Dementia-friendly technology charter

Ali Rogan
DFT Chair of task and finish group for Alzheimer’s Society, External Affairs Director, Tunstall Healthcare

8 June 2015
PM’s Dementia Friendly Communities Task & Finish Groups

Civil Society  Arts  Technology
Financial Services  Sport & Leisure  Transport
Rural Communities  Retail  Employment
Maintaining Personal Wellbeing
Dementia-friendly Technology Charter contributors

- Alzheimer’s Society service user review panels
- ADASS West Midlands Telehealthcare Network
- Advanced Digital Institute
- Alzheimer’s Society
- Association of Directors of Adult Social Services
- Bournemouth University, Dementia Studies Unit
- British Assistive Technology Association
- BT
- Bury Council
- Children’s Charities’ Coalition
- City University London
- Design Council
- Doncaster Dementia Strategic Partnership
- Halton Borough Council
- Hertfordshire County Council
- Just Checking
- Local Government Association
- London Borough of Croydon, AZTEC Centre
- London Fire Brigade
- Mid Cheshire Hospitals NHS Foundation Trust
- National Museums Liverpool
- NHS England
- NIHR Dementia and Neurodegenerative Diseases Research Network (DeNDRoN)
- One Voice for Accessible ICT Coalition
- Public Health England
- Registered Nursing Home Association
- Sanctuary Supported Living
- South London and Maudsley NHS Foundation Trust
- Stockport Council
- Telecare Services Association
- trueCall Nuisance phone call blocking
- Tunstall Healthcare
- University Hospitals Birmingham NHS Foundation Trust
- Westminster Rehabilitation Services Central London Community Healthcare NHS Trust
Dementia-friendly Technology Charter

Aims

• Enable every person with dementia to have the opportunity to benefit from technology appropriate to their needs

• To outline and encourage high level principals and best practice for those organisations providing services to people with dementia

First year ambitions

Charter published and communicated

Work towards having all CCGs*, local authority and housing commissioners signed up

All service and technology providers signed up

www.alzheimers.org.uk/technologycharter
General thoughts on technology?

- They need to be user friendly
- Everyone is different, some people see them as intrusive, others view them as another way to stay as independent
- Can offer families peace of mind
- Seemed a good idea, but you would need to get used to it
- It should be introduced earlier in order for people with dementia to be able to be involved in the decision making and to have the opportunity to familiarise themselves with the technology

Direct feedback from the Alzheimer’s Society Service User Review Panels
What difficulties do you think could be made easier by technology?

- **Alarms and sensors for independence**
- **Peace of mind and reassurance**
- Feels a bit like ‘Big Brother’ is watching you
- **It’s like having someone to come and stand by you**
- **Medication dispensers**
  - This would be really useful – I always find it difficult to remember whether I’ve taken my tablet
- **Safer Walking Technologies**
  - It might be nice as it would be like someone walking alongside you, able to lend a hand if you got lost
  - It would be like being watched, someone keeping an eye on you

Direct feedback from the Alzheimer’s Society Service User Review Panels
## How technology is enabling services for customers today

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virtual Clinics</strong></td>
<td>Videoconferencing supported by biometrics (e.g. Australia)</td>
</tr>
<tr>
<td><strong>Wearables Integration</strong></td>
<td>Using consumer wearable tech to support health/care (e.g. Europe/US)</td>
</tr>
<tr>
<td><strong>Social Inclusion</strong></td>
<td>Connecting people with social circles/activities (e.g. UK)</td>
</tr>
<tr>
<td><strong>Service Delivery Extension</strong></td>
<td>Using telemonitoring centre as integrated service hub (e.g. Spain)</td>
</tr>
<tr>
<td><strong>Behavioural Trends/Analysis</strong></td>
<td>Building a picture of activity &amp; responding to changes (e.g. US/Aus)</td>
</tr>
<tr>
<td><strong>Supported Discharge</strong></td>
<td>Hospital discharge support – also Hospital@Home (e.g. South America)</td>
</tr>
<tr>
<td><strong>Specialist Need Support</strong></td>
<td>Tailored services supporting specific needs (e.g. UK)</td>
</tr>
<tr>
<td><strong>Apps &amp; Health Tracking</strong></td>
<td>Supporting health and care via smart technology (e.g. UK/Aus)</td>
</tr>
<tr>
<td><strong>Supporting Mobility</strong></td>
<td>Mobile health &amp; care solutions (e.g. US/Europe)</td>
</tr>
<tr>
<td><strong>Service Delivery Management</strong></td>
<td>Information and scheduling for professionals (e.g. Nordics)</td>
</tr>
</tbody>
</table>
Understanding people’s needs to identify the right technology solution

Although every person with dementia will have different needs, it is possible to identify technology that may be useful in a number of broad circumstances.

