Review	Intervention of interest	Participant demographics	Setting, delivery mode,	Content, focus, and mode of instruction	Duration, intensity, and follow-up
Diabetes Revi	ews				
Baron 2012	Mobile telemonitoring of blood glucose	Type 1 diabetes – 2 RCTs – mean age 23.8 and 35.7, % male 43% and 59.1%, respectively Type 2 diabetes – 10 RCTs – mean age ranged 46.9 to 63.9, % male ranged 36.6% to 78.3%	All interventions involved transmission of data from a mobile device to a central server, from where the participants would then obtain specific feedback.	Focus was on aiding patients in interpretation of self-monitored data with the aim of improving self- management.	Duration 3-12 months Daily to fortnightly data transmission. Follow-up ranged from 3-12 months
Beatty 2013	Internet based self-help programmes	Type 2 diabetes Mean age ranged 40.6 to 61.5	3/5 "diabetes-Net" online programme with professional online support 1/5 "Internet Diabetes Self- Management Programme" – includes moderated forum 1/5 CD-ROM tailored self- management with professional telephone support	4/5 conducted by the same group, investigating different levels of professional input to an online diabetes self- management programme.	3/5 reported duration, range 6 to 8 weeks
Berat- arrechea 2014	Mobile health interventions	One type 2 diabetes. Two not specified.	Limited to low- and middle-income countries. All interventions delivered by SMS.	One interventions involved SMS transmission of self- monitored glucose data with feedback from study doctor. Two educational interventions with SMS reminders	Glucose monitoring: daily. One study followed up for 1 year. Otherwise n.s.
Cassimatis 2012	Behavioural telehealth interventions	n.s.	Telephone counseling, videoconferencing, educational telephone based interventions. Interventions could not be primarily telemonitoring.	All educational in focus. 10/13 telephone support 1/13 video messaging 2/13 phone messaging supplementing nurse follow-up	5 weeks to 12 months duration Follow up 3-12 months
Currell 2010	Telemedicine – use of telecommunicati ons to provide care	Type 1 diabetes – 2 RCTs Children over 5 years and patients aged 16-65, respectively	Transfer of self-monitored blood glucose readings via modem. Both also included clinic follow-up.	One RCT also included telephone counseling	Duration: 12 weeks to 12 months Frequency: weekly to 2 weekly
De Jongh 2012	Mobile phone messaging for facilitating self- management	Type 1 diabetes – Youth and young adults	SMS sent between healthcare provider and participants' mobile phone.	 1/2 – medication reminders 1/2 – reminders for blood glucose monitoring, automated feedback plus diabetes related educational messages 	1 study, average 2.7 messages per day 1 study – 2 weekly
Farmer 2005	Telemedicine interventions supporting blood glucose self- monitoring	6/12 – type 1 diabetes 1/12 – both type 1 and 2 diabetes 2/12 did not specify 2/12 – pregnant participants with	Transmission of blood glucose results via a remote server. Feedback was either automated of clinical delivered. 11/12 transmitted using telephone	11/12 evaluatedtelemedicine in addition tousual care.4/12 transmitted self-management data (not	Duration 12 weeks to 1 year in the 9 pooled RCTs. "Majority of trials" transmitted data weekly

		type 1 diabetes 1/12 – gestational diabetes	line or internet	specified) in addition to blood glucose	
Farmer 2016	Monitoring or brief messaging interventions to support medication adherence.	Type 2 diabetes	Most concerned mobile messaging. Some used specifically designed technologies such as electronic monitoring of blister packs.	Mobile messaging delivered by clinician. Algorithmic responded designed to support medication adherence.	Duration: 6 weeks to 1 year Intensity: Daily to weekly
Flodgren 2015	Telemedicine interventions grouped into <i>remote</i> <i>monitoring, store</i> <i>and forward</i> <i>applications,</i> and <i>interactive (real-</i> <i>time)</i> <i>telemedicine.</i>	8 RCTs – type 1 diabetes Mean age 9 to 41 One RCT of pregnant women with type 1 diabetes 6 RCTs – type 2 diabetes Mean age 46 to 72 7 RCTs – mixed type 1 and 2 diabetes	Type 1 diabetes: 4 self-monitored glucometer data with transfer 1 smartphone application with data transfer 2 internet based interventions 1 videoconferencing intervention Type 2 diabetes 1 mobile intervention 2 internet based interventions 1 glucometer with transfer 1 HTM unit 1 videoconferencing Mixed diabetes 3 internet interventions 2 glucometer readings with transfer 2 videoconferencing interventions 1 glucometer readings with transfer 2 videoconferencing interventions 1 HTM	11 RCTs had a specific educational focus. All focused on review of clinical data – some self- monitored glucose data.	Data transfer daily to monthly Follow-up 3 to 18 months
