Bibliometric Analysis of Adult Social Care Research in the UK, 1996–2011

Final Methodology
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1 METHODS

The selection of the bibliographic database for the constitution of the adult social care research (ASCR) dataset is discussed in Section 1.1, the construction of an initial dataset of ASCR is discussed in Section 1.2 and the construction of the adult social care research (ASCR) dataset itself is discussed in Section 1.3. Section 1.4 presents the approach used in identifying the 50 most publishing UK institutions and researchers in ASCR. Section 1.5 presents the indicators used in this study.

1.1 SELECTION OF DATABASE

Worldwide, there are only two major bibliographic databases that are suitable to compute statistics on the scientific impact of peer-reviewed research outputs based on citation analyses, namely the Web of Science (WoS) by Thomson Reuters and Scopus by Elsevier. These types of analyses are possible because these databases index the cited references of each document they contain (e.g., articles, conference papers, letters, reviews, notes and press releases). This study is based on Elsevier’s Scopus abstract and citation database of peer-reviewed literature. Scopus was chosen over the WoS for its broader coverage of the scientific literature in the Social Sciences and Humanities (SSH) and because its bias towards literature written in English is less pronounced than it is in the WoS. Scopus also has a broad coverage of the scientific literature in the Natural Sciences and Engineering (NSE) and in the life sciences, including more than 15,000 peer-reviewed journals from over 4,000 international publishers and covering at least 90% of papers indexed in Medline, a bibliographic database of life sciences and biomedical information compiled by the United States National Library of Medicine (NLM). In addition, compared to the WoS, Scopus links the authors of papers to their institutional addresses, which significantly reduces the time required to clean the publication portfolios of researchers and the risk of falsely assigning a paper to a researcher.

In producing bibliometric data, only documents that were peer-reviewed prior to being accepted for publication were retained. The peer-review process ensures that the research is of good quality and constitutes an original contribution to scientific knowledge. Moreover, the study is based on a selection of document types that include references to and are cited by other academic documents. These document types are mainly articles, conference papers and reviews, collectively referred to in this report as papers. All papers published over the 1996–2011 period (i.e., all 16 years for which citation data is available in Scopus) were considered in producing the dataset for this study. Please note that the fields and subfields used in building the dataset on adult social care research are based on Science-Metrix’ journal-based classification of scientific papers.1,2 This taxonomy is based on a traditional disciplinary subdivision of science being somewhat similar to the patterns of departmental subdivision found in academic institutions (e.g., biology, mathematics).


1.2 Construction of the Initial ASCR Dataset

The bibliometric analysis was commissioned by the NIHR School for Social Care Research (SSCR) which has only been in existence since 2009. As SSCR is a commissioning body, and studies were funded for 2-3 years duration, it is unlikely that the research activities performed/funded by the school would have led to the publication of an appreciable number of peer-reviewed scientific papers prior to 2012 (at the earliest) considering the usual time-lag of two years between the reception of funding and the publication of the resulting findings. Furthermore, by searching the name or abbreviation of SSCR in the author addresses of papers in Scopus, only five paper was retrieved, one of which was published in 2010 and the remaining ones in 2011.

In order to provide a starting point, and because the core of SSCR (in its first phase) comprised six research groups that existed prior its establishment and were awarded core SSCR membership because of their ASCR track records, the names or abbreviations of these units as well as those of the school were searched for in the author addresses of papers in Scopus to retrieve papers that are highly likely to be representative (in terms of scope of research [i.e., scientific specialisation], production volume and scientific impact) of the research to be relevant to ASCR funded by SSCR. The six units covered by the dataset are as follows:

- Personal Social Services Research Unit, London School of Economics (LSE)
- Personal Social Services Research Unit, University of Manchester
- Personal Social Services Research Unit, University of Kent
- Social Policy Research Unit, University of York
- Social Care Workforce Research Unit, King’s College London
- Tizard Centre, University of Kent

1.3 Construction of ASCR Dataset

In building a dataset of peer-reviewed literature for the field of adult social care research, a first step has been to analyse the scientific literature making use of the term ‘social care’. It was found that the term ‘social care’ is highly specific to the UK whose share of all papers with this term in their titles, abstracts or author keywords is equal to 71% (see Table I).
Table I  Distribution of papers with the term ‘social care’ in their titles, abstracts or author keywords across countries (1996-2011)

