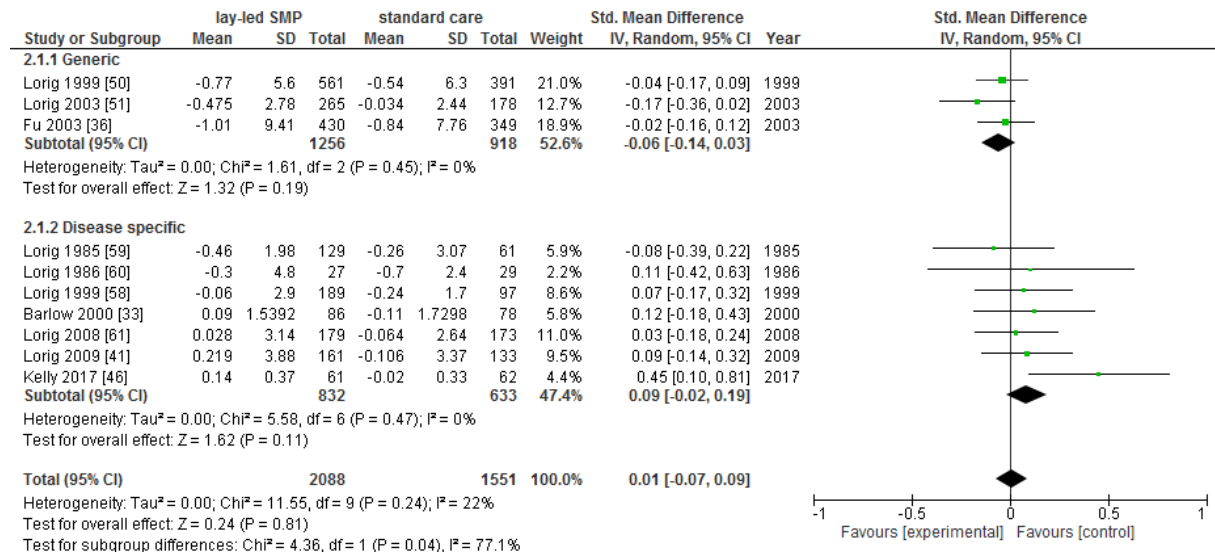


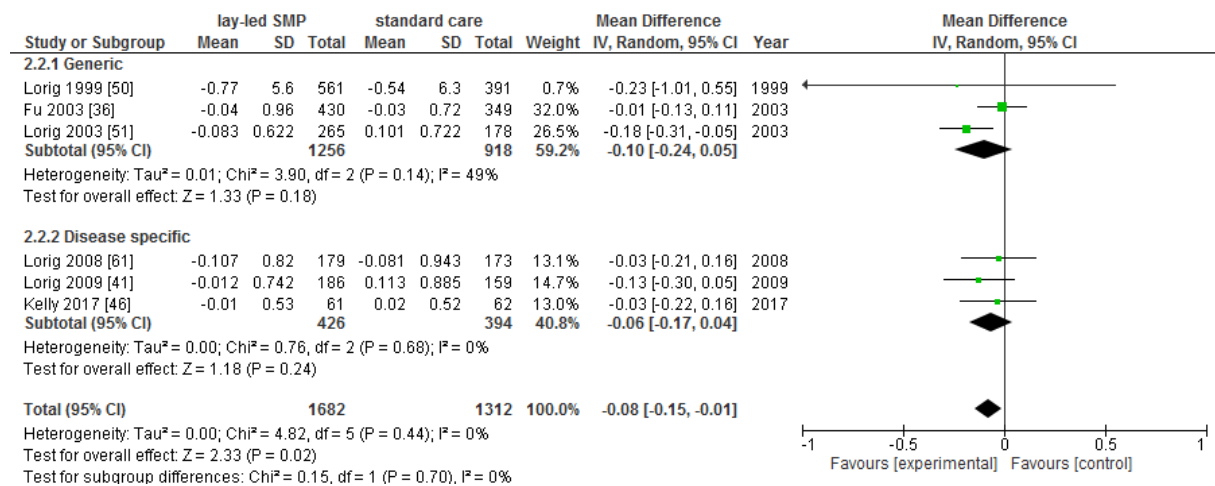
Appendix

Appendix Figure 1: Number of physician visits, short follow-up



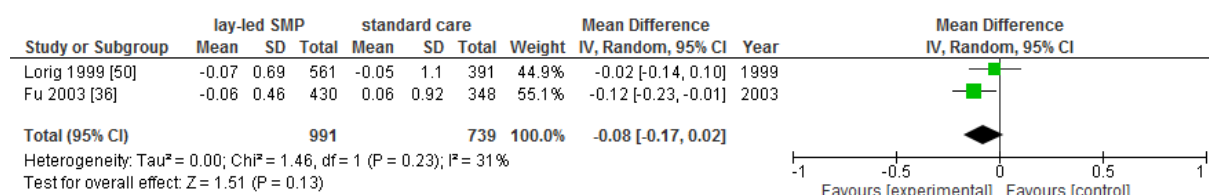
Numbers in brackets refer to reference list in the article.

Appendix Figure 2: Number of emergency department visits, short follow-up



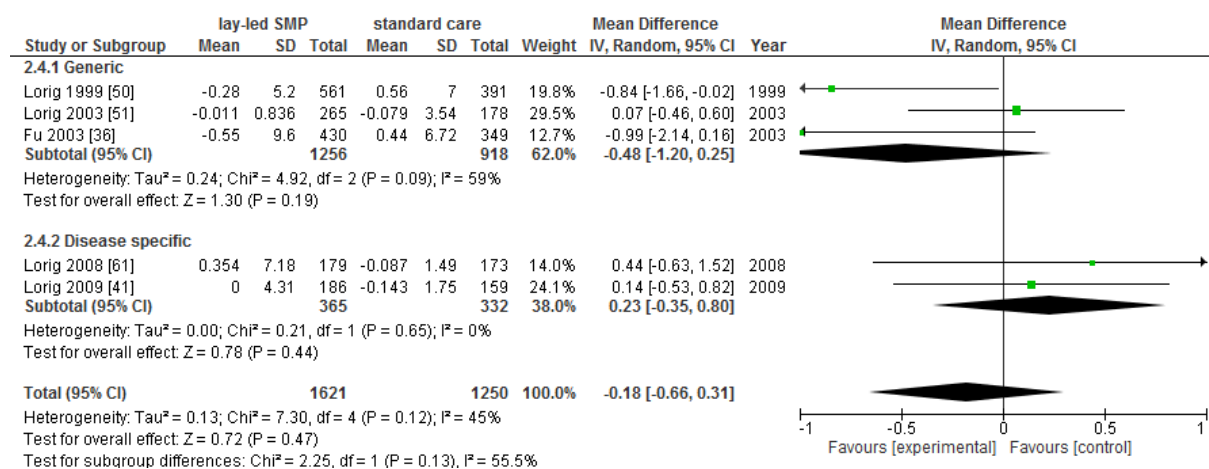
Numbers in brackets refer to reference list in the article.

Appendix Figure 3: Number of hospital admission, short Follow-up



Numbers in brackets refer to reference list in the article.

Appendix Figure 4: Length of stay in the hospital, short Follow-up



Numbers in brackets refer to reference list in the article.

Appendix Table 1: Characteristics of included studies, n=49

Study*	Sample size	Outcomes	Follow-up (months)	Diseases	Intervention	Intensity (hours)	Country
Included in meta-analysis							
Lorig 1985 [59]	286	PV	4, 8, 20	arthritis	ASMP°	–	USA
Lorig 1986 [60]	100	PV	4	arthritis	ASM°		USA