Garcia- Lizana 2007	Information communication technology (excluding telephone-only) for chronic disease management	1/7 children 1/7 aged 15/20 5/7 not specified	n.s.	 4/7 involved transmission of blood sugar. 3 of these provided telephone feedback. 3/7 predominantly education delivery by internet (2/7) and 'telemedicine' (not defined) (1/7) 	Follow-up 6 weeks to 12 months
Graziano 2009	Isolated telephone interventions for type 2 diabetes	5/8 type 2 diabetes only 1/8 95% type 2 diabetes 2/8 not specified Mean age 60 years 7/8 reported insulin use – mean 34% in these studies	Outgoing calls to patients with type 2 diabetes	6/8 evaluated telephone- only interventions for glycaemic control 2/8 evaluated telephone components of broader interventions	Duration 3 to 12 months 5/8 twice weekly calls 2/8 reported number of contacts (3-4 and 13 respectively) 1/8 not reported Follow-up 3-12 months
Greenwood 2014	Remote patient monitoring incorporating structured self- monitoring of blood glucose	Type 2 diabetes	Any method of remote interaction and healthcare delivery (including telephone, video, text message, vital signs monitoring)	Interventions involved at least one of seven elements of structured self- monitoring of blood glucose: 1. patient education 2. healthcare	n.s.

				providor	[
				provider education 3. specific self- monitoring profile	
				(frequency and intensity) 4. Specific pre- and post-meal	
				blood glucose goals 5. Blood glucose data used to	
				modify behaviour 6. Evidence of	
				feedback to patient 7. Evidence of 2- way interaction	
Hamine 2015	Mobile phone interventions to promote medication adherence	Results for diabetes used. No further details given	n.s. for diabetes RCTs separately from other trial types	n.s. for diabetes RCTs separately from other trial types	n.s. for diabetes RCTs separately from other trial types
Holtz 2012	Mobile phone interventions for diabetes management	57% of studies included type 1 diabetes only 19% type 2 diabetes 10% mixed 14% did not specify	71% used a study specific application, others simple messaging. 52% involved messaging	81% used a diary function 39% used educational messaging 71% used automatic transmission of blood glucose data from glucometer to phone	Duration 2 weeks to 1 year
Huang 2015	Self-monitored transmission of glucometer data with healthcare professional feedback.	Type 2 diabetes % female ranged 38.75 to 71.67	5 telephone based 11 Internet based 2 automated	n.s.	Duration 3 to 60 months
Jaana 2007	Home telemonitoring (automated transmission of clinical data) for diabetes	Type 1 or 2 diabetes Average age ranged from 13 to 69	 11/13 – glucometer linked to phone, video or internet for transmission of data. 2/13 – electronic diary with data transmission/reminders. Older studies tended to use phone only with internet and videoconferencing being used for feedback in more recent studies. 	All involved transmission of blood glucose measurements. 3/13 also included lifestyle/behavioural data	Duration 3 to 15 months
Kok 2011	e-health interventions (interaction	9/12 RCTs concerned diabetes 5/9 type 2 diabetes 2/9 not specified	All web based, combination of videoconferencing, discussion, education website and email.	5/9 evaluated e-health in addition to usual care, 4/9 instead of usual care.	Follow-up: 3-30 months, and until birth in study of gestational diabetes

	between patient	1/9 type 1 or 2		9/9 offered web-based	
	and healthcare	1/9 indigent women with		education	
		diabetes			
	provider via	ulabeles		4/9 gave feedback on	
	internet) to			glucose monitoring data	
	support self-			2/9 incorporated	
	management			videoconferencing	
Krishna	Diabetes self-	Type 1 or 2 diabetes	All participants received face-to-face	Interventions included	3-12 months duration
2008	management via	6/18 studies involving children	diabetes care with the intervention	educational messages,	Daily to weekly input
	cell-phone	12/18 involving adults	groups also receiving cell-phone	reminders, management	
			based input in addition.	plans and input of self-	
			Delivery was by SMS, voice-mail,	monitoring blood glucose	
			internet or email.	data.	
