Characteristics of included reviews

Aaserud 2006	
Review question/objective: What are the effects of pharmaceutical pricing and purchasing policies on medicines use, healthcare utilisation, patient outcomes and costs?	
Studies	Search date up to: September 2005 Number of studies related to medicines use: 11 Study design: ITS (simple and repeated measure designs; some with controls), CBA
Participants	Patients: elderly people aged 65 years and older; otherwise not specified. Medicines involved included nitrates, beta-blockers, ACE inhibitors, calcium channel blockers, histamine H2 receptor antagonists, proton pump inhibitors, antidiabetic agents, antibiotics, and antidepressants. Carers: not specified. Professionals: not specified.
Setting	Not specified
Interventions	Reference pricing; index pricing; other
Maps to intervention taxonomy categories	Improving quality
Outcomes	Adverse events, health status and wellbeing, system benefits
Quality of the review (AMSTAR)	10
Quality of the included studies	Overall, included studies were generally well designed but some had serious limitations in design and implementation. Transferability across populations and settings may also be limited.

Al-aqeel 2011	
Review question/objective: What is the effectiveness of interventions to improve adherence to antiepileptic medications in adults and children with epilepsy?	
Studies	Search date up to: June 2010 Number of studies related to medicines use: 6 Study design: RCT, CT
Participants	Patients: adults and children prescribed antiepileptic medicines. Carers: parents of children with epilepsy. Professionals: none.
Setting	Outpatient
Interventions	Identifying cues (Implementation intervention); motivational interviewing; education and psychosocial therapy; patient reminders plus counselling leaflet; patient education, usual care
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, knowledge and understanding

Quality of the review (AMSTAR)	7
Quality of the included studies	All interventions were assessed by single studies which had unclearly reported allocation, blinding and randomisation (sequence generation) which may contribute potential sources of bias in the majority of studies. No studies assessed adverse events or cost.

Amico 2006	
Review question/objective: What are the effects of interventions to improve adherence to antiretroviral therapy (ART) for people living with HIV?	
Studies	Search date: from 1996 up to December 2004 Number of studies related to medicines use: 24 Study design: RCT, CCT, CBA
Participants	Patients: people with Human Immunodeficiency Virus (HIV) and receiving antiretroviral therapy. Carers: informal caregivers. Professionals: none.
Setting	Community, not specified
Interventions	Any intervention to improve adherence (support and referral interventions; education; feedback on viral load; reminder or calendar packaging or pill boxes; alarms; information provision, counselling and support; problem solving skills training; self-management medication training; harm reduction training; directly observed therapy; incentives; medication diaries); control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Acquiring skills and competencies, Support, Minimising risks or harms
Outcomes	Health behaviour
Quality of the review (AMSTAR)	4
Quality of the included studies	Included study populations were generally small and may have been too small (based on power calculations) to detect effects of interventions. Half (52%) of included studies were RCTs, others included were of non-randomised or within-group design. Methodological quality was not formally assessed so the risk of bias is unknown.

Argarwal 2011	
Review question/objective: Does home blood pressure monitoring overcome therapeutic inertia and improve hypertension control?	
Studies	Search date: from 1966 up to May 2010 Number of studies related to medicines use: 37 Study design: RCT
Participants	Patients: people taking antihypertensive medicines including

	haemodialysis patients, otherwise not described. Carers: none. Professionals: none.
Setting	Home, primary care, community, hospital, outpatient
Interventions	Home blood pressure monitoring; clinic blood pressure monitoring
Maps to intervention taxonomy categories	Acquiring skills and competencies, Minimising risks or harms
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	5
Quality of the included studies	The quality for each study was not described, but studies were typically of moderate to high quality.

Austvoll-Dahlgren 2008	
Review question/objective: What are the effects of cap and co-payment (cost-sharing) policies on medicines use, healthcare utilisation, health outcomes and costs?	
Studies	Search date up to: September 2007 Number of studies related to medicines use: 21 Study design: RCT, ITS (simple and repeated measure designs), CBA
Participants	Patients: families; employees in large companies; community mental health service users; people with schizophrenia; elderly people (high, low and mixed income groups); nursing home residents; low income populations (including those receiving social security, families with dependent children). Medicines involved included antihypertensives, anticoagulants, antithrombotics, nitrates, corticosteroids, anticonvulsants, neuroleptics, antibiotics, diabetic agents, thyroid agents, beta-blockers, antiparkinsonian drugs, antipsychotics, mood stabilizers and antidepressants. Carers: not specified. Professionals: not specified.
Setting	Primary care, hospital, long term care, community, home, private organisation, not specified
Interventions	Cap (limits on: number of prescriptions reimbursed, number of repeat prescriptions, or number of days before prescriptions can be re-supplied); fixed co-payments (fixed co-payment per branded or generic medicine, income based partial co-payments up to limit, co-payments in different schedules, phased co-payment increases); ceiling (based on proportion of income), including fixed co-payments with ceiling; co-insurance with ceiling (where co-payment was based on income, or ceiling was income based); fixed co-payments and co-insurance with ceiling; tier co-payments (based on different numbers of tiers according to medicine types); no restrictions; full medicine coverage; no

	medicine coverage; alternate medicine cap and co-payment policies (different schedules, tiers, ceilings)
Maps to intervention taxonomy categories	Improving quality
Outcomes	Health status and wellbeing, system benefits, health behaviour
Quality of the review (AMSTAR)	10
Quality of the included studies	Individual comparisons were typically based on small numbers of studies. Only 1 included study was randomised, while the majority (2/3rds) of included studies had some methodological limitations that may introduce bias, with 3 studies having serious limitations in design and implementation.

Bain-Brickley 2011	
Review question/objective: Do behavioural and medical interventions improve paediatric adherence to antiretroviral therapy?	
Studies	Search date up to: From January 1980 to July 2010 Number of studies related to medicines use: 4 Study design: RCT, CT
Participants	Patients: children (age less than 18 years) with HIV on ART. Carers: adult parents and carers of children with HIV. Professionals: none.
Setting	Community, outpatient, primary care
Interventions	Counselling plus medication diary; home based-education plus support; limited education and support; peer support group therapy; varied treatment regimens; usual care
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Support
Outcomes	Health behavior, knowledge and understanding, health status and wellbeing
Quality of the review (AMSTAR)	9
Quality of the included studies	There were a limited number of included trials, and half had methodological weaknesses including lack of randomisation which may strongly predispose them to bias.

Bainbridge 2006	
Review question/objective: Does patient-controlled analgesia (PCA) improve clinical and healthcare utilisation outcomes post cardiac surgery when compared with nurse-controlled analgesia (NCA)?	
Studies	Search date up to: August 2005 Number of studies related to medicines use: 10 Study design: RCT
Participants	Patients: cardiac surgery patients (coronary artery bypass graft, with or without valvular repair). Carers: none. Professionals: none.

Setting	Hospital, not specified
Interventions	PCA (using ketobemidone, morphine, piritramide, hydromorphone; intravenous administration, with or without limits, lockouts or infusions); NCA (ketobemidone codeine, morphine, piritramide, Demerol; administered orally and/or through infusion)
Maps to intervention taxonomy categories	Acquiring skills and competencies, Minimising risks or harms
Outcomes	Health behaviour, consumer evaluation of care, adverse events, health status and wellbeing
Quality of the review (AMSTAR)	9
Quality of the included studies	Many included studies were too small to detect differences between groups, and there was significant heterogeneity for many outcomes. Included studies were all of moderate methodological quality, but groups were unevenly distributed on several key characteristics, and this may predispose the results to bias.

Bayoumi 2009	
Review question/objective: Do medicines reconciliation interventions in primary care improve medicines discrepancies and related outcomes?	
Studies	Search date up to: March 2008 Number of studies related to medicines use: 4 Study design: RCT, BA
Participants	Patients: adult patients in primary care or ambulatory settings. Carers: none. Professionals: physicians, pharmacists, nurses, receptionists.
Setting	Outpatient, primary care, hospital, community, home
Interventions	Ambulatory care medicines reconciliation; post-hospital discharge medicines reconciliation; usual care
Maps to intervention taxonomy categories	Minimising risks or harms, Supporting behaviour change, Improving quality
Outcomes	Health behaviour, adverse events, system benefits
Quality of the review (AMSTAR)	7
Quality of the included studies	There was limited information about the clinical importance of the errors detected and none on patients' medicines knowledge. Results are based on very few studies, only one of which was a randomised controlled trial, while the remaining lacked a control group and so were of poor design for assessing effectiveness. All included studies had methodological limitations that may introduce bias.

Bennett 2009
Review question/objective:

Do patient-based educational interventions improve knowledge, attitudes and pain management in cancer patients?	
Studies	Search date up to: November 2007 Number of studies related to medicines use: 21 Study design: RCT, CT, CBA
Participants	Patients: adults taking analgesics for cancer-based pain. Carers: caregivers of adults with cancer-based pain. Professionals: none.
Setting	Home, community, primary care, hospital
Interventions	Patient-based cancer pain management education; usual care
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, knowledge and understanding, support and skills acquisition of consumer, health status and wellbeing, adverse events, system benefits
Quality of the review (AMSTAR)	7
Quality of the included studies	The majority of included studies had methodological limitations that may predispose them to bias, including unclear allocation concealment and blinding.

