

# Connected Health contribution to Health and Well-being

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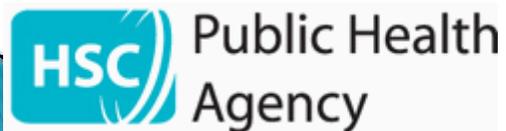


# Agenda

1. Societal needs & challenges facing the HSC – the potential contribution of connected health
2. About Long Term Conditions and Remote Telemonitoring
3. About the Future

# Societal needs & challenges facing the HSC

## Potential contribution of connected health



# What is the context?

- ▶ Changing Demography
- ▶ Changing Social Structures
- ▶ Changing Patterns of Disease and Medicine
- ▶ Public Expectations
- ▶ Patient Safety

# What do People Want?

1. Improved quality of life, health, well-being & independence
2. To be supported & enabled to self-care & to be involved in decisions about them
3. To have some choice & control over their care & support
4. To have services which are integrated, flexible, proactive & responsive
5. To have services that are high quality, efficient & sustainable

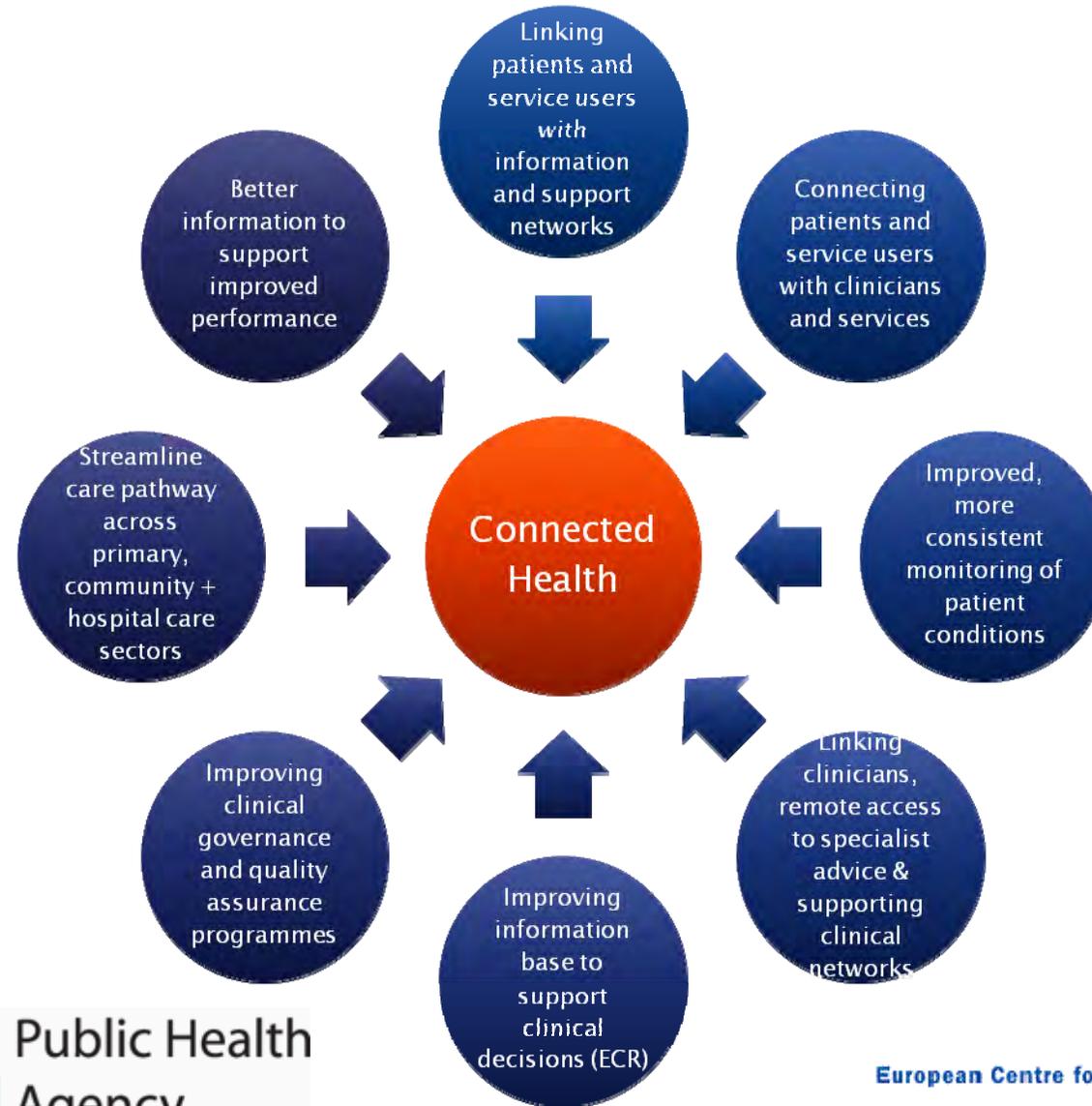
# What are our key challenges?