Lorig 1999 [50]	1140	PV, ED, LOS	4	diagnosis of chronic lung disease (asthma, chronic bronchitis, or emphysema), heart disease (coronary artery disease or congestive heart failure), stroke, chronic arthritis	CDSMP	17.5	USA
Lorig 1999 [58]	331	PV	4, 12	arthritis	SDSMP°	12	USA
Barlow 2000 [33]	544	PV, PV arthritis	6	arthritis	ASMP°	12	UK
Fu 2003 [36]	954	PV, ED, LOS	6	hypertension, heart disease (coronary heart disease or congestive heart disease), chronic lung disease (asthma, chronic bronchitis, or emphysema), arthritis, stroke, diabetes	Shanghai CDSMP	15	China
Lorig 2003 [51]	551	PV, ED, LOS	6, 12	heart disease, hypertension, diabetes, lung disease including asthma, chronic bronchitis, emphysema	Tomando	15	USA
Lorig 2008 [61]	567	PV, ED, LOS	6, 18	type 2 diabetes	SDSMP°	15	USA
Lorig 2009 [41]	345	PV, ED, LOS	6, 12	type 2 diabetes	DSMP°	15	USA
Kelly 2017 [46]	151	PV, ED, screening, doctor-patient relationship	6.12	serious mental illness	The Bridge°	–	USA

