of 10,000 to 125,000)
- Accessible\* small towns (with a population of 3,000 to 10,000)
- Remote small towns (with a population of 3,000 to 10,000)
- Accessible\* rural
- Remote rural

\* Accessible is defined as those areas that are within a 30 minute drivetime from the centre of a town with a population of 10,000 or more

Source:  
SG Urban Rural Classification - Scottish Government 07-08

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Scottish Government Geographical Information Science and Analysis Team  
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# Telemedicine/health/care

Scottish Centre for Telehealth definitions.

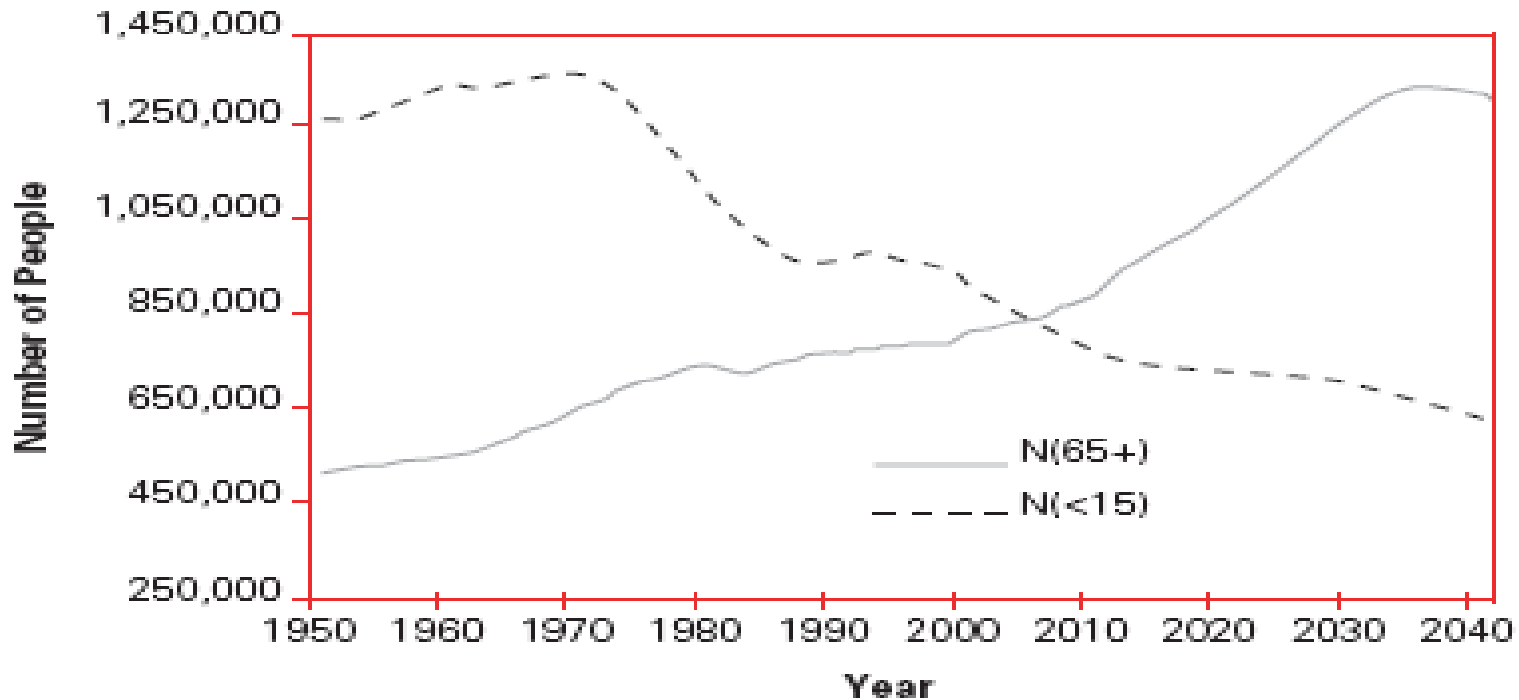
- **Telehealth** is the provision of health services at a distance using a range of digital technologies. E.g. video consultations to support diagnosis and management, clinical networks and health professional education
- **Telecare** is the remote or enhanced delivery of care services to people in their own home or a community setting by means of telecommunications and computerised services. Telecare usually refers to sensors and alerts which provide continuous, automatic and remote monitoring of care needs emergencies and lifestyle changes, using information and communication technology (ICT) to trigger human responses, or shut down equipment to prevent hazards.
- **Telehealthcare** is defined as the convergence of telecare and telehealth to provide a technology-enabled and integrated approach to the delivery of effective, high quality health and care services. It can be used to describe a range of care options available remotely by telephone, mobile, broadband and videoconferencing



# So.....

- We are definitely remote and rural.
- We know what Telemedicine is
- NHS Highland are embracing the use of tele's
- Why is it one of the answers?
- Do we have the infrastructure to support it?

