

Conditions affecting medical leadership

APPENDIX 4 DETAILED OVERVIEW OF THE INCLUDED STUDIES (IN ORDER OF PUBLICATION DATE)

No	Reference	Study design	Country	Setting	Study participants
1.	Perreira, T., <i>et al.</i> (2019)	Concept analysis using literature review	N/A	N/A	N/A
2.	Nieuwboer, M., <i>et al.</i> (2019)	Systematic literature review	N/A	N/A	N/A
3.	Boyle, T., <i>et al.</i> (2019)	Semi-structured interviews (n=10)	Canada	Hospital	Senior health care executives
4.	Vazquez, C. (2019)	Semi-structured in-depth individual interviews (n=4)	USA	Non-profit teaching hospitals	Physician leaders responsible for pediatric heart programs
5.	Keller, E., <i>et al.</i> (2019)	Qualitative mixed methods: Semi-structured interviews (n=40) and observations	USA	Academic hospital	Physicians Administrators
6.	Berghout, M., <i>et al.</i> (2019)	Ethnographic study (n=23): Observations (100 hours)	The Netherlands	Hospital	Participants of a medical leadership development program (all physicians)
7.	Van de Riet, M., <i>et al.</i> (2019)	Interview study (n=39)	The Netherlands	General district hospital	Physicians Nurses Laboratory technicians Managers
8.	Jorm, C., <i>et al.</i> (2019)	Scoping study: Literature review, interviews (n>100), survey (n=1800)	Australia	Health system	Clinicians Executives

Conditions affecting medical leadership

9.	McHugh, S. <i>et al.</i> (2019)	Multiple case study (n=6): Documents, key stakeholder interviews (n=36)	Ireland	Health system	Managers, patient advocates, doctors, nurses, private ambulance representatives, general practitioners, private hospital representatives, hospital campaigners, local media representatives, local politicians
10.	Ahnfeldt-Mollerup, P., <i>et al.</i> (2018)	Survey (n=352), registrar of quality reports	Denmark	Primary care	General Practitioners
11.	Kampstra, M., <i>et al.</i> (2018)	Systematic literature review	N/A	N/A	N/A
12.	Berghout, M., <i>et al.</i> (2018).	Qualitative: observations and document analysis	The Netherlands	Health system	Opinion-making physicians
13.	Nzinga, J., McGivern, G., & English, M. (2018).	Case study: ethnographic observation (480 h), interviews, focus groups (n=61)	Kenya	Hospital	Mid-level departmental leaders, nurses in charge of inpatient wards, senior managers, frontline workers
14.	Yanchus, N. J., <i>et al.</i> (2018).	Qualitative survey comments	US	Health system	Physicians
15.	Berghout, M. A., <i>et al.</i> (2017).	Literature review	N/A	Hospital	Physicians in managerial or leadership roles
16.	Bharwani, A., <i>et al.</i> (2017).	Interview study (n=77)	Canada	Academic medicine system	Trainees, mid-level university leaders, senior medical clinical leaders, senior university leaders, medical scientists, senior

Conditions affecting medical leadership

					executives and directors
17.	Canaway, R., <i>et al.</i> (2017).	Semi-structured interviews (n=17)	Australia	Hospital	Senior management
18.	Clay-Williams, R., <i>et al.</i> (2017).	Literature review	N/A	N/A	Senior management
19.	Dickinson, H. <i>et al.</i> (2017).	Case study: 9 cases, 150 interviews	UK	Hospital	Doctors, nurses and managers
20.	Giri, P., Aylott, J., & Kilner, K. (2017).	Quantitative: survey study (n=249)	UK	N/A	Faculty of Occupational Medicine
21.	Ileri, S. K., <i>et al.</i> (2017).	Multi-method: 25 interviews, survey (n=292)	UK & Kenya	Hospital	Middle and senior management
22.	Jones, L., <i>et al.</i> (2017).	Qualitative: interviews (n=65), observations (60 hours), document analysis	UK	Hospital	Senior management
23.	Kerrissey, M., <i>et al.</i> (2017).	Case study: 16 clinics, 18 interviews	US	Primary care	All staff, interviews with heads of clinics
24.	Macinati, M. S., Cantaluppi, G., & Rizzo, M. G. (2017).	Multi-method study: literature review, performance data, unstructured interviews, questionnaire n=72	Italy	Hospital	Physicians
25.	Spehar, I., <i>et al.</i> (2017).	Interview study: Focus group interviews with 17 GPs	Norway	Primary care	Physicians
26.	Storkholm, M. <i>et al.</i> (2017).	Interview study (n=30)	Denmark	Hospital	Staff and managers

