Standards for Telehealth Services - role and trends

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Broad Perspective on Standards

• Standards as ‘voluntary tools’ ... to define a ‘repeatable way for doing something’
  [EY 2015 ‘Independent Review of the European Standardisation System]

• Products and services
• Increasing interoperability
• Reducing costs / increasing competitiveness
• Fostering innovation
• Supporting health and safety; accessibility; environmental protection
• Means towards quality marks
European Standards (EN = European Norm)

- Once approved must be ‘transposed as national standards in EU and EFTA member states’ (with withdrawal of any conflicting national standard)
- A ‘hEN’ is a harmonised standard that responds to specific mandates or requests from the Commission.
- CEN, CENELEC and ETSI are the recognised European standardisation organisations
  - CENELEC – standards in electro-technical field; ETSI – standards in ICT and telecommunications field
- Internationalisation and increasing co-ordination
Standards for Telehealth
What do we mean by telehealth?

Telehealth is the means by which technologies and related services concerned with health and well-being are accessed by people or provided for them irrespective of their location.


• Relevant standards, therefore, relate to products and services
• Changing service paradigms ...
Domains of Telehealth
Absolutely not just vital-signs monitoring!

- Health and motivational coaching and advice
- Activity and lifestyle monitoring
- Safeguarding and monitoring in care settings
- Gait, seizure and falls prediction / management
- Point of care testing and diagnoses
- Vital signs monitoring
- Mobile Health technology systems (e.g. apps)
- Medication or therapy adherence
- Rehabilitation and (re)ablement
- Responses to adverse ‘events’ and incidents
- Tele-consultation and virtual presence


- ...and more!
Standards for Telehealth
- in context of changing service paradigms

• For technologies:
  - key issues around accessibility, usability and user empowerment / control

• For services:
  - key issues around prescriptiveness versus consumer / user choice

• European Commission committed to ‘Design for All’ approaches

• Process of ‘standardisation’ includes ANEC (Consumers), ETUI (Trade Unions) and ECOS (Environment) but (and because) ‘participation by civil society remains weak’

[Hauert et al (2015) from INTERNORM project]
# Standards for Telehealth
- what’s out there?

<table>
<thead>
<tr>
<th></th>
<th>UK</th>
<th>EU</th>
<th>Spain</th>
<th>Australia</th>
<th>Germany</th>
<th>New Zealand</th>
<th>Australia</th>
<th>Netherlands</th>
<th>UK</th>
<th>France</th>
<th>Canada</th>
<th>US</th>
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<th>EU and International</th>
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<tbody>
<tr>
<td>Social Alarms</td>
<td>Social Alarm Systems</td>
<td>Servicio Asistencia</td>
<td>PER Services</td>
<td>Staying at Home</td>
<td>Telecare Services</td>
<td>eHealth: Telehealth</td>
<td>Personal Alarm Services</td>
<td>Telecare and Telehealth</td>
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<td>Telehealth Services</td>
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Standards for Telehealth - what’s out there?

- Increasing number of standards
- Some through ‘recognised’ national / international standards bodies
- Focus (in this presentation) on telehealth in community (public and preventative) health context
- Embracing ‘home telehealth’ (e.g. the ATA), telecare and social alarms

Source: Dignio AS

Source: Health IT Outcomes
Standards for Telehealth - what’s out there?

- Main focus on technologies and service operation (‘this is how you do it’) … therefore prescriptive, often clinical perspective
- Most require performance indicators to be met
- Low level of awareness of social care agenda
- Little or no attention to potential positioning in relation to service ‘integration’
- Little or no realisation of potential for standards to support ‘paradigm shift’ … towards user self-management, behaviour and lifestyle change
Standards: Three Trends or Markers of Change? 1

- Increasing flexibility (less prescription) ... service frameworks not blueprints?

- Move away from top-down towards consumer oriented (user-driven) approaches

- Move towards wider perspective that relates to service integration (?)
Standards: Three Trends or Markers of Change? 2

Potential measures (?)

- Increasing flexibility (less prescription) ... service frameworks not blueprints?

