Multimedia Appendix 3. Citation analysis of systematic reviews and meta-analyses of home telemonitoring interventions for patients with heart failure.

A bibliographic analysis was carried out by means of simple matrices to assess whether the identification of relevant primary studies in each systematic review and meta-analysis was comprehensive and the extent to which reviews overlapped.

Citation matrices that cross-linked individual reviews with the corresponding primary study identified and included in that review were generated separately for each chronic disease considered. Here, we present as an example, the citation patterns of reviews that focused on patients with heart failure.
**Figure 1:** Citation matrix of previously published RCTs of Home Telemonitoring interventions involving patients with Heart Failure (full peer reviewed publications, abstracts and non-English articles; duplicate publications have been merged)

<table>
<thead>
<tr>
<th>Author - Publication date</th>
<th>Number of RCTs</th>
<th>Reported search range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaudhry - Feb 2007</td>
<td>4</td>
<td>1966 - Aug 2006</td>
</tr>
<tr>
<td>Clark - May 2007</td>
<td>5</td>
<td>Jan 2002 - May 2006*</td>
</tr>
<tr>
<td>Paré - May 2007</td>
<td>7</td>
<td>1990 - 2006</td>
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<tr>
<td>Seto - Sep 2008</td>
<td>5</td>
<td>all dates - Nov 2007</td>
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<tr>
<td>Paré - Apr 2010</td>
<td>12</td>
<td>1966 - 2008</td>
</tr>
<tr>
<td>Inglis - Aug 2010</td>
<td>14</td>
<td>Jan 2002- Nov 2008**</td>
</tr>
<tr>
<td>Giamouzis - June 2012</td>
<td>12</td>
<td>2001- Nov 2011</td>
</tr>
</tbody>
</table>

- **Primary study cited and included in the systematic review**
- **nE** Non English publication of primary study cited and included in the systematic review
- **A** Study published as Abstract
- **ex** Study was cited as excluded because it did not meet the eligibility criteria
- **TS** Study was interpreted and meta-analyzed as structured telephone support not home telemonitoring
- **X** Study published after the reported end date of the search for relevant articles
- **TS** Study published after the reported end date of the search for relevant articles
- **TT** Study published after the publication date of the systematic review

* Update of the systematic review by Louis et al (2003)
** Update of the systematic review by Clark et al (2007)
Figure 2: Citation matrix of previously published RCTs of Home Telemonitoring interventions involving patients with Heart Failure (full peer reviewed English publications only; duplicate publications have been merged; abstracts are excluded)

<table>
<thead>
<tr>
<th>Author - Publication date</th>
<th>Number of RCTs</th>
<th>Reported search range</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Giamouzis - June 2012</td>
<td>12</td>
<td>2001 - Nov 2011</td>
</tr>
</tbody>
</table>

Legend:
- Primary study cited and included in the systematic review
- Non English publication of primary study cited and included in the systematic review
- Study was cited as excluded because it did not meet the eligibility criteria
- Study was interpreted and meta-analyzed as structured telephone support not home telemonitoring
- Study published after the reported end date of the search for relevant articles
- Study published after publication date of the systematic review
- Update of the systematic review by Louis et al (2003)
- Update of the systematic review by Clark et al (2007)
**Figure 3:** Citation matrix of previously published non-randomized and observational studies of Home Telemonitoring interventions involving patients with Heart Failure (full peer reviewed publications and abstracts)

<table>
<thead>
<tr>
<th>Author - Publication date</th>
<th>Number of studies</th>
<th>Reported search range</th>
<th>Louis - Oct 2003</th>
<th>Paré - May 2007</th>
<th>Seto - Sep 2008</th>
<th>Polisena - March 2010</th>
<th>Paré - Apr 2010</th>
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<tbody>
<tr>
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<td>all dates - Nov 2007</td>
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<tr>
<td>Polisena - March 2010</td>
<td>10</td>
<td>1998 - 2008</td>
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<td>Paré - Apr 2010</td>
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<td>1966 - 2008</td>
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</table>

- **A** Primary study cited and included in the systematic review
- **Study published as Abstract**
- **Study published after the end date of the search for relevant articles**
- **ex** Study was cited as excluded because it did not meet the eligibility criteria
- **X** Study published after publication date of study in question
**Figure 4:** Citation matrix of previously published non-randomized and observational studies of Home Telemonitoring interventions involving patients with Heart Failure (full peer reviewed publications only)

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</tbody>
</table>

- **A** Primary study cited and included in the systematic review
- **Study published as Abstract**
- **Study published after the end date of the search for relevant articles**
- **ex** Study was cited as excluded because it did not meet the eligibility criteria
- **X** Study published after publication date of study in question
References of primary studies on heart failure included in the systematic reviews


44. Macropoulos LR, Knoop JD. CHF hospital admissions reduced by 57% (0.234 PPPY) in medicare population and 48% (0.299 PPPY) in commercial population using advanced home monitoring program in large patient population. Journal of Cardiac Failure. 2002;9(5):S103. Doi: 10.1016/S1071-9164(03)00178-7.


