

# The Effective Use of Health Technology and ICT

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**Health, Social Services  
and Public Safety**

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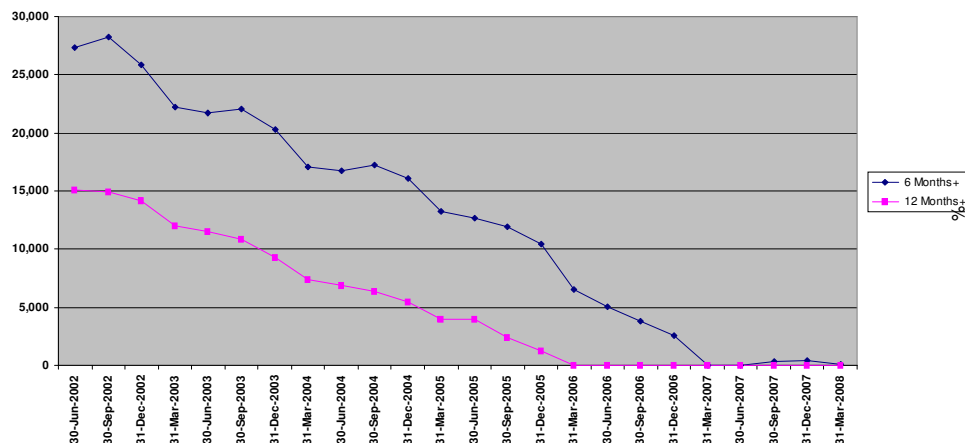
1. Transformational change in the NI Health and Social Care system
2. Key challenges facing the health and social care system
3. How can ICT help?
4. The role of ECCH
5. Current initiatives and progress
6. The future



# Transformational Change in the NI Health and Social Care System

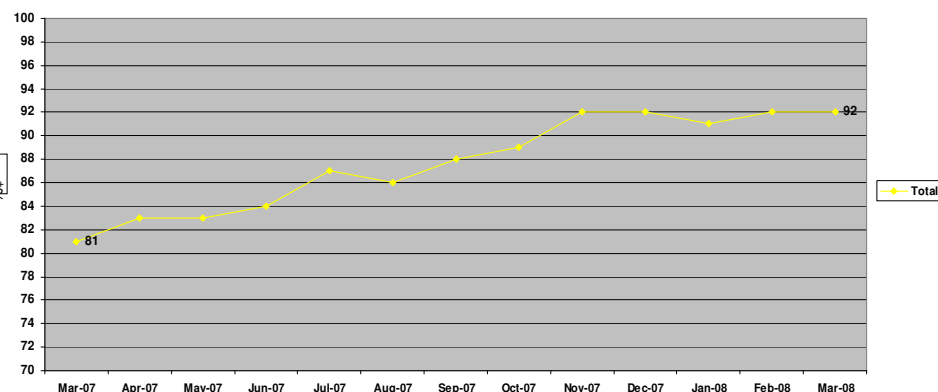
## Inpatient and Day Care Waiting Times 2002 - 2008

IPDC - 6m+ & 12m+ waiters by timeband by quarter Jun 02 - Mar 08



## Regional Performance against 4-hour target

% of patients admitted, transferred or discharged within 4 hours March 07 - March 08



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# Transformational Change in the NI Health and Social Care System

“The picture that emerges is one of marked improvement in access, quality and outcomes in many areas of health and social care services...”

The Performance of the Health  
Service in Northern Ireland  
Report by the Comptroller and  
Auditor General 1 October 2008



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# Key Challenges Facing NI Health and Social Care System

- Increasing Demand (Demographics and morbidity)
- Quality, Safety and Accessibility
- Improving Performance
- Involving People
- Resource Constraints