Bhogal 2006	
Review question/objective: Do written action plans improve the management of asthma in children and adolescents?	
Studies	Search date up to: November 2004 Number of studies related to medicines use: 4 Study design: RCT, CCT
Participants	Patients: school-aged children and adolescents with mild to severe asthma. Carers: parents of children or adolescents with asthma. Professionals: none.
Setting	Primary care, secondary care, home
Interventions	Symptom-based written action plan; peak flow-based written action plan
Maps to intervention taxonomy categories	Supporting behaviour change, Facilitating communication and/or decision making, Acquiring skills and competencies, Minimising risks or harms
Outcomes	System benefits, health status and wellbeing, support and consumer skills acquisition, health behaviour
Quality of the review (AMSTAR)	11
Quality of the included studies	Overall of included trials only 1 was of good quality, 2 were assessed as of fair quality, and 1 poor quality, and these limitations may introduce bias. Of included trials, 3 were truly randomised, with allocation concealment inadequate in 1 trial and unclear in 2 trials. All but 1 trial assessed baseline comparability and adequately followed up participants. None used intention-to-treat analysis.

Bower 2006	
Review question/objective: Do collaborative care interventions improve the symptoms of depression and use of antidepressants in patients in primary care settings?	
Studies	Search date up to: November 2005 Number of studies related to medicines use: 32 Study design: RCT
Participants	Patients: adults with depressive symptoms or depression managed in primary care. Carers: none. Professionals: none.
Setting	Primary care
Interventions	Collaborative care; usual care
Maps to intervention taxonomy categories	Improving quality
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	4
Quality of the included studies	Allocation concealment was unclear in the majority of studies and other aspects of methodological quality were not assessed; therefore the risk of bias is unclear. All results of meta-regression analysis should be interpreted with caution as they rely on observational comparisons between groups.

Buckley 2010	
Review question/objective: Do service organisation interventions in primary care improve secondary prevention of ischaemic heart disease by improving risk factor management and use of appropriate medicines?	
Studies	Search date up to: February 2008 Number of studies related to medicines use: 8 Study design: RCT
Participants	Patients: adults with ischaemic heart disease (angina, previous acute myocardial infarction, coronary artery bypass graft, pericutaneous transluminal coronary angioplasty). Carers: none. Professionals: doctors, nurses and pharmacists.
Setting	Primary care, community
Interventions	Service organisation interventions; usual care
Maps to intervention taxonomy categories	Supporting behaviour change, Providing information or education, Improving quality
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	8
Quality of the included studies	The included studies were typically of high quality, and at low risk of bias but interventions were heterogeneous in terms of their components.

Castelino 2009	
Review question/objective: Do interventions delivered by pharmacists improve suboptimal prescribing in the elderly?	
Studies	Search date up to: December 2008 Number of studies related to medicines use: 11 Study design: RCT
Participants	Patients: adults 65 years or older. Carers: none. Professionals: pharmacists, physicians, nurses.
Setting	Home, hospital, community, long term care, outpatient, primary care
Interventions	Multidisciplinary team including pharmacist intervention; pharmacist-delivered intervention; control; usual care
Maps to intervention taxonomy categories	Improving quality, Minimising risks or harms
Outcomes	Health behaviour, health status and wellbeing, knowledge and understanding, system benefits, adverse events, consumer evaluation of care
Quality of the review (AMSTAR)	5
Quality of the included studies	The majority of results were based on a small number of studies, and the methodological quality of included studies was poorly described, meaning that results may be affected by an unknown risk of bias.

Chivu 2008	
Review question/objective: Do interventions to promote awareness and use of folic acid supplementation in women of reproductive age improve outcomes compared to usual care?	
Studies	Search date up to: not stated, searched for studies published 1992 up to 2005 Number of studies related to medicines use: 29 Study design: RCT, CT, CBA, BA, ITS, other
Participants	Patients: women of reproductive age (15 to 49 years). Carers: none. Professionals: health professionals, not otherwise specified.
Setting	Primary care, outpatient, community, pharmacy, home
Interventions	Intervention to women promoting folic acid consumption; intervention to health professional promoting folic acid consumption; control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Consumer knowledge and understanding, health behaviour, provider knowledge and understanding

Quality of the review (AMSTAR)	5
Quality of the included studies	Most results were based on studies of poor design for assessing intervention effectiveness (i.e., no control group) and results should be treated with caution due to potential for bias.

De Bleser 2009	
Review question/objective: What is the efficacy of interventions to improve adherence to medicines regimens in solid organ transplant patients?	
Studies	Search date up to: August 2008 Number of studies related to medicines use: 12 Study design: RCT, CT, BA
Participants	Patients: adult and child recipients of renal, heart, lung or liver transplants. Carers: carers of child recipients of renal, heart, lung or liver transplants. Professionals: pharmacists, nurses, transplant team, otherwise not described.
Setting	Hospital, outpatient, home
Interventions	Education (informational, hehaviour); education (informational, affective); behavioural intervention; mixed (informational, behavioural, affective); patient (informational, behavioural); free immunosuppressants; no control group; usual care; control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Improving quality
Outcomes	Health behaviour, knowledge and understanding, support and consumer skills acquisition, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	5
Quality of the included studies	Effects were inconsistent and most of the results were based on a small number of studies, some of which were also of small sample size. Most of the included studies were of poor design for assessing intervention effectiveness (i.e., no control group) and results should be treated with caution due to the potential for bias. Those studies that were randomised were of poor methodological quality.

Ford 2009	
Review question/objective: Does directly observed therapy (DOT) improve adherence to highly active antiretroviral therapy (HAART) or clinical outcomes, compared to self-administration, for patients with human immunodeficiency virus (HIV)?	
Studies	Search date up to: July 2009 Number of studies related to medicines use: 12 Study design: RCT

Participants	Patients: adults with HIV requiring HAART. Carers: none. Professionals: none.
Setting	Outpatient, community, private organisation
Interventions	DOT; self-administered therapy
Maps to intervention taxonomy categories	Supporting behaviour change, Minimising risks or harms
Outcomes	Health behaviour, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	9
Quality of the included studies	Included trials were of moderate methodological quality overall, with some potential for bias. Feasibility and cost of DOT interventions are further issues for lifelong HAART therapy required in HIV treatment.

Garcia-Alamino 2010	
Review question/objective: Does self-monitoring or self-management of oral anticoagulation therapy improve the quality of anticoagulation and patient outcomes compared to standard monitoring?	
Studies	Search date up to: November 2007 Number of studies related to medicines use: 18 Study design: RCT
Participants	Patients: adults requiring long term (> 2 month) anticoagulant therapy for any indication (such as valve replacement, atrial fibrillation, venous thromboembolism). Carers: none. Professionals: none.
Setting	Primary care, hospital, home, outpatient
Interventions	Self-monitoring (self-testing and calling a clinic to receive the appropriate dose adjustment); self-management (self-testing and then self-adjusting treatment based on a predetermined dose schedule); standard monitoring
Maps to intervention taxonomy categories	Acquiring skills and competencies, Minimising risks or harms, Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing, adverse events, consumer evaluation of care
Quality of the review (AMSTAR)	11
Quality of the included studies	Included trials were of moderate methodological quality overall, with some potential for bias. A significant proportion (mean 25%) of people assigned to self-monitoring or self-management were unable to complete treatment and dropped out, reasons included device problems, physical limitations preventing self-testing inability to attend training or failing the assessment. Trial participation was also low with 68% overall refusing participation. Long term effects were generally not reported by trials even though the requirements for anticoagulant therapy may be long term or lifelong.

Gilbody 2006
This review is a duplicate of Bower 2006.

Giuffrida 1997	
Review question/objective: Do financial incentives improve adherence to healthcare interventions or treatments?	
Studies	Search date up to: April 1997 Number of studies related to medicines use: 4 Study design: RCT
Participants	Patients: with hypertension, tuberculosis, cocaine dependence or overweight; pregnant teenagers, or teenage mothers. Carers: parents considering dental care or immunisation for children; parents for paediatric outpatient clinic attendance. Professionals: none.
Setting	Community, primary care, outpatient, not specified
Interventions	Financial incentives; other interventions; usual care/ no intervention
Maps to intervention taxonomy categories	Improving quality
Outcomes	Health behaviour
Quality of the review (AMSTAR)	6
Quality of the included studies	Most studies in the review were small, none performed a sample size calculation to justify choice of numbers in sample, and none indicated that allocation was adequately concealed.

Gleeson 2009	
Review question/objective: Are interventions to improve adherence and persistence with osteoporosis medicines effective?	
Studies	Search date: 1990 up to July 2008 Number of studies related to medicines use: 7 Study design: RCT, CT
Participants	Patients: new or current users of osteoporosis therapy. Carers: none. Professionals: physicians.
Setting	Primary care, home, hospital, outpatient, academic institution
Interventions	Patient education; patient education and medicines barriers counseling; patient and physician education; simplified dosing and patient support; feedback on response to therapy plus patient education and/or medicines barriers counseling; usual care
Maps to intervention taxonomy	Providing information or education, Support, Supporting

categories	behaviour change
Outcomes	Health behaviour
Quality of the review (AMSTAR)	6
Quality of the included studies	All results were based on a small number of studies of moderate quality. Adherence and persistence were measured inconsistently, impairing comparability of the outcomes between the studies and blinding was inadequate in all studies, potentially introducing bias in self-reported outcomes.

Golicki 2008	
Review question/objective: Does the Continuous Glucose Monitoring System improve glycemic control and other outcomes, compared with self-monitoring blood glucose, in children with type 1 diabetes mellitus?	
Studies	Search date up to: June 2007 Number of studies related to medicines use: 5 Study design: RCT
Participants	Patients: children with type 1 diabetes. Carers: none. Professionals: none.
Setting	Not specified
Interventions	Continuous Glucose Monitoring System device (CGMS) use, Self-monitoring of blood glucose (SMBG).
Maps to intervention taxonomy categories	Minimising risks or harms
Outcomes	Health behaviour, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	7
Quality of the included studies	Reported results are typically based on relatively few studies, and the majority of included studies had methodological limitations that may introduce bias: generation of allocation sequence and allocation concealment were inadequate in 3 of 5 studies, and blinding not done in 2 of 5 studies.

