The national Clinical Research Nurse workforce – how is it structured?

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Background
Background – Where did it all start?
Development of the Clinical Research Nurse (CRN) role since the late 1980’s.
Increasing research governance
NHS Cancer Plan 2000 led to set up of National Cancer Research Network
Increase in national research infrastructure following DH report “Best Research for Best Health” (2006)
  • Set up of the NIHR
  • Roll out of topic specific networks
  • Funding for Clinical Research Facilities
  • Funding and structure of Biomedical Research Centres / Units.
Growth of NIHR portfolio led to increase in funding available.
Increase in CRN posts and beginning of the emergence of non nursing roles

Situation in 2012
Known large increase in the size of the CRN workforce.
Limited empirical data on workforce size and structure:
  • MacArthur and Hill (2006)
  • Ledger (2008)
  • Coulson and Grange (2012)
Small number of unpublished workforce reviews:
  • Simpson (2006)
  • Carrick – Sen (2007)
  • Edwards (2008)
Anecdotal articles speculating on workforce size:
  • Pidd and O’Neill (2011) – “conservative estimate anticipates a UK wide workforce of around 10,000 by 2013”.

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Overall research questions

• How is the CRN workforce currently organised within NHS Acute trusts?

• What is the experience of CRNs working within acute NHS hospital trusts?

• What is the most effective way to structure the CRN workforce?
Methodology

- Used a pragmatic mixed methods approach.
- Pragmatism allows the researcher to use a combination of whichever methods are needed to find answers to the research questions.
- Instead of focusing on methods, researchers initially emphasise the research question and then use all approaches available to understand the issues within it (Morgan 2007).
- For mixed methods researchers, pragmatism opens the doors to use of multiple method, different worldviews and different assumptions gained from different forms of data collection (Cresswell 2009).
- A pragmatic approach enabled the researcher to initially consider the research questions to be explored. This then led to the use of a variety of data collection methods in order to gain a broader understanding of the issues being explored.

What did I do?

2 Phase study:

Phase 1: National Survey
- To gain an overview of the current CRN workforce and the teams within which they are based.
- To identify which organisations have reviewed their CRN workforce and what form this has taken.

Phase 2: Case Study of 4 organisations
- To explore and compare the experience of CRNs within different organisations using a quality framework.
- To explore the experience and perception of senior research staff (R&D Directors, Lead CRN and PI’s concerning the CRN workforce)
- To further examine the workforce structure currently in place.
What did I do?

National survey of UK CRN workforce.
Planned survey to send to Lead CRN across the UK.
Planned participants (n = 177):
• 161 Acute NHS Trusts
• 14 Scottish Health Boards
• 1 organisation each in Wales and Northern Ireland
Developed survey using framework which identifies the 6 challenges of Quality Improvement
Piloted with Network Managers in December 2013 prior to re structure of national network infrastructure
Aimed to send to Lead CRN in each organisation or the individual responsible for the CRN workforce.
Survey ran from April to July 2015

Physical & Technological
infrastructure and technologies supportive of improvement and quality of care

Structural
structuring, planning and co-ordinating the improvement effort

Political
negotiating the buy-in, conflict, opposition, and other politics of change

Emotional
energising, mobilising, and inspiring people to join in the improvement effort

Educational
establishing and nurturing a learning process to support continual improvement

Cultural
giving 'quality' a shared, collective meaning, value and significance
## Results

### Responses

<table>
<thead>
<tr>
<th>Type of Trust</th>
<th>Total number</th>
<th>Total sent survey</th>
<th>Number of replies received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Acute</td>
<td>25</td>
<td>21</td>
<td>16 (14.5%)</td>
</tr>
<tr>
<td>Medium Acute</td>
<td>46</td>
<td>36</td>
<td>26 (23.5%)</td>
</tr>
<tr>
<td>Large Acute</td>
<td>43</td>
<td>38</td>
<td>29 (26%)</td>
</tr>
<tr>
<td>Teaching</td>
<td>24</td>
<td>24</td>
<td>19 (17%)</td>
</tr>
<tr>
<td>Specialist</td>
<td>19</td>
<td>16</td>
<td>12 (11%)</td>
</tr>
<tr>
<td>NHS Scottish Health Boards</td>
<td>14</td>
<td>7</td>
<td>7 (6%)</td>
</tr>
<tr>
<td>Wales &amp; Northern Ireland</td>
<td>2</td>
<td>2</td>
<td>2 (2%)</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>173</strong></td>
<td><strong>144</strong></td>
<td><strong>111 (77%)</strong></td>
</tr>
</tbody>
</table>
## Distribution of respondents by role

<table>
<thead>
<tr>
<th>Level of post</th>
<th>Total Number</th>
<th>Post Title</th>
<th>Number of respondents</th>
<th>Total % response per band</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band 6</td>
<td>2</td>
<td>Clinical Research Nurse</td>
<td>1/111 (0.9%)</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical Trials Co-ordinator</td>
<td>1/111 (0.9%)</td>
<td></td>
</tr>
<tr>
<td>Band 7</td>
<td>41</td>
<td>Clinical Research Nurse</td>
<td>26/111 (23.5%)</td>
<td>30.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trials Practitioner / Co-</td>
<td>5/111 (4.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ordinator</td>
<td>6/111 (5.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>R&amp;D Manager</td>
<td>4/111 (3.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Band 8a</td>
<td>45</td>
<td>Matron</td>
<td>4/111 (3.5%)</td>
<td>42.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lead CRN</td>
<td>25/111 (22.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>R&amp;D Manager</td>
<td>10/111 (9%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research Manager</td>
<td>6/111 (5.5%)</td>
<td></td>
</tr>
<tr>
<td>Band 8b</td>
<td>12</td>
<td>Lead CRN</td>
<td>9/111 (8%)</td>
<td>11.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R&amp;D Manager / Research</td>
<td>2/111 (1.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manager</td>
<td>1/111 (0.9%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chief Nurse – R&amp;D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Band 8c</td>
<td>6</td>
<td>Lead CRN</td>
<td>4/111 (3.5%)</td>
<td>5.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head of Nursing for Research</td>
<td>1/111 (0.9%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>R&amp;D Director</td>
<td>1/111 (0.9%)</td>
<td></td>
</tr>
</tbody>
</table>
Distribution of respondents by organisation and band