- ▶ Increasing demand (demographics & morbidity)
- ▶ Quality, safety and accessibility
- ▶ Improving performance
- ▶ Resource constraints
- ▶ Large & complex system, hard to change

# The relevance of technology

- ▶ Touches every aspect of our daily lives
- ▶ Speed of change
- ▶ Delivery of health and care today is dependent upon technology
- ▶ But, we remain a slow adopter
- ▶ Significant opportunity to improve quality, safety and efficiency

# Contribution to Connected Health



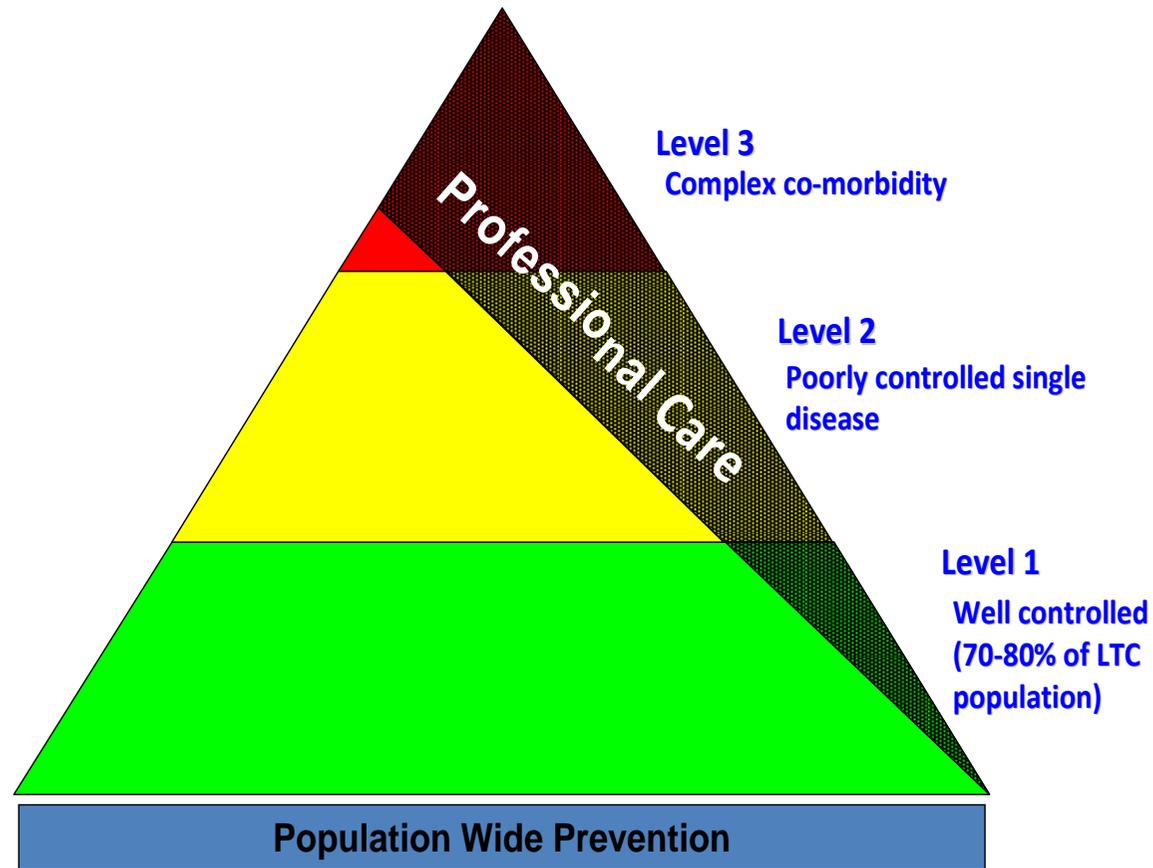
# Role of ECCH

- ▶ To improve the quality and responsiveness of health & social care services by assisting the faster adoption of technological innovation
- ▶ Contribute to the advancement of the wider European e-Health agenda
- ▶ Contribute to the establishment of NI as an outward focussed and competitive region in the global economy