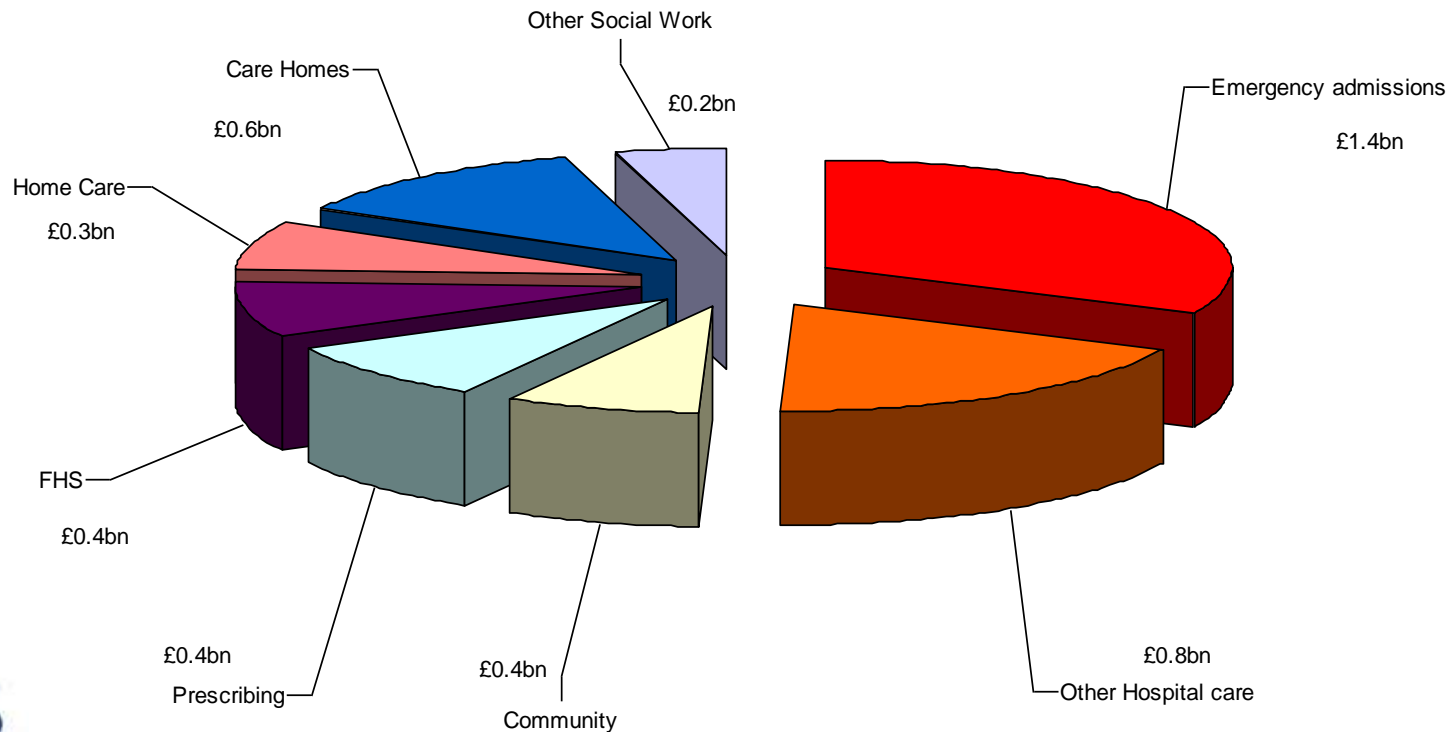
# Population in <15 and 65+ age groups Scotland: 1950-2042 (GAD projection)



Source:

[http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/images/demography\\_seminar\\_tcm6-7919.pdf](http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/images/demography_seminar_tcm6-7919.pdf)

# Health and social care expenditure Scottish population aged 65+ (2007/08 total=£4.5bn)





# Demographics

- Aging population
- Less contributions to the pensions pot
- Reduced younger workforce
- Longer lifespan with ill health
- Changing face of the NHS.
- More IT savvy population.

# Infrastructure

- Tele's – can work with VC, landline, broadband, mobile phone, internet, is green and time efficient.

However,

- Do we have good mobile phone signal?
- Do we have band width?
- Do we have a culture of investing in technology

If we continue to do what we have always done, we will get what we have always got.

# Partnerships

- Industry – definitely needed. Solutions to fit needs in a partnership approach.
- Academia – use of evaluation and research to demonstrate the benefits and potential of THC in care delivery.
- Government – direction and incentives to support delivery of care delivery via remote means.

If we are together nothing is impossible. If we are divided all will fail.

[Winston Churchill](#)

# Conclusion

- Telemedicine/health/care – could be an answer to addressing our aging population living longer with long term conditions, by a workforce who is also aging and at distance.
- However, do we have the underpinning infrastructure and the vision to embrace technology to support healthcare?
- Is it possible – definitely
- Is it probable - ??



# Thank you for listening

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