Respondents by organisation type
Results

- An inconsistent workforce structure, both nationally and within organisations, was identified.
- Organisations had a range of different workforce structures in place to support their CRN workforce.
- For the majority of organisations, the structure had evolved in a reactive manner in response to local and national influences.
- The CRN workforce is mainly comprised of band 6 and band 7 research nurses with 50% (55/111) organisations having band 5 research nurse posts.
- 53% (59/111) organisations had reviewed their workforce to further improve recruitment of which 25% (15/59) had subsequently re-structured.
- Smaller organisations favoured a generic workforce covering many clinical areas.
- The case study phase demonstrated that within these 4 organisations, the oncology CRN workforce was managed separately from the remainder of the CRN workforce.

Is your CRN workforce embedded in a defined structure?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent (Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN workforce works as part of the Local Research Networks or within one of the divisions</td>
<td>86% (73)</td>
</tr>
<tr>
<td>Organisation has one or more Clinical Research Facilities (CRFs)</td>
<td>34% (23)</td>
</tr>
<tr>
<td>Organisation is part of the Network of Experimental Cancer Medicine Centres (ECMC)</td>
<td>16.5% (14)</td>
</tr>
<tr>
<td>Organisation has been assigned as one of the NIHR Biomedical Research Units</td>
<td>10.5% (9)</td>
</tr>
<tr>
<td>Organisation is part of an Allied Health Sciences Centre</td>
<td>10.5% (9)</td>
</tr>
<tr>
<td>Organisation has been assigned as one of the NIHR Biomedical Research Centres</td>
<td>5.5% (8)</td>
</tr>
<tr>
<td>Answered question (Skipped question)</td>
<td>85 (26)</td>
</tr>
</tbody>
</table>

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CRN team structures

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Proportion of response (count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working directly with Consultants on their research studies</td>
<td>63.5% (52)</td>
</tr>
<tr>
<td>In a structured research team within one clinical area</td>
<td>55% (45)</td>
</tr>
<tr>
<td>Working within clinical teams with non-research colleagues</td>
<td>51% (42)</td>
</tr>
<tr>
<td>Working within a Clinical Research Facility</td>
<td>40% (33)</td>
</tr>
<tr>
<td>Working in one area in different research teams</td>
<td>38% (31)</td>
</tr>
<tr>
<td>Working independently in one or more clinical teams but not within a research or clinical team</td>
<td>21% (17)</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>30.5% (25)</td>
</tr>
<tr>
<td>Answered question (skipped)</td>
<td>82 (29)</td>
</tr>
</tbody>
</table>

Structure

Banding level of CRN workforce

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NHS
Royal Free London
NHS Foundation Trust
Importance of Lead CRN role

Study highlighted the key role that the Lead CRN has in providing leadership, direction and increased awareness of the CRN workforce.

- Observations that a dedicated Lead CRN had enabled research to run more efficiently.
- CRNs across the organisation commented on feeling “supported” and “focused upon”. It was felt the role was able to “open doors” and speak on behalf of the nurses especially if this involved an awkward conversation.
- Recognition of the importance of having a Lead CRN who was able to line manage the research nurses. It was felt that this would ensure “a very clear performance schedule because to line manage research nurses you have to be a research nurse”.
- The Lead CRN role provided representation at senior nurse meetings across the organisation and enabled links to be developed. CRNs felt this gave them “visibility” from a senior nursing level and their role was “seen as important”.

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Importance of Lead CRN role

Principal Investigators also commented on the positive impact that the Lead CRN role had:

- Acknowledged the importance that having someone who was knowledgeable and with previous experience who had done the role before. They felt that this gave the CRNs "someone with previous experience to guide them" as they often arrive in the role with no experience.

- The P.I’s leading research saw the role as "essential" which provided a "seamless service" which overall "works really well".

- It was felt that the Lead CRN had been able to "draw things together" and "build up a fantastic team".

- Many of the P.I’s described how they now liaised directly with the Lead CRN when considering whether to set up new studies and how "having someone with experience makes a big difference to the running of their studies".

Recommendations and Conclusion
Conclusion

- Study provides the first ever national overview of the CRN workforce.
- It identifies the reactive and inconsistent nature of its growth in response to external and internal influences.
- This dedicated nursing workforce is crucial to support ongoing progress in future research delivery so ensuring continued patient safety.
- Study can be used as the foundation for further in-depth analysis of this workforce to develop a more consistent structure and so support NIHR objectives and ongoing developments in evidence based care.
- The study suggests a possible segregation of the CRN workforce between oncology and non oncology research. This requires further exploration.
- Has identified some important attributes of a potential research nurse workforce structure.
Conclusion

- Proposed workforce model highlights the importance of the Lead CRN.
- Organisations should ensure that the CRN workforce is well led with the establishment of a Lead CRN post.
- The Lead CRN post should be linked in with both the R and D Director and the senior nursing leadership team.
- The post should be positioned at a band 8 level but the exact level within this band will depend on the size of the CRN workforce and the responsibilities within the role.
- Consideration of the proposed workforce model may assist practice and provide organisations with a suggested framework for structuring their CRN workforce and the aspects within this that a Lead CRN will need to implement.

References

Acknowledgements

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