<table>
<thead>
<tr>
<th>Early stage dementia – symptoms</th>
<th>Middle stage dementia – symptoms</th>
<th>Late stage dementia – symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory problems.</td>
<td>Increased disorientation in time and place, with reversal in some cases of day-night cycle, so the person with dementia is awake at night.</td>
<td>Totally dependent on others for all activities of daily living.</td>
</tr>
<tr>
<td>Difficulty in doing everyday tasks that a person could do before.</td>
<td>Further reduction in short-term memory. Difficulty in speech (finding words). Difficulty in reading and writing. Problems with performing tasks (apraxia).</td>
<td>Minimal or no verbal communication.</td>
</tr>
<tr>
<td>Reduced attention and concentration.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**individual’s distinct and changing needs**

<table>
<thead>
<tr>
<th>Need</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify dementia early.</td>
<td>Some automation; safety features; robotics; voice recognition; medication dispensing.</td>
</tr>
<tr>
<td>Compensate loss of abilities.</td>
<td>Brainteaser games or apps; life history exploration and recording tools.</td>
</tr>
<tr>
<td>Stimulate memory and cognition.</td>
<td>Easy-to-use telephone; social media; video-calling; access to helpline.</td>
</tr>
<tr>
<td>Reduce isolation and depression.</td>
<td></td>
</tr>
</tbody>
</table>

**Technology**

<table>
<thead>
<tr>
<th>Need</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home safety.</td>
<td>Sensors for monitoring, initiating alarms and data collection, eg bed/chair occupancy, pendant alarms, enuresis alarm, activity monitoring. GPS/GSM for navigation or locating the person outside the home. Access control systems.</td>
</tr>
<tr>
<td>Reducing distress caused by disorientation.</td>
<td>Radio-frequency identification (RFID) technology to locate items, helping to reduce crime.</td>
</tr>
<tr>
<td>Dealing with more severe short-term memory loss.</td>
<td></td>
</tr>
</tbody>
</table>

**Technology**

<table>
<thead>
<tr>
<th>Need</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of technology key to enhancing stimulation and engagement.</td>
<td>Various apps can provide visual or auditory stimulation. Apps can also aid communication.</td>
</tr>
</tbody>
</table>

“It’s such a relief, knowing that Mum is taking the right medication, at the right time. I’ve even been able to have a short holiday for the first time in years.”

Lucy

Telecare allowed Barbara to avoid entering residential care for 16 months, despite concerns about her safety.

“It never seems like he is listening to me. With the Talking Mat®, I can make him sit down and look at symbols and get him to understand what I am trying to say.”

Safety risks should be assessed at every point in the journey.
Types of technology

Safety
Enabling people with dementia to live as fully as possible without putting themselves and others at risk

Health
Supporting people to manage, assess and treat co-morbidities and improve health outcomes

Enhancing
Devices or apps to improve the quality of life for people with dementia

Components of a good quality technology service
- Service blueprint
- Standards
- Timely referral
- Timely assessment
- Ethics/consent
- Service set-up
- Monitoring
- Response
- Re-evaluation
Telecare helping to manage independence

Rose from Hull

Challenge
- Rose lives in a new extra care flat with onsite staff. There were a few issues during the night when the building was not staffed. Rose would wander down corridors, knock on neighbours doors and may leave the building. She has no close family members.

Solution
- Rose agreed to have a bed sensor (indicating possible falls) and door sensor fitted to connect to her telecare home unit. The door sensor sent an alert between 10pm and 7am to the out of hours team.

Outcome
- This solution has allowed Rose to remain safely at home.
- The out of hours team has been called out 7 times in 4 months.
- This has provided reassurance to Rose and prevented her from disturbing other residents or leaving the building at unsocial hours.
Managing risk
Mrs B, London Fire Brigade

Challenge
• 96 year old Mrs B lived alone. One summer evening she left the grill pan on and forgot about it. Some oil in the pan overheated and caught fire
• Alarmed, Mrs B tried to put out the fire with a damp mop. She also tried to turn the grill off, but in doing so, possibly through panic, she turned on three of the cooker top gas rings. At this point Mrs B retreated to her living room and was overcome by fumes

Solution
• A smoke alarm linked to her telecare system activated, and immediately sent a signal to the alarm remote monitoring centre, who contacted the Fire Brigade, triggering a swift emergency response. In a short time, fire fighters using breathing apparatus forced entry into Mrs B’s home and found her unconscious on a living room armchair
• The crew removed her from the smoke logged room, brought her round and helped her into the care of the ambulance service. Mrs B suffered from smoke inhalation and was kept in hospital overnight for observation, but was otherwise fine

Outcome
• Mrs B is alive and is still cooking
Mrs C had dementia and had lived in an EMH unit in Residential Home for 3 years. She appeared settled and had a good rapport with the staff. Staff had noticed that during the night Mrs C was attempting to climb onto the white sink basin in her room believing it to be a toilet; this was putting her at huge risk of falling and loss of dignity.