# About Long Term Conditions and Remote Telemonitoring



# Chronic Disease Management Triangle

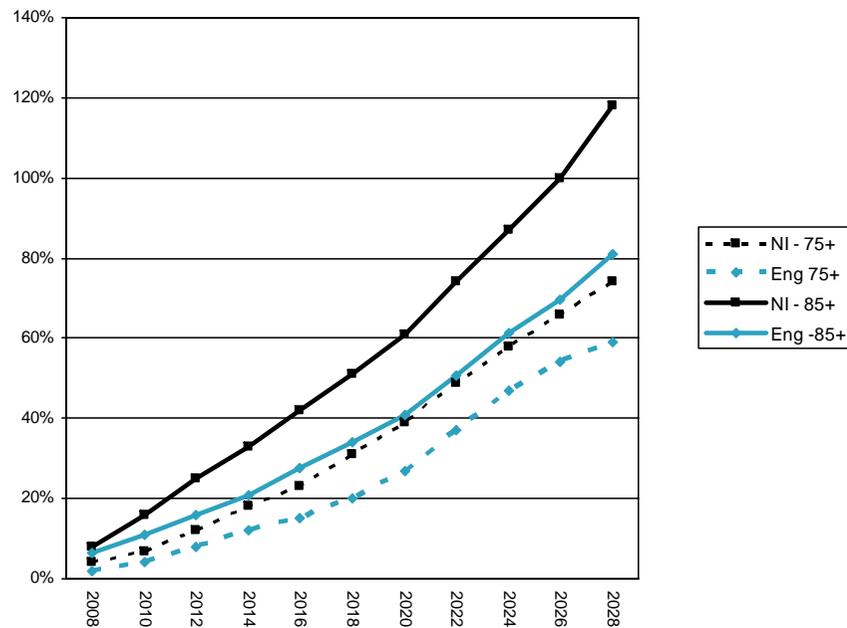


# Why LTC focus?

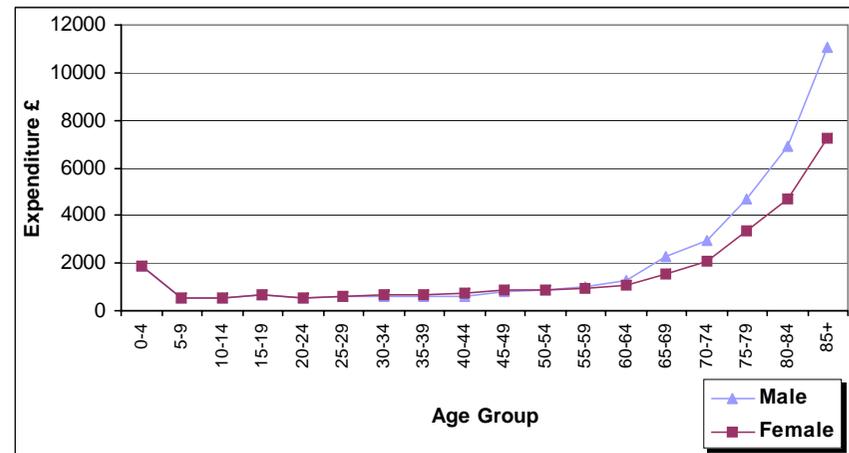
- ▶ 60% of patients >65 have at least 1 LTC. This population is set to rise by 50% by 2025
- ▶ This population currently account for:
  - 52% of all GP appointments
  - 65% of all OP appointments
  - 72% of all I/P bed days
  - Are twice as likely to have used SSD within last 6 months
  - Are three times as likely to have used Community Nurses within last 6 months
- ▶ Probably >70% of all current healthcare expenditure

Although NI currently has a younger age profile than England, its elderly population, who have very expensive care costs, are growing more rapidly, placing an increasing demand on resources.