Gray 2009	
Review question/objective: What are the effects of interventions to help people adhere to ocular hypotensive therapies?	
Studies	Search date up to: January 2009 Number of studies related to medicines use: 8 Study design: RCT,CT
Participants	Patients: people with raised intraocular pressure or glaucoma who were prescribed ocular hypotensive therapy. Carers: none. Professionals: none.
Setting	Outpatien
Interventions	Reminder devices; simplified regimens; education and individualised care planning; control; usual regimen

Maps to intervention taxonomy categories	Supporting behaviour change, Providing information or education
Outcomes	Health behavior, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	10
Quality of the included studies	Most outcomes were reported by single studies. Included studies were of generally poor or unclear methodological quality, with allocation concealment, blinding and incomplete outcome data reporting being the main potential sources of bias.

Halpern 2011	
Review question/objective: Do enhanced counselling techniques or other client-provider interventions increase adherence to and continuation of hormonal contraceptives?	
Studies	Search date up to: October 2010 Number of studies related to medicines use: 8 Study design: RCT
Participants	Patients: women of reproductive age (no contraindications to hormone use), women who wanted or were willing to use hormonal contraception, who requested an abortion or had an abortion and who were at risk of unplanned pregnancy. Carers: none. Professionals: none.
Setting	Primary care, hospital, outpatient
Interventions	Group motivational counselling; structured counselling; multicomponent intervention; peer counseling; nurse counselling; intensive reminders; written appointment cards; daily text message reminders; motivational phone calls; routine counselling; no reminders
Maps to intervention taxonomy categories	Facilitating communication and decision making, Providing information or education, Support, Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	8
Quality of the included studies	There were several limitations: studies were of moderate quality; typically losses to follow-up were high which may jeopardise the validity of the results; and interventions were assessed by individual studies of small sample size. The effect of enhanced counselling interventions may be different depending on the site and groups and may not be generalisable to wider populations.

Haynes 2008	
Review question/objective: What are the effects of interventions to help patients follow prescriptions for medical problems?	
Studies	Search date up to: February 2007

	Number of studies related to medicines use: 78 Study design: RCT
Participants	Patients: all ages, acute infections and long-term conditions (including heart disease and related conditions, HIV, mental health, asthma/ chronic obstructive pulmonary disease (COPD), arthritis, epilepsy, diabetes, tuberculosis, contraception). Carers: parents, carers or legal guardians of children were included; as were carers of elderly people. Professionals: none.
Setting	Community, outpatient, primary care, hospital, home
Interventions	Instruction; counselling; automated telephone monitoring and counselling; manual telephone follow-up; family intervention; increasing the convenience of care; simplified dosing; self-monitoring; reminders; special 'reminder' pill packaging; dose-dispensing units and medicines charts; appointment and prescription refill reminders; reinforcement/rewards; medicines formulations; crisis intervention; direct observation of treatment; lay health mentoring; comprehensive pharmaceutical care services; psychological therapy
Maps to intervention taxonomy categories	Providing information or education, Facilitating communication and/or decision making, Acquiring skills and competencies, Supporting behaviour change, Support, Minimising risks or harms, Improving quality
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	10
Quality of the included studies	Most included study populations were small and there is a high possibility that no difference in adherence was found by studies when in truth there was one. Only a minority of included studies adequately concealed allocation; however studies with high drop out (> 20%) or those with confounded comparisons were excluded by the review. Only published studies were included, this may overestimate intervention effects. Interventions for long-term treatments were complex and labour-intensive, and feasibility of implementation in 'real world' settings is unclear. Elements of the interventions were also not described well in many studies, and effectiveness of the individual components is also not clear.

Haywood 2009	
Review question/objective: Do patient- or provider-targeted interventions improve adherence to sickle cell disease (SCD) therapy recommendations and patient outcomes?	
Studies	Search date up to: June 2007

	Number of studies related to medicines use: 13 Study design: RCT, BA, CBA
Participants	Patients: adults and children with SCD. Carers: parents or carers of children with SCD. Professionals: Healthcare providers, otherwise not described.
Setting	Primary care, outpatient, community, hospital, home
Interventions	Provider-targeted interventions (clinical protocol with or without provider sensitivity training; audit and feedback; organisational or structural changes (day hospital establishment, fast track admission)); patient-targeted interventions (self-management; telephone outreach); control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Improving quality
Outcomes	Health behavior, consumer evaluation of care, system benefits, health status and wellbeing
Quality of the review (AMSTAR)	6
Quality of the included studies	Most of the results were based on a small number of studies, some of which were also of small sample size. Most of the included studies were of poor design for assessing intervention effectiveness (i.e., no control group) and results should be treated with caution due to the potential for bias.

Holland 2008	
Review question/objective: Does pharmacist-led medicines review improve clinical and patient outcomes in older people?	
Studies	Search date up to: September 2005 Number of studies related to medicines use: 32 Study design: RCT
Participants	Patients: mean age older than 60 years, and unrestricted to a particular disease or diagnosis. Carers: none. Professionals: none.
Setting	Primary care, outpatient, home, pharmacy, long-term care, hospital
Interventions	Pharmacist-led medicines review; control
Maps to intervention taxonomy categories	Improving quality, Minimising risks or harms, Providing information or education, Support, Supporting behaviour change
Outcomes	Health behavior, adverse events, knowledge and understanding, health status and wellbeing, consumer evaluation of care, system benefits
Quality of the review (AMSTAR)	6
Quality of the included studies	The majority of the included studies adequately addressed more than half of the methodological quality criteria components, although many trials failed to report a sample of size calculation, define primary outcomes, use intention to treat analysis or check data. Patient characteristics and outcomes were not consistently

	reported and this also limited conclusions.

Jacobson 2005	
Review question/objective: Do patient reminder and recall systems improve immunisation rates?	
Studies	Search date up to: May 2007 Number of studies related to medicines use: 47 Study design: RCT, CBA
Participants	Patients: children and adolescents (birth to 18 years); adults 65 years and older or those with chronic illnesses; adults. Carers: family members. Professionals: healthcare providers/ physicians/ community residents who deliver immunisations.
Setting	Primary care, community, academic institution, private organisation
Interventions	Patient reminder and recall systems (letters, postcards, person-to-person phone calls, autodialer computer phone messages, reminders with outreach or with provider reminder, and reminders in combination); usual care
Maps to intervention taxonomy categories	Supporting behaviour change, Minimising risks or harms
Outcomes	Health behaviour, system benefits
Quality of the review (AMSTAR)	10
Quality of the included studies	Several included studies had methodological limitations that may introduce bias. Allocation concealment was unclear in over half of included trials; follow-up was unclear in almost half of studies (21/47); blinding of outcome assessment was done in half of studies; while protection against contamination was implemented in only a minority (6/47) of included trials. Only papers published in English were included, but publication bias was assessed, and did not appear likely.

Jegu 2011	
Review question/objective: Is slow-release oral morphine an effective alternative for opioid maintenance therapy?	
Studies	Search date up to: October 2010 Number of studies related to medicines use: 13 Study design: RCT, CT, other
Participants	Patients: adults with opioid dependence, receiving opioid maintenance treatment or not. Carers: none. Professionals: none.
Setting	Not specified
Interventions	Slow release oral morphine (SROM) maintenance treatment; usual care

Maps to intervention taxonomy categories	Minimising risks or harms
Outcomes	Health behavior, health status and wellbeing, consumer evaluation of care, adverse events
Quality of the review (AMSTAR)	4
Quality of the included studies	While SROM may lead to improvements in some outcomes, most studies did not make comparisons with other maintenance treatments (ie they did not have a control group) and the evidence that SROM is an effective alternative for opioid maintenance therapy is therefore limited.

Koshman 2008	
Review question/objective: Does pharmacist care improve outcomes for people with heart failure?	
Studies	Search date up to: August 2007 Number of studies related to medicines use: 12 Study design: RCT
Participants	Patients: adults (majority over 65) with heart failure. Carers: none. Professionals: general practitioners, community pharmacists.
Setting	Outpatient, community, home, hospital, pharmacy
Interventions	Pharmacist directed care (including medicines assessment and recommendations, self-monitoring education, General Practitioner (GP) liaison, written information, adherence assessment, medicines review and organizers, adherence aids); pharmacist collaborative care (including medicines assessment, education and recommendations, self-monitoring education, referrals to community pharmacist, telephone follow-up, GP liaison, written and audio information); usual care; no education; no intervention; general information
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Minimising risks or harms, Improving quality
Outcomes	Health behaviour, health status and wellbeing, adverse events, system benefits
Quality of the review (AMSTAR)	6
Quality of the included studies	Included studies were of variable quality, and the majority of studies did not adequately conceal allocation or blind different aspects of the study, which may introduce bias. Authors note that analysis based on study quality showed that lower quality studies were more likely to overestimate interventions' effects.

Lewin 2010
Review question/objective: Do lay health worker interventions in primary and community health care improve maternal and child health and the management of infectious diseases?

Studies	Search date up to: April 2009 Number of studies related to medicines use: 17 Study design: RCT
Participants	Patients: adults and children. Carers: families and mothers of children. Professionals: none.
Setting	Home, primary care, community
Interventions	LHW interventions; usual care; other adherence support
Maps to intervention taxonomy categories	Improving quality, Minimising risks or harms, Providing information or education, Supporting behaviour change
Outcomes	Health behavior, health status and wellbeing
Quality of the review (AMSTAR)	10
Quality of the included studies	The included studies were of low to moderate methodological quality, which may introduce bias.

