

Appendix 2. Excluded studies

When screening titles by title/abstract, I first looked at whether it was clearly not qualitative research (a randomised control trial or guidelines). If this was unclear from the title, then I considered if it was clearly not dealing with multimorbidity (ie title contained other disease focus such as prostatic disease or asthma). If the citation was still not excludable, I then considered if I was primary care based or concerned the GPs perspective. For foreign language titles, Google translate was used to ascertain if the title was applicable.

EMBASE

Of the 1105 that remained after excluding duplicates, 1082 were excluded by reading titles / abstracts, leaving 23 citations.

- Excluded because not primary care based : 34 (pharmacy/hospital/dentistry)
- Excluded because not qualitative: 577 (guidelines/editorials/ reviews/ quan research/ opinions/recommendations/education related)
- Excluded because not concerning MM: 447 (asthma/COPD/ psychiatric disease/ abs/gout/cv disease)
- Excluded because no related to Dr or decision making: 24

Of the 23 remaining, the following 18 were excluded after reading the full texts:

1. Ampt AJ, Amoroso C, Harris MF, McKenzie SH, Rose VK, Taggart JR. Attitudes, norms and controls influencing lifestyle risk factor management in general practice. [Internet]. BMC family practice. 2009. Concerns lifestyle modification in the management of chronic disease, but does not incorporate multimorbidity.
2. Balla, 2012 #5087; Balla J, Heneghan C, Thompson M, Balla M. Clinical decision making in a high-risk primary care environment: A qualitative study in the UK. BMJ Open [Internet]. 2012;2(1). Concerns decision making and out of hours care.
3. Boyd, 2005 #5697; Boyd CM, Darer J, Boulton C, Fried LP, Boulton L, Wu AW. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. JAMA. 2005 Aug 10;294(6):716-24. Review of one case vignette/policy analysis.
4. Davidson, 1995 #6059; Davidson, W, Molloy, W, Bedard, M. Physician characteristics and prescribing for elderly people in New Brunswick: Relation to patient outcomes Canadian Medical Association Journal. 1995. 152. 8. Quantitative analysis only.
5. Demirkol, 2003 #5826; Demirkol A, Ritchie JE, Craig P. Providing healthcare for people with chronic illness: the views of Australian GPs. Med J Aust. 2003 Sep 1;179(5):269. Not concerning multimorbidity.
6. Fortin, 2007 #5577; Editorial
7. Horne, 2001 #5943; Horne R, Mailey E, Frost S, Lea R. Shared care: a qualitative study of GPs' and hospital doctors' views on prescribing specialist medicines. Br J Gen Pract. 2001

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Mar;51(464):187-93. Concerns GPs perceptions of shared care between primary and secondary care.

8. Hudon, 2012 #5041; Hudon C, Fortin M, Haggerty J, Loignon C, Lambert M, Poitras ME. Patient-centered care in chronic disease management: A thematic analysis of the literature in family medicine. *Patient Educ Couns*. 2012 Aug;88(2):170-6. Epub 2012 Feb 22. Analysis of existing literature rather than primary data.
9. Kadam, 2012 #5012; Editorial
10. Loeb, 2011 #5197; Loeb DF, Bayliss EA, Binswanger IA, Candrian C, Degruy FV. Primary care physician perceptions on caring for complex patients with medical and mental illness. *J Gen Intern Med*. 2012 Aug;27(8):945-52. Epub 2012 Feb 28. Topic guide focused interviews on the interaction between mental and physical illness, making mental illness an index illness.
11. Mangin, 2012 #5048; Editorial.
12. Martin, 2002 #5918; Martin C, Rohan BG. Chronic illness care as a balancing act. A qualitative study. [Internet]. *Australian family physician*. 2002. Concerns models of care rather than delivery of care/actual patient management.
13. May, 2004 #5795; May C, Allison G, Chapple A, Chew-Graham C, Dixon C, Gask L, Graham R, Rogers A, Roland M. Framing the doctor-patient relationship in chronic illness: a comparative study of general practitioners' accounts. *Sociol Health Illn*. 2004 Mar;26(2):135-58. Re-analysis of previously gathered qualitative data to examine the doctor –patient relationship.
14. Salisbury, 2012 #5057; Editorials
15. Saltman, 2004 #5794; Editorials
16. Shepherd, 2012 #5036; Letter in response to Mercer article.
17. Webster, 2000 #5951 Letter.
18. Weiner M, Wells S, Kerse N. Perspectives of general practitioners towards evaluation and treatment of cardiovascular diseases among older people. *J Prim Health Care*. 2009 Sep;1(3):198-206. Although reported as mixed methods, the qualitative component was just 'narrative comments' at the end of a quantitative/likert questionnaire.
19. Abstract only: Limm, 2012 #5088; Study authors contacted – Dr C Boyd – and full account not yet published.

4 were included after reading fulltexts

- 1) Bower, 2011 #5145;
- 2) Smith, 2010 #5300;
- 3) O'Brien, 2011 #5227;
- 4) Marx, 2009 #5434.

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CINAHL.

59 citations reviewed after duplicates removed. 55 excluded by reading the titles/abstracts, leaving 4 full papers to be reviewed.