Conditions affecting medical leadership

27.	Waring, J., & Crompton, A. (2017).	Case study: non-participant observation's (90 hours), semi-structured interviews (n=34), focus groups (n=3) and document analysis	UK	Hospital	Senior managers, senior medical and nursing leaders, quality and safety managers, senior human resources, communications and operations managers, nurses, doctors, departmental managers, and support workers.
28.	Clark, K. D., <i>et al.</i> (2016).	Case study: Observational cross-case comparative study (19 practices)	US	Primary care	Staff and leaders at all levels
29.	Denis, J.-L., & van Gestel, N. (2016).	Qualitative: Document analysis	The Netherlands and Canada	Health system	N/A
30.	Kristensen, S., <i>et al.</i> (2016).	Intervention study: A repeated cross-sectional experimental study, 2 surveys	Denmark	Hospital	Staff and managers
31.	Lega, F., & Sartirana, M. (2016).	Qualitative: literature review, action-research and field investigations	Italy	Hospital	N/A
32.	Macinati, M. S., Bozzi, S., & Rizzo, M. G. (2016).	Multi-method: Literature review to develop hypothesis, performance data, unstructured interviews, questionnaire (n=65)	Italy	Hospital	First and middle managers

Conditions affecting medical leadership

33.	Macinati, M. S., & Rizzo, M. G. (2016).	Survey n=53	Italy	Hospital	General manager, administrative officer, controller, clinical managers
34.	Noordegraaf, M., <i>et al.</i> (2016).	Qualitative: document analysis, observation, interviews (n=38)	The Netherlands	Hospital	Residents and program directors
35.	Sarto, F., & Veronesi, G. (2016).	Literature review	N/A	Hospital	Senior management
36.	Bresnen, M., <i>et al.</i> (2015).	Qualitative: n=85 interviews with 68 respondents, 54 hours of observations	UK	Two hospitals and a trust providing mental health and community services	Medical, general, and functional managers.
37.	Burgess, N., <i>et al.</i> (2015).	Interview study (n=91)	UK	Hospital	Middle managers
38.	Martin, G., <i>et al.</i> (2015).	Interview study: 56 focus group interviews, 46 individual interviews, 25 in-depth individual interviews	UK	Primary and secondary care	Staff and managers
39.	Mascia, D., <i>et al.</i> (2015).	Survey, n=791	Italy	Hospital	Physicians
40.	Quinn, J. F. (2015).	Survey, (n=677)	US	N/A	Senior managers
41.	Spurgeon, P., <i>et al.</i> (2015).	Survey, UK 30 trusts, Australia and New Zealand 4 sites	UK, Australia and New Zealand	Hospital	All staff
42.	Tsai, T. C., <i>et al.</i> (2015).	Survey (n=722 in the US, n=132 in the UK)	UK & US	Hospital	First line and senior managers