Study	Sample size	Outcomes	Follow-up (months)	Diseases	Intervention	Intensity (hours)	Country
RCTs							
de Weerd 1991 [76]	558	PV, PV (GP), LOS	6	diabetes	EP°	12	NL
Clarke 2000 [90]	114	ED, LOS	24	serious mental illness	Peer Support°	–	USA
Hopman-Rock 2000 [49]	119	PV	6	arthritis	SMP for patients with osteoarthritis°	12	NL
Craig 2004 [35]	45	HA, LOS	12	serious mental illness	Peer Support°	–	UK
Riegel 2004 [43]	88	LOS, HA, Re-HA	6	congestive heart failure	Peer Support°	–	USA
Griffiths 2005 [38]	476	PV	4	diabetes, arthritis, respiratory or cardiovascular disease	CDSMP	18	UK
Haas 2005 [39]	120	PV, Chiro, AP, HCU	6	low back pain	CDSMP°	15	USA
Buszewicz 2006 [34], Patel 2009 [94]	812	PV, PV (home), PV (telephone), PT, Ergo, Nurse, ED, HA	4, 12	arthritis	SMP for arthritis°	–	UK
Lorig 2006 [74]	958	PV, HA, LOS	12	heart disease, chronic lung disease, type 2 diabetes	Internet-based CDSMP	18–36	USA
Swerissen 2006 [78]	728	PV (GP), SP, AP, Psy, ED	6	chronic diseases	CDSMP	15	AU
Carroll 2007 [92]	247	HA, LOS	1.5, 3, 6, 12	heart disease	Peer Support°	–	USA
Kennedy 2007 [40], Richardson 2008 [95], Rogers 2008 [96]	629	PV (GP), OUT, LOS, HCU	6	musculoskeletal, endocrine, circulatory, myalgic encephalitis/ chronic fatigue, respiratory, mental health, neurological	EPP	–	UK
Elzen 2008 [77]	129	PV (GP), SP, PT, LOS, HA, HCU	6	angina pectoris or heart failure, chronic obstructive pulmonary disease or asthma, arthritis, diabetes	CDSMP	15	NL
Lorig 2008 [52]	855	PV, Chiro, PT, ED, LOS	6, 12	osteoarthritis, rheumatoid arthritis, fibromyalgia	ASMP°	18–36	USA
Jerant 2009 [47]	415	LOS	12	arthritis, asthma, chronic obstructive pulmonary disease, congestive heart failure, depression, diabetes mellitus	Homing in on Health	12	USA
Smeulders 2009 [44]	317	PV (GP), Cardio, SP, ED, N, HA, LOS	12	congestive heart failure	CDSMP°	15	NL
Chan 2011 [75]	772	PV, PV (GO), ED, LOS	6	hypertension, heart disease, chronic lung disease, osteoarthritis, diabetes, stroke	CDSMP	15	China
Ackerman 2012 [32]	130	PV (GP), HP, RH, PT, HCU	1.5, 3, 12	arthritis	ASMP°	15	AU
Goldberg 2013 [91]	63	ED	2	serious mental illness	Living Well	16.25	USA
Adepoju 2014 [45]	376	ED, HA	24	type 2 diabetes	CDSMP	15	USA
McGowan 2015 [42]	361	PV, HA, LOS	6, 12	type 2 diabetes	CDSMP, DSMP	–	CA
Johansson 2017 [48]	328	HA, LOS	24	type 2 diabetes	Peer Support°	–	AT