<table>
<thead>
<tr>
<th>Country</th>
<th>Papers</th>
<th>% of papers with the term 'social care'</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>2006</td>
<td>70.5%</td>
</tr>
<tr>
<td>United States</td>
<td>92</td>
<td>3.2%</td>
</tr>
<tr>
<td>Germany</td>
<td>82</td>
<td>2.9%</td>
</tr>
<tr>
<td>France</td>
<td>76</td>
<td>2.7%</td>
</tr>
<tr>
<td>Canada</td>
<td>75</td>
<td>2.6%</td>
</tr>
<tr>
<td>Sweden</td>
<td>66</td>
<td>2.3%</td>
</tr>
<tr>
<td>Australia</td>
<td>66</td>
<td>2.3%</td>
</tr>
<tr>
<td>Spain</td>
<td>57</td>
<td>2.0%</td>
</tr>
<tr>
<td>Italy</td>
<td>53</td>
<td>1.9%</td>
</tr>
<tr>
<td>Ireland</td>
<td>53</td>
<td>1.9%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>41</td>
<td>1.4%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>40</td>
<td>1.4%</td>
</tr>
<tr>
<td>Finland</td>
<td>38</td>
<td>1.3%</td>
</tr>
<tr>
<td>Croatia</td>
<td>38</td>
<td>1.3%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>32</td>
<td>1.1%</td>
</tr>
<tr>
<td>Norway</td>
<td>29</td>
<td>1.0%</td>
</tr>
<tr>
<td>Greece</td>
<td>29</td>
<td>1.0%</td>
</tr>
<tr>
<td>Poland</td>
<td>26</td>
<td>0.9%</td>
</tr>
<tr>
<td>China</td>
<td>25</td>
<td>0.9%</td>
</tr>
<tr>
<td>Denmark</td>
<td>23</td>
<td>0.8%</td>
</tr>
<tr>
<td>Belgium</td>
<td>23</td>
<td>0.8%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>19</td>
<td>0.7%</td>
</tr>
<tr>
<td>Brazil</td>
<td>17</td>
<td>0.6%</td>
</tr>
<tr>
<td>Portugal</td>
<td>15</td>
<td>0.5%</td>
</tr>
<tr>
<td>Japan</td>
<td>15</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Source: Computed by Science-Metrix using Scopus

In fact, the usage of this term is negligible outside the UK; the next countries with the largest shares are the US and Germany (each with a share of about 3%). After examining relevant online resources, it appeared that the term ‘social care’ might be equivalent to ‘social work’ in other countries. This was supported by the fact that until August 1st 2010, the General Social Care Council (GSCC) was the regulator of social workers and social work education in England.3

However, slight differences might exist in the subjects covered under the ‘social care’ label in the UK and the ‘social work’ label in other countries (e.g., social care research might encompass more than just social work research). Thus, prior to building a dataset of scientific papers on adult social care research, an extensive analysis of the papers with the term ‘social care’ in their titles, abstracts or author keywords as well as of the initial ASCR dataset papers (all papers produced by the core member groups of the school and indexed in Scopus were identified by searching the name of the school and its units in the author address field of papers in the database) in Scopus was performed to better grasp the diversity of subjects covered under the ‘social care’ label. Papers

3 http://www.gsc.org.uk/holding.html
with the ‘social care' keyword in their titles, abstracts or author keywords published between 1996 and 2010 and covered in Scopus were used in this regard.

