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## City St George's, University of London

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**Characteristics of studies**

| Reference            | Study type                                                                                                                                                                   | Isolated                                                                                                                                                          | Non isolated                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Colorado (2014)      | Retrospective matched case control study.<br>Rehabilitation facility- tertiary centre<br>United States<br>July 2009 to December 2010                                         | N20<br>Patients in contact isolation                                                                                                                              | N=20<br>Matched to patients not in contact isolation based on age, rehabilitation diagnosis, and type of insurance                                |
| Croft (2015)         | Prospective cohort<br>Medical or surgical inpatients admitted to non-intensive care unit hospital wards, United States.<br>January to November 2010.                         | N=148<br>Patients on contact precautions<br>Age: 52 (13.8)<br>% male: 53.4                                                                                        | N=148<br>Individually matched by after an initial 3-day length of stay to patients not on contact precautions.<br>Age 52.3 (14.6)<br>% male: 46.6 |
| Dashiell-Earp (2014) | Collected real-time data on the location of 15 internal medicine interns, United States.<br>October 1, 2012 to December 31, 2012                                             | 1156 encounters                                                                                                                                                   | 2467 encounters                                                                                                                                   |
| Day (2011)           | Patients admitted to the general acute care units, United States.<br>June 1, 2009 to October 30, 2009                                                                        | N=20<br>Age: 68.5 (14.7)<br>% male: 85.0                                                                                                                          | N=83<br>Age: 63.9 (12.6)<br>% male: 95.2                                                                                                          |
| Day (2011)           | A two-year retrospective cohort<br>Tertiary care, United States..<br>All general inpatients over 18 years hospitalized for >24 h<br>February 1, 2007 to January 31, 2009.    | Contact precautions private room when possible, can be cohorted<br>General N = 3138<br>Age: 51.2 (17.5) % male 58.9<br>ITU N=1694<br>Age: 54.9 (17.5) % male 61.0 | General N = 25 426<br>Age: 49.6 (19.0) % male 46.3%<br>ICU N = 5 854<br>Age: 56.0 (17.7)<br>% male 59.7                                           |
| Day (2012)           | 2-year retrospective cohort study of all non-psychiatric hospital admissions >18 years, United States.<br>February 1, 2007 to January 31, 2009                               | N = 9 684<br>Contact precautions as above<br>Mean age: 50.1 (18.8) % male 51.4                                                                                    | N = 50 458<br>Mean age: 52.3 (16.9)<br>% males 59.1                                                                                               |
| Day (2013)           | Longitudinal frequency-matched cohort study of patients admitted to general medical and surgical units, United States. Day 0, day 3 then weekly.<br>January to November 2010 | N = 148<br>Mean age: 52.0 (13.9)<br>% male 58.1                                                                                                                   | N = 148<br>Mean age: 52.3 (14.6)<br>% male 50.7                                                                                                   |

|                          |                                                                                                                                                                  |                                                                                                                   |                                                                                                                      |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Evans (2003)             | Prospective observation; survey; retrospective review, United States. Tertiary care. June and July 2001                                                          | N = 48<br>Mean age: 47.8 (2)<br>% male 85%                                                                        | N = 48<br>Mean age: 58.3 (2.4)<br>% male 75%                                                                         |
| Findink (2012)           | Non-random quasi-experiment, Turkey<br>Age 18 to 65 Administered day 5<br>January 1, 2009 to December 31, 2009                                                   | N = 60<br>Mean age: 53.95 (18.4)<br>% male 75%                                                                    | N = 57<br>Mean age: 56.14 (17.1)<br>% male 76.3%                                                                     |
| Gammon (1998)            | Quasi experiment<br>Selected if last two numbers on their case notes even.<br>Two large District General Hospitals and one elderly care hospital, United Kingdom | N = 20<br>Placed in isolation for a minimum of 7days<br>Mean age: 61 years<br>% male: 65                          | N = 20<br>Mean age: 52 years<br>% male: 55                                                                           |
| Gandra (2014)            | Retrospective hospital-wide cohort study, United States. All patients admitted to medical-surgical inpatient units<br>November 1, 2009 to October 31, 2011       | Falls N=77<br>Mean age: 66.1 (14.3)<br>% male: 61%<br>Pressure ulcers N=82<br>Mean age: 64.5 (15.5)<br>% male: 63 | Falls N=82<br>Mean age: 63.7 (15.8)<br>% male: 51 (62%)<br>Pressure ulcers N=71<br>Mean age: 65.7 (15)<br>% male: 57 |
| Guilley-Lerondeau (2017) | Matched cohort study with prospective inclusions<br>Interview 3 days after commencing<br>General sample. France<br>March to July 2012                            | N=30<br>First prescription of isolation precaution<br>Median age (range) 69 (32 to 91)<br>% male 47               | N=60<br>Median age (range) 64 (24 to 91)<br>% male 53                                                                |
| Kennedy (1997)           | Cross-sectional matched-control study, United Kingdom.<br>May 1994 to November 1996                                                                              | N = 16<br>Isolated as a result of being MRSA<br>Mean age: 31.1<br>All male                                        | N = 16<br>Matched for age, sex, level of injury, and time since admission or injury                                  |
| Kirkland (1999)          | Observational study - 7 months<br>Medical intensive-care, United States                                                                                          | N=14                                                                                                              | N=21                                                                                                                 |
| Lau (2016)               | Prospective cohort study.<br>Adult patients discharged from internal medicine wards, Canada<br>October 2013 to November 2014,                                    | N=75<br>Mean age 60.35 (17.83)<br>% male 59                                                                       | N=420<br>Mean age 63.31 (18.69)<br>% male 48%                                                                        |
| Livorsi (2015)           | Case-control study<br>Retrospective January 1, 2012 to                                                                                                           | N = 70<br>On contact precautions for MRSA throughout                                                              | N = 139<br>No significant differences between isolated and                                                           |