Liu 2008	
Review question/objective: Do reminder systems and late patient tracers improve treatment commencement, completion and cure rates in people being treated for active tuberculosis or receiving treatment prophylactically?	
Studies	Search date up to: June 2008 Number of studies related to medicines use: 8 Study design: RCT, CT
Participants	Patients: adults and children, undergoing treatment for active tuberculosis, tuberculosis diagnosis, tuberculosis chemoprophylaxis, and students participating in tuberculosis detection drives. Carers: parents and adults of children receiving tuberculosis prevention, treatment or diagnosis. Professionals: none.
Setting	Primary care, outpatient, community, academic institution
Interventions	Late patient tracer (home visit, reminder letter, home visit plus health education); reminder (automated telephone reminder, non-automated telephone reminder, reminder plus health education, postcard, take-home card, person-to-person home visit); no reminder; usual care; no late patient tracer
Maps to intervention taxonomy categories	Minimising risks or harms, Providing information or education, Supporting behaviour change
Outcomes	Health behavior, health status and wellbeing
Quality of the review (AMSTAR)	9
Quality of the included studies	Results are based on a small number of studies for each comparison, and the majority of included studies have methodological limitations that may introduce bias (including unclear or inadequate sequence generation, allocation concealment, blinding and protection against contamination).

Lummis 2006	
Review question/objective: Are there benefits, risks and other impacts when patients' own medicines (POMs) are used in hospital?	
Studies	Search date up to: From 1984 up to 2004 Number of studies related to medicines use: 5 Study design: CT, BA
Participants	Patients: patients on hospital wards (acute medical, general medical and surgical, endocrine and diabetes medicine, vascular surgery and renal medicine). Carers: none. Professionals: ward pharmacists, discharge pharmacists, dispensary staff, nurses.
Setting	Hospital
Interventions	Using patients' own medicines (POM) that have been prescribed and dispensed in the community and brought to hospital; pharmacists assessing POMs use; POM use; control
Maps to intervention taxonomy categories	Support, Minimising risks or harms, Improving quality
Outcomes	Health status and wellbeing, adverse events, system benefits
Quality of the review (AMSTAR)	5
Quality of the included studies	Results should be interpreted with caution due to small numbers of studies assessing relevant outcomes and comparisons. There were also serious limitations of study design that introduce the risk of bias: none were RCTs; only 1 included study was quasi-randomised and the remainder were observational studies which are prone to bias.

Lutge 2012	
Review question/objective: Do material incentives improve management of tuberculosis (TB) treatment?	
Studies	Search date up to: June 2011 Number of studies related to medicines use: 9 Study design: RCT
Participants	Patients: adolescents or adults requiring tuberculosis prophylaxis or treatment or undergoing diagnostic testing (tuberclin test). Carers: none. Professionals: none.
Setting	Community, primary care, private organisation
Interventions	Material incentives (e.g. cash payments, vouchers); immediate incentives; delayed incentives; nutritional advice; education; counseling; usual care
Maps to intervention taxonomy categories	Minimising risks or harms, Supporting behaviour change

Outcomes	Health behaviour
Quality of the review (AMSTAR)	11
Quality of the included studies	A major limitation was the difficulty in generalising study findings; most studies were conducted with specific highly vulnerable populations (e.g. homeless males) for whom the relationship to incentives may be different to that for the general population. The quality of the evidence was also generally low to very low, with specific methodological limitations predisposing the results to bias.

Machado 2007b	
Review question/objective: Do pharmacists' interventions improve outcomes for patients with hypertension?	
Studies	Search date up to: December 2006 Number of studies related to medicines use: 28 Study design: RCT, CT, BA, Other
Participants	Patients: adults with hypertension. Carers: none. Professionals: none.
Setting	Hospital, community, primary care, pharmacy, private organisation
Interventions	Pharmacist interventions; control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing, knowledge and understanding
Quality of the review (AMSTAR)	8
Quality of the included studies	Results were presented in the review as 'sensitive,' defined as a clinically important (10 mmHg systolic or 5mmHg diastolic change) and statistically significant change; or as 'non-sensitive' (if failing to meet both criteria). Included studies were of fair methodological quality, but with lack of blinding and randomisation common limitations that may introduce bias.

Machado 2007a	
Review question/objective: Do pharmacists' interventions improve outcomes for patients with diabetes?	
Studies	Search date up to: December 2006 Number of studies related to medicines use: 36 Study design: RCT, CT, BA, Other
Participants	Patients: adults with diabetes (type 1 and/or 2) prescribed medicine. Carers: none. Professionals: none.
Setting	Hospital, outpatient, community, primary care, pharmacy, private

	organisation
Interventions	Pharmacist interventions; control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing, knowledge and understanding
Quality of the review (AMSTAR)	7
Quality of the included studies	Results were presented in the review as 'sensitive,' defined as a change of more than 10% and statistically significant; or as 'non-sensitive' (if failing to meet both criteria). Included studies were of fair methodological quality, but with lack of blinding and randomisation common limitations that may introduce bias. Typically adherence and adverse events were not reported by the included studies.

Machado 2008	
Review question/objective: Do pharmacists' interventions improve outcomes for patients with hyperlipidemia?	
Studies	Search date up to: August 2007 Number of studies related to medicines use: 23 Study design: RCT, CT, BA, Other
Participants	Patients: adults with hyperlipidemia. Carers: none. Professionals: none.
Setting	Hospital, outpatient, community, primary care, pharmacy, home
Interventions	Pharmacist interventions; control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	8
Quality of the included studies	Results were presented in the review as 'sensitive,' defined as a clinically important (change was more than 10%) and statistically significant; or as 'non-sensitive' (if failing to meet both criteria). Included studies were of generally good methodological quality, but a minority of studies did not adequately randomise participants and this may introduce bias.

Maglione 2002	
Review question/objective: Do mass mailings increase the uptake of influenza immunisation among people receiving Medicare?	
Studies	Search date up to: Early 1999 Number of studies related to medicines use: 5 Study design: RCT, CT
Participants	Patients: adult Medicare beneficiaries eligible for influenza vaccination.

	Carers: unclear. Professionals: none.
Setting	Not specified
Interventions	Mass mailings (personalised or form letters, postcards and/or brochures); control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Minimising risks or harms
Outcomes	Health behaviour
Quality of the review (AMSTAR)	5
Quality of the included studies	The quality and number of studies in the review were limited. No further details were provided and so risk of bias is unclear.

Mahtani 2011	
Review question/objective: What are the effects of reminder packaging aids to enhance patient adherence to self-administered medicines taken for one month or more?	
Studies	Search date up to: September 2010 Number of studies related to medicines use: 12 Study design: RCT
Participants	Patients: adults with hypertension, type II diabetes, chronic mental illness; African-Americans with low literacy skills and chronic medical conditions; elderly with variety of illnesses, grass pollen-induced allergic rhinoconjunctivitis (with or without asthma), healthy adults. Self-administered medicine for at least one month, at least 80% follow-up, direct observation of therapy by health professional excluded. Carers: administration by carer included. Professionals: none.
Setting	Community, academic institution, outpatient
Interventions	Reminder packaging, usual care
Maps to intervention taxonomy categories	Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing, consumer evaluation of care, system benefits
Quality of the review (AMSTAR)	10
Quality of the included studies	The majority of the studies in this review were of low quality and are therefore at high risk of bias. Potential sources of bias included unclear adequacy of randomisation and allocation concealment methods in the majority of studies. Conclusions about effects of different types of reminder packages could not be made. There were also few studies focusing on the elderly.

Maio 2005
Review question/objective: What is the impact of pharmacy utilisation management measures (PUM) on the care of seniors?

Studies	Search date up to: May 2003 Number of studies related to medicines use: 18 Study design: RCT, other
Participants	Patients: people older than 60 years (or mean > 60). Carers: none. Professionals: none.
Setting	Community, pharmacy, outpatient
Interventions	Drug benefit cap; copayment, coinsurance, deductibles; prior authorisation; closed formulary; therapeutic substitution; generic substitution; incented formulary
Maps to intervention taxonomy categories	Improving quality
Outcomes	Health behaviour, health status and wellbeing, adverse events, system benefits
Quality of the review (AMSTAR)	6
Quality of the included studies	Overall, the number of included studies was small. Trial methodological quality was generally inadequately reported, and where reported trials lacked rigorous study design. It is therefore difficult to assess the impacts of interventions conclusively or to draw valid conclusions.

Mbuba 2008	
Review question/objective: Do interventions to improve treatment for epilepsy in developing countries improve health and other outcomes?	
Studies	Search date up to: June 2007 Number of studies related to medicines use: 27 Study design: BA
Participants	Patients: adults and children with epilepsy. Carers: none. Professionals: health care workers (primary health care nurses, environmental health technicians, district medical officers, neurologists, state health administrators).
Setting	Community
Interventions	Health care worker education; patient education; AED provision; usual care
Maps to intervention taxonomy categories	Improving quality, Providing information or education
Outcomes	Health behaviour, health status and wellbeing, adverse events, knowledge and understanding
Quality of the review (AMSTAR)	5
Quality of the included studies	Provision of AEDs may improve clinical and medicines use outcomes but are based on studies without control groups. Effects of interventions on other outcomes are unclear. Studies were of generally poor design for assessing intervention effectiveness and this may introduce bias, and follow-up was

	typically short so applicability to longer-term outcomes is unknown.