Projected percentage increase in elderly population (relative to 2006)



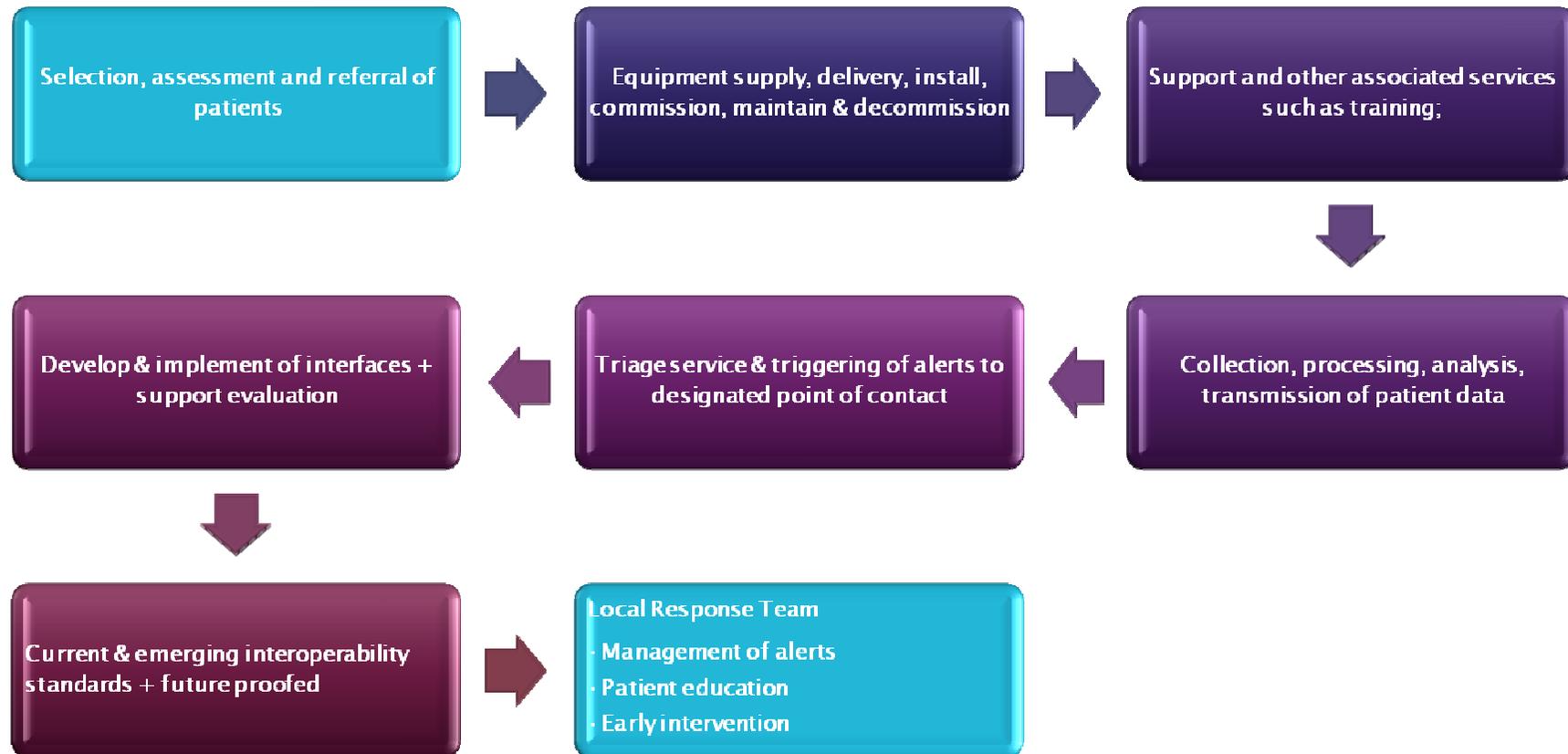
Age/Gender Costs – All Services, 2003/04



# Vision for Remote Telemonitoring

- ▶ Bring information to professionals, enabling more proactive, effective and co-ordinated community based care
- ▶ Provide greater support for self-care and for carers
- ▶ Large scale, end-to-end service
- ▶ Flexible, i.e. responsive to individual needs and local circumstances
- ▶ Part of a new way to manage increasing burden of chronic disease which is both more efficient and better quality

# The Service We Wish To Procure



# Anticipated Benefits

- ▶ Improving quality of care & quality of life for patients
- ▶ Informing patient-centred case management. Enabling reductions in inpatient admissions
- ▶ More & better targeted proactive support, enabling greater patient control
- ▶ Optimising use of staffing resources
- ▶ Improved quality assurance through improving the flow of accurate & timely information

