Knowledge Exchange Seminar Series (KESS)

Northern Ireland Assembly

Queen's University Belfast · The Open University · Ulster University

...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-based policy and law-making within Northern Ireland

Technologies for care – the imperative for upskilling carers

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Increasing demands on services in Northern Ireland

Figure 28: Total Admissions to HSC Hospitals in Northern Ireland under the Elderly Care Programme of Care, (2012/13 - 2016/17)
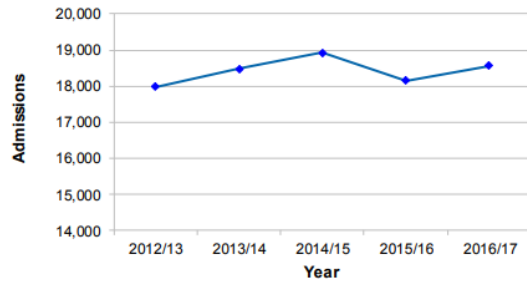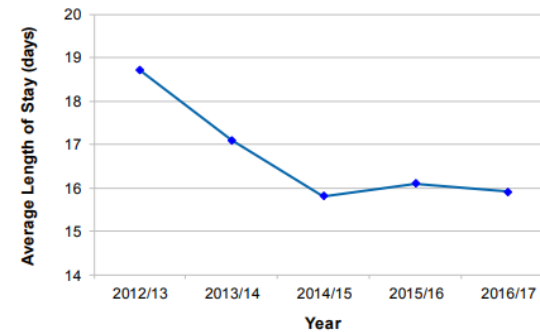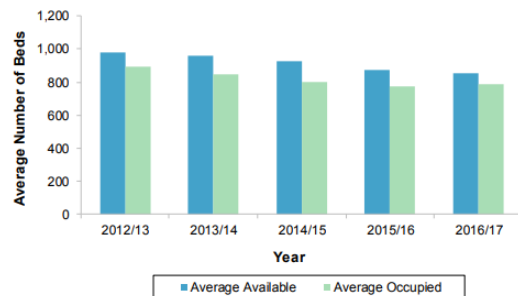

Figure 29: Average Number of Available and Occupied Beds in HSC Hospitals in Northern Ireland within the Elderly Care Programme of Care, (2012/13 - 2016/17)

Source: DoH (2017) *Hospital Statistics: Inpatient and Day Case Activity Statistics 2016/17*

Figure 31: Average Length of Stay for Admissions within the Elderly Care Programme of Care, (2012/13 - 2016/17)

- Overloaded GPs
  (The Irish News Feb 2018)

- Nursing shortage
  (Regulation and Quality Improvement Authority, in *Nursing in Practice* Nov 2017)

- Careworker shortage
  (Healthcare deficit 2016)

Financial constraints on services

- ❑ Increasing ageing profile: by 2025 the number of people in NI aged over 65 will increase by 42%*

- ❑ Increase in population living with long-term illness

- ❑ By 2060 the ratio of working age people to retirees across the EU is estimated to fall from 4:1 to 2:1**

- ❑ By 2030 estimated to be an 18 million shortfall in healthcare workers worldwide, over twice the 7 million shortfall estimated in 2013 ***

- ❑ By 2025 estimated additional 20 million family carers will be needed across the EU****

(*NISRA 2015 **EU annual ageing report 2015, ***WHO 2016. **** ICT and ageing 2012)
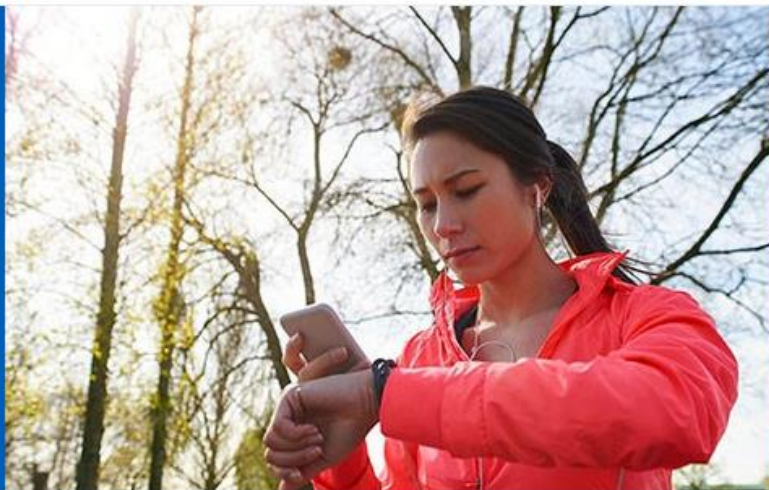
Digital by default