McIntosh 2006	
Review question/objective: Does compliance therapy improve adherence to antipsychotic medication, symptoms or quality of life for people with schizophrenia?	
Studies	Search date up to: June 2005 Number of studies related to medicines use: 1 Study design: RCT
Participants	Patients: English-speaking adults with a diagnosis of schizophrenia. Carers: none. Professionals: none
Setting	Primary care, hospital
Interventions	Compliance therapy using aspects of motivational interviewing, cognitive therapy, cognitive behavioural techniques and psychoeducation to explore with the patient their medical history and the benefits and limitations of antipsychotic treatment; non-specific counselling
Maps to intervention taxonomy categories	Facilitating communication and/or decision making, Supporting behaviour change, Support
Outcomes	Health behaviour, health status and well being, adverse events, system benefits
Quality of the review (AMSTAR)	10
Quality of the included studies	Results are based on a single small study. This study was at moderate risk of bias: it was rated as poor on randomisation and allocation concealment; blinding of outcome assessment was unclear; reasons for dropouts were not given, although all participants were accounted for; and it was unclear whether analysis was based on intention-to-treat principles for all reported outcomes.

Misso 2010	
Review question/objective: Do continuous subcutaneous insulin infusion (CSII) improve outcomes for patients with type 1 diabetes, compared to multiple insulin injections (MI)?	
Studies	Search date up to: July 2009 Number of studies related to medicines use: 23 Study design: RCT
Participants	Patients: adults and children with type 1 diabetes taking insulin treatment; one study included only pregnant females, the rest excluded them. Carers: none.

	Professionals: none.
Setting	Outpatient, hospital, primary care
Interventions	Continuous subcutaneous insulin infusion (CSII); multiple insulin injections (MI)
Maps to intervention taxonomy categories	Supporting behaviour change, Minimising risks or harms
Outcomes	Health behaviour, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	10
Quality of the included studies	The majority of the included studies had small sample sizes and there was considerable heterogeneity in the outcomes, therefore pooled effect estimates need to be interpreted with caution. The quality of the included studies was also often unclear, which means that results may be predisposed to an unknown level of bias.

Molife 2009	
Review question/objective: Do insulin pen devices result in better patient outcomes compared to conventional vial and syringe for diabetes management?	
Studies	Search date: January 1980 to February 2009 Number of studies related to medicines use: 38 Study design: RCT, CT, BA
Participants	Patients: adults and children with Type 1 and/ or Type 2 diabetes who require insulin. Carers: not described. Professionals: none.
Setting	Not described
Interventions	Insulin pen device; vial and syringe
Maps to intervention taxonomy categories	Supporting behaviour change
Outcomes	Health status and wellbeing, adverse events, consumer evaluation of care
Quality of the review (AMSTAR)	6
Quality of the included studies	The statistical significance of the findings was not reported, and neither was methodological quality of the included studies, therefore the studies have unknown limitations that may predispose them to bias.

Mollon 2009	
Review question/objective: Do prescribing computer decision support systems improve provider behaviour and patient outcomes?	
Studies	Search date up to: June 2008 Number of studies related to medicines use: 41 Study design: RCT

Participants	Patients: adults and children requiring prescriptions. Carer: none. Professionals: physicians, pharmacists, or practices, care units or health centres.
Setting	Hospital, outpatient, community, primary care, pharmacy
Interventions	Prescribing computer decision support system (CDSS); control
Maps to intervention taxonomy categories	Supporting behaviour change, Minimising risks or harms, Providing information or education
Outcomes	Health status and wellbeing, system benefits, consultation and communication by provider
Quality of the review (AMSTAR)	5
Quality of the included studies	Included studies were of generally good quality. There insufficient information about the significance of results reported within the review to draw conclusions. There was considerable heterogeneity between the settings, diseases, CDSS interventions, and participants of included studies, and the results should be interpreted carefully.

Morrison 2001	
Review question/objective: Do services provided by pharmacists improve patient outcomes in ambulatory care settings?	
Studies	Search date up to: May 1999 Number of studies related to medicines use: 32 Study design: RCT, CCT
Participants	Patients: patients requiring pharmacist services. Carers: none. Professionals: physicians of patients requiring pharmacist services.
Setting	Outpatient, primary care, hospital, home, pharmacy, community
Interventions	Pharmacist counselling of patients; pharmacist counselling of physicians; pharmacist counselling of patients and physicians; pharmacist provided patient care; usual care
Maps to intervention taxonomy categories	Providing information or education, Acquiring skills and competencies, Supporting behaviour change
Outcomes	Health behaviour, knowledge and understanding, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	4
Quality of the included studies	Conclusions are limited by the small number of studies reporting several outcomes. Methodological quality of included studies overall was fair, however many had methodological limitations that may introduce bias: the majority (26/32 trials) were randomised; but observers were blinded in the minority of trials (8/32) and subjects were blinded in only 2/32 trials.

Nicolson 2009

Review question/objective: Does providing written information about individual prescription or over-the-counter medicines improve patient outcomes?	
Studies	Search date up to: June 2007 Number of studies related to medicines use: 25 Study design: RCT
Participants	Patients: individuals of any age currently taking medicines (prescribed or over the counter medicines). Carers: none. Providers: none.
Setting	Hospital, outpatient, community, long term care, primary care
Interventions	Written medicines information; written medicines information in different formats; no written medicines information
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Knowledge and understanding, consumer evaluation of care, health behaviour, consumer involvement in care process
Quality of the review (AMSTAR)	9
Quality of the included studies	For many comparisons, there were only single small studies contributing to results. Included trials were of generally poor quality which may introduce bias: 10 trials reported adequate randomisation, but 15 trials failed to report this or rated it as unclear; 8 trials reported allocation concealment but this was rated as adequate in only 5 and unclear in the remaining trials; 10 trials adequately blinded outcome assessors, and in 2 this was inadequate. Loss to follow up was variable, ranging from 0 to 68% (mean loss to follow-up in the 22 trials reporting it was 16%). Withdrawals in the 11 trials reporting it was also variable, ranging from 0 to 37% (mean withdrawal was 12%).

Nishtala 2008	
Review question/objective: Do educational interventions and/ or medicines review improve psychotropic drug use in older adults in long-term care facilities?	
Studies	Search date up to: April 2007 Number of studies related to medicines use: 11 Study design: RCT, CT.
Participants	Patients: elderly adults (mean ≥ 65 years), in long term care facilities. Carers: none. Professionals: physicians, nurses pharmacists and psychologists.
Setting	Long term care
Interventions	Pharmacist medicines review and/or healthcare worker education; health care worker education; usual care

Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Minimising risks or harms
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	4
Quality of the included studies	Reported results are typically based on relatively few studies, and as methodological quality of included studies was not assessed, results need to be interpreted with caution as there are unknown potential sources of bias.

Nkansah 2010	
Review question/objective: Does expanding the role of outpatient pharmacists improve patient outcomes and management of medicines?	
Studies	Search date up to: March 2007 Number of studies related to medicines use: 43 Study design: RCT
Participants	Patients: adults and children receiving medicines and including those with asthma, COPD, depression, diabetes, heart failure, hyperlipedemia, hypertension, home care patients, patients with repeat prescriptions, patients on warfarin or those at high risk for medicines problems. Carers: none. Professionals: physicians, not specified.
Setting	Outpatient, pharmacy, academic institution, primary care, private organisation, home
Interventions	Pharmacist services targeted at patients; pharmacist services targeted at professionals; services delivered by other professionals (physician); usual care.
Maps to intervention taxonomy categories	Improving quality, Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, adverse events, health status and wellbeing
Quality of the review (AMSTAR)	9
Quality of the included studies	The majority of results were based on single or a small number of studies, and included studies were generally of moderate methodological quality which may introduce bias.

Odegard 2007	
Review question/objective: What are the effects of interventions to improve medicines adherence in type 1 and type 2 diabetes mellitus?	
Studies	Search date up to: May 2007 Number of studies related to medicines use: 7 Study design: RCT, other
Participants	Patients: adolescents (aged 13 to 17 years) and older adults, including veterans (mean age range 52 to 69 years) with type 1 or

	type 2 diabetes mellitus. Carers: none. Professionals: none.
Setting	Primary care, home, pharmacy
Interventions	Pharmacological education and/or medicines review by pharmacist; reminder; unit-dose packaging; reminder plus unit-dose packaging; cue-dose training; counselling (psychotherapy or counselling); weekly telephone follow-up by nurse educator; standard care; control
Maps to intervention taxonomy categories	Improving quality, Providing information or education, Support, Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing, system benefits
Quality of the review (AMSTAR)	4
Quality of the included studies	Most outcomes and comparisons were reported in only a small number of studies, and all had methodological limitations than may introduce bias.

Olthoff 2005	
Review question/objective: What are the effects of interventions to help patients adhere to medicines for glaucoma?	
Studies	Search date up to: February 2004 Number of studies related to medicines use: 4 Study design: RCT, ITS, CBA
Participants	Patients: people with raised intraocular pressure or glaucoma. Carers: none. Professionals: none.
Setting	Not specified
Interventions	Compliance aid (medicines alarm or memory aid); counselling and memory aid; education and tailoring of medicines routine; counselling only; no intervention
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour
Quality of the review (AMSTAR)	7
Quality of the included studies	Of the 4 included intervention studies, only 1 study was rated as good quality (with 2 rated as moderate and 1 poor), and this may introduce bias.

Orton 2005	
Review question/objective: What are the effects of unit-dose packaged treatment on cure and treatment adherence for people with uncomplicated malaria?	
Studies	Search date up to: November 2004 Number of studies related to medicines use: 4 Study design: RCT, CT

Participants	Patients: people with uncomplicated malaria. Carers: parents. Professionals: none.
Setting	Primary care, community, home
Interventions	Unit-dose packaged medicines: labelled and boxed blister packs or labelled and sectioned polythene bags; usual care
Maps to intervention taxonomy categories	Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	10
Quality of the included studies	All of the included studies were relatively small and had serious methodological limitations that might introduce bias. Only 1 cluster RCT adequately generated the randomisation sequence; while adequacy of allocation concealment was unclear in all included studies. Similarly, blinding of outcome assessment was not done all trials; completeness of outcome data was assessed in only 2 trials (1 assessed as adequate, 1 inadequate); and there were unit of analysis issues in cluster RCTs.

