Author (year)	Country	Purpose of study	Setting Patient group	Type of study	Design	Quality appraisal (MMAT)
Anhøj & Møldrup (2004)	Denmark	To evaluate the feasibility of using SMS for asthma diary data collection and patient	Outpatient clinic	Quantitative and qualitative	Mixed methods	3/4
[39]		compliance with an SMS diary	Patients with asthma			
Agyapong et al (2013) [38]	Ireland	To examine the perception of patients with AUD and comorbid depression about the usefulness of supportive text messages	University psychiatric hospital	Quantitative	Cross-sectional semi- structured survey	3/4
		supportive text messages	Patients with alcohol use disorder			
Altuwaijri et al (2012) [72]	Kingdom of Saudi Arabia	To evaluate the effect of sending SMS reminders to patients with outpatient clinic appointments on non-attendance rates	Outpatient clinic	Quantitative	Retrospective data- analysis study	3/4
		non-attendance rates	Outpatients			
Arora et al. (2012) [32]	USA	A To assess satisfaction and preliminary effectiveness of the "TExT-MED program"	Emergency department	Quantitative	Prospective proof-of- concept study	2/4
(2012) [32]			Patients with diabetes			
Balato et al (2012) [37]	Italy	treatment adherence and other patient outcomes with patients with psoriasis	Department of Dermatology	Quantitative R	RCT	4/4
			Patients with psoriasis			
D. I. (2012)	***		•		D CIT	2/4
Boker et al (2012) [47]	USA	To determine if daily automated SMS would result in increased adherence to recommended use	Dermatology clinics	Quantitative RCT	3/4	
		of topical acne medication	Patients with acne			
Bos et al (2005) [58]	The Netherlands	To retest the hypothesis that a reminder would reduce the failed attendance rate	Orthodontic clinic	Quantitative	RCT	2/4
			Patients at orthodontist clinics			

Bourne et al (2011) [69]	Australia	To evaluate the impact of an SMS system on HIV/sexually transmitted infection re-testing	Sexual health clinic	Quantitative	Cohort study	2/4
		rates among men who have sex with men	Patients with HIV/ sexually transmitted infection			
Brannan et al (2011) [56]	UK	To determine the effectiveness of an SMS reminder in improving attendance in return	Ophthalmology clinic	Quantitative	Prospective study	3/4
		general ophthalmology clinic patients	Patients at ophthalmology clinic			
Branson et al (2011) [70]	USA	To examine the feasibility, acceptability, and preliminary efficacy of text message appointment reminders to improve attendance in outpatient	Outpatient child mental health clinic	Quantitative	Quasi-experimental	4/4
		therapy	Adolescents with mental health problems			
Britto et al (2011) [85]	USA	To assess the feasibility, acceptability and utility of a text messaging system on teenagers with asthma	Pediatric academic medical center	Quantitative	Nonrandomised feasibility trial	3/4
			Patients with asthma			
Chen et al (2008) [61]	China	To compare the efficacy of an SMS reminder and phone reminder to improve attendance rates	Health promotion center	Quantitative	RCT	3/4
			Outpatients			
da Costa et al (2010) [67]	Brazil	To evaluate the impact of appointment reminders sent as SMS on nonattendance rates	Outpatient clinic	Quantitative	Cohort study	3/4
			Outpatients			
da Costa et al (2012) [80]	Brazil	To assess whether a warning system based on mobile SMS messages increases the adherence of HIV-infected women to antiretroviral treatment	Center for infectious diseases in pregnancy	Quantitative	RCT	3/4
			Patients with HIV/AIDS			

Dick et al (2011) [44]	USA	diabetes-focused text message-based reminder	Outpatient clinic	Quantitative	Pre-and-post design	3/4
		and data collection system	Patients with diabetes			
Downer et al (2005) [59]	Australia	To evaluate the effect of appointment reminders sent as SMS text messages on attendance at	Children's Hospital	Quantitative	Cohort study with historical control	2/4
		outpatient clinics	Outpatients			
Downing et al (2013) [77]	Australia	To assess the effectiveness of using SMS reminders with and without incentive payments to	Sexual health clinic	Quantitative	RCT	4/4
		increase re-testing rates in clients diagnosed with Chlamydia	Patients with chlamydia			
Dowshen et al (2012) [48]	USA	preliminary efficacy of SMS reminders to improve adherence to ART for youth living with	Community based health center	Quantitative	Prospective, pre-post design	3/4
			Patients with HIV/AIDS			
Fairhurst & Sheikh (2008) [62]	UK	To evaluate the effectiveness of texting appointment reminders to patients who persistently fail to attend appointments	Inner city general practice	Quantitative	RCT	4/4
			Outpatients			
Fischer et al (2012) [73]	USA	diabetes in self-management behaviors between	Community health center	Quantitative	Quasi-experimental	3/4
			Patients with diabetes			
Foley & O'Neill (2009) [64]	UK	To evaluate the operational and financial efficacy of sending short message service (SMS) mobile telephone text message to patients with outpatient	Pediatric dental outpatient clinic	Quantitative	Cohort study with historical control	2/4
		clinic appointments	Outpatients			
Foreman et al (2012) [82]	USA	opting to receive text message medication	Outpatient clinic	Quantitative	Cohort study	3/4
			Patients with chronic disease			

