Adding NRS to a Cochrane review on CDM and asthma: an augmented systematic review and meta-analysis / Supplementary Table: Key components of included studies

Study ID	Design (allocation)	Country HC setting	Patients	Intervention (name[1], duration, number of components, main component)	Comparison	Outcomes
Armour 2007	C-RCT (pharmacy)	Australia Rural and urban pharmacies	N=346 women: 63.7.% mean age: 49.1 asthma: mod/sev	Pharmacy Asthma Care Program 6 months components: 8 main: EDU	Usual care (including minimal training for pharmacists)	Org: 1 Process: 6 QOL: 1 Symptoms/activity: 2 Self-care: 5 Lung function: 2
Cambach 1997	RCT	Netherlands Local physiotherapy practices	N=43 women: 74.4% mean age: 46.3 asthma: mild/mod	Rehabilitation program 3 months components: 6 main: ORG_PT	Usual care	QOL: 1 Symptoms/activity: 3
Castro 2003	RCT	USA Inpatients and outpatients in a hospital	N=96 women: 82.4% mean age: 36.4 asthma: mod/sev	Asthma nurse specialist for "high-risk" inpatients 6 months components: 10 main: ORG_PT / ORG_HC	Usual care (including minimal intervention for patients)	HC use: 8 QOL: 1
Charrois 2006	RCT	Canada Community rural pharmacies and PCPs	N=70 women: 53% mean age: 37.2 asthma: mod/sev	Better Respiratory Education and Asthma Treatment in Hinton and Edson (BREATHE) 6 months components: 11 main: EDU / ORG_HC	Usual care (including minimal intervention for patients)	Org: 1 Process: 3 HC use: 1 Symptoms/activity: 2 Lung function: 1
Couturaud 2002	RCT	France Outpatient clinic of two university hospitals	N=54 women: 68% mean age: 38 asthma: mod/sev	Educational program following treatment readjustment 12 months components: 7 main: EDU	Usual care	HC use: 1 QOL:1 Symptoms/activity: 3 Self-care: 3 Lung function: 1
Galbreath 2008	RCT	USA University medical centre and a PCP	N=386 women: 79% mean age: 42.8 asthma: mod/sev	The South Texas Asthma Management Project (STAMP) 6 months components: 9 main: EDU / ORG_PT	Usual care	Org: 1 Process: 2 HC use: 4 QOL: 1 Symptoms/activity: 2 Lung function: 3
Huang 2009	RCT	Taiwan Outpatient chest department of a hospital	N=148 women: 27.3% mean age: na asthma: mod/sev	Individualised self-care education program 6 months components: 6 main: EDU	Usual care (including minimal intervention for patients)	Process: 1 HC use: 1 Symptoms/activity: 2 Self-care: 3 Lung function: 4
Kokubu 2000	RCT	Japan Hospital and patients' home	N=66 women: 58.9% mean age: 48.6 asthma: na	Asthma telemedicine system 6 months components: 8 main: ORG_HC	Usual care	HC use: 4 Pt satis: 1 QOL: 1 Symptoms/activity: 3 Self-care: 3 Lung function: 1
Martin 2009	RCT	USA PCPs	N=37 women: 68.3% mean age: 35 asthma:na	Community-based intervention to improve asthma self-efficacy in African American adults designed by the Chicago Initiative to Raise Asthma Health Equity (CHIRAH) 3 months components: 7 main: EDU	Usual care (including minimal intervention for patients)	Org: 1 Process: 2 QOL: 1 Symptoms/activity: 3 Self-care: 3
Mayo 1990	RCT	USA Outpatient chest clinic of a hospital	N=104 women: 63.5% mean age: 42 asthma: mod/sev	Outpatient program to reduce readmissions for asthma exacerbations 8 months components: 6 main: EDU	Usual care	HC use: 1 Symptoms/activity: 1

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McLean 2003	RCT	Canada Community pharmacies	N=224 women: 63% mean age: na asthma: na	The British Columbia pharmacy asthma study incorporating an asthma care protocol provided by specially trained community pharmacists 12 months components: 7 main: EDU	Usual care	HC use: 4 Pt satis: 1 QOL: 1 Symptoms/activity: 4 Self-care: 1 Lung function: 1
Petro 2005	C-RCT (provider)	Germany PCPs	N=111 women: 49.1% mean age: 56.2 asthma: mod/sev	A disease management program with a case manager 12 months components: 7 main: ORG_HC	Usual care	HC use: 2 QOL: 3 Symptoms/activity: 1 Lung function: 2