❏ Many initiatives see digital technologies as a way of improving healthcare

❏ ICT and Telemedicine in Europe estimated to improve healthcare efficiency by 20%

❏ Telehealth and telecare increasing

❏ More public services accessible online

❏ Online GP appointments, prescriptions

❏ mHealth apps – encourage healthy lifestyle, self-management of health (100,000)

mHealth

What it covers

mobile devices

Personal Digital Assistant (PDA)

smart watches & other body-worn devices or implants

With these devices it is possible to **collect big amounts of data** such as

health monitoring

lifestyle

daily activity

with this data, your doctor will make a better diagnosis & give the best treatment

patients can take control of their health: accessing their records or getting reminders about their medication

NHS

Find digital tools to help you manage and improve your health

Find out more

FILTER BY CATEGORY

All

Cancer

COPD

Dementia

Dental

Diabetes

Healthy Living

Learning Disabilities

Mental Health

Online Community

Other

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myCOPD
✔ **NHS Approved**

myCOPD helps people with COPD to better manage their condition.

COPD

Cove
⟳ **Being Tested in the NHS**

Create music to capture your mood and express how you feel with the Cove app.

MENTAL HEALTH

Chill Panda
⟳ **Being Tested in the NHS**

Learn to relax, manage your worries and improve your wellbeing with Chill Panda.

MENTAL HEALTH

BlueIce

BlueIce is an evidenced-based app to help young people manage their emotions and reduce urges to self-harm.

MENTAL HEALTH
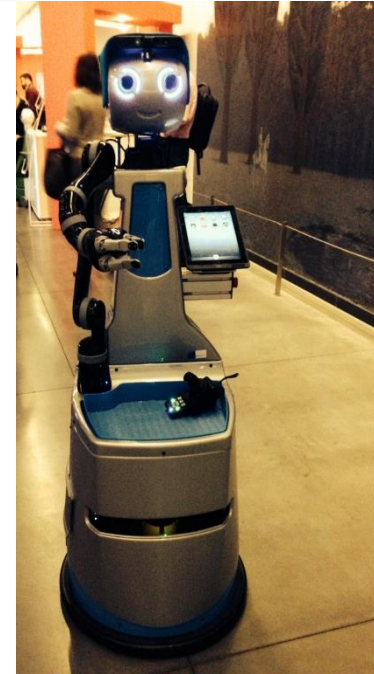
Initiatives

Telemonitoring

Text messaging e.g. Florence, Italy

  (70 health care authorities, 22,000 patients)

Video links to service user homes

Robotic assistants – 26% comfortable with a

  robot providing services/companionship

  when infirm or elderly (Source: Eurobarometer 460 2017)

Now that this robot lives with me I feel safer.

3:19 / 3:58

Digital Health literacy

Health literacy – long-standing recognition that cognitive and social skills needed to access, understand and use health information is a pre-requisite for empowering individuals to take control of their own health (Nutbeam 1999)

However, in the 21st century

it is imperative that individuals develop digital health literacy skills to enable them to make full use of digital health information and current and emerging ehealth tools and services.

Barriers to digital health literacy

Recent survey: 50-62% of respondents felt they had limited digital health literacy (EU 2014).