Franklin et al (2006) [35]	UK	To assess a text-messaging support system in pediatric patients with Type 1 diabetes	Outpatient clinic	Quantitative	RCT	4/4
(====)		F	Patients with diabetes			
Furberg et al (2012) [21]	USA	To develop, implement and test a tailored SMS-based intervention for HIV-positive patients	Primary care clinic	Quantitative	Proof-of-concept study	1/4
(2012) [21]		based intervention for the positive patients	Patients with HIV		study	
Granholm et al (2012) [49]	USA	To pilot test an interactive text-messaging intervention for medication adherence,	Community-dwelling	Quantitative	Quasi-experimental	1/4
(2012) [42]			Patients with schizophrenia			
Greaney et al (2012) [86]	USA	To examine the association between participants' characteristics and preferred reminder modality	Urban health center	Quantitative	RCT	2/4
			Outpatients			
Guy et al (2013) [78]	Australia	To evaluate the impact of an SMS reminder system on chlamydia re-screening rates among women and heterosexual men	Public sexual health clinic	Quantitative	Before-and-after study	3/4
			Patients with chlamydia			
Hanauer et al (2009) [36]	USA	To test the feasibility of implementing a fully automated, two-way text messaging system to	Diabetes center	Quantitative	Quasi-experimental	3/4
		encourage increased blood glucose monitoring	Patients with diabetes			
Hardy et al (2011) [45]	USA	To compare the efficacy of a personalized cell phone reminder system in enhancing adherence to	Outpatien HIV clinic	Quantitative	RCT	3/4
r1		ART to a beeper with patients with HIV	Patients with HIV			
Holtz & Whitten (2009) [84]	USA	To determine the feasibility of monitoring asthma via an SMS application	Outpatient clinic	Quantitative	Quasi-experimental	1/4
(2007) [0 1]		, in all office application	Patients with asthma			

Hou et al. (2010) [42]	USA	To estimate daily text-message reminders impact on oral contraception pill adherence	Planned Parenthood clinic	Quantitative	RCT	4/4
			Oral contraceptive pill users			
Kollman et al (2007) [79]	Austria	To evaluate the feasibility and user acceptance of a mobile-based data service to support diabetes	Diabetes clinic	Quantitative	Clinical pilot trial	4/4
			Patients with diabetes			
Koshy et al (2008) [63]	UK	To assess the effectiveness of the use of SMS- based reminders for hospital outpatient appointments as a method of reducing the non-	Hospital outpatient ophthalmology clinic	Quantitative	Observational study	3/4
		attendance rates	Patients attending outpatient ophthalmology clinics			
Leong et al (2006) [60]	Malaysia	Malaysia To determine the effectiveness of a text messaging reminder in improving attendance in primary care	Primary care clinics	Quantitative	RCT	4/4
			Primary care patients			
Lewis et al (2013) [53]	USA	USA To determine if dynamically tailored medication messages delivered to people living with HIV via	Urban health clinic	Quantitative	One-group prepost test preexperimental	4/4
	taxt massaging would be well received and	Patients with HIV	design			
Liew et al (2009) [65]	Malaysia	To determine if text messaging would be effective in reducing non-attendance in patients on long-term follow-up	Urban, primary care clinics for patients requiring chronic disease care	Quantitative	RCT	4/4
			Patients with chronic disease			

Lua et al (2012) [33]	Malaysia	To develop and assess the feasibility and acceptability of an SMS-based epilepsy educational program	General hospitals neurology clinic	Quantitative	Prospective randomized interventional study	4/4
			Patients with Epilepsy			
Ludlow et al (2009) [66]	UK	To investigate whether the use of email and text messaging to remind patients to have blood tests	University hospital	Quantitative	Quasi-experimental	2/4
		might result in better compliance than using more conventional methods of communicating	Patients with inflammatory bowel disease			
Lund et al (2012) [34]	Zanzibar	phone intervention and skilled delivery attendance in a resource-limited setting	Primary health care facilities	Quantitative	RCT	3/4
			Pregnant women			
Lv et al (2012) [50]	China	To know whether SMS can improve perceived control of asthma	Department of Respiratory Medicine	Quantitative	RCT	1/4
			Patients with asthma			
Mao et al (2008) [55]	China	To develop a mobile pharmacy service system (MPSS) to deliver individualized pharmaceutical	General hospital	Quantitative	Quasi-experimental	2/4
		care via the SMS, with the aim of improving	Outpatients			
Milne (2010) [68]	UK	booking and last minute reminders using SMS messages to reduce non-attendance at consultant outpatient clinics	Consultant outpatient clinics	Quantitative Cohort study		2/4
			Patients needing specialist medical advice and treatment from consultants			