To uncover the subjects of highest relevance to this set of papers using Medline’s controlled vocabulary (i.e., Medical Subject Headings, MeSH) for indexing journal articles by subject in the life sciences, the resulting set of papers was matched with the Medline database using an algorithm developed at Science-Metrix. Only major terms were used at this stage (MeSH terms associated to a paper are classified as ‘major’ if they represent a major focus of the study). The map shown in Figure 1 was built based on the similarities between major MeSH terms which were computed from their co-occurrence patterns in the retrieved papers that were matched with Medline. Thus, the closer two MeSH terms are to one another on the map, the more closely related they are. Each bubble on the map represents a unique MeSH term and the bubbles were coloured using a clustering algorithm. Terms of the same colour are also closely related. Finally, the size of a bubble is proportional to the occurrence of the corresponding Mesh term in the dataset. Frequent MeSH terms in SCR include: aged, mental health service, intellectual disability, health service, social work and health care cost. To further assess the specificity of Mesh terms to the above set of papers, the TF-IDF weight of MeSH terms was computed. In information retrieval, the terms within a corpus of document can be normalized using the TF-IDF weight (term frequency–inverse document frequency). This weight is a statistical measure used to evaluate how important a word (or expression) is to a corpus relative to a reference collection. The importance increases proportionally to the number of times a word appears in the cluster but is offset by the frequency of the word in the reference collection (in the present case, the reference collection consist of all papers in Scopus that can be matched to Medline). This operation increases the detection of rare words. By sorting MeSH terms in descending order of their specificity (i.e., TF-IDF) to the above set of papers, it was possible to establish that the MeSH term of highest relevance to SCR is social work, thus confirming that ‘social care’ is somewhat synonymous of ‘social work’.
Noun phrases were then extracted from papers in the initial ASCR dataset and the papers with the ‘social care’ keyword in their titles, abstracts or author keywords to better grasp the topics covered by SCR. The map shown in Figure 2 was built based on the similarities between noun phrases which were computed from their co-occurrence patterns in the retrieved papers. Thus, the closer two noun phrases are to one another on the map, the more closely related they are. Each bubble on the map represents a unique noun phrase and the bubbles were coloured using a clustering algorithm. Noun phrases of the same colour are also closely related. Finally, the size of a bubble is proportional to the occurrence of the corresponding noun phrase in the dataset. This map shows that SCR relates to social care for the elderly (clusters in light blue and violet), people with mental illnesses and other disabilities (clusters in yellow and red), young people (red cluster); however, note that this study is on adult social care research since the school focuses on this population. It also relates to the delivery of health care and the social care profession (e.g., integrated health care, interprofessional education and practice, job satisfaction; green and pink clusters). Noun phrases related to social policy and the economics of health and social care are

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found throughout the map. Finally, the map indicates that most of social care relates to care given in the community; for example in nursing homes, foster homes, care homes and hospices.

Figure 2 Co-word map of noun phrases extracted from the papers in the initial ASCR dataset as well as with the ‘social care’ keyword in their titles, abstracts or author keywords (1996-2010)

Source: Computed by Science-Metrix using Scopus and Medline. The visual display was produced with VosViewer.5

Because the MeSH term of highest relevance to SCR is social work, Science-Metrix has used a set of specialist journals in social work (112 journals; See the Appendix for a listing of these journals) as a seed in creating the dataset for ASCR. These journals were identified either from the list of journals falling in the subfield of Social Work in Science-Metrix’ journal based classification of science6 (see Section 1.1) or from SSCR staff input (some social policy journals were also

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included); note that journals dealing specifically with youth were excluded as the study focuses on adult social care research. From there, three steps have been used to expand the seed dataset:

1) Extraction of additional papers from Scopus as a whole using MeSH Terms highly specific to the seed dataset (dataset 1) as well as to the papers in initial ASCR dataset (dataset 2) and the papers with the ‘social care’ keyword in their titles, abstracts or author keywords (dataset 3) (i.e., the TF-IDF of major MeSH terms in each of these datasets [the intersection of dataset 1, 2 and 3 with Medline] was computed to identify relevant Mesh terms); and

2) Extraction of additional papers from the whole of Scopus using noun phrases highly specific to dataset 1, 2 and 3 (again using the TF-IDF).

3) Finally, papers having received at least 4 citations, 60% of which are from the expanded dataset (i.e., dataset 1 after the two steps described above) were included as well as papers having referenced at least 5 papers, 60% of which are from the expanded dataset.