Barriers include

no access to internet/poor digital skills

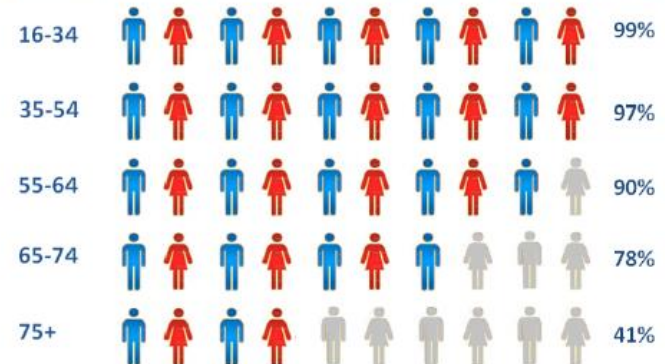lack of confidence to search
and evaluate information

lack of trust in information found

lack of confidence to use information
/discuss with healthcare professsionals

Almost 9 in 10 adults in the UK have recently used the internet (89%)

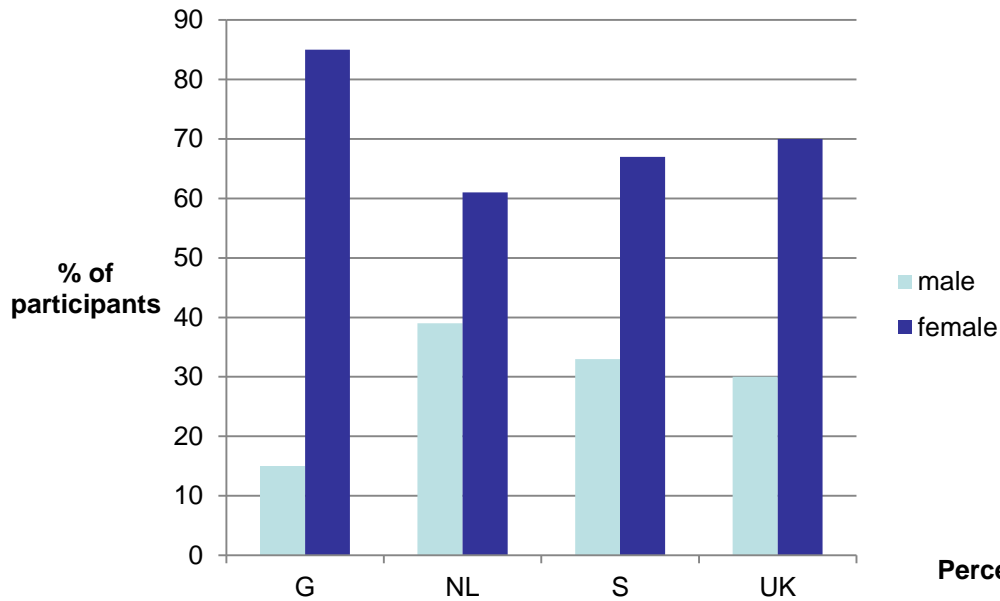Almost all adults aged 16 – 54 years have recently used the internet ...