Schatz 2006	RCT	USA Kaiser Permanente Medical Care program	N=45 women: 39.8% mean age: 45.1 asthma: mod/sev	Regular care manager and intensive individualised educational visit 12 months components: 11 main: EDU / ORG_PT	Usual care (including minimal intervention for patients)	Process: 1 HC use: 1 QOL: 1 Symptoms/activity: 2 Self-care: 1
Smith 2005	RCT	UK Outpatient asthma clinics of a hospital and PCPs	N=84 women: 73% mean age: 36.4 asthma: mod/sev	The Coping with Asthma Study (a home based, nurse led psycho-educational intervention for adults at risk of adverse asthma outcomes) 6 months components: 15 main: EDU	Usual care	QOL: 6 Symptoms/activity: 1 Self-care: 6
Wilson 2010	RCT	USA Kaiser Permanente clinics	N=551 women: 56.5% mean age: 46.3 asthma: mod/sev	The Better Outcomes of Asthma Treatment (BOAT) study 9 months components: 9 main: EDU / ORG_PT	Usual care (including minimal intervention for patients)	Process: 1 HC use: 2 QOL: 1 Symptoms/activity: 5 Lung function: 2
Herborg 2001	C-QRCT (pharmacy)	Denmark Community pharmacies	N=413 women: 56.2% mean age: 40.6 asthma: mod/sev	Therapeutic outcomes monitoring (TOM) program 12 months components: 9 main: ORG_PT	Usual care	Org : 3 HC use: 7 Pt satis: 1 QOL: 2 Symptoms/activity: 4 Self-care: 1 Lung function: 1
Feifer 2004	CBA*	USA PCPs in a region covered by a health insurance company	N=70,900 women: 56% mean age: na asthma:na	Population-based asthma disease management program using broad-based educational interventions 12 months components: 7 main: EDU / ORG_PT	Usual care	Process: 3 HC use: 3 QOL: 1 Symptoms/activity: 4 Self-care: 3
Landon 2000	CBA*	USA Community health centers	N=3392 women: 65.6% mean age: 31.4 asthma: na	Health Disparities Collaboratives disseminating quality-improvement techniques 54 months components: ≥11 main: ORG_HC	Usual care	Process: 7 HC use: 1 Symptoms/activity: 1
Weng 2005	CBA*	Taiwan Outpatient clinics of a hospital and PCPs	N=4042 women: 43.3% mean age: na asthma: na	A government-sponsored outpatient-based disease management program 12 months components: 8 main: EDU	Usual care	Pro satis: 1 HC use: 4
Windt 2010	CBA*	Germany PCPs	N=634 women: 46.4% mean age: 36.5 asthma: na	Nationwide asthma disease management program >12 months components: ≥5 main: ORG_HC	Usual care	Process: 8 HC use: 2
Allen-Ramey 2002	CBA	USA Managed care organisation	N=3013 women: 70.9% mean age: 46.6 asthma: mod/sev	Anthem "Healthy Solutions for Asthma" program 3-36 months components: 9 main: EDU	Limited intervention for patients and HC professionals	Process: 2 HC use: 2 Symptoms/activity: 2 Self-care: 1

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Curtin 1998	CBA	USA Health care plan PCPs	N=na women: % na mean age: na asthma: na	Asthma Game Plan and reminder system 6 months components: 6 main: ORG_HC	Usual care	Process: 2 HC use: 3
Gaude 2014	CBA	India Tertiary care hospital	N=500 women: % na mean age: 37 asthma: na	Health education and self-action plan to improve the compliance in bronchial asthma patients 3 months components: 6 main: EDU	Usual care	Self-care: 1
Kelso 1996	CBA	USA Teaching hospital and the community	N=39 women: 79.5% mean age: 38.2 asthma: mod/sev	Comprehensive long-term management program for asthma in adult African-Americans Ongoing components: 6 main: EDU	Usual care	Process: 2 HC use: 2
Saini 2004	CBA	Australia Pharmacies	N=67 women: 68.5% mean age: 42.6 asthma: mod/sev	The Australia Six-Step Asthma Management Plan 6 months components: 7 main: EDU	Usual care	Process: 1 HC use: 1 Pt satis: 1 QOL: 1 Symptoms/activity: 4 Self-care: 4
Saini 2008	CBA	Australia Pharmacies	N=83 women: 69% mean age: 50.6 asthma: mod/sev	Rural Asthma Management Service (RAMS) 6 months components: 8 main: EDU	Usual care	Process: 2 HC use: 1 QOL: 1 Symptoms/activity: 2 Self-care: 4
Tatis 2005	CBA	USA University-affiliated medical centre	N=396 women: 71% mean age: 38.4 asthma: na	Culturally-targeted program aimed at reducing asthma morbidity 18 months components: 8 main: EDU	Usual care	HC use: 2 QOL: 1 Self-care: 1
Brandao 2009	BA	Brazil Outpatient clinics	N=102 women: 80.4% mean age: 43 asthma: mod/sev	Program for the Control of Asthma and Allergic Rhinitis in Feira de Santana (ProAR-FS) 12 months components: 4 main: EDU	Usual care before intervention	HC use: 2