Conditions affecting medical leadership

43.	Damschroder, L. J., <i>et al.</i> (2014).	Interview study (n=62)	US	Hospital	Network-level and facility-level executives, managers, front-line providers and staff
44.	Macinati, M. S., & Rizzo, M. G. (2014). <i>et al.</i>	Questionnaire (n=70)	Italy	Hospital	First and middle managers
45.	Moffatt, F., Martin, P., & Timmons, S. (2014).	Qualitative: Document analysis	UK	Health system	N/A
46.	Nelson, M. F., <i>et al.</i> (2014)	Intervention study	US	Hospital	Physicians, nurse managers, administration, and board members
47.	Nicol, E. D., Mohanna, K., & Cowpe, J. (2014).	Interview study (n=20)	UK	Health system	Senior management
48.	Lega, F., Prenestini, A., & Spurgeon, P. (2013).	Literature review	N/A	N/A	N/A
49.	Fulop, L. (2012).	Interview study (n=31)	Australia	Hospital	Clinical managers
50.	Howard, J., <i>et al.</i> (2012).	Case study: observation notes, meeting recordings, interviews (n=8)	US	Primary care	Physician leaders
51.	Mallon, W. T., & Buckley, P. F. (2012).	Literature review	N/A	Hospital	Senior management
52.	Numerato, D., Salvatore, D., & Fattore, G. (2012).	Literature review	N/A	N/A	N/A
53.	Spehar, I., Frich, J. C., &	Qualitative: In-depth interviews (n=30) and	Norway	Hospital	First line and middle managers

Conditions affecting medical leadership

	Kjekshus, L. E. (2012).	participant observations (n=20)			
54.	Choi, S., <i>et al.</i> (2011).	Single case study: 22 interviews, 22 hours of observations and document analysis	Sweden	Hospital	Senior management
55.	Ham, C., <i>et al.</i> (2011).	Interview study (n=20)	UK	Health system	Senior management
56.	Lin, B. Y.-J., <i>et al.</i> (2011).	Survey (n=448)	Taiwan	Hospital	Staff and middle managers
57.	Snell, A. J., Briscoe, D., & Dickson, G. (2011).	Interviews (n=51)	Canada	N/A	Physicians who have attended leadership development courses
58.	Spurgeon, P., Mazelan, P. M., & Barwell, F. (2011).	Survey: (n=30 secondary care trusts)	UK	Secondary care trusts	Physicians
59.	Albert, K., Sherman, B., & Backus, B. (2010).	Intervention study	US	Hospital	First line and middle managers
60.	Hayes, C., <i>et al.</i> (2010).	Case study of four quality leaders	Canada	Hospital	Middle managers
61.	von Knorring, M., de Rijk, A., & Alexanderson, K. (2010).	Interview study (n=18)	Sweden	Health system	Senior management
62.	Jiang, H. J., <i>et al.</i> (2009).	Quantitative (n=562)	US	Hospitals and health system	Senior management
63.	Johansen, M. S., & Gjerberg, E. (2009).	Multi-method (interviews 44; survey 166)	Norway	Hospital	Managers from different levels

Conditions affecting medical leadership

64.	Waring, J., & Currie, G. (2009).	Case study (observations 200hrs, semi-structured interviews n=43)	UK	Hospital	Hospital managers, senior physician leaders, nursing director, senior physicians, staff
65.	Epstein, A. L., & Bard, M. A. (2008).	Interview study (n=68)	US	Hospital	Middle managers
66.	Ham, Chris, & Dickinson, H. (2008).	Literature review	N/A	N/A	N/A
67.	Lega, F. (2008).	Qualitative: Literature review, action-research and field investigations	Italy	Health system	N/A
68.	McAlearney, A. S. (2008).	Interview study (n=200)	US	Health system	Hospital and health system managers and executives, academic experts, consultants, association reps, vendors of leadership development programs, program participants
69.	Menaker, R., & Bahn, R. S. (2008).	Survey (n=314)	US	Hospital	Physicians and senior managers
70.	Shipton, H., <i>et al.</i> (2008).	Survey (n=17 949)	UK	Hospital	Staff
71.	Sorensen, R., & Iedema, R. (2008).	Ethnographic study: observation, interviews, focus groups (n=89)	Australia	Hospital	Medical managers, physicians, nursing managers, nurses, patients, other external palliative care specialists

Conditions affecting medical leadership

72.	Waring, J. (2007).	Case study (observations 200hrs, semi-structured interviews n=43)	UK	Hospital	Hospital managers, senior physician leaders, nursing director, senior physicians, staff
73.	Prybil, L. D. (2006).	Quantitative (14 hospitals)	US	Hospitals	N/A