# Where we are now with RTNI

- ▶ Well developed service specification including robust performance management framework and future flexibilities
- ▶ Robust commercial contractual framework, with significant Authority rights
- ▶ Enduring regional contract management responsibility (PHA/Board)

# Where we are now with RTNI

- ▶ Two consortia bidders
- ▶ Best & Final Offers received
- ▶ Evaluation complete – end of February
- ▶ Business Case, annual investment of circa £2.7m
- ▶ Contract award middle of March

# Critical Success Factors: Learning to Date

- ▶ Alignment with strategic and operational health and social care agenda
- ▶ Design, procurement and implementation are complex – requiring regional leadership, drive and resourcing
- ▶ Securing local, clinical and corporate support and ownership is vital. Focus on quality, safety and patient experience – efficiency is a by-product

# Critical Success Factors: Learning to Date

- ▶ Promotion of 'logic' and evidence base
- ▶ Pilots are helpful but need to be strategically aligned, of sufficient scale and designed to be tested
- ▶ Scaling an application is significantly more complicated than piloting and takes time

# Connected Health – About the Future



# Strategic Agenda: Where technology can make a positive contribution

**Promoting health & well-being**

• Providing access to validated information to support self management

**Helping individuals to live independently.**

• Systematic approach to the deployment of telecare

**Early intervention strategies**

• Utilising technology to assist management of hypertension

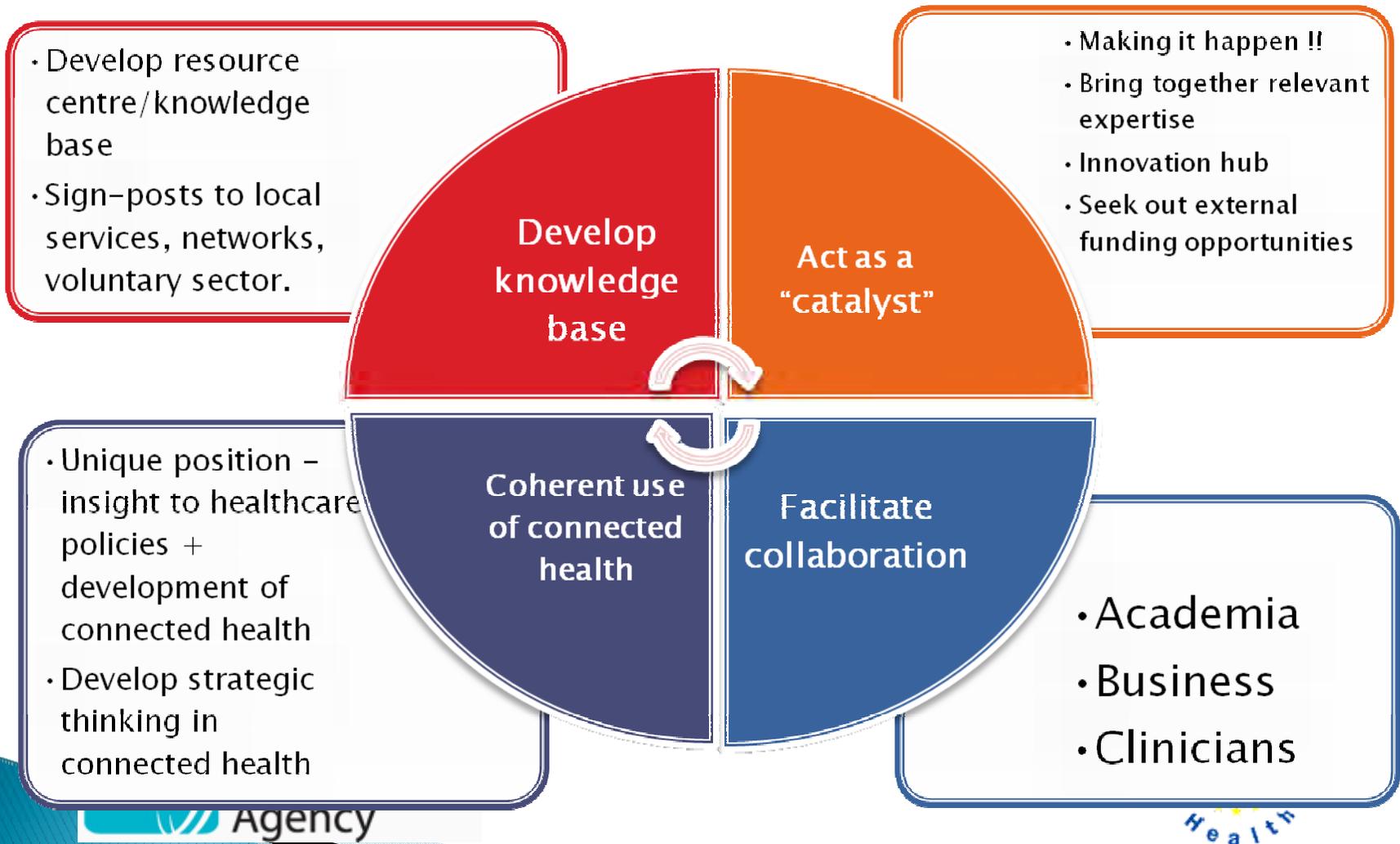
**Supporting professionals and multi-disciplinary networks**