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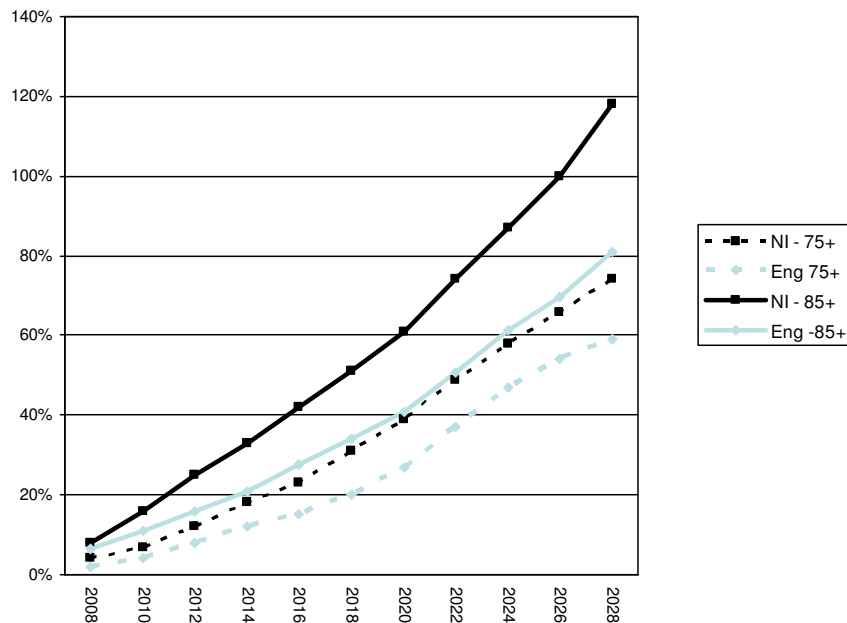
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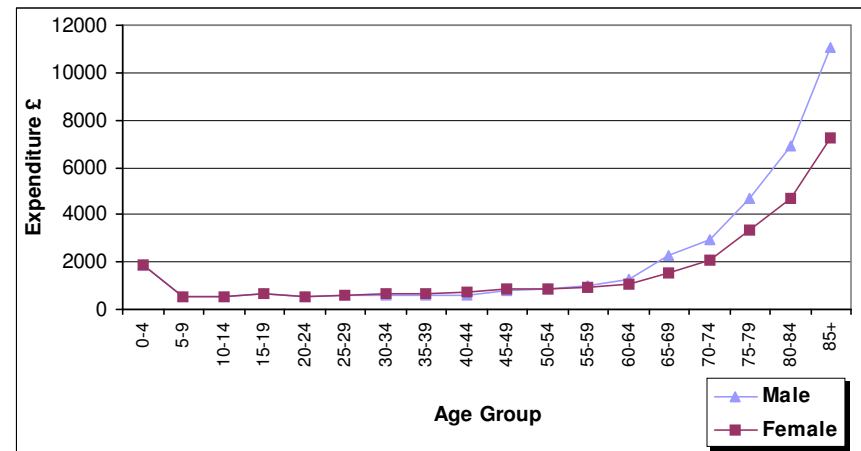


Although NI currently has a younger age profile than England, its elderly population, who have very expensive care costs, are growing more rapidly placing an increasing demand on resources.

Projected percentage increase in elderly population (relative to 2006)



Age/Gender Costs – All Services, 2003/04



# Quality, Safety and Accessibility Issues

- Better outcomes assured through access to larger multi-disciplinary teams
- Sustainability of local services
- Reducing risks of error and harm
- Future supply of workforce



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# European Commission

“The way healthcare is presently delivered has to be deeply reformed. The situation is becoming unsustainable and will only worsen in the future as chronic diseases and demographic change place additional strains on healthcare systems around Europe.

**A new healthcare delivery model based on preventative and person-centred health systems is needed. This new model can only be achieved through better use of ICT in combination with appropriate organisational change and skills.”**



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# How Can ICT Help?

“People save people. Information technology can only improve the chances of doing that better.”

Ilias Iakovidis, ICT for Health, European Commission

“ICT systems that provide information can save lives, improve the quality and efficiency of the health delivery system and contain the cost.”

Vivienne Reading, European Commissioner  
for Information, Society and Media

Source: eHealth for Safety: Impact of ICT on Patient Safety and Risk Management



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# How Can ICT Help?

- Linking patients and service users with information and support networks
- Connecting patients and service users with clinicians and services
- Improved, more consistent monitoring of patient conditions
- Linking clinician to clinicians, providing remote access to specialist advice and supporting improved communication across clinical networks
- Improving the information base to support clinical decisions (Electronic Care Record)
- Improving clinical governance and quality assurance programmes
- Streamlining the care pathway across the primary, community and hospital care sectors
- Better information to support improved performance



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# The Role of the European Centre for Connected Health

- To improve the quality and responsiveness of services by fast tracking new products and technological innovations in health and social care
- To promote the establishment of an ICT infrastructure fit for purpose for the 21<sup>st</sup> century
- Contribute to the advancement of the wider European e-Health agenda, and thereby
- Contribute to the establishment of NI as an outward focussed and competitive region in the global economy



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# Current Initiatives and Progress

## ICT Strategy

- GP ICT Modernisation, all GP practices connected to private ASDL network enabling electronic Pathology results, electronic radiology reports, managed email and a system to support GP payments
- Health & Care Number has established new NI patient index
- NIPACS implementing a regional PACS system enabling sharing of images
- Development of a cancer pathway system
- Developing system to support bowel cancer screening, electronic referrals from GPs and community services
- Emergency Care Record
- Improving ambulance communication systems
- Chronic disease management



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# NIAS Ambulance Service

- The introduction of **Telemetry, providing pre-hospital information** to cardiologists has enabled paramedics to intervene with “clot-busting” drugs during life-critical early stages of cardiac arrest.