Mrs C`s Social Worker carried out a Mental Capacity test in order to identify if Mrs C had the mental capacity to make an informed decision about the provision of Telecare equipment. This test identified that Mrs C did not have the mental capacity to make an informed decision about the provision of Telecare equipment so a Best Interest decision was made to provide the least restrictive option of Telecare provision in order to keep her safe.

An Infra-Red Bed Exit sensor was provided which alerted staff if Mrs C attempted to get out of bed. This enabled staff to assist Mrs C to her toilet, provide her with reassurance and settle her back to bed safely.
DH launches Prime Minister’s challenge on dementia 2020
22.2.15

Objectives include:

• Pg 30 We want to see greater provision of innovative and high quality dementia care at home, delivered in a way that is personalised and appropriate to the specific needs of the person with dementia, their family and carers. This requires greater efforts in making working in homecare an attractive profession and enabling a degree of freedom and flexibility to allow providers to incorporate new ideas including technology solutions into everyday practice.

• Pg 43 under Promoting awareness and understanding, they would wish to see:, A national simple to use and regularly updated online resource to enable people with dementia and carers to access assistive technology.

• Pg 48 under Research, they would wish to see: Research on assistive technologies and assisted living, including research on how information and communication technologies can best help people with dementia and carers.

What does signing up to the charter mean for my organisation? Recommendations for commissioners, providers and suppliers

<table>
<thead>
<tr>
<th>Assessment</th>
<th>The statutory right to a social care assessment should always include a consideration for dementia-friendly technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to date national resource</td>
<td>A single, simple to use, updated web resource for dementia friendly technology should be developed</td>
</tr>
<tr>
<td>Local resources</td>
<td>Accessible and easy to find information that lists where technology is available in their local areas. This info should reference and include a link to this charter</td>
</tr>
<tr>
<td>User friendly technology</td>
<td>Technology providers should take into account the specific needs of people with dementia when developing care services that use technology</td>
</tr>
</tbody>
</table>
Evidence | Telecare for People with Dementia: Evaluation of Renfrewshire Project

- 320 people with dementia were provided with telecare in Renfrewshire in the five years to 31 March 2012, equivalent to 31% of all users of Renfrewshire telecare under this programme
  - Over 67% of savings from avoided hospital admissions or shorter lengths of stay
  - A further 24% of savings from care home admissions avoided.
- Renfrewshire Partnership gave estimated net savings attributable to the 325 clients with dementia, over the five-year period, of over £2.8 million, equivalent to about £8,650 per client receiving a telecare system.
  - 88 admissions to care homes avoided, saving 606 days each, at a daily saving of £48.06 (£29,124 per event), giving total savings of £2.55 million;
  - 114 hospital admissions avoided, saving almost 20 days each, at a saving per day of £336, giving total savings of £0.75 million;
  - Delayed discharges avoided, saving £0.45 million;
  - Other savings from avoided sleep-overs (£110,910) and respite care (£30,060)

Innovative new partnership model of care - CCG and Council invest in telehealth and telecare solutions, benefitting up to 1,000 people in 25 care homes.

Why introduce technology in care homes?

- Calderdale has a higher rate of older people in care homes compared to other regions across England
- GPs didn’t want to come out to care homes and discharge teams didn’t want to send people to particular care homes who weren’t in the quest for quality scheme
- CQC radar about poor quality care at some homes

Objectives

- To avoid unnecessary hospitalisation through early intervention, management of risks and improved medicine compliance
- To support people with round the clock assistance

“Telehealth and telecare provides us with the opportunity to encourage self-management and better care and support. In turn this can help reduce costs on the NHS caused in part by unnecessary hospital and GP visits”

Dr Steven Cleasby, Clinical Lead for Care Homes and Safeguarding, NHS Calderdale CCG
Q&A
Thank you

Ali Rogan
alison.rogan@tunstall.com | @AliRogan