Charlton 1991	BA	UK PCPs	N=115 women: 62.3% mean age: 56.2 asthma: mod/sev	Nurse-run asthma clinic Ongoing components: 8 main: EDU	Usual care before intervention	Process: 1 HC use: 1 Symptoms/activity: 3
Charlton 1992	BA	UK PCPs	N=105 women: 57% mean age: 42 asthma: na	Nurse-run asthma clinic Ongoing components: 4 main: EDU	Usual care before intervention	HC use: 3 QOL: 1 Pt satis: 1 Symptoms/activity: 3 Self-care: 1
Dsouza 1994	BA	New Zealand Community centres	N=46 (at 12 mo) women: 80% mean age: 38 asthma: na	Wairarapa Asthma Program 4 months components: 6 main: EDU	Usual care before intervention	Process: 3 HC use: 3 Symptoms/activity: 3 Lung function: 1
Dsouza 1996	BA	New Zealand Hospital outpatient clinic	N=26 (at 12 mo) women: 70% mean age: na asthma: mod/sev	Asthma Program 6 months components: 6 main: EDU	Usual care before intervention	HC use: 1 Symptoms/activity: 4
Emmerton 2003	BA	New Zealand Pharmacies	N=100 women: % na mean age: na asthma: na	Pharmaceutical care demonstration project 24 months components: 6 main: EDU	Usual care before intervention	Process: 2 QOL: 2 Symptoms/activity: 3 Lung function: 1

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Franco 2007	BA	Brazil Referral clinic	N=64 women: 84% mean age: 45 asthma: mod/sev	Program for the Control of Asthma and Allergic Rhinitis (ProAR) Ongoing components: 6 main: ORG_HC	Usual care before intervention	HC use: 5 QOL: 1 Symptoms/activity: 1 Lung function: 2
Franco 2009	BA	Brazil Referral clinic	N=180 women: 84% mean age: 45 asthma: mod/sev	Program for the Control of Asthma and Allergic Rhinitis (ProAR) Ongoing components: 6 main: ORG_HC	Usual care before intervention	Process: 1 HC use: 4 QOL: 1 Symptoms/activity: 1 Lung function: 2
Hertzman 2005	BA	Russia Hospitals and policlinics	N=85 women: 67% mean age: 50.2 asthma: mod/sev	Ongoing components: 7 main: EDU / ORG_HC	Usual care before intervention	HC use: 2 Pt satis: 1 Symptoms/activity: 4 Lung function: 1
Ignacio-Garcia 2002	BA	Spain General hospital	N=63 women: 44% mean age: 39.5 asthma: mod/sev	Asthma self-management education program 36 months components: 7 main: EDU	Usual care before intervention	Process: 1 HC use: 3 Symptoms/activity: 5 Lung function: 1
Licksai 2012	BA	Canada PCPs	N=312 women: 60.7% mean age: 35.7 asthma: mild/mod	The Essex County Community Asthma Care Strategy Ongoing components: 7 main: ORG_HC	Usual care before intervention	Process: 4 HC use: 2 Symptoms/activity: 2
Lind 2006	BA	USA Managed care organisation	N=1982 women: 66% mean age: 35 asthma: mild/mod	The Washington State Asthma Program Ongoing components: 10 main: EDU	Usual care before intervention	Process: 8 HC use: 3 Pt satis: 1
Lindberg 1999	BA	Sweden A PCP	N=63 women: 63.5% mean age: na asthma: mild/mod	Asthma Nurse Practice 12 months components: 6 main: ORG_HC	Usual care before intervention	Process: 6 HC use: 1 Symptoms/activity: 2 Self-care: 1 Lung function: 3
Maljanian 1999	BA	USA Hospital	N=68 (at 12 mo) women: % na mean age: na asthma: mod/sev	Asthma Control and Education program (ACE) 12 months components: 7 main: EDU	Usual care before intervention	HC use: 2 QOL: 2 Symptoms/activity: 1 Self-care: 1
Mangiapane 2005	BA	Germany Pharmacies	N=128 women: 65.6% mean age: 43.1 asthma: mild/mod	Community pharmacy-based pharmaceutical care 12 months components: 5 main: EDU	Usual care before intervention	Process: 4 QOL: 1 Symptoms/activity: 3 Self-care: 4 Lung function: 4
Nähri 2001	BA	Finland Pharmacies	N=26 (at 12 mo) women: 75% mean age: 41.3 asthma: mild/mod	Therapeutic Outcomes Monitoring (TOM) program 12 months components: 5 main: EDU	Usual care before intervention	Pt satis: 2 QOL: 2 Self-care: 3
Patel 2004	BA	USA Large medical group practice	N=2920 (at 12 mo) women: % na mean age: na asthma: na	Advocate Health Centers (AHC) Asthma Project 12 months components: 12 main:ORG_PT / ORG_HC	Usual care before intervention	Process: 4 HC use: 3 Self-care: 2