Krishna	Delivery of	9/25 studies focused on	Delivery by SMS (9/9) plus voice	All had an educational	Duration 3 to 12 months
2009	health	diabetes	interaction (3/9) or internet (5/9).	focus. 7/9 included support	Frequency – 2/9 daily, 7/9
	information or	4/9 type 1 diabetes		for blood glucose	weekly.
	education by	5/9 type 2 diabetes		monitoring, medication	
	mobile phone or			dose and lifestyle. 1/9	
	messaging			focused on hypoglycaemic	
				events.	
Kujipers	Web-based	Mean age 60 years (all	Web based – included online	Online support promoting	Duration 6 weeks to 18
2012	interventions for	conditions)	interaction with professional – usually	self-management and	months.
	patient	,	study nurse	physical activity	Frequency and intensity
	empowerment		,	programmes with peer	"poorly reported in studies"
	and physical			support and professional	, . , , ,
	activity			feedback.	
Liang 2011	Mobile phone	9/22 type 1 diabetes	12/22 SMS and internet	All contained reinforcement	14/22 daily
	interventions for	10/22 type 2 diabetes	8/22 SMS alone	of lifestyle management	3/22 weekly
	diabetes self-	2/22 mixed	2/22 compared SMS and internet	Most encouraged self-	4/22 unspecified
	management	1/22 unspecified	2/22 compared SWS and internet	monitoring of blood glucose	Median follow-up 6 months
	management	Mean age 44 years		5/22 tailored SMS	(range 3-12 months)
		Mean duration of diabetes 6.4		interventions	(range 5-12 months)
		years		linerventions	
Lieber 2011	Telemontoring of	4/5 type 2 diabetes	n.s.	n.s.	Follow-up 6-12 months
	blood glucose	1/5 type 1 diabetes	11.3.	11.3.	1 ollow-up 0-12 months
	data	1/3 type 1 ulabeles			
Marcolino		nc	8/13 primary care, 4/13 secondary	Interventions either	Duration: 6-18 months
	Telemedicine	n.s.		Interventions either	
2013	interventions for		care, 1/13 primary and secondary	monitored clinical values or	(6/13 6 months, 6/13 12
	type 1 or type 2		care	combined monitoring with	months, 1/13 18 months)
	diabetes		Exchange of clinical information	education.	8/13 reported weekly data
			between patient and healthcare	Educational components	transmission
			provider by computer,	included phone calls,	
			videoconferencing, telephone or	videoconferencing, SMS,	
			mobile device, in addition to usual	websites, educational	
			care.	reminders.	
Montori	Telecare	Type 1 diabetes.	Transmission of glucometer data with	n.s.	Daily to 2 weekly
2004	(transmission of	7/8 adult patients	professional feedback		transmission
	glucometer data	1/8 paediatric patients			Daily to 4 weekly feedback
	with healthcare	All studies recruited patients with			
	professional	poor glycaemic control			

	type 1 diabetes.				
Medical Advisory Secretariat 2009	Home telemonitoring	Type 2 diabetes Mean age ranged 45 to 71 years	Self-monitored blood-glucose data transmitted to healthcare professional that provided feedback. 4/8 used automated, linked glucometers 4/8 manually sent data	Specific training given to intervention group, although content of this not reported. Interventions also included videoconferencing (2/8), web-based education (5/8), monitoring of lifestyle factors (7/8).	Frequency poorly reported. Weekly to monthly when available. Duration and follow-up 6-30 months.