When building a dataset on a specific research area, two indicators (i.e., recall and precision) must be maximized to optimize the resulting dataset. However, the gains for one indicator are often offset by the gains for the other. Thus, a balance must be achieved between recall (i.e., the percentage of false negatives, relevant papers that were not retrieved, must be reduced) and precision (i.e., the percentage of false positives, irrelevant papers that were accidentally retrieved, must be reduced). The most relevant MeSH terms and noun phrases identified using the TF-IDF weight were therefore tested (in groups of different sizes; sometimes one term at a time and sometimes multiple terms at a time) for their incremental value in building the ASCR dataset (i.e., for their recall) and for their precision (i.e., % of false positives). The selected MeSH terms and noun phrases were then used to extract additional papers from the whole of the Scopus database. The set of MeSH terms and noun phrases to include in the final query was expanded until a satisfactory recall of dataset 1, 2 and 3 was achieved. It is often more difficult to obtain a high recall in the SSH as the language used is often less specialised (i.e., terms in these areas is often used more broadly) than in the NSE. Based on past experiences, Science-Metrix considers a recall in the order of 70% to be excellent in these areas. In this study, Science-Metrix query using Mesh terms and noun phrases retrieved 35% of all papers in dataset 1 (i.e., in the specialist journals), 67% of all papers in dataset 2 (i.e., initial ASCR dataset papers), and 55% of all papers in dataset 3 (i.e., excluding the noun phrase ‘social care’ from the query since it was used to create this dataset). Taken individually, these recalls are not satisfactory. However, expanding the seed dataset (i.e., dataset 1) with the results of Science-Metrix query using Mesh terms and noun phrases (step 1 and 2, see above) as well as with the results of the third approach searching for papers preferentially ‘citing’ or ‘cited by’ the core dataset (step 3, see above) allowed increasing the coverage of the papers within the initial ASCR dataset to 83%, thereby reaching a recall well above the satisfactory threshold for the SSH (see above). The final ASCR dataset thus include the papers from the specialist journals, the papers retrieved using the query based on Mesh terms and noun phrases (including the term ‘social care’) as well as the papers preferentially ‘citing’ or ‘cited by’ the core dataset.

An analysis of the 131 papers in the initial ASCR dataset (17% of total) not retrieved by Science-Metrix’ query revealed that about 36% of missed papers relate to social care for young people and that another 21% relate to the economics of health and social care. In the current query, children were not voluntarily included since SSCR – who commissioned the analysis - focuses on adult
social care research. In addition, the economics of social care was not thoroughly covered since this would result in the inclusion of a significant amount of papers on the economics of health care. The high ratio of economics papers in the missed ones might, to some extent, explain the lower recall of the papers for the following two units: the Social Policy Research Unit-University of York (73% recall) and the PSSRU-London School of Economics (LSE; 76% recall).

Based on a random sample of 30 papers from the resulting dataset (195,829 ASCR papers in Scopus for the 1996-2011 period; see Appendix one for the complete query), the precision is estimated as follows:

- about 7% of false positives (most of which could not be removed without reducing importantly the recall),
- 14% of peripheral research, and
- 79% of core research.

Thus, the precision of the dataset is good.

1.4 Cleaning Top Institutions and Researchers in the UK

To obtain the list of most publishing institutions in the UK, the author addresses of papers in the ASCR dataset were carefully standardized (i.e., cleaned). Often, the format of author addresses varies across data sources and even within a single source. For example, the University of Durham might appear as “Univ Durham”, “University of Durham”, or “Durham University”. Science-Metrix analysts have made significant effort to clean the various databases it uses to ensure the integrity and uniformity of the records across data sources and to produce robust statistics.

The standardization of the author addresses was performed in an Excel file that contained all author addresses listed in the Scopus database for the papers found in the ASCR dataset for the 2003–2011 period, as well as the number of ASCR papers associated with each address. In this file, expert analysts searched for specific names, abbreviations and/or pieces of words (using filters and various fuzzy logic functions) used in the author addresses of leading research institutions to assign a cleaned name to each author address.

Cleaning the preliminary lists of institutions begins with those that publish the most to those that publish the least. This is done until it becomes highly improbable that an “un-cleaned” institution would have more publications once cleaned than the institution having produced the least amount of papers within the top 50. Once a list of institutions that publish the most has been identified and their addresses standardized, validation and quality control measures are conducted to verify the results of the standardization. Finally, when the standardization process is completed, the unique and standardized institution names are reincorporated in the database, where they can be used to produce robust bibliometric data and statistics at the institutional level.

The institutions that publish the most were identified based on a 9-year period to allow for a robust analysis of their growth in terms of the size of their production. A similar approach was

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7 [http://www.sscr.nihr.ac.uk](http://www.sscr.nihr.ac.uk)
used to obtain the list of the UK’s most publishing researchers, but instead of cleaning the author addresses, the names of researchers were cleaned.