- 14 excluded as not qualitative papers
- 32 excluded as not concerning multimorbidity (COPD + mental health issues predominantly)
- 9 excluded as did not concern the GPs perspective/ decision making. (patient perspective).

Four full papers reviewed – 3 excluded, one included.

- 1) Falling on stony ground? A qualitative study of implementation of clinical guidelines' prescribing recommendations in primary care.(includes abstract); Rashidian A; Eccles MP; Russell I; Health Policy, 2008 Feb; 85 (2): 148-61. GP assessment of the process in development and use of CPGs
- 2) Interactions between practitioners and patients with chronic illnesses.(includes abstract); Kupka NJ; Rush University, College of Nursing, 2003; D.N.Sc. (108 p) (doctoral dissertation – research) Are motivational techniques used by GPs in managing CD?
- 3) Mutual influence in shared decision making: a collaborative study of patients and physicians. By: Lown, Beth A.; Hanson, Janice L.; Clark, William D. Health Expectations. Jun2009, Vol. 12 Issue 2, p160-174. 15p. Concerns characteristics of the DrPt relationship and SDM.
- 4) Fried: included.

Medline

364 citations read : 360 excluded by title abstract:

- Excluded because not primary care based : 12 (pharmacy/hospital/dentistry)
- Excluded because not qualitative: 185 (guidelines/editorials/ reviews/ quan research/ opinions/recommendations/education related)
- Excluded because not concerning MM: 153 (asthma/COPD/ psychiatric disease/ abs/gout/cv disease)
- Excluded because no related to Dr or decision making: 10

Full texts retrieved for 4 citations. The following were excluded:

- 1) Müller-Engelmann M, Keller H, Donner-Banzhoff N, Krones T. Shared decision making in medicine: the influence of situational treatment factors. Patient Educ Couns. 2011 Feb;82(2):240-6. Concerns what situations shared decision making is an appropriate approach.
- 2) (Harries, Forrest et al. 2007) Really focuses on management of angina and has only one line on MM in qual section.
- 3) Solomon: included.

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4) Luijks: included.

PsycInfo

137 citations read. 134 excluded by title abstract, leaving three full texts for review.

- Excluded because not primary care based : 0 (pharmacy/hospital/dentistry)
- Excluded because not qualitative: 48 (guidelines/editorials/ reviews/ quan research/ opinions/recommendations/education related)
- Excluded because not concerning MM: 72 (asthma/COPD/ psychiatric disease/ abs/gout/cv disease)
- Excluded because no related to Dr or decision making: 14

Full texts retrieved for 3 citations. The following were excluded:

- 1) Physicians' view of primary care-based case management for patients with heart failure: A qualitative study. Peters-Klimm, Frank Olbort, Rebecca Campbell, Stephen Mahler, Cornelia Miksch, Antje Baldauf, Annika Szecsenyi, Joachim ; International Journal for Quality in Health Care, Vol 21(5), Oct, 2009. pp. 363-371. Concerns the evaluation of the implementation of a case management programme for heart failure.
- 2) (Chew-Graham and Hogg 2002). Concerns the management and diagnosis of depression in patients with chronic physical disease
- 3) Steinman was included.

Academic Search Complete / Social Science Full Text/

140 citations read. 137 excluded by title abstract:

- Excluded because not primary care based : 2 (pharmacy/hospital/dentistry)
- Excluded because not qualitative: 67 (guidelines/editorials/ reviews/ quan research/ opinions/recommendations/education related)
- Excluded because not concerning MM: 65 (asthma/COPD/ psychiatric disease/ abs/gout/cv disease)
- Excluded because no related to Dr or decision making: 3

Full texts retrieved for 3 citations. One was excluded

- 1) GPs' decision-making--perceiving the patient as a person or a disease. By: André, Malin; Andén, Annika; Borgquist, Lars; Edvard Rudebeck, Carl. BMC Family Practice. 2012, Vol. 13 Issue 1, p38-43. 6p. Concerns things that influence gradual or immediate decision making in primary care, and used a quantitative questionnaire.
- 2) Hunt excluded as although does deal with multiple chronic diseases, (DM and HTN) does not deal with the presentation of these in tandem as multimorbidity.
- 3) Schuling included

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	Citations	Duplicates within this database and in comparison to other databases*	After removal of duplicates	Excluded by title/abstract	Not Primary Care	Not Qualitative Research	Not Multimorbidity	Not Dr's perspective	Full text read	Not Primary Care	Not Qualitative Research	Not Multimorbidity	Not Dr's perspective	Included	Full text not available	Excluded by Full text	
EMBASE	1121	16	1105	1082	34	577	447	24	23	0	11	7	0	4	1	19	
CINAHL	65	6	59	55	0	14	32	9	4	0	0	3	0	1	0	3	
PsycInfo	184	47	137	134	0	48	72	14	3	0	0	2	0	1	0	2	
Academic Search Complete	198	58	140	137	2	67	65	3	3	0	0	2	0	1	0	2	
Medline (Ovid)	437	73	364	360	12	185	153	10	4	0	0	2	0	2	0	2	
Total	2005	200	1805	1768	48	891	769	60	37	0	11	16	0	9	1	28	

Table showing distribution of excluded articles across databases.

*Duplicates searched for in order of EMBASE/ CINAHL/Medline/PsycInfo/ASS)