

Appendix 4. General characteristics of included reviews.

| Review | Type of review | Design of included studies | Number of studies | Search dates | Target populations (n) | Health care settings |
|-----------------|----------------|---|-------------------------------|--------------|---|---|
| Anderson (2008) | Mixed | Various, including qualitative, experimental, quasi-experimental, and nonexperimental | 17 | Not reported | Nurses | Emergency department (ED), oncology nursing, in-hospital clinic, long-term care, neonatal unit, critical care |
| Bartoli (2009) | Mixed | Various including quantitative and qualitative (no specific designs were mentioned) | 17 from 40 full-text articles | 1996-2008 | Patients (1236); nurses (23) | Not specified |
| Bowles (2007) | Mixed | Various, including prospective, pre- and posttest, group case control, observational, descriptive, randomized trial, intervention group only, pilot study, longitudinal, quasi-experimental, retrospective chart review | 19 | 1995-2005 | <i>For those numbered:</i> patients (1554), nurses (26) | Home care |

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|--------------------|-----------------------------|---|-----|----------------------------------|---|---|
| Carrington (2013) | Rapid review (mixed) | Various, including qualitative, quantitative, and mixed-methods | 80 | August 1, 2011 to August 1, 2012 | Nurses and nurse managers | Hospital; community; online; education, ambulatory; home health; long-term care |
| Dowding (2015) | Rapid review (quantitative) | Various, including before-after study, usability study, cluster randomized controlled trial (RCT), noncomparative study, time series analysis | 11 | November 1996 to December 2012 | Patients (20), nurses (not numbered), clinical staff (175), mental health professionals (21), primary care physicians (72), clinicians (258), radiologists (47), anesthesiologists (29), pharmacists (51) | Primary care practices |
| Finkelstein (2012) | Mixed | Various, including quantitative (eg, RCT), qualitative, and usability studies | 327 | Unspecified to July 31, 2010 | Physicians, patients, nurses, providers (clinic staff, clinicians), pharmacists | Home health care; clinic; primary care health center; hospital |

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|-----------------|--------------|---|----|--------------------------------|---|-----------------------------|
| Free (2013) | Quantitative | Controlled trials | 42 | January 1990 to September 2010 | <i>For those numbered:</i> medical students (361), residents (356), physicians (80), second-year baccalaureate nursing students (36), nurse anesthetists (4), undergraduate nurses (87), nursing coordinators (16), nurses (71), patients (3767), patient scans (42), volunteers (62) | Acute care hospital; clinic |
| Georgiou (2013) | Quantitative | Various including: pre-post design, prospective studies, RCT, time series studies | 22 | January 1990 to May 2011 | <i>For those numbered:</i> patients (32182); physicians (126); nurses (26) | ED |

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|---------------|-------------------------------|---|----|---|--|---|
| Husebo (2014) | An integrative review (mixed) | Various including RCT, descriptive, qualitative, longitudinal study, quasi-experimental with qualitative data, cross-sectional study | 12 | January 2003 to April 2013 | Elderly patients aged 65 years and over (548), nurses (57), professionals caregivers (4), family users (8) | Home health care |
| Jones (2002) | Integrated review | Various including retrospective review, randomized prospective trial, cross-over design, pair wise comparison, randomized field experience, qualitative | 18 | 1966-2001 | Nurses, adult clients of a medical ambulatory clinic (152), patients (188), elderly (68, home care patients), residents long-term facility (120), patients receiving telenursing (22), caregivers of Alzheimer (102) | Medical ambulatory clinic, home care, long-term care facility, psychiatry service |
| Kelley (2011) | Integrative | Various, including descriptive and cross-sectional designs | 24 | Articles published over the past 30 years | Nurses | Hospital settings |

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|----------------|--------------|--|----|-----------|---|---|
| Mador (2009) | Quantitative | Various including pre-and posttest, prospective observational analysis, RCT, comparative observational design, meta-analysis | 12 | 1937-2008 | Nurses, physicians, ward secretaries, respiratory therapists, and technologist | Intensive care unit (ICU) |
| Maenpaa (2009) | Mixed | Various, including survey research, case study, evaluation or constructive evaluation studies, and multimethodical triangulation | 24 | 1966-2008 | <i>For those numbered:</i> participants (262), health professionals (318), patients (324), nurses (41), physicians (1390), potential users (250), administrators (8), managers (12), representative of federally qualified clinic (1), local public health officials (2). | Community health centers, health departments and hospitals, provider organizations, academic health centers, and community health information exchange organizations. |

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|-----------------|------------------|---|-----|------------------------------|---|--|
| McKibbon (2011) | Mixed | Various, including RCT, cohort, case-control, observational, and qualitative studies | 789 | Fall 2009 to Summer 2010. | Physicians, pharmacists, nurses, junior students, residents, respiratory technicians, health care providers, clinicians, physician assistants, midwives, staff, patients, hospital administrators | Ambulatory care; hospital; ambulatory clinic; acute care; American pediatric hospital; long-term care; elderly home care |
| Meißner (2014) | Meta-ethnography | Qualitative | 7 | January 2000 to January 2013 | Administrators, director of nursing, nurses, charge nurses, personal carers | Residential aged care facilities |
| Mickan (2014) | Quantitative | RCT | 7 | 2001-2013 | physicians and residents, nursing students, RN ^a , patients | Clinic, ED, med-surg wards |
| Nguyen (2014) | Mixed | Various including single and multiple case studies, survey, ethnography, focus group, secondary | 98 | 2001-2011 | Clinicians (34, doctors and nurses), doctors only | Tertiary care, secondary care, primary care, long- |

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|------------------|--------------|---|----|--|--|---|
| | | data analysis, mixed-methods, longitudinal | | | (27), doctors and other nonclinical participants (4), nurses and nonclinical participants (12), management and/or administration only (8), patients only (5), organizations (4), IT ^b providers and staff | term care facilities |
| Nieuwlaat (2011) | Quantitative | RCT | 33 | In previous review: until September 2004; current review: extended search until Jan 2010 | Patients (24,627), physicians, advanced practice nurses (APN), physician assistants, pharmacists, other health professionals | Academic centers, hospital outpatients or inpatients, primary care, community-based and subspecialty clinic |
| Poissant (2005) | Quantitative | Various, including RCT, posttest control studies, | 23 | 1990-2004 | Physicians, nurses (215) | Home, hospital, clinic |

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| | | one-group pre- and posttest designs. | | | | |
| Randell (2007) | Quantitative | RCT | 9 | Up to April 2005. The search was rerun in May 2006. | Nurses (100 and more), patients (more than 24,000) | Primary care, National Health Service (NHS), ICU |
| Stevenson (2010) | Mixed | Various, including descriptive, cross-sectional, pre- and postquasi-experimental, qualitative | 5 | 2000-2009 | Midwives, nurses, nursing assistants, project managers (326) | Acute or inpatient care settings |
| Urquhart (2009) | Quantitative (Cochrane) | 8 RCT; 1 controlled before and after study | 9 | Update of 2000 and 2003 review; searched up to the end of 2007 | Patients and nurses (1846 in total) | Nursing wards, long-term care facility, psychiatric department, ICU |

^aRN: registered nurse.

^bIT: information technology.

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