*“The cardiac radiologist, at the end of my heart scan, showed and explained the video pictures of my heart in minute detail and said the purpose of the scan was to see and record muscle damage. There was none and she attributed that to the speed and attention when the 999 call was made.”*  
*Patient, Belfast*



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# Chronic Disease Management

- 70% of all current healthcare expenditure
- New approaches being developed to support early intervention and avoid exacerbations of disease, involving
- Remote monitoring of vital signs, using technology to monitor blood pressure, weight, oxygen levels, pulse, glucose levels etc in the home, triggering alerts to the Health and Social Care system when these readings fall outside pre-determined parameters
- Supported by health promotion information to promote greater personal engagement of service users, supporting behavioural change
- 5000 people to be on system by 2011
- Procurement process commenced



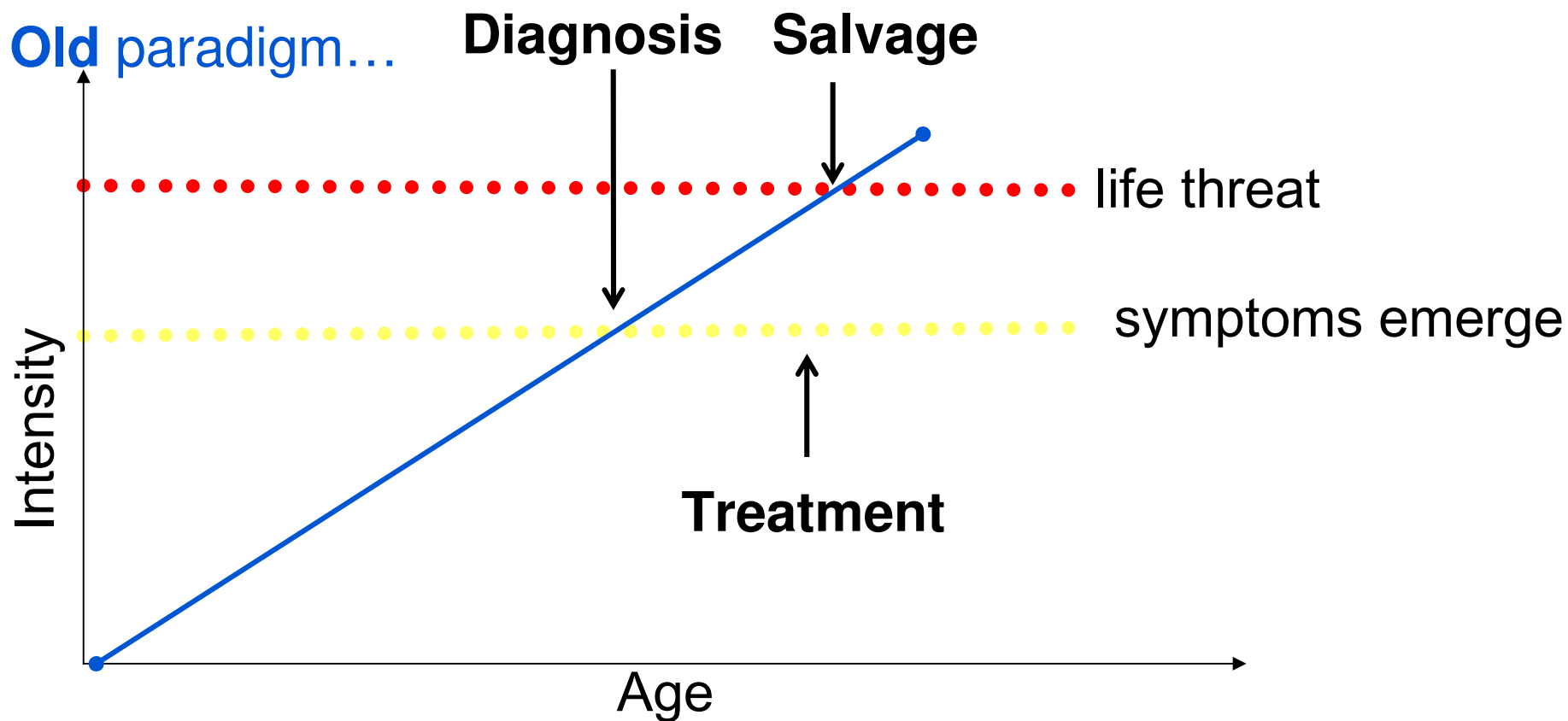
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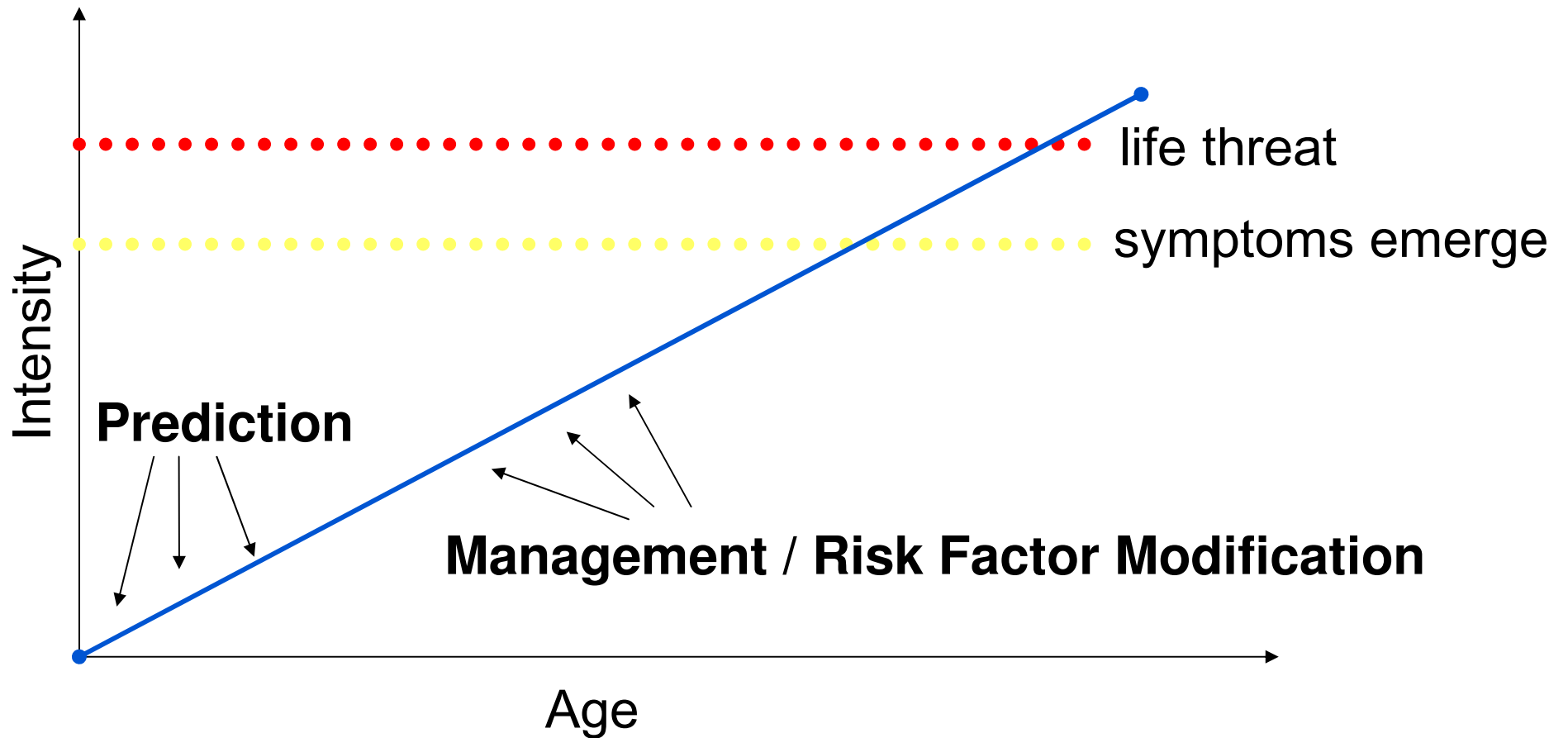