Oyo-Ita 2011	
Review question/objective: What is the effectiveness of interventions to improve immunisation coverage in low- and middle-income countries?	
Studies	Search date up to: March 2011 Number of studies related to medicines use: 6 Study design: RCT
Participants	Patients: children (aged 0-4), pregnant mothers, general populations. Carers: parents and general population. Professionals: primary healthcare workers.
Setting	Community, home, clinic
Interventions	Health education (information campaign; facility based; facility based plus redesigned immunisation card; or evidence-based community discussion); monetary incentive; provider-oriented interventions (training); health system intervention (home visit or provision of equipment, drugs and materials); routine immunisation
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Improving quality, Minimising risks or harms
Outcomes	Health behaviour, system benefits
Quality of the review (AMSTAR)	8
Quality of the included studies	The majority of interventions were assessed in single studies of low to moderate quality.

Pankowska 2009

Review question/objective: Does continuous subcutaneous insulin infusion improve glycemic control and other outcomes, compared with multiple daily injections, in children with type 1 diabetes mellitus?	
Studies	Search date up to: October 2007 Number of studies related to medicines use: 6 Study design: RCT
Participants	Patients: children, adolescents, and young adults aged 1 to 21 years with type 1 diabetes for at least 3 months. Carers: none. Professionals: none.
Setting	Not specified
Interventions	Continuous subcutaneous insulin infusion (CSII); multiple daily injections (MDI)
Maps to intervention taxonomy categories	Minimising risks or harms
Outcomes	Health behaviour, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	7
Quality of the included studies	Included studies were of variable methodological quality: randomisation was adequate in half of studies, intention to treat analysis done in the minority (2 of 6 studies), and allocation concealment and blinding not achieved for any included study. These limitations may introduce bias that influences the results.

Parr 2009	
Review question/objective: Do targeted interventions (gradual dose reduction, brief interventions, and psychological interventions) improve benzodiazepine cessation, compared to routine care?	
Studies	Search date up to: 2007 Number of studies related to medicines use: 32 Study design: RCT
Participants	Patients: adults who used benzodiazepines continuously for at least 3 months. Carers: none. Professionals: none.
Setting	Primary care, outpatient, community, private organisation
Interventions	Combinations of: Brief intervention; gradual dose reduction (GDR); psychological intervention; abrupt or gradual substitutive pharmacotherapy; abrupt withdrawal; routine care
Maps to intervention taxonomy categories	Supporting behaviour change, Providing information or education
Outcomes	Health behaviour
Quality of the review (AMSTAR)	5
Quality of the included studies	Included studies were of variable quality, and results should be interpreted with caution due to the possibility of bias. Blinding of outcome assessors was not achieved in over half the studies and there was less than 70% follow-up in a quarter; however authors

	did test for and note that results were not related to methodological quality scores of included studies.

Polis 2007	
Review question/objective: Does advance provision of emergency contraception improve pregnancy rates and other outcomes?	
Studies	Search date up to: August 2006 Number of studies related to medicines use: 8 Study design: RCT, CT
Participants	Patients: women. Carers: none. Professionals: none.
Setting	Community, hospital, outpatient, not specified
Interventions	Advance provision of emergency contraception; standard provision of emergency contraception
Maps to intervention taxonomy categories	Supporting behaviour change, Improving quality
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	5
Quality of the included studies	Included studies were of variable methodological quality: while randomisation and allocation concealment were adequate in the majority of studies, follow-up rates were variable and may represent a source of bias.

Ranji 2008	
Review question/objective: Are quality improvement interventions effective at reducing inappropriate antibiotic prescribing for acute outpatient illnesses?	
Studies	Search date up to: March 2007 Number of studies related to medicines use: 43 Study design: RCT, CT, CBA
Participants	Patients: adults and children; illnesses included bronchitis, acute respiratory infection, pharyngitis, otitis media, sinusitis, sore throat, acute diarrhea, acute cough, common cold. Carers: parents. Professionals: clinicians.
Setting	Outpatient, not specified
Interventions	Clinician education alone (mailed materials, seminars, outreach or workshops, written materials); patient education alone (mailed and office based materials, self-management guides, individual and group interactive meetings, written materials); clinician plus patient education (patient and/or clinician: educational materials, outreach, workshops, written materials, group sessions, mass media campaign); clinician plus patient education plus audit and feedback (clinician audit and feedback, educational meetings,

	outreach, guideline development and written materials, patient written or mailed educational materials, self-management guide); other quality improvement strategies (combinations of paper or computer-based decision support systems); educational meetings, outreach or workshops; written educational materials for providers; financial disincentives for patients; patient educational materials (written and electronic); audit and feedback; community-based interventions (mass media campaigns, patient or provider educational meetings and outreach, written materials, audit and feedback, guideline distribution for providers, decisional support materials, self-management guides); non-community-based interventions targeting clinicians and patients (combinations of audit and feedback, education outreach and meetings, written and or mailed educational materials, guideline development, self-management guides for patient); non-community-based studies targeting clinicians (educational workshops, guideline distributions, patient-centred communication skills interactive training, audit and feedback, computer based reminders, written materials, paper based decision support system); non-community-based interventions targeting patients (financial incentives, educational video, material and/or pamphlet); delayed prescriptions; control
Maps to intervention taxonomy categories	Facilitating communication and/or decision making, Improving quality, Minimising risks or harms, Providing information or education
Outcomes	Health behaviour, adverse events, consumer evaluation of care, health status and wellbeing, system benefits
Quality of the review (AMSTAR)	6
Quality of the included studies	Intervention components and details of implementation were not well described and most comparisons are based on small numbers of studies. The overall quality of included studies was fair although cluster sizes were not reported in majority of studies.

Roughead 2005	
Review question/objective: Do pharmaceutical care service interventions improve patient outcomes?	
Studies	Search date up to: December 2003 Number of studies related to medicines use: 22 Study design: RCT
Participants	Patients: adults and children with chronic conditions or at high risk of medicines misadventure (eg polypharmacy). Carers: none. Professionals: none.
Setting	Outpatient, primary care, pharmacy, community

Interventions	Pharmaceutical care services involving one-to-one consultation between patient and pharmacist, to manage health or resolve medicines-related problems, to develop a care plan and provide follow-up; usual care
Maps to intervention taxonomy categories	Facilitating communication and/or decision making, Acquiring skills and competencies, Minimising risks or harms, Improving quality
Outcomes	Health behaviour, knowledge and understanding, health status and wellbeing, adverse events, system benefits
Quality of the review (AMSTAR)	7
Quality of the included studies	This review included only published, English-language randomised trials, and almost half (10/22) were rated as having a high risk of bias. Methodological limitations included inadequate randomisation in some included trials, allocation concealment adequacy was often unclear, as were blinding of outcome assessors and contamination between study sites. Additionally, some included studies had sample sizes that were too small to detect effects of interventions.

Royal 2006	
Review question/objective: Do interventions aiming to reduce preventable medicines-related adverse events decrease morbidity, hospital admission and mortality?	
Studies	Search date up to: February 2005 Number of studies related to medicines use: 38 Study design: RCT, CT, CBA, ITS
Participants	Patients: people taking medicines. Carers: none. Professionals: healthcare professionals and pharmacists providing care in community-based family medical services.
Setting	Primary care, community, long term care, pharmacy
Interventions	Pharmacist-led medicines review; primary healthcare professional-led interventions (nurse protocols or primary care physician education); complex interventions including medicines review to reduce falls; control
Maps to intervention taxonomy categories	Minimising risks or harms, Improving quality
Outcomes	Adverse events, health status and wellbeing, system benefits
Quality of the review (AMSTAR)	8
Quality of the included studies	None of the included studies were designed to explicitly assess patient outcomes that could be linked causally to medicines adverse events, and these studies set in primary care may not be applicable to other healthcare settings. All of the included studies had methodological limitations that are likely to introduce bias: many are subject to attrition bias, allocation concealment and blinding of assessors was unclear or not done in the majority of

	studies and analysis did not adjust for clusters of sites.

Rueda 2006	
Review question/objective: What are the effects of interventions to support and educate people living with HIV/AIDS on adherence to highly active antiretroviral therapy (HAART)?	
Studies	Search date up to: May 2005 Number of studies related to medicines use: 19 Study design: RCT
Participants	Patients: adults and children with HIV and receiving HAART. Carers: none. Professionals: none.
Setting	Outpatient, hospital, community
Interventions	Support and education interventions; individual or group interventions; medical management strategies; cognitive behavioural therapy; motivational interviewing; usual care
Maps to intervention taxonomy categories	Providing information or education, Acquiring skills and competencies, Supporting behaviour change, Support
Outcomes	Health behaviour, health status and well being
Quality of the review (AMSTAR)	9
Quality of the included studies	Overall, the quality of studies was low, with potential for bias. Randomisation was described and adequate in only 5 trials, with allocation adequately concealed in 3. Intention-to-treat analysis was conducted in 3 included trials, while follow-up post intervention and up to 6 months was variable (3 studies up to 6 months). Only 6 studies used an objective measure of adherence.