Age	%
16-34	99%
35-54	97%
55-64	90%
65-74	78%
75+	41%

... but just 4 in 10 adults aged 75+ years have used the internet in the last 3 months
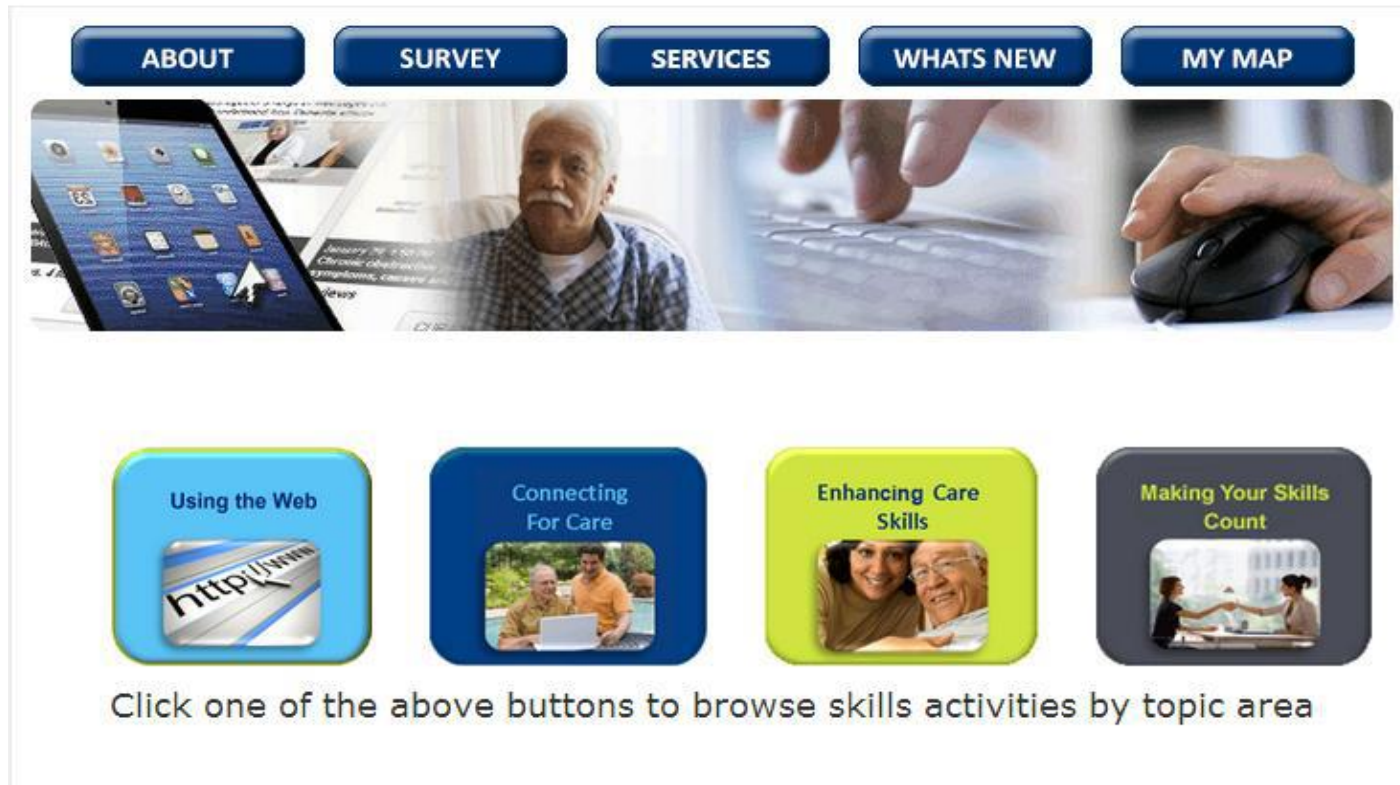
[Internet use (UK 2017), Office for National Statistics]

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DISCOVER: an EU-funded project

Carers

The Skills Zone

Using the web

Reducing the risk of falls
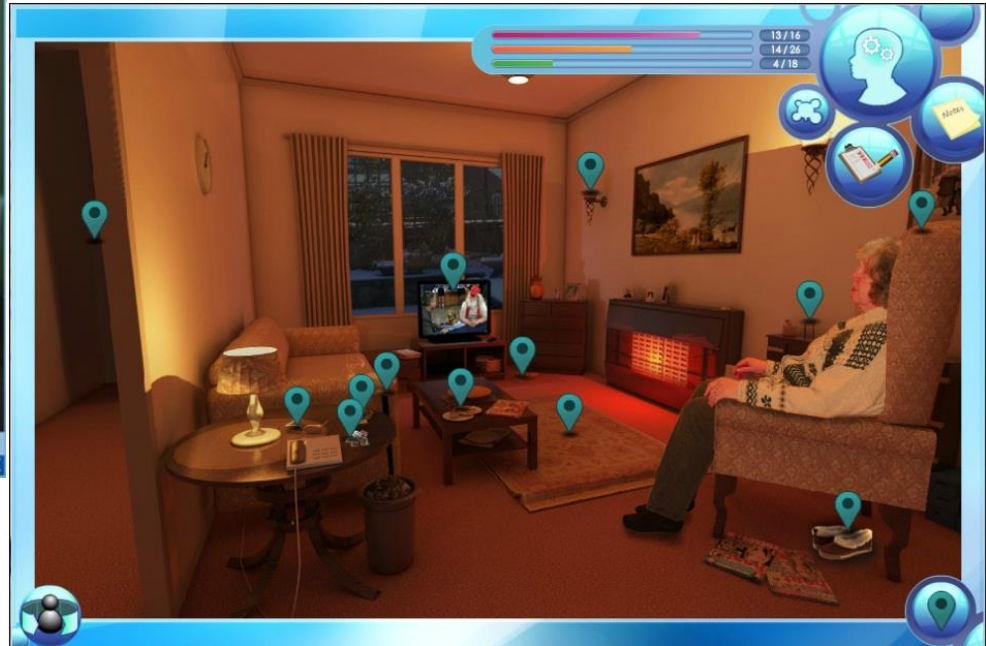
Importance of high quality information