Mushcab 2015	Web-based remote monitoring	Type 2 diabetes Age data incomplete	Web-based transmission of self- monitored blood glucose data.	n.s.	Duration 3 to 18 months
Polisena 2009	"home telehealth" – transmission of clinical data from home to healthcare providor	Type 1 and 2 diabetes – 4 studies did not specify. Patients with impaired cognitive function, language barrier or major chronic illnesses were excluded from most studies.	Home telemonitoring included synchronous (audio- and video- conferencing) and asynchronous (tramission via internet, video clips or electronic clinical data). Telephone support involved phone contact only without the transmission of clinical or outcome data.	Home telemonitoring: 11/12 focused on tranmsision of blood glucose data 1/12 had an educational focus 2/12 included transmission of other biological data 1/12 reinforced lifestyle advice Telephone support: 3/5 focused on lifestyle intervention 2/5 monitored blood glucose 4/5 had an education focus	Follow-up 3 months to 3 years Home telemonitoring frequency – daily to 2 weekly Telephone support frequency – weekly to 3 weekly.
Saffari 2014	Health education interventions delivered via mobile phone.	Type 2 diabetes Mean age ranged 47 to 63 % males ranges 22.2 to 51	Mobile phone SMS delivery	Education focus including reminders and dietary/lifestyle information and prompts.	Duration 3 months to 1 year.
Small 2013	Telephone- based self- management interventions	Review focus on vascular diseases 7 RCTs of interventiions for type 2 diabetes. 1807 participants	Telephone interventions by trained 'lay health workers'.	Educational content to telephone interventions. 3 RCTs specifically addressed adherence. 4 RCTs contained specific lifestyle interventions.	Intensity ranged from weekly to 3 monthly phone calls.
Suksomboo	Telephone	n.s.	Telephone only interventions –	2/5 educational focus	Number of phone calls
n 2014	interventions for diabetes		excluded those with other technologies	3/5 encouraged medicationcompliance3/5 focused on problemsolving and goal setting	ranged from 2 to 16. Mean phone call length 9 to 15 minutes.
Sutcliffe 2011	ICT interventions to promote access and engagement of young people	776 young people (Males = 499, Females = 277) with type 1 diabetes. Study sizes ranged from 28 to 123 (Mean = 78.3, SD = 30.78). The mean age of	Video- or tele-conferencing Telephone support Novel electronic devices transferring clinical data Web based discussion boards	n.s.	Duration 6-18 months

	with diabetes	patients ranged from 11.9 to			
	into healthcare	23.9 years (Mean = 16, SD =			
		3.74)			
Verhoeven	Teleconsultation	Type 1 or type 2 diabetes	Combination of primary and	8 RCTs – teleconsultation	n.s.
2007	and	mellitus. Videoconferecing	secondary care	3 RCTs -	
	videoconferencin	included only type 2 diabetes		videoconferencing	
	g for diabetes				
Verhoeven	Comparison	Type 1 or type 2 diabetes	Both primary and secondary care.	Unable to separate RCT	n.s. for RCT data
2010	between	mellitus		data – n.s.	
	synchronous and				
	asynchronous				
	teleconsultation				
Viana 2016	Interventions	Type 1 diabetes.	2 RCTs – telephone based contact.	Feedback aimed a	Most 6 month duration, on
	aimed at	Mean age ranged 13 to 43	4 RCTs – self- monitored glucometer	promotion of adherence to	9 month.
	improving patient		data transmitted via internet/mobile	management plans to	Data tramsmission twice
	compliance with		device.	improve HbA1c.	weekly to monthly.
	therapies for			2 telephone based RCTs	
	glycaemic			educational in focus.	
	control in type 1			4 involved direct monitoring	
	diabetes. Data			of self-monitored blood	
	for telecare			glucose data.	
	used.				