• Providing access to validated information to support decision making

**Quality and safety**

• E-prescribing and medication concordance

# ECCH role in the future



# Our Connected Health Strategy Should:

- Focus on proven and stable technologies that are beneficial and meets healthcare needs in Northern Ireland
- Keep abreast on developments on the new and emerging technologies
- Trial for suitability of implementation of new/emerging technologies

# Key messages from strategies

## Cancer

Dissemination and sharing of all kinds of information (in huge quantities and “all over the shop” – information such as:

- Condition, treatment, post-treatment
- Services, self-management, carer’s issues, funding

## Dementia

Need to have a central “place” where patients/clients can get information and be signposted to local services

Need for central “co-ordinator”

## Palliative Care

Need to improve clinical outcomes to more prompt treatment, etc..

Need to access to better quality of care

## Stroke

Need to raise awareness of prevention where applicable (cancer, stroke and dementia)

Better training and support on awareness and detection for professionals and across non-healthcare bodies (schools, etc..)

Common message

# Connected health contribution

- ▶ **Information sharing, patient support**
  - Central Patient Information Database
  - Patient Portal
- ▶ **Improve clinical outcomes**
  - Access to specialists in a prompt manner
  - Prevention and awareness
    - Video conferencing, mHealth
- ▶ **Improve access to better quality of care**
  - Video conferencing
- ▶ **Improve quality of care**
  - Telehealth, Assistive technologies, mHealth
- ▶ **Improve awareness and better training and support**
  - Video conferencing, mHealth

# mHealth Examples

- ▶ Prevention – sunscreen, teenage pregnancies, sexual health
- ▶ Long term condition management such as diabetes
  - Allows patients to upload and manage blood glucose readings
  - Some apps review and evaluate results; and collate other relevant information such as weight, exercise and nutritional information
- ▶ Medication adherence – asthma, diabetes
- ▶ Appointment reminders

# Telemedicine

## Example areas for applications

- ▶ Teleconsultation/Teleconference – remote/isolated location, access to specialised clinical expertise, access to shared clinical expertise e.g. Oncologists; faster access to clinicians for Stroke patients
- ▶ Training – specialised training for professionals and/or rehab for patients or carers e.g. Cancer patients
- ▶ Support – between patients/carers and clinicians/professionals
- ▶ Diagnostics – in cases of dementia enables clinicians to detect abnormal behaviour from patients through CCTV (see Dr David Craig study)

# Assistive technology

## Example areas for application

- ▶ Telehealth
  - Disease management – LTCs, post Stroke, etc
  - Symptom management – Cancer (Pain, emotional distress)
- ▶ Telecare
  - Disease management – dementia, epilepsy
  - Support to patient and carers
- ▶ Medication adherence

# Conclusions

- ▶ Health systems around the world face huge challenges and are seeking to modernise and innovate faster
- ▶ Connected health is seen nationally, across Europe and internationally as corner stone to such modernisation
- ▶ Technology has a substantial role in enabling and assisting system response. Properly harnessed it has the potential to improve the care and treatment of patients & clients, improve working lives and contribute to service modernisation

# Conclusions

- ▶ Virtually limitless possibilities
- ▶ Not about technology, it's about harnessing technology to radically change how we empower people and change traditional professional practice
- ▶ Change needs to be embedded, focus needs to be on systematic application as well as on new research
- ▶ NI has unique opportunity