### 1.5 Bibliometric Indicators

Using the datasets presented above, the following indicators were computed:

**Number of papers**: Whole counting of the number of scientific papers written by researchers based on author names, or by authors associated with a region (i.e., an institution, a country) based on author addresses.

**Growth Index (GI)**: This indicator represents the ratio in the output of a given entity (e.g., a researcher) between the first and second halves of a study period. In other words, it measures the increase in the number of publications.

\[
\text{Increase} = \frac{X_b}{X_a}
\]

Where:

- \(X_a\) = Publications from entity X published between 2003 and 2006; and
- \(X_b\) = Publications from entity X published between 2008–2011.

The increase for a given entity can be compared to the increase calculated for the world in the same research area in order to ascertain whether the increase experienced by the entity has kept pace with the world increase in this research area.

**Specialization index (SI)**: The SI is an indicator of the research intensity of a given entity (e.g., a country, an institution, or a researcher) in a given research area (e.g., a field or topic), relative to the intensity of a reference entity (e.g., the world, or the entire output as measured by the database) in the same research area. In other words, when a country is specialized in a field, it places more emphasis on that field at the expense of other research areas. Specialization is therefore said to be a zero sum game: the more one specializes somewhere, the less it does elsewhere. The SI is formulated as follows:

\[
\text{SI} = \frac{X_s / X_T}{N_s / N_T}
\]

Where:

- \(X_s\) = Publications from entity X in a given area (e.g., papers by SSCR units in ASCR);
- \(X_T\) = Publications from entity X in a reference set of papers (e.g., total papers by core research units within SSCR in Scopus);
- \(N_s\) = Publications from reference entity N in a given topic (e.g., world papers in ASCR);
- \(N_T\) = Publications from reference entity N in a reference set of papers (e.g., total world papers in Scopus).

An index value above 1 means that a given entity is specialized in a given area within ASCR relative to the reference entity, whereas an index value below 1 means the reverse.

**Average of relative citations (ARC)**: This is an indicator of the scientific impact of the papers produced by an entity (e.g., country, institution, and researcher) on the scientific community. It is based on the number of citations received by the papers (i.e., citation counts) produced by the
entity. In general, papers reach a citation peak year (i.e., when they receive the highest number of citations) four to five years after publication in the social sciences & humanities (SSH). Thus, the number of citations to each paper was counted for the year in which it was published and all subsequent years. This results in a variable citation window across publication years. To compensate this inequality across papers published in different years (older papers have had more time to accumulate citations) as well as the inequality arising from differences in citation practices across scientific fields (papers published in the field of biochemistry include around 30 references, while mathematics papers generally have fewer than 10), the citation count of papers was normalised by the average citation count for all papers in their subfield for the year in which they were published to obtain a relative citation count (RC). The ARC of a given entity (e.g., a country, an institution, a researcher) is the average of the RC of papers belonging to it (i.e., if an institution has 20 papers, the ARC is the average of 20 RC, or one per paper). When the ARC is above 1, the entity (e.g., country, institution) scores better than the world on average; when it is below 1, this means that the papers it publishes are cited less often than the world average. Because ARC scores computed using short citation windows are unreliable, the years 2010 and 2011 were not considered in computing the ARC.

Average of relative impact factors (ARIF): This indicator measures the expected impact of an entity’s papers based on the journals in which they are published. However, this indicator has been shown to correlate poorly with the observed scientific impact of papers (i.e., the ARC) at low aggregation levels (i.e., researchers). Its main advantage is that, compared to the ARC, it can be computed up to the latest available year. In addition, this indicator can serve as a proxy for the ‘quality’ of the research performed by a given entity. Indeed, the more cited a journal, the more researchers will seek to publish in it. This means that editors can be more selective, thus producing a virtuous circle wherein the most highly cited journals select the best papers, which are then more cited, which in turn increases the impact factor of the journal.

Each journal has an impact factor (IF), which is calculated annually by Thomson Reuters based on the number of citations it received relative to the number of papers it published (see: http://scientific.thomson.com/free/essays/journalcitationreports/impactfactor/). Thus, each journal’s IF will vary from year to year. The IF of a journal in 2007 is equal to the number of citations to articles published in 2006 (8) and 2005 (15) divided by the number of articles published in 2006 (15) and 2005 (23) (i.e., IF = numerator [23] / denominator [38] = 0.605). However, as pointed out by Moed and colleagues (1999), Thomson Reuters’ IF is flawed in that its numerator and denominator are not symmetric:

ISI classifies documents into types. In calculating the nominator of the IF, ISI counts citations to all types of documents, while as citable documents in the denominator ISI includes as a standard only normal articles, notes and reviews. However, editorials, letters, and several other types are cited rather frequently in a number of journals. When they are cited, these types do contribute to the citation counts in the IF’s nominator, but are not included in the denominator. In a sense, the citations to these documents are “for free.”