Number of quantifiable PIs

- Away from top-down towards consumer oriented (user-driven) approaches

Number of clauses concerned with working with clients, patients, etc. (numerator) in relation to total number of clauses

- Towards wider perspective that relates to service integration

Use of term ‘patient’ rather than person, consumer or user

... overall, may consider other terms such as service ‘delivery’; or specific clause content around ethics?
<table>
<thead>
<tr>
<th>Country</th>
<th>Standards</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>Social Alarms</td>
<td>1998</td>
</tr>
<tr>
<td>EU</td>
<td>Social Alarm Systems</td>
<td>2003/16</td>
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<td>Spain</td>
<td>Servicio Asistencia</td>
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## Standards for Telehealth

- **taking a selection 2**

[NB. approx figures ... work in progress]

<table>
<thead>
<tr>
<th></th>
<th>UNE Spain</th>
<th>TSA Code of Practice UK</th>
<th>Accreditation Canada Standard</th>
<th>International (TQG) Code of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Clauses</strong></td>
<td>52</td>
<td>&gt;250 (all modules)</td>
<td>78</td>
<td>54</td>
</tr>
<tr>
<td><strong>Quantifiable PIs</strong></td>
<td>8</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>User / Customer Clauses (%)</strong></td>
<td>6 (12%)</td>
<td>~22 (~8%)</td>
<td>~15 (~19%)</td>
<td>12 (22%)</td>
</tr>
<tr>
<td><strong>Consistent use of term ‘patient’</strong></td>
<td><strong>No (User)</strong></td>
<td><strong>No (User)</strong></td>
<td><strong>No (Client)</strong></td>
<td><strong>No (User)</strong></td>
</tr>
</tbody>
</table>
Observation 1

• Similarity in approach / perspective between the Canadian and International (TQG) Code e.g. no PIs

Accreditation Canada 2.2
‘The organization sets measurable goals and objectives ... to guide day to day telehealth activities’

13.3 The service ‘identifies measurable objectives for its quality improvement initiatives and specifies the timeframe in which they will be reached’ and 13.4 ‘identifies the indicators that will be used to monitor progress for each quality improvement objective’

International Code (Telehealth Quality Group, TQG) A7
‘Services shall determine the relevant measures of performance ... a set of relevant measures should be determined so that there is a framework against which future measurement of performance can be made’

... ‘It is highly desirable that services honestly and openly display a range of such measures on their website or in other publicly available material. A clear declaration regarding compliance, specific to the telehealth service, shall be placed on the website or in the Discovery Zone of the TQG website.’
Observation 2

• Difference in perspective of the TSA (Integrated) Code and International (TQG) Code e.g. number of clauses and prescriptiveness

**TSA Perspective**

‘Telehealth is the remote exchange of data between a patient at home and their clinician(s) to assist in diagnosis and monitoring typically used to support patients with LTCs’

**International Code (TQG Perspective) reminder**

‘Telehealth is the means by which technologies and related services concerned with health and well-being are accessed by people or provided for them irrespective of their location’

**TSA Code PI (example) for Call Handling**

97.5% of calls – answering time not to exceed 1 minute; 99% not to exceed 3 minutes

**International Code (Telehealth Quality Group, TQG)**

G1 ‘Services that provide remote monitoring shall ensure that timely action is taken where there is a known or indicated change in health, well-being and/or personal circumstances’

A7 points to usefulness of operational measure (amongst other things) for ‘time taken with regard to examining data and/or responding to needs indicated through enquiries or device activation’

F1 requires response protocols to be set out in agreements with users / carers.
In Conclusion

• Standards have a role to play – but there are choices
• Trends in telehealth standards means that changes in service paradigms are beginning to be accommodated (and promoted)
• Trends (for telehealth service standards) appear to relate to
  - diminishing prescriptiveness, greater use of frameworks ...
  from ‘how you do it’ to ‘these are your options’
  - less use of PIs;
  - move away from top-down (clinically or technology driven) telehealth towards the user / carer; and (maybe)
  - growing recognition of ‘integration’, public and preventative health agendas.

• Are these trends a good thing? ...
Trends in Standards: Are these Good?

Yes

... but at the same time we must guard against the adoption (or enforcement) of ‘inappropriate’ standards that are rooted in the old service paradigms

• Let’s, instead, look to flexibility and choice
• Let’s look to standards that offer a clear user perspective
• More than this ... let’s look to standards that help to drive the agenda within which services (that truly empower their users) develop
Thank You

... Diolch yn Fawr