Pauley 1995	BA	USA Hospital	N=25 women: 68% mean age: 32 asthma: na	Asthma clinic 6 months components: 5 main: EDU	Usual care before intervention	Process: 3 HC use: 2
Ponte 2007	BA	Brazil Referral clinic	N=269 women: 75.8% mean age: 46 asthma: mod/sev	Program for the Control of Asthma and Allergic Rhinitis (ProAR) Ongoing components: 5 main: ORG_HC	Usual care before intervention	HC use: 2 Symptoms/activity: 2

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Steuten 2006	BA	Netherlands PCPs and a hospital	N=nc women: 75.9% mean age: 38.8 asthma: mild/mod	Regional disease management program 12 months components: 7 main: ORG_HC	Usual care before intervention	HC use: 1 Pt satis: 1 QOL: 2 Lung function: 3
To 2008	BA	Canada PCPs	N=551 women: 59% mean age: 54 asthma: mild/mod	Primary care asthma pilot project (PCAPP) 12 months components: 9 main: EDU	Usual care before intervention	Process: 4 HC use: 2 Symptoms/activity: 4
Tschopp 2002	BA	Switzerland PCPs within a health network	N=66 women: 43.4% mean age: 43 asthma: mod/sev	Mieux vivre avec son asthme 12 months components: 9 main: EDU	Usual care before intervention	HC use: 3 QOL: 1 Symptoms/activity: 2 Lung function: 2
Boonsawat 2013	ITS (population based)	Thailand Hospitals	N=44,124 (at baseline) women: % na mean age: na asthma: na	National Asthma Program Duration: nc components: 7 main: ORG_HC	Usual care before intervention	Process: 2 HC use: 2
Fireman 2004	ITS (population based)	USA Kaiser Permanente Medical group practices	32,246 (patient years at baseline) women: % na mean age: 42 asthma: na	The Permanente Medical Group (TPMG) disease management program 12 months components: 11 main: ORG_HC	Usual care before intervention	Process: 1 HC use: 5 Symptoms/activity: 2
Haahtela 2006	ITS (population based)	Finland Hospitals, clinics and pharmacies	N=na women: % na mean age: na asthma: na	Finnish National Asthma Program 1994-2004 Ongoing components: 12 main: ORG_HC	Usual care before intervention	Org: 1 Process: 1 HC use: 5 Pt satis: 1 Symptoms/activity: 1
Kauppi 2013	ITS (population based)	Finland Hospitals, clinics and pharmacies	N=na women: % na mean age: na asthma: na	Finnish Allergy Program 2008-2018 Ongoing components: ≥12 main: ORG_HC	Usual care before intervention	HC use: 1
Mehring 2013	ITS (population based)	Germany PCPs	N=20,982 (at baseline) women: % na mean age: na asthma: na	German disease management programs for asthma Ongoing components: 10 main: EDU / ORG_HC	Usual care before intervention	Process: 8 HC use: 1 Symptoms/activity: 1
Souza-Machado 2010	ITS (population based)	Brazil Specialized clinics	N=na women: % na mean age: na asthma: na	Program for the Control of Asthma and Allergic Rhinitis (ProAR) Ongoing components: 8 main: ORG_HC	Usual care before intervention	Process: 1 HC use: 1 Symptoms/activity: 1
Carmo 2011	XS	Brazil Family health units	N=313 women: 57.2% mean age: na asthma: mild/mod	Respira Londrina >4 months components: 7 main: EDU	Limited intervention for patients	Org: 1 Process: 3 HC use: 3 Symptoms/activity: 1
Lindberg 2002	XS	Sweden PCPs	N=348 women: 53.9% mean age: 48.5 asthma: na	Asthma Nurse Practice Duration: nc components: 7 main: ORG_HC	Usual care	Process: 5 HC use: 1 QOL: 1 Symptoms/activity: 4 Self-care: 4

[1] name of intervention or brief description if name not provided RCT: randomised controlled trial; QRCT: quasi randomised controlled trial; CBA*: controlled before-after study (with 2 or more sites for intervention and control groups); CBA: controlled before-after study; ITS: interrupted-time-series study; BA: before-after study (without external control group); XS: cross-sectional studies (with concurrent measurement of intervention exposure and outcomes); PCP: primary care practice; EDU: education component; ORG_HC: organisational component targeting the healthcare system or professionals; ORG_PT: organisational component targeting patients; QoL: quality of life; HC: healthcare; na: not available; nc: not clear