Wens 2008	Educational	Type 2 diabetes	2 RCTs delivered educational	Both educational in focus.	Weekly intervention
	interventions		intervention via telemedicine. One	Aimed at promoting	
	aimed at		telephone intervention. One	adherence to lifestyle	
	improving		telemedicine mediated 'visit'	interventions as well as	
	adherence to		supplementing an educational class	medication.	
	treatment				
	recommend-				
	ations in type 2				
	diabetes				
Wu 2010	Telephone	Type 2 diabetes, mean duration	All involved phone call to patient from	Lifestyle 2/7	Follow-up 6 to 18 months
	follow-up	8 years.	a trained diabetes professional.	Self-care 6/7	Call frequency biweekly to
		Mean age 63 years	Some also incorporated calls from	Glucose monitoring 5/7	monthly
		50% female	patients to an automated service.	Therapy adjustment 5/7	
		13% controlled with diet only,		Psychological input 2/7	
		31% diet and oral agents, 56%		Guideline driven 2/7	
		on insulin.		Physician input 3/7	
Zhai 2014	Telemedicine	Type 2 diabetes.	12 RCTs – telephone based	Telephone based	Duration 3-30 months
	interventions	Mean age ranged 46 to 70.	interventions	interventions were all	
	(including web-	% male ranged 37 to 75	19 RCTs – internet based	educational in focus.	
	based,		interventions	Internet mediated transfer	
	teleconferencing,		6 RCTs – Internet mediated data	involved clinical data	
	mobile and		transmission	monitoring. Internet-based	
	landline-based		2 RCTs – messaging based (SMS)	interventions also involved	
	telephone			uploading of self-monitored	
	interventions)			blood glucose data.	
Heart Failure	Reviews				
Berat-	Mobile health	Heart failure.	Limited to low- and middle-income	Disease counseling and	Weekly telephone

arrechea	interventions		countries.	access to telephone	intervention
2014			Delivery by mobile telephone	helpline.	
Chaudhry	Telemonitoring	2627 participants (range 134-	All involved monitoring from	Symptom monitoring via	Duration 6-12 months.
2007	systems (any	1518).	centralised nurses. Delivered by	live, nurse delivered, one-	1 study weekly calls for 2
	technology,	Mean age 65 to 72 years.	telephone call.	to-one phone call.	weeks then decreasing
	including	Percentage male ranged from		All were multi-faceted	frequency. 2 studies 2
	telephone) for	46 to 71.		interventions which	weekly calls for 8 weeks
	heart failure.	Variation in severity of heart		included an educational	then decreasing frequency.
	Telephone	failure (NYHA IV ranged from 9-		component addressing diet,	2 studies had 17 and 14
	support included	59%)		medication adherence.	calls, respectively, over 6
	educational			One intervention also	months.
	component. Also			included educational	
	considered			support to the patient's	
	separately			family.	
	automated			One intervention included	
	physiological			adjustment of diuretic	
	monitoring (not			doses, however this was	
	considered self-			under direction of the trial	
	management.)			nurses.	
Ciere 2012	Telehealth	Mean age of participants ranged	Community setting	11/11 involved monitoring	Duration 6 weeks to 12
	interventions	61–78 years.	7/11 – home telehealth system	of signs and symptoms	months (median 3 months)
	(home-based	proportion of males ranged from	4/11 – telephone	9/11 included specific	Most studies requested the
	self-monitoring of	37–99%, although gender	1/11 – website	educational component	patients use equipment
	signs and	was unreported in two studies.	2/11 - videophone		daily.
	symptoms with	Seven studies reported			Follow up ranged from 2-12
	data transferred	baseline severity of HF based on			months
	to remote	NYHA. Most were mild or			
	healthcare	moderately impaired. Some			
	professionals)	studies included those with no			
	delivered to	impairment or severe			
	community-	impairment.			
	dwelling patients				
	with heart failure				
	in which				
	measures of				
	knowledge,				
	perceived self-				
	efficacy of self-				
	care behaviours				
Clarka 2011	were reported	2400 patients	All used specialised monitoring	10/12 doily shy sisteria	Doily monitoring
Clarke 2011	Telemonitoring for heart failure	3480 patients Mean age 55-85		10/13 – daily physiological	Daily monitoring Follow-up: 3-15 months
	(excluded	Reporting of comorbidities highly	equipment, in the patient's home, connected via a phone line.	monitoring (weight, HR, BP, ECG)	1 010w-up. 5-13 11011015
	telephone-only	variable.	כטיווובטבע אמ מ אווטווב וווופ.	2/13 – daily body weight	
	interventions).	All had LVEF <40%, NYHA I-IV		plus symptom monitoring	
	Physiological	רווומע בעבו ≤40,/0, ועד⊓א ו-וע 		All transmitted to central	
	monitoring but			healthcare professional	
	also addressed			(often nurse)	
	adherence.				
	aunerence.				

