Technologies for care – the imperative for upskilling carers

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Increasing demands on services in Northern Ireland

- 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****

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)
Find digital tools to help you manage and improve your health

**myCOPD**  
NHS Approved  
myCOPD helps people with COPD to better manage their condition.

**Cove**  
Being Tested in the NHS  
Create music to capture your mood and express how you feel with the Cove app.

**Chill Panda**  
Being Tested in the NHS  
Learn to relax, manage your worries and improve your wellbeing with Chill Panda.

**Bluelice**  
Bluelice is an evidenced-based app to help young people manage their emotions and reduce urges to self-harm.
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)
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 professionals

[Internet use (UK 2017), Office for National Statistics]
DISCOVER: an EU-funded project
The Skills Zone

Click one of the above buttons to browse skills activities by topic area.
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

<table>
<thead>
<tr>
<th>Statement</th>
<th>Carers who felt this all or most of the time</th>
<th>Carers who felt this only some of the time or never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>carers</td>
<td>Employed carers</td>
</tr>
<tr>
<td>I have felt cheerful and in good spirits</td>
<td>44%</td>
<td>48%</td>
</tr>
<tr>
<td>I have felt calm and relaxed</td>
<td>44%</td>
<td>43%</td>
</tr>
<tr>
<td>I have felt active and vigorous</td>
<td>39%</td>
<td>58%</td>
</tr>
<tr>
<td>I woke up feeling fresh and rested</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>My daily life has been filled with things that interest me</td>
<td>35%</td>
<td>59%</td>
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</tbody>
</table>
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
Knowledge Exchange Seminar Series (KESS)

...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