In this study, we therefore used a symmetric IF based on three documents types (i.e., articles, notes, and reviews), computed using Elsevier’s Scopus database.

The IF of papers is calculated by ascribing to them the IF of the journal in which they are published for the year in which they are published. To account for different citation patterns across fields and subfields of science (e.g., there are more citations in biomedical research than mathematics), each paper’s IF was subsequently divided by the average IF of the papers published the same year in its subfield to obtain the Relative Impact Factor (RIF). The ARIF of a given
entity is the average of its RIFs (i.e., if an institution has 20 papers, the ARIF is the average of 20 RIFs, or one per paper). When the ARIF is above 1, it means that an entity scores better than the world average; when it is below 1, it means that on average, an entity publishes in journals that are not cited as often as the world level. Note that because citations take longer to accumulate in the SSH, an impact factor based on five years was computed.

**Positional analysis:** Radar graphs, also called positional analysis, are used by Science-Metrix to aid in the interpretation of relative strengths and weaknesses of an entity (e.g., a country or an institution) and/or to compare different entities through the combination of three indicators in a two-dimensional space. The horizontal axis of radar graphs corresponds to the specialisation index (SI) and the vertical axis to the average of relative citations (i.e., a measure of scientific impact; ARC).

In radar graphs, the SI and ARC scores are transformed to obtain a symmetrical distribution of possible scores around the world level (i.e., the origin in the Cartesian coordinate system). Thus, the strengths of an entity are to be found in the top right quadrant (high level of specialisation, high level of impact). The third dimension is obtained by making the size of data points in the graph proportional to the number of publications produced by the corresponding entities; the colours of data points in the graph can be customized for example, to differentiate entities.

**Social network analyses:** Collaboration networks are used to study the patterns of scientific collaboration between entities (e.g., institutions or researchers). Based on a matrix cross-linking entities based on their number of co-publications (a symmetric matrix in full or sparse format), the software programs GEPHI is used to produce a visual representation of the strength of the relationships between the selected entities. More specifically, a ‘force atlas’ algorithm (similar to a ‘spring-embedding’ algorithm with node repulsion and equal edge length) is used to establish the relative locations of the entities in the graphic representation. Statistics (e.g., degree of nodes or average weighted in-degree within the network) describing the network were computed and represented on the graphic. Finally, entities are clustered into communities (the clustering algorithm identifies the optimal clustering of nodes in communities by maximising the density of edges within communities at the expense of the density of edges between communities).
Appendix — Query to build the SCR dataset

Phase 1 (seed dataset): Below is the list of specialist journals whose papers are included in the SCR dataset