Garcia-	Information	n.s.	2/6 web based	1/6 specified feedback	Follow-up: 6-15 months
Lizana 2007	communication	11.5.	2/6 videoconferencing	1/6 specific education focus	
	technology		2/6 telemonitoring	The specific curculor rocus	
	(excluding		210 totemonitoring		
	telephone-only)				
	for chronic				
	disease				
	management				
Inglis 2015	Telephone	13192 participants	Community based home intervention	25.41 – structured	Follow-up 3-18 months
inglis 2015	-		by telephone or telemonitoring		-
	support -	Mean age ranged 44.5 to 78	by telephone of telemonitoring	telephone support including	Intensity ranged from daily
	monitoring and/or self-care	years		18/41 – telemonitoring of	to weekly, with reducing
		Mean male participants 64%		vital signs, ECGs, weight.	frequency over time.
	management			2/41 – telephone support	
	delivered using			and telemonitoring	
	telephone				
	technology				
	Telemonitoring -				
	digital/broadband				
	/satellite/wireless				
	or bluetooth				
	transmission of				
	physiologic data				
Kujipers	Web-based	Mean age 60 years (all	Web based – included online	Online support promoting	Duration 3 to 12 months.
2012	interventions for	conditions)	interaction with professional – usually	self-management and	Frequency and intensity
	patient		study nurse	physical activity	"poorly reported in included
	empowerment			programmes with peer	studies"
	and physical			support and professional	
	activity			feedback.	
Radhakrish	Telecommunicati	n.s.	In most studies data review and	Vital signs monitoring (5/8)	Duration 6 weeks-12
nan 2012	on (excluding		patient interaction carried out by trial	videoconferencing (4/8)	months.
	telephone only)		nurse	and tailored education	Follow-up similar duration.
	with self-care			content through questions	6 week intervention had
	outcomes			and answers (4/8).	additional 4 month follow-
					up
Schmidt	Home	n.s.	n.s.	n.s.	n.s.
2010	telemonitoring				
	13/19 telephone				
	monitoring				
	6/19 vital signs				
	monitoring				
Asthma Revie				1	
Berat-	Mobile health		Limited to low- and middle-income	1 RCT – mobile based self-	
arrechea	interventions		countries.	management plan with	
2014			All interventions delivered by SMS.	interactive feedback.	
				1 RCT – Mobile monitoring	
				of spirometry data with	
				feedback.	
De Jongh	Mobile phone	Moderate persistent asthma,	SMS	Participants submitted peak	Daily self-monitoring results
		mean age 24.6 (1 RCT)		flow readings	sent to central server.

	facilitating self-			Content of feedback not	Weekly review by
	management			specified	healthcare professional with
	- Start				personalized feedback and
					advice.
Flodgren	Telemedicine	5 RCTs of asthma interventions	3 internet based interventions	All had educational focus	Follow-up 6-12 months
2015	interventions	2 RCTs children only – mean	1 computer based intervention	and concerned review of	Data transfer weekly to
2010	grouped into	age 10 in both	involving camera and real time	clinical data with feedback	fortnightly.
	remote	2 RCTs adults only, mean ages	review		lorungnuy.
	monitoring, store	28 and 32	1 portable hand held data transmiting		
	and forward	One adults and children (mean	device with self-monitoring and input		
	applications, and	ages 45 and 10, respectively)	device with self-monitoring and input		
	interactive (real-	ages 45 and 10, respectively)			
	time)				
	telemedicine.				