|                       |                                                                                                                                                      |                                                                                                                                                                                                    |                                                                                       |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                       | May 31, 2012/prospective June 1, 2012 to March 31, 2013<br>'safety-net facility', United States                                                      | their hospital stay. Found to be MRSA positive during a previous hospitalization or as an outpatient, not current case                                                                             | non-isolated patients                                                                 |
| Lupión-Mendoza (2015) | Matched case-control study<br>Tertiary hospital, Spain<br>2011 and 2012                                                                              | N = 72<br>Adult patients admitted in isolation for $\geq 5$ days.<br>Median age (range) 62 (21-93)<br>% male 73%                                                                                   | N = 72<br>Median age (range) 69 (23-89),<br>% male 68.1%                              |
| Massee (2013)         | Retrospective case-control<br>Tertiary care, Canada                                                                                                  | N = 111<br>Matched MRSA patients with an admission diagnosis of heart failure or COPD to similar non-isolated controls<br>Median age (IQR) 80.0 (69.0-86.0)<br>% male 60.4%                        | N = 111<br>Median age (IQR) 80.0 (68.0–86.0)<br>% male 60.4%                          |
| Mehrotra (2013)       | Prospective cohort<br>Admission and on days 3, 7, 14<br>Tertiary centre, United States                                                               | N = 238<br>Segregation into a private or cohorted room<br>Mean age (SD) 52.4 (13.4)<br>% male 55.7                                                                                                 | N = 290<br>Mean age (SD) 52.9 (14.8)<br>% male 48                                     |
| Saint (2003)          | Prospective cohort study<br>2 university-affiliated medical centers, United States.<br>October 1999 to March 2000                                    | N=31                                                                                                                                                                                               | N=108                                                                                 |
| Soon (2013)           | Cross-sectional survey of cases and matched controls<br>Teaching hospital Singapore<br>June and August 2011                                          | N=20<br>Contact isolation in a cohort cubicle for the first time because of colonization or infection with a MDRO for at least 3 days<br>No statistically significant differences in age or gender | N=20                                                                                  |
| Spense (2011)         | Retrospective evaluation of incident reports<br>All patients admitted to acute care facility, United States<br>January 1, 2008 to December 31, 2008. | N=45                                                                                                                                                                                               | N=256                                                                                 |
| Stelfox (2003)        | Case control study<br>Consecutive adults isolated for at least 2 days with MRSA. Canada and United States<br>Controls patients admitted before       | General N = 78<br>Age: 69.6 (17.1)<br>% male: 45%<br>CHF N = 72<br>Age: 66.9 (14.7)                                                                                                                | General N = 156<br>Age: 65.4 (18.2)<br>% male: 51%<br>CHF N = 144<br>Age: 66.0 (14.5) |

|                   |                                                                                                                              |                                                                                                                     |                                                                         |
|-------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
|                   | and after.<br>January 1, 1999, to January 1, 2000                                                                            | % male: 58                                                                                                          | % male: 54                                                              |
| Tarzi (2001)      | Cross-sectional matched case-control study<br>Care of the elderly rehabilitation wards, UK                                   | N = 22<br>Had been in isolation for at least two weeks with MRSA<br>Mean age (SD) 80 (8.4)<br>% male 27.3           | N = 20<br>Mean age (SD) 81 (9.1)<br>% male 33.3                         |
| Tran (2017)       | Propensity matched cohort study.<br>General internal medicine services, 3 hospitals, Canada<br>January 2010 to December 2012 | MRSA<br>Age: 69<br>% male 57%<br>Respiratory<br>Age: 71.7<br>% male: 53<br>Isolated for MRSA or respiratory illness | MRSA<br>Age: 69<br>% male 58%<br>Respiratory<br>Age: 70.6<br>% male: 55 |
| Wassenburg (2010) | Cross-sectional matched cohort study<br>Single university hospital, Netherlands<br>November 2006 to February 2007            | N = 42<br>Age: 52 (19)<br>% male: 52                                                                                | N = 84<br>Age: 55 (16)<br>% male: 55                                    |

Excluded papers

| Reference             | Reason for exclusion         |
|-----------------------|------------------------------|
| Chittick et al (2016) | No comparative data          |
| Godsell (2013)        | Focussed on HCP              |
| Jeong (2016)          | MERS                         |
| MacKellaig (1986)     | Qualitative                  |
| Madsden (2015)        | Qualitative                  |
| Maunder (2003)        | SARS                         |
| Moran (2009)          | Focus on family centred care |
| Morgan (2011)         | Focus on process measures    |
| Rees (2000a)          | No comparative data          |
| Rees (2000a)          | No comparative data          |
| Simon (2016)          | Before and after             |
| Wilkins (1988)        | No comparative data          |