Administration in Social Work
Affilia - Journal of Women and Social Work
Age and Ageing
Ageing and Society
Aging & Mental Health
American journal on intellectual and developmental disabilities
Asia Pacific Journal Of Social Work
Australian Social Work
Autism
Benefits quarterly
British Journal of Learning Disabilities
British Journal of Occupational Therapy
British Journal of Social Work
Care Management Journals
Clinical Social Work Journal
Clinical Supervisor
Community Care
Continuum (Society for Social Work Administrators in Health Care)
Crisis Intervention and Time Limited Treatment
Critical Social Policy
Dementia
Disability & Society
European Journal of Social Work
Evidence and Policy
Families in Society
Fiscal Studies
Global Social Policy
Groupwork
Health & Social Care In The Community
Health & social work
Health Economics
Health Economics, Policy and Law
Health Policy
Health Risk & Society
Indian Journal of Social Work
Intellectual and Developmental Disabilities
International Journal of Geriatric Psychiatry
International Journal of Public Administration
International Journal of Social Research Methodology
International Journal of Social Welfare
International Psychogeriatrics
International Social Work
Journal of Adult Protection
Journal of Applied Research in Intellectual Disabilities
Journal of Autism and Developmental Disorders
Journal of Community Practice
Journal of Dementia Care
Journal of Developmental and Physical Disabilities
Journal of elder abuse & neglect
Journal of Epidemiology and Community Health
Journal of Ethnic and Cultural Diversity in Social Work
Journal of European Social Policy
Journal of Evidence-Based Social Work
Journal of Family Social Work
Journal of Gerontological Social Work
Journal of health & social policy
Journal Of Human Behavior In The Social Environment
Journal of Integrated Care
Journal Of Intellectual & Developmental Disability
Journal of Intellectual Disabilities
Journal of Intellectual Disability Research
Journal of Intellectual Disability Research, Supplement
Journal of Interprofessional Care
Journal of Policy and Practice in Intellectual Disabilities
Journal of Policy Practice
Journal of Poverty
Journal of Progressive Human Services
Journal of Public Health
Journal of Religion and Spirituality in Social Work
Journal of Social Policy
Journal of Social Service Research
Journal of Social Work
Journal of Social Work Education
Journal of Social Work Practice
Journal of Sociology and Social Welfare
Journal of Teaching in Social Work
Journal of Technology in Human Services
Journal of the American Geriatrics Society
Journal of the Association for Persons with Severe Handicaps
Mental Retardation
Mental Retardation and Developmental Disabilities Research Reviews
NWSA Journal
Pensee Plurielle
Policy and Politics
Poverty: a global review. Handbook on international poverty research
Practice
Primary Health Care Research and Development
Public Money & Management
Public Welfare
Qualitative Social Work
Research and Practice for Persons with Severe Disabilities
Research in Developmental Disabilities
Research on Social Work Practice
Revista De Cercetare si Interventie Sociala
Scandinavian Journal Of Social Welfare
Sexual abuse : a journal of research and treatment
Sexuality and Disability
Smith College Studies in Social Work
Social Indicators Research
Social Policy & Administration
Social Service Review
Social Work
Social Work & Social Sciences Review
Social Work Education
Social Work in Health Care
Social Work Research
Social Work with Groups
States of health
The Social worker
Tizard Learning Disability Review
Working with Older People

**Phase 2 (expansion of seed dataset using major MeSH terms)**

Social Work
Social Work Department Hospital
Social Work Psychiatric
Social Welfare
Social Support
Nursing Homes
Home Nursing
Deinstitutionalization
Intermediate Care Facilities
Residential Facilities
Residential Treatment
Hospice Care
Homes for the Aged
Group Homes
Self Care
Self-Help Groups
Home Care Agencies
Home Care Services Hospital-Based
Home Care Services
Long-Term Care
Respite Care

**Phase 3** (expansion of seed dataset using major MeSH terms in combination with minor MeSH terms to reduce false positives associated with these major terms)

**Major terms**

((Community Health Services
Community Mental Health Services
Managed Care Programs
Health Care Reform
Delivery of Health Care Integrated
Public Assistance
Medical Assistance
Old Age Assistance
Social Security
Social Justice
Needs Assessment
Health Services Needs and Demand
Public Policy
Community Networks
Policy Making
Politics
Health Policy
Health Services Accessibility)

**AND minor terms**

(Poverty
Homeless Persons
Frail Elderly
Mental Disorders
Substance-Related Disorders
Domestic Violence
Battered Women
Disabled Persons
Elder Abuse)
Crime Victims
Burnout Professional
Developmental Disabilities
spouse abuse
Aged
Dementia
Sexual Harassment
Sex Offences
Social Behavior Disorders
Vulnerable Populations
Mentally Disabled Persons
Learning Disorders
Intellectual Disability
Medically Uninsured
Alzheimer Disease

Phase 4 (expansion of seed dataset using noun phrases): the following noun phrases were searched for in the title, abstract, and author keywords of papers in Scopus