Garcia-	Information	All children or adolescents with	3/5 – interactive computer game	All educational and	Follow-up: 3-15 months
Lizana 2007	communication	asthma	2/5 web based educational	interactive in focus	
	technology	asullia	intervention	Interactive III IUCUS	
	05				
	(excluding telephone-only)				
	for chronic disease				
Jaana 2009	management	Maan aga 7.6 ta 20 yaara	E/7 used encoipliced equiptment	7/7 evaluated asthma	Duration 3 to 12 months
Jaana 2009	Home	Mean age 7.6 to 28 years	5/7 used specialised equiptment		
	telemonitoring		3/7 utilised telephone connection	symptoms	Frequency twice daily in
	(transfer of		1/7 SMS	6/7 assessed peak	one RCT, daily in 5 RCTs,
	clinical data from		3/7 internet connection	expiratory flow	twice weekly in one RCT.
	home to			5/7 symptom diary	
	healthcare			3/7 evaluated medication	
	centre) for			use	
	respiratory			3/7 assessed function	
	conditions			status	
Vrichno	Delivory of	Acthmo	CMC only	1/7 spirometry values	Duration 4 months
Krishna 2009	Delivery of health	Asthma	SMS only	Peak flow monitoring and	Duration 4 months
2009	nealth information or			weekly medication	Frequency: weekly
				adjustment	
	education by				
	mobile phone or				
Maraana	messaging Smartphone or	Acthma (although diagraphia	Acthma colf management	Data an cumptoma	Twice delly one years to
Marcano	Smartphone or	Asthma (although diagnostic	Asthma self-management	Data on symptoms,	Twice daily app usage in
Belisario	tablet self-	criteria differed)	smartphone apps compared to	medication usage, peak	one study, other not
2013	management	One RCT – aged 12 and over.	traditional, paper-based, asthma self-	expiratory flow etc. was	specified.
	apps for asthma	One RCT did not report age	management	recorded on app and	3-6 month follow-up
		ranges.	Outpatient setting	transmitted intermittently to	
				central server. Data then	
				transmitted back along with	
				control analysis and self-	
				management	
				recommendations.	
McLean	Home telecare.	Asthma	9 RCTs – telephone interventions	Majority incorporated and	Daily to 2 weekly contact.
2010	Broad definition,		2 RCTs – videoconferencing	initial face-to-face	3 to 18 month follow-up

	included video,	Γ	2 RCTs – Internet interventions	introductory session	
	telephone or		6 RCTs - other networked	followed by telemedicine	
	internet links with		interventions	follow-up which included	
	health		1 RCT – Text messaging	symptoms monitoring,	
	professionals,		1 RCT – combination of text and	educational aspects and	
	wired or wireless		internet	self-management plans.	
	transfer of		Internet	seir-management plans.	
	patient data.				
COPD Reviews	•				
Bolton 2011	Self- or carer-	6 included studies	n.s.	4/6 studies (1 RCT)	Daily completion of
DOILOIT 2011	recorded	Only 1 RCT including	11.5.	included educational	educational modules and
	physiological	educational component/self-		component	transmission of data in
	data	management relevant to meta-		component	relevant RCT
	Transmission of	review.			
	data to	COPD – GOLD stage 3 or 4			
	healthcare	55% female, mean age 67 years			
	provider using	5570 Terriale, mean aye 07 years			
	telecommunicati				
	on (manual or				
	automated)				
	Review of data				
	with				
	personalised				
	feedback				
Cruz 2014	Home	Mean age >65	Home setting.	n.s.	Duration 2-12 months
0102 2014	telemonitoring -	All studies included COPD	Self-recorded physiological data as	11.3.	Daily transmission
	transmission of	severity in inclusion criteria.	well as monitoring of symptoms and		Dully transmission
	clinical data	4/7 moderate to severe COPD	exercise tolerance. Transmitted to		
	(physiological or	3/7 severe to very severe COPD	healthcare professional using		
	symptoms) using	and/or long term oxygen therapy	information communication		
	information and		technology.		
	communication				
	technologies to				
	be assessed by				
	healthcare				
	provider.				
Flodgren	Telemedicine	Mean age 60 to 68	2 specifically designed monitoring	All had educational focus	Follow-up 6-12 months
2015	interventions		devices (one hand-held, one home	and concerned review of	Data transfer weekly to
	grouped into		based).	clinical data with feedback	fortnightly.
	remote		One internet-based intervention.		
	monitoring, store				
	and forward				
	applications, and				
	interactive (real-				
	time)				
	telemedicine.				