'sometimes the information you find is deceptive, it could scare you more than help you… so you have to know how to differentiate the good information'

female carer, Spain

'I didn't realise at the time but not knowing enough about strokes, he would have been better off being transferred to a hospital in Birmingham. There's a dedicated stroke unit … nearer to his house, but I knew none of this at the time, that he could have done that'

female carer, UK

Preventing falls

'I have learned to help her do specific exercises to prevent another fall' man caring for his mother-in-law, UK

'I found the falls scenario interesting and have changed the living space of the older person that I care for to protect them'. female carer, Greece

'What to do yourself when you fall. Not to panic and do what you have to do (phone for help etc)'
94 yr old male carer/cared for person, Netherlands

Coping with challenging behaviour

'Dementia was an 'unknown terrain for us' …I not only know more about dementia through DISCOVER but now understand the 'change of behaviour that goes with that'

female carer caring for mother in law, Netherlands

'[I wanted to know] how to better for the care person because Alzheimer is difficult to understand. Sometimes I became angry even I know it's not his fault. Now I can do this'

female carer for father, Spain

'I have changed the way I talk with my son [who has had a stroke]'. female carer, Spain

Improving quality of care - technologies aiding independence

'[I] didn't know about automatic pill boxes and think this would be a great idea for my mother. Currently my sister is making sure she takes her pills on time'. female carer, Spain

'When you have epilepsy it's really dangerous if you have a fit in your sleep… she {my mum} won't wear her medical bracelet because she can't stand things on her wrist and round her neck so the full sensors are out… but the one under the bed seems like a really good fit for her. To be honest I never even heard about it'.