"social care*" OR
"social service*" OR
"social work*" OR
"travail social" OR
"social welfare*" OR
"social group work*" OR
"social protection*" OR
"respite care" OR
"welfare service*" OR
"welfare support*" OR
"welfare care*" OR
"welfare work*" OR
"welfare user*" OR
"welfare recipient*" OR
"Developmental welfare" OR
"welfare system*" OR
"welfare practice*" OR
"Welfare agency" OR
"community care*" OR
"welfare polic*" OR
"care in the community" OR
"community mental health team" OR
"community mental health service*" OR
"residential home*" OR
"Residential care" OR
"home nursing" OR
"home support*" OR
"home care*" OR
"home service*" OR
"support at home*" OR
"service at home*" OR
"care at home*" OR
"care home*" OR
"relative care*" OR
"Out of home care*" OR
"home health care" OR
"home closure*" OR
"informal care*" OR
"self fund care*" OR
"self help group*" OR
"close care" OR
"assisted living home*" OR
"family care*" OR
"dementia service*" OR
"dementia support*" OR
"disable service*" OR
"disable support*" OR
"disabil service*" OR
"disabil support*" OR
"adult protection*" OR
"adult safeguarding*" OR
"protection of vulnerable adult*" OR
"balance of care" OR
"Older people services" OR
"Older people service" OR
"Older people service*" OR
"Older people s support" OR
"Older people s support" OR
"Older people support*" OR
"elder support*" OR
"elder service*" OR
"service for the aged*" OR
"support for the aged*" OR
"care for older people" OR
"care of older people" OR
"older service user*" OR
"long term care*" OR
"longterm care*" OR

("social policy" AND ("care" OR "service*" OR "support")) OR

"self directed support*" OR

"MSW Student*" OR

"MSW program*" OR

("NASW" AND "ethic*") OR

("family intervention" OR "family support") AND ("care" OR "health") OR

"community based rehabilitation*" OR

"group home*" OR

"psychosocial support*"

Phase 5 (expansion of seed dataset using noun phrases): the following noun phrases were searched for in the title and author keywords of papers in Scopus to limit false positives (i.e., not searched in the abstract)

"social support*" OR

"self care*" OR

"supportive care" OR

"nursing home*" OR

"emotional support"

Phase 6 (expansion of seed dataset using noun phrases): the following noun phrases were searched for in the title, abstract and author keywords of papers in Scopus in combination with another set of noun phrases to restrict false positives

("emotional support" OR
"supportive care" OR
"self care*" OR
"social support*" OR
"Service" OR
"protection" OR
"protect" OR
"protecting" OR
"assistance" OR
"Engagement in meaningful activity" OR
"social polic*" OR
"social security" OR
"social justice" OR
"management arrangement*" OR
"care manager*" OR
"day care" OR
"day service*" OR
"care management" OR
"managed care" OR
"care polic*" OR
"inequalit*" OR
"need assessment*" OR
"meeting the needs" OR
"policy" OR
"policies" OR
"welfare" OR
"voluntary organisation*" OR
"care agenc*" OR
"integrated care*" OR
"Anti oppressive*" OR
"Antioppressive*" OR
"social environment" OR
"ethic of care*" OR
"health ethic*" OR
"economic*" OR
"cost effectiveness" OR
"expenditure*")
AND
("disempowered individual*" OR
"disempowered people" OR
"disempowered person" OR
"disempowered adult*" OR
"adult with complex need*" OR
"adult with severe need*" OR
"adult with complex and severe need*" OR
"adult with severe and complex need*" OR
"people with complex need*" OR
"people with severe need*" OR
"people with complex and severe need*" OR
"people with severe and complex need*" OR
"person with complex need*" OR
"person with severe need*" OR
"person with complex and severe need*" OR
"person with severe and complex need*" OR
"individual with complex need*" OR
"individual with severe need*" OR
"individual with complex and severe need*" OR
"individual with severe and complex need*" OR
"person without capacity" OR
"adult without capacity*" OR
"people without capacity" OR
"individual without capacity*" OR
"disabled adult*" OR
"disabled people*" OR
"disabled person" OR
"disabled individual*" OR
"frail adult*" OR
"frail people*" OR
"frail person" OR
"frail individual*" OR
"vulnerable adult*" OR
"vulnerable people*" OR
"vulnerable person" OR
"vulnerable individual*" OR
"adult abuse" OR
"elder abuse" OR
"professional abuse" OR
"disabilities" OR
"disability" OR
"disable" OR
"disabled" OR
"dementia" OR
"chronic illness*" OR
"learning difficult*" OR
"mental health" OR
"mental illness*" OR
"challenging behaviour*" OR
"intellectual disabi*" OR
"older people" OR
"older person" OR
"elderly" OR
"needy famil*" OR
"social impairment" OR
"cognitive impairment" OR
"needy fami*")}