Use of digital clinical communication for families and carers of children and young people with short or long term conditions: a rapid scoping review

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Inclusion/exclusion criteria

• **Study type/language of publication:** All type of study design published in English language from January 2009 to August 2015 except conference abstracts and articles with fewer than 5 participants.

• **Participants:** Family members and/or carers of young people/ adolescents/ children aged between 0-25 years.

• **Condition/disease:** All type of acute, short and long-term conditions were included.

• **Intervention:** All forms of communication technologies which involve two-way communication between families (including child minders, babysitters, home care workers) and health professionals

• **Comparator:** None pre-specified

• **Outcomes:** All outcomes such as:
  – The attitude of families and carers
  – The quality of care
  – The organization of care
  – The capacity to achieve independence in the management of their condition
  – Emotional/functional outcomes
  – Patient outcomes
Characteristics of populations

- Relationship of participants to children: mainly parents
- Main conditions of children/young people:
  - Traumatic brain injury x 5 studies
  - Prematurity and/or consequences of prematurity x 3
  - Anorexia nervosa x 2, Atopic dermatitis x 2, Autism spectrum disorder x 2, Type 1 diabetes x 2, Palliative care x 2

- Range of mean age of children/young people, 24 days to 28 years

Characteristics of interventions

14 studies: Video-conferencing or video-consultation x 14 studies
13 studies: Emails or web-messaging systems
3 studies: Web-chat or SMS
<table>
<thead>
<tr>
<th>Aim of evaluated interventions</th>
<th>Number of studies</th>
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<tbody>
<tr>
<td>Consultation</td>
<td>7</td>
</tr>
<tr>
<td>Problem-solving training (CBT)</td>
<td>7</td>
</tr>
<tr>
<td>Communication</td>
<td>4</td>
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<tr>
<td>Communication + support</td>
<td>3</td>
</tr>
<tr>
<td>Access to medical record elements + communication</td>
<td>2</td>
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<tr>
<td>To improve parenting skills</td>
<td>2</td>
</tr>
<tr>
<td>Care coordination</td>
<td>1</td>
</tr>
<tr>
<td>Support + education</td>
<td>1</td>
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<td>Education</td>
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Randomised Controlled Trials (n=10)

- Limited duration of follow-up (24 days to 6 months)
- No difference between groups (no impact of digital communication) with respect to:
  - behavioural rating scales
  - satisfaction/acceptance
  - self-report instruments including HRQoL and visual analogic scale
  - biologic exam
  - clinical outcomes

Other Trial designs (n=22)

- Cost saving for remote patients
- Complement to face to face meetings but concern for loss of interpersonal contact
- Increased sense of control and independence
- Increased sense of support
- Potential of risk to privacy
In conclusion

Digital communication between patient and clinician has been developing alongside policy; governance remains unclear.

Digital clinical communication can usefully be an integral part of clinical care as a targeted response to a problem; consider why it is used, when, where and with whom?

Tracking the effect of the introduction of digital clinical communication demands attention to (among others): equality, efficiency, opportunity costs.
Quick Reference Guides

For health professionals considering using digital clinical communication

- Hard copies available at our project stand
- [http://www2.warwick.ac.uk/fac/med/research/hscience/sssh/research/lyncs/](http://www2.warwick.ac.uk/fac/med/research/hscience/sssh/research/lyncs/)
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