young adult carer, UK

Stakeholders' perspectives

'Generally, there was a better understanding of health conditions, but simultaneously there was an improvement of carers' knowledge about the use of technologies'
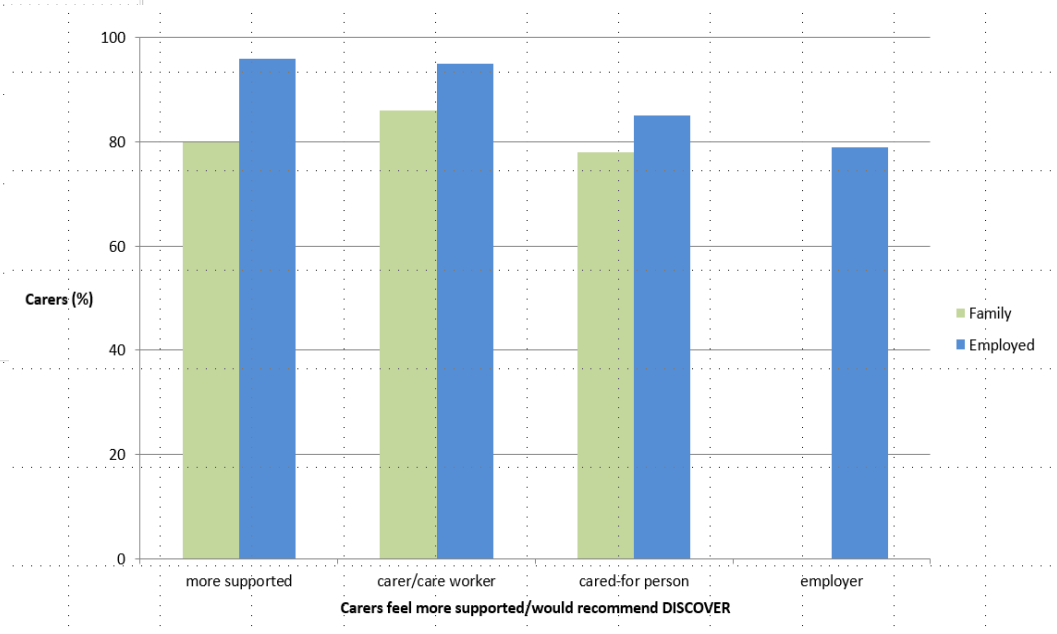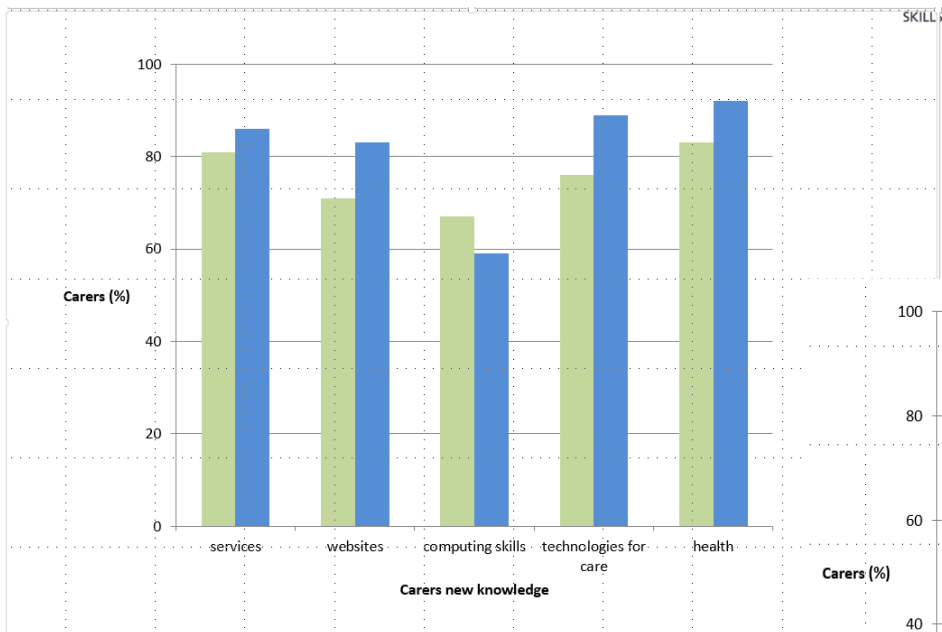
Psychologist at Care Home, Greece

'Caregivers who participated present generally a consistent positive feedback having also pointed out during consultations what they have learned with DISCOVER'.

Psychiatrist at a Memory clinic, Spain

Findings: knowledge & recommendations

wellbeing

Statement Over the last two weeks…	Carers who felt this all or most of the time		Carers who felt this only some of the time or never	
	carers	Employed carers	carers	Employed carers
I have felt cheerful and in good spirits	44%	48%	26%	1%
I have felt calm and relaxed	44%	43%	2%	8%
I have felt active and vigorous	39%	58%	13%	1%
I woke up feeling fresh and rested	25%	26%	21%	1%
My daily life has been filled with things that interest me	35%	59%	17%	3%

Benefit for Cared-for people

Pre DISCOVER

Less than 25% of carers felt the people they cared for would benefit from developing their digital skills

Post DISCOVER

85% of carers would recommend Discover

Challenges

❑ Enhancing digital/digital health literacy skills of family carers, care workers and cared-for people

❑ Raising awareness of opportunities arising from telehealth, telecare and being online

❑ Overcoming fear of computers
   Difficult to use/Risk of identity theft and fraud/Lack of technical support

❑ Overcoming 'stigma'
   Devices identify you as old/Loss of Privacy/Under surveillance

❑ Mismatch between older people and technologies

Recommendations

❑ Increase opportunities/programmes for digital health literacy- based on health conditions

❑ ensure seamless linking between care workers, carers, services, information and online communities via 'one stop shops'

❑ enable care-home residents to use digital devices, currently little provision for them to use such devices

❑ adequately resource/accelerate NHS app approval process

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