# Chronic Disease Management



# Chronic Disease Management

New paradigm...



# Northern Ireland Connected Health Pilots

- As of July 2008, over 800 patients across Northern Ireland have benefited from participation in a range of eHealth pilot schemes including:
  - Remote monitoring of implantable Cardiac Devices;
  - Video conferencing for Paediatric Congenital Heart Disease;
  - Remote Telemonitoring of chronic diseases including COPD, Diabetes and Dementia; and
  - Telecare projects to support independent living.
- Many of these pilots are being extended to allow a further 800 patients to be added by March 2008.



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# The Future

- Immediate focus on Heart Failure, Diabetes, COPD
- Developing a Connected Health strategy to take this further
  - Stroke
  - Support of independent living
  - Early discharge
  - Supporting clinical networks
  - Mental health
  - Dementia
  - See [www.eu-cch.org](http://www.eu-cch.org)
- Electronic Care Record
- Links with academic and industry to promote innovation



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# And finally...

“This year the NHS is celebrating its 60<sup>th</sup> anniversary year. These have been 60 years of incredible change and development... Today, the health service faces a series of new challenges. It is only by adopting new modern approaches to care delivery that we can meet the challenges which lie ahead.

By embracing the concept of Connected Health and applying the technology of today to improve our services, we will also sow the seeds for the different kinds of services our communities will require to meet their needs tomorrow.”

Michael McGimpsey  
January 2008



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