Study	Sample size	Outcomes	Follow-up (months)	Diseases	Intervention	Intensity (hours)	Country
One-group pretest-posttest							
McGowan 2000 [85]	64	PV, HA, LOS, HCU	6	chronic diseases	CDSMP	17.5	CA
Lorig 2001 [79]	831	PV, ED, HA, LOS	12, 24	heart disease, chronic lung disease, stroke, arthritis	CDSMP	16.8	USA
McGowan 2003 [86]	132	PV, HP, ED, HA, LOS	6	chronic diseases	CDSMP	17.5	CA
Wright 2003 [89]	185	PV, SP, ED, LOS	6	chronic diseases	CDS	12	UK
McGowan 2004 [57]	329	PV, ED, HA, LOS	6	diabetes	CDSMP°	15	CA
Lorig 2005 [53]	445	PV, ED, LOS	6, 12	type 2 diabetes and other chronic diseases	Tomando	15	USA
Goepfing 2007 [37]	416	PV, HA, LOS	6, 12	arthritis	CDSMP, ASHC°	15	USA
Gitlin 2008 [84]	569	PV, ED, HA, LOS, HCU	6	diabetes, high blood pressure, asthma, COPD, heart disease, arthritis, cancer	CDSMP	15	USA
Lorig 2008 [54]	1074	PV (GP), ED, P, PT, LOS	6, 12	type 1 diabetes, type 2 diabetes, hypertension, lung disease (like COPD, asthma and other), heart disease, arthritis, mental health condition, chronic fatigue syndrome, multiple sclerosis, back problems	EPP online	12	UK
Drenkard 2012 [56]	49	ED, OUT, HA	4	systemic lupus erythematosus	CDSMP°	15	USA
Gamboa Moreno 2013 [83]	173	PV, ED, HA	6	type 2 diabetes	SDSMP°	15	ES
Lorig 2013 [55]	114	PV, ED	6, 12	type 2 diabetes	CDSMP	15	UK
Lorig 2013 [82]	254	PV, ED, LOS	6, 12	arthritis, asthma, cancer, COPD, type 1 diabetes, type 2 diabetes, heart disease, lung disease, mental health condition, others	CDSMP	12	AU
Ory 2013 [87], Ory 2013 [93], Ahn 2013 [97]	1170	PV, ED, HA	6	asthma, COPD, arthritis, cancer	CDSMP	15	USA
Jaglal 2014 [80]	106	PV, ED, HA	6, 12, 18	chronic lung disease, heart disease, stroke, arthritis	CDSMP	15	CA
Liddy 2015 [81]	228	PV, PV (GP), SP, ED, HA	6, 12	chronic diseases	CDSMP	15	CA
Slesnick 2015 [88]	14	PV, ED, HA, LOS	6	chronic hemodialysis	CDSMP	15	USA

* Numbers in brackets refer to reference list in the article.

Abbreviations: °: disease-specific; **AP:** alternative practitioner; **ASHC:** Arthritis Self-Help Course; **ASM:** Arthritis Self-Management Course; **ASMP:** Arthritis Self-Management Program; **Cardio:** cardiologist; **CDS:** Chronic Disease Self-Management Course; **CDSMP:** Chronic Disease Self-Management Program; **Chiro:** chiropractor; COPD: chronic obstructive pulmonary disease; **DSMP:** diabetes self-management program; **ED:** emergency department visits; **EP:** Education Program; **EPP:** Expert Patients Program; **Ergo:** ergo therapist; **HA:** hospital admission; **HCU:** hospital admission; **HP:** other health professional; **LOS:** length of stay; **N:** nurse; **OUT:** outpatient visits; **P:** pharmacy; **Psy:** psychologist; **PT:** physiotherapist; **PV:** physician visits; **PV arthritis:** physician visits to discuss arthritis; **PV (GP):** general practitioner visits; **RCT:** randomized controlled trial; **Re-HA:** rehospitalisation; **RH:** rheumatologist; **SMP:** Self-Management Program; **SDSMP:** Spanish Diabetes Self-Management Program; **SP:** specialist; **Tomando:** Tomando Control de su Salud (Taking Control of Your Health)