Montes et al (2012) [51]	Spain	To assess the impact of SMS-based strategy on adherence to antipsychotic treatment	Outpatietnt psychiatric centre	Quantitative	RCT	4/4
			Patients with schizophrenia			
Nundy et al (2013) [54]	USA	To explore the potential mechanism by which a text-message based diabetes program affected	Academic medical center	Qualitative	Qualitative description	3/4
, , ,		self-management	Patients with diabetes		-	
Nundy et al (2013) [20]	USA	To assess the feasibility and acceptability of SMS- base intervention and explore its effects on self- management	Academic medical center (Cardiology services)	Quantitative	antitative Pretest and posttest	3/4
		management	Patients with acute decompensated heart failure			
Pena-Robichaux et al (2010) [31]	USA	To evaluate the use of text messages to provide treatment adherence reminders and patient education in adults and adolescents with atopic dermatitis	General hospital	Quantitative	Pretest and posttest	3/4
(· · · · · · · · · · · · · · · · · · ·			Patients with atopic dermatitis			
Perry (2011) [71]	UK	(SMS) text reminders on appointment attendance rates at a dental access centre	Dental access centre	Quantitative	Before and after design	2/4
			Patients at dental access centre		9	
Pijnenborg et al (2007) [30]	The Netherlands	To evaluate the efficacy of short message service (SMS) text messages as a compensatory aid to improve independence in individuals diagnosed	Department of psychotic disorders: inpatients	Quantitative	Single case experimental design	2/4
		with schizophrenia and cognitive deficits	Patients with schizophrenia			

Pijnenborg et al (2010) [83]	The Netherlands	To evaluate the efficacy of short message service (SMS) text messages to compensate for the effects of cognitive impairments in schizophrenia in daily life	Department of psychotic disorders: inpatients and outpatients	Quantitative	Waiting list controlled trial	3/4
			Patients with schizophrenia			
Pop-Eleches et al (2011) [46]	Kenya	To test the efficacy of SMS reminders on adherence to ART	HIV clinic	Quantitative	RCT	3/4
			Patients with HIV			
Prasad & Anand (2012) [74]	India	To evaluate the effect of SMS appointment reminders on attendance at outpatient clinics	Dental outpatient clinic	Quantitative	RCT	2/4
			Patients at dental clinics			
Rodrigues et al (2012) [40]	India	To assess the influence of mobile phone reminders on adherence to antiretroviral therapy	Infectious disease clinic	Quantitative	Quasi-experimental cohort study	3/4
			Patients with HIV			
Shaw et al (2013) [22]	USA	To develop and test feasibility and acceptability of an SMS-based intervention to promote sustaining	Diet and fitness center	Quantitative	Experimental study	2/4
		recent weight loss	Obese participants			
Sidney et al	India	To assess the perceived usefulness and	Infectious disease clinic	Quantitative	Cross-sectional study	4/4
(2012) [41]		acceptability of mobile phone reminders to support adherence to ART	Patients with HIV			
Sims et al (2012) [75]	UK	To examine the effect of SMS reminders on the attendance of appointments at mental health clinics	Community mental health clinics	Quantitative	Cohort study	4/4
			Mental health outpatients			
Strandbygaard et al (2010) [43]	Denmark	To examine the impact of receiving daily text message reminders on the adherence to asthma	Outpatien clinic	Quantitative	RCT	3/4
		treatment	Patients with asthma			

Taylor et al (2012) [76]	Australia	To investigate whether SMS reminders reduce non-attendance in physical therapy outpatient clinics	Physical therapy outpatient clinic	Quantitative	RCT	4/4
			People in a physical therapy outpatient clinic			
Ting et al (2012) [52]	USA	To investigate the effects of cellular text messaging reminders on adherence to clinic visits and medication among adolescents and youth with	Pediatric rheumatology clinic	Quantitative	Quasi-experimental	4/4
		systemic lupus erythematosus	Patients with childhood- onset systemic lupus erythematosus			
Vervloet et al (2012) [81]	The Netherlands	To investigate the effect of SMS reminders on adherence to oral antidiabetics	Pharmacies	Quantitative	RCT	3/4
			Patients with diabetes			
Vilella et al (2004)	Spain	To evaluate whether a reminder of the next vaccination dose sent by the Short Message	Vaccination centre	Quantitative	Experimental, controlled study,	3/4
[57]		Service (SMS) increases compliance with hepatitis A+B and hepatitis A vaccination schedule	Travellers		historical control	

SMS=Short Message Service MMAT: for example 3/4=3 out of for 4 criterion met