Franek 2012	Home telehealth	HTM:	HTM:	HTM:	HTM:
	technologies –	3/5 specified severe COPD	Connected via landline	All included personalised	1-12 month intervention
	self-recorded	(and/or LTOT in one study)	All included pulse oximetry plus other	feedback on symptom	No additional follow-up
	physiological	Telephone support:	physiological recording equipment	management	
	1	1	1		

	data transmitted	COPD patients discharged from	including FEV1 monitor, pedometer,	1/5 explicitly included self-	Telephone support:
	to healthcare	a single hospital	thermometer	management education	18 day intervention, 15 day
	professional	a single nospital	Telephone support:	Telephone support:	follow-up
	using ICT		Delivered post discharge	Individualised post-	
	Telephone only		Bointorod post discharge	discharge patient education	
	support – regular			disonargo pationt oddoaton	
	contact between				
	patient and				
	professional by				
	telephone or				
	videoconference				
Kujipers	Web-based	Mean age 60 years (all	Web based – included online	Online support promoting	12 months
2012	interventions for	conditions)	interaction with professional – usually	self-management and	
2012	patient	conditionsy	study nurse	physical activity	
	empowerment		Sludy Huise	programmes with peer	
	and physical			support and professional	
	activity			feedback.	
Lundell	Home-based	Mean age ranged 64 to 73.	5 telephone interventions	Motivation or counseling	Feedback or motivation
2015	telehealthcare	wearraye rangeu 04 10 75.	4 web based	-	
2015				elements of patient feedback common to all	element at least 3 times in first months of intervention.
	incorporating feedback,		3 mobile interventions		
				interventions included.	Up to 12 months follow-up
	counseling or				
	motivational				
	elements.	0000			
McLean	Home telecare.	COPD	3 telephone systems	Combination of educational	Follow-up 6 to 12 months
2011	Broad definition,	Classified as severe in 2 RCTs	3 internet delivery	self-management	
	included video,		3 videoconferencing	interventions combined with	
	telephone or		1 specialised independent network	telemonitoring (2 RCTs)	
	internet links with		with video	and home visits (2 RCTs)	
	health				
	professionals,				
	wired or wireless				
	transfer of				
	patient data.				
Polisena	Home	COPD	4 telemonitoring	Follow-up 3 to 19 months	Daily to weekly contact
2010	telemonitoring	Mean age ranged 67 to 72	6 telephone support		3 to 15 month follow-up
	(remote care	Male:female ratio ranged 50:46			
	delivery or	to 87:3			
	monitoring) or				
	telephone				
	support (without				
	electronic				
	transmission of				
	data)				
Cancer Reviev					
Beatty 2013	Internet based	1 RCT of 62 patients with breast	Web-based	Internet delivered cognitive	12 weeks duration
	self-help	cancer.		behavioural therapy with	
	programmes	Mean age 52.5 and 50.3		email prompts	
		(intervention and control			
		respectively)		1	i de la companya de la company

Kujipers	Web-based	1 RCT – 325 patients with breast	Web based – included online	Self-monitoring plus	12 months duration
2012	interventions for	and prostate cancer	interaction with professional	tailored self-management	
	patient			support	
	empowerment			Communication with other	
	and physical			patients and with expert	
	activity			nurses via internet	
McAlpine	Online	2 RCT – various cancer types –	All web based delivery.	One moderated	Follow-up 9 months in one
2015	interventions for	353 patients total		internet0based CBT	RCT, otherwise n.s.
	cancer patients.	1RCT – Lung cancer – 79		programme.	
	Various types	patients – mean age 60		One post-thoracotomy	
	but separately	1 RCT – Breast cancer. 252		symptom monitoring	
	considered those	patients		programme incorporating	
	facilitating			telephone elements as well	
	communication			as online.	
	between clinician			Two online information	
	and patient (only			portal.	
	these data			/educational interventions	
	considered for			with online interaction with	
	meta-review)			clinician.	