Russell 2006	
Review question/objective: Do interventions directed at older adults improve medicines adherence?	
Studies	Search date up to: 2004 Number of studies related to medicines use: 57 Study design: RCT
Participants	Patients: older adults (mean age over 60 years) with hypertension or other cardiac, diabetes mellitus, osteoarthritis, cancer, glaucoma, receiving blood thinners, or with multiple (> 2) or other diagnoses. Carers: none. Professionals: none.
Setting	Home, community, pharmacy, hospital, primary care
Interventions	Counselling and education (brief (1 to 3 days), extensive (> 3 days), or unknown duration); cues, organisers or both; simplification of dose frequency; self-medication management programs; control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Acquiring skills and competencies, Support

Outcomes	Health behaviour
Quality of the review (AMSTAR)	4
Quality of the included studies	Many studies were small, with insufficient power to detected an effect of interventions in approximately 1/3rd of studies. Study quality was not formally assessed, and risk of bias is therefore unknown.

Saini 2009	
Review question/objective: Does simplifying the dosage frequency of oral daily medicines for chronic conditions improve adherence?	
Studies	Search date up to: 2007 Number of studies related to medicines use: 11 Study design: RCT, other, not specified
Participants	Patients: adults with chronic diseases (hypertension, stable angina, type 2 diabetes mellitus, epilepsy). Carers: none. Professionals: none.
Setting	Not described
Interventions	Simplified oral medicines dosage: once daily, twice daily, three times daily; four times daily
Maps to intervention taxonomy categories	Supporting behaviour change
Outcomes	Health behaviour
Quality of the review (AMSTAR)	4
Quality of the included studies	The methodological quality of included studies was poorly described, which means that results may be affected by an unknown risk of bias.

Schedlbauer 2010	
Review question/objective: What is the effect of adherence-enhancing interventions to help people take prescribed self-administered lipid lowering medicines?	
Studies	Search date up to: March 2008 Number of studies related to medicines use: 11 Study design: RCT
Participants	Patients: adults (over 18 years age) prescribed lipid-lowering medicines for primary and secondary prevention of cardiovascular disease. Carers: none. Professionals: none.
Setting	Primary care, pharmacy, outpatient
Interventions	Simplification of medicine regime (decreasing intake from four times daily to twice daily or powder form to bar form); patient information and education (pharmacist-mediated counselling and

	information, handing out videotapes, booklets and newsletters, followed by educational newsletters sent via post or sending out informational/educational videotapes); intensified patient care (reminders via mail and telephone); complex behavioural approach – group sessions (small group training with information packages sent by post); usual care or other intervention
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, consumer evaluation of care, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	9
Quality of the included studies	There were no studies evaluating decision support or administrative improvements. There are very few studies in this area and quality of the studies ranged from moderate to high risk of bias.

Schroeder 2004	
Review question/objective: What is the effect of adherence-enhancing interventions to help people take prescribed antihypertensive medicines?	
Studies	Search date up to: April 2002 Number of studies related to medicines use: 38 Study design: RCT
Participants	Patients: community dwelling adults with primary hypertension, newly diagnosed or established; excluded: secondary hypertension; hospitalised (non-ambulatory) patients. Carers: none. Professionals: none.
Setting	Primary care, community, outpatient
Interventions	Simplification of medicines regimens (once daily versus twice daily; tablet to transdermal delivery; 2 tablets versus 1 tablet); patient education (programmes with slides, audiotapes, booklets, group education, written materials, visual aids, lecture, discussion and knowledge tests); complex health and organisational interventions including interventions in combination and structured hypertension management; patient motivation, support and reminders (dispensers, medicines reminder charts with pharmacist supervision, self-recording of blood pressure, home visits, nurse and psychologist teaching self-determination, counselling, nurse phone calls, social support, group training, postal reminders, reminder packaging, telephone-linked computer counselling); usual care or no treatment
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Support; Improving quality
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	10

Quality of the included studies	Results may be limited as study quality was generally low. No included study met all methodological quality criteria. Randomisation method and adequate allocation concealment occurred in only 10/38 studies; outcome assessors were blinded in 12/38 studies; losses to follow-up were accounted for in 33/38 studies. Only a minority (8/38 studies) reported a power calculation and the majority of the remaining trials appear too small to detect clinically important differences between groups.

Smith 2009	
Review question/objective: Do provider and user behaviour interventions improve appropriateness and timing of malaria treatment?	
Studies	Search date up to: March 2008 Number of studies related to medicines use: 23 Study design: RCT, CBA, BA, other
Participants	Patients: adults and children. Carers: parents or carers of children with malaria symptoms. Professionals: public and private formal (e.g.,doctors, pharmacists, nurses) or informal (e.g.,medicine vendors, shopkeepers) providers, community health workers, community drug distributors, village health motivators, school teachers and midwives.
Setting	Community, primary care, not specified
Interventions	Education; education and/or training plus pre-packaged AM; pre-packaged AM tablet; AM syrup plus pictorial instruction; AM syrup plus pictorial instruction plus verbal instruction; AM syrup; integrated childhood disease management; treatment supervision; provider (formal or informal) training/ education; dispensing and communication skills training; training plus community education; control; no intervention
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change
Outcomes	Health behaviour, knowledge and understanding, provider knowledge and understanding
Quality of the review (AMSTAR)	5
Quality of the included studies	Most results were based on one or two studies poor design for assessing intervention effectiveness (i.e., no control group) and results should be treated with caution due to the potential for bias.

Spurling 2007
Review question/objective: What are the effects of delaying antibiotic prescriptions for at least 48 hours after respiratory

infection symptoms begin on antibiotic use, clinical outcomes and patient satisfaction?	
Studies	Search date up to: January 2007 Number of studies related to medicines use: 9 Study design: RCT
Participants	Patients: adults or children with respiratory infections. Carers: parents. Professionals: none.
Setting	Primary care, outpatient, home
Interventions	Delayed antibiotics; immediate antibiotics; no antibiotics
Maps to intervention taxonomy categories	Facilitating communication and/or decision making, Minimising risks or harms
Outcomes	Health behaviour, consumer evaluation of care, health status and wellbeing, adverse events
Quality of the review (AMSTAR)	9
Quality of the included studies	There were methodological limitations with some included studies that may introduce bias. Overall, 8 studies were rated as high quality. All 9 included trials were properly randomised, with 5 adequately concealing allocation. Six trials had attempted blinding some aspect of the study; and analysis was on an intention-to-treat basis in 5 trials.

Stevenson 2004	
Review question/objective: What are the effects of interventions to improve two-way communication between patients and healthcare professionals about medicines?	
Studies	Search date up to: From 1991 up to July 2001 Number of studies related to medicines use: 16 Study design: RCT, CBA, BA
Participants	Patients: any patient requiring medicines. Carers: none. Professionals: pharmacists and pharmacy staff, GPs, nurses, outpatient clinic doctors and staff, staff at psychiatric inpatient units.
Setting	Primary care, outpatient, hospital, pharmacy, community, home
Interventions	Training seminars for doctors; patient communication skills training; medicine fact sheet plus counselling; modified pharmacy services and medicines review; advertising campaign to promote communication with pharmacists; written questions for pharmacist plus counselling; nurse/ assistant telephone follow-up; nurse/ assistant face-to-face consultation; usual care; medicines education; medicines fact sheet; no control
Maps to intervention taxonomy categories	Providing information or education, Facilitating communication and/or decision making, Improving quality, Support, Minimising risks or harms
Outcomes	Health behaviour, knowledge and understanding, consumer evaluation of care, health status and wellbeing, adverse events,

	consumer involvement in care process, communication and consultation by provider, system benefits
Quality of the review (AMSTAR)	5
Quality of the included studies	Most included studies were only of moderate methodological quality that may predispose results to bias. Of the included intervention studies, 10 were RCTs, however, many included studies had methodological limitations (such as lack of randomisation, lack of numbers recruited, pre- and post-intervention data not given; attrition from study), and these may introduce bias.

Stone 2002	
Review question/objective: Which interventions improve adherence to preventive cancer screening and adult immunisation guidelines?	
Studies	Search date up to: February 1999 Number of studies related to medicines use: 29 Study design: RCT, CT
Participants	Patients: adults eligible for immunisation or cancer screening. Carers: none. Professionals: any involved in the delivery of preventive care services.
Setting	Not specified
Interventions	Organisational change; provider reminder; patient financial incentives; provider education; patient reminder; patient education; provider financial incentive; feedback; usual care/control
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Improving quality, Minimising risks or harms
Outcomes	Health behaviour
Quality of the review (AMSTAR)	9
Quality of the included studies	Most included studies were high quality (although not described in any detail). The majority of included studies were RCTs, but no further details were given about assessment of risk of bias. Authors note that several cluster randomised trials suffered from unit of analysis issues which may distort the results.

Thomas 2010	
Review question/objective: Are interventions to increase influenza vaccination rates in adults 60 years and older in the community effective?	
Studies	Search date up to: July 2010 Number of studies related to medicines use: 44 Study design: RCT
Participants	Patients: adults 60 years and older. Carers: none.

	Professionals: Physicians, clinic staff
Setting	Home, primary care, community, outpatient
Interventions	Participant reminders (postcard); tailored reminders (letter, postcard or phone call); participant reminder and recall (telephone call and education brochure); participant reminder and recall (letter and leaflet, letter alone, customised letter, telephone invitation); participant invitation while in clinic; education and vaccination offer; health risk appraisal and vaccination offer; group visits to providers plus offer to vaccinate; home visit plus vaccination offer; home visits with vaccination encouragement plus GP care plan; home visit plus safety intervention; free vaccination offer; vaccination invitation (patient pays); physician reminder (posters of vaccination uptake in clinic) alone or plus patient postcard; facilitators working with physicians on prevention measures including influenza vaccination; educational reminders plus academic detailing and peer comparisons; education and feedback to physicians; chart review and feedback; financial incentives to physicians; no intervention; usual care
Maps to intervention taxonomy categories	Facilitating communication and decision making, Providing information or education, Improving quality, Supporting behaviour change, Minimising risks or harms
Outcomes	Health behaviour
Quality of the review (AMSTAR)	10
Quality of the included studies	The majority of interventions were examined in single studies. The included studies were of moderate quality with allocation concealment and blinding being potential sources of bias in the majority of studies.

van Eijken 2003	
Review question/objective: What is the effectiveness of interventions, both multifaceted and tailored, that aim to improve medicines adherence in older people living in the community?	
Studies	Search date up to: June 2001 Number of studies related to medicines use: 14 Study design: RCT
Participants	Patients: people aged 60 years (median > 70); community-dwelling. Carers: none. Professionals: none.
Setting	Community, pharmacy, home, primary care
Interventions	Single generalised intervention; multifaceted generalised intervention; multifaceted tailored intervention; control
Maps to intervention taxonomy categories	Supporting behaviour change, Improving quality
Outcomes	Health behaviour

Quality of the review (AMSTAR)	6
Quality of the included studies	The methodological quality of the studies was moderate. Although all 14 included studies were RCTs, many had methodological limitations that may introduce bias: only 3 reported power calculation to justify sample size; only 4 described randomisation explicitly; only 1 conducted intention-to-treat analysis; and proportion of patients followed up was unclear in 5 trials.

van Wijk 2005	
Review question/objective: Do interventions delivered by community pharmacists improve patient adherence to chronic medicines?	
Studies	Search date up to: November 2003 Number of studies related to medicines use: 17 Study design: RCT, BA, other
Participants	Patients: patients prescribed medicine for a chronic disease (lasting > 3 months). Carers: none. Professionals: community pharmacists.
Setting	Community, pharmacy
Interventions	Education; counselling and monitoring (at prescription refill or initial fill, pharmacist incorporation of written patient questions, identification of medicines problems); chart review and identification of drug related problems; usual care
Maps to intervention taxonomy categories	Providing information or education, Support
Outcomes	Health behaviour
Quality of the review (AMSTAR)	5
Quality of the included studies	Studies were generally small in size, and only a minority of studies reported conducting a power calculation and most contained methodological limitations that may introduce bias. Overall, several studies were of poor design for assessing effectiveness, and in many baseline adherence was high which may mask intervention effects. Overall quality of included studies was poor: only a minority of included studies blinded outcome assessors or had < 10% loss to follow up; randomisation was not clear in many studies; and several included studies were of non-randomised design and this may introduce bias.

Vergouwen 2003	
Review question/objective: What is the effectiveness of interventions to improve adherence to antidepressant medicines in patients with unipolar depression?	
Studies	Search date up to: January 2002

	Number of studies related to medicines use: 19 Study design: RCT
Participants	Patients: people with unipolar depression. Carers: none. Professionals: physicians, nurses, psychiatrists, psychologists.
Setting	Primary care, outpatient
Interventions	Education (outpatient); education (primary care); multimodal collaborative care (primary care; including counselling, general and emotional support, psychotherapy); dosage regimen; usual care
Maps to intervention taxonomy categories	Providing information or education, Supporting behaviour change, Support, Improving quality
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	5
Quality of the included studies	There were methodological limitations to included studies which may introduce bias, and several studies on patient education in particular were of poor methodological quality. Few details of quality assessment were reported, except for numbers completing, which ranged from 38% to 100% in included trials

Vermeire 2005	
Review question/objective: What are the effects of interventions to improve adherence to treatment recommendations for people with type 2 diabetes mellitus?	
Studies	Search date up to: November 2002 Number of studies related to medicines use: 21 Study design: RCT, CT, CBA, other
Participants	Patients: people with Type 2 diabetes. Carers: none. Professionals: none.
Setting	Primary care, outpatient
Interventions	Nurse led interventions; home aides; diabetes education programmes; pharmacy based interventions; dosing and frequency interventions; other: patient participation programme; oral versus injected medicines; fundus photography; patient participation consultation; counselling; usual care
Maps to intervention taxonomy categories	Providing information or education, Acquiring skills and competencies, Supporting behaviour change
Outcomes	Health behaviour, health status and wellbeing, knowledge and understanding
Quality of the review (AMSTAR)	10
Quality of the included studies	Overall, of 21 included studies, 3 were considered at low risk of bias; 13 moderate; and 5 high risk of bias. In 5 randomised trials, randomisation and allocation were both adequate; in 6 trials there was adequate randomisation but not concealment of allocation; and in 4 studies both were unclear due to lack of data.

	Groups were similar at baseline in 15 trials. In 3 studies blinding of patients, administrators and outcome assessors was adequate; 2 studies had adequate blinding of patients, but not of administrators and outcome assessors; in 1 study there was adequate blinding of patients, but unclear blinding of administrators or outcome assessors; in 11 studies data any blinding was unclear; and 1 study did not apply any form of blinding. In 11 studies, groups were provided with comparable care (1 study not equivalent; missing in 5 studies); analysis was on an intention-to-treat basis in 8 studies, and other losses to follow-up were adequately described in 15 (inadequately in 6 studies).

Volmink 2006	
Review question/objective: Does directly observed therapy (DOT) cure or improve treatment completion in people with clinically active tuberculosis or requiring prevention of active disease?	
Studies	Search date up to: May 2007 Number of studies related to medicines use: 11 Study design: RCT, CT
Participants	Patients: low, middle and high-income countries; preventive therapy for tuberculosis or clinically active tuberculosis. Carers: none. Professionals: none.
Setting	Outpatient, community, home, primary care
Interventions	DOT; DOT at home or at clinic; DOT by family member, community health worker, nurse, family member, lay health worker; DOT for prophylaxis with IV drug users (own location or treatment centre); self-administration
Maps to intervention taxonomy categories	Supporting behaviour change, Minimising risks or harms
Outcomes	Health behaviour, system benefits, health status and wellbeing
Quality of the review (AMSTAR)	10
Quality of the included studies	Several of the included studies had methodological limitations that may introduce bias. Generation of the allocation sequence was adequate in 7 trials; inadequate in 1 and unclear in the remainder. Allocation concealment was adequate in 4 trials; unclear in 3; and inadequate in those remaining. Blinding of outcome assessment occurred in only 4 trials; while completeness of follow up was adequate in all but 6 trials (2 trials with > 20% excluded from analysis; 4 trials where follow-up was rated unclear).

Wright 2006
Review question/objective: Do self-administration programmes improve medicine adherence, risks associated with medicines,

clinical and other outcomes for people in hospital?	
Studies	Search date up to: March 2004 Number of studies related to medicines use: 47 Study design: RCT, CT, CBA, ITS, BA, other
Participants	Patients: not specified. Carers: none. Professionals: pharmacists, nursing staff.
Setting	Hospital, long-term care
Interventions	Self-administration programmes (including one or more of the following in combination): Discharge planning and/or counselling; reminders (diary cards, record sheets); information provision and education (written, verbal); compliance aids; structured teaching; nurse or technician or pharmacist administration; control
Maps to intervention taxonomy categories	Acquiring skills and competencies, Minimising risks or harms, Providing information or education, Support, Supporting behaviour change
Outcomes	Health behaviour, knowledge and understanding, consumer evaluation of care, adverse events
Quality of the review (AMSTAR)	5
Quality of the included studies	No health outcomes, treatment failures or hospitalisation data were reported. Included trials were generally small and several were of poor design for assessing intervention effectiveness. The majority of included studies had serious methodological limitations, including lack of blinding and sample attrition, and this likely introduces bias.

Yankova 2008	
Review question/objective: Does structured preoperative education on patient controlled analgesia (PCA) improve pain management post-surgery?	
Studies	Search date up to: Not stated Number of studies related to medicines use: 6 Study design: RCT, CT
Participants	Patients: surgical patients (16 years and older) prescribed requiring PCA postoperatively. Carers: none. Professionals: none.
Setting	Hospital
Interventions	Structured PCA education; informal routine PCA education
Maps to intervention taxonomy categories	Providing information or education, Acquiring skills and competencies
Outcomes	Knowledge and understanding, health status and wellbeing
Quality of the review (AMSTAR)	5
Quality of the included studies	This review suggests that although knowledge may be improved by structured patient education on PCA, compared to informal or routine education, pain control is not consistently improved.

	Included studies were of variable methodological quality: while 5 of 6 studies used random allocation and withdrawals were generally well described, only the minority (2 of 6) blinded study researchers, and such limitations may introduce bias. Additionally content or delivery of routine education (control) was not well described in any study.

Zygmunt 2002	
Review question/objective: Do psychosocial interventions improve adherence to antipsychotic medicines in people with schizophrenia?	
Studies	Search date up to: December 2000 Number of studies related to medicines use: 39 Study design: RCT, CT
Participants	Patients: people with schizophrenia requiring antipsychotic medicine. Carers: family members. Professionals: none.
Setting	Outpatient, hospital, home, community
Interventions	Pyschoeducation (dissemination of knowledge about disease, treatment and medicines); group programmes (peer support and shared identification); family (influence on patient illness); cognitive (attitudes and beliefs towards medicines); behavioural; and, community (support and rehabilitation); standard care; other interventions
Maps to intervention taxonomy categories	Providing information or education, Facilitating communication and/or decision making, Supporting behaviour change, Support
Outcomes	Health behaviour, health status and wellbeing
Quality of the review (AMSTAR)	4
Quality of the included studies	Limited outcomes were reported. Effectiveness of components of multifaceted interventions could not be assessed. No included study rigorously assessed adherence; and methodological quality was variable, although no further details were provided so risk of bias is unknown.