Table D1. Description of intervention and comparison groups

| Author, Year Trial name | Groups | Interventions and Comparators | Medication Name(s)/ Class(es)/Indication(s) |
| --- | --- | --- | --- |
| Bender et a., 20101 NA | G1: Interactive voice response (IVR) intervention G2: Usual care | G1: Each patient received at least two IVR calls separated by 1 month; veriﬁed correct person had been called; if respondent indicated that during the previous week awoken at night, limited activities, or use of rescue inhaler >2 times, then told that daily use of controller meds should prevent symptoms; advised to discuss symptoms with physician. Modules on benefits of asthma meds and filling and using meds provided with tailored responses; participants informed about free telephone service to answer asthma questions and free smoking cessation phone line; participants who reported symptoms or no intention of refilling meds received a 3rd IVR call 2 weeks following call #2. G2: usual care; not described | ICS |
| Berg et al., 19972 NA | G1: Self-management intervention G2: Usual care | G1: 6 sessions provide info about self-management behaviors and skills, asthma medications, asthma triggers, prevention of asthma attacks, relaxation techniques, psychological responses to asthma, and problem-solving skills. The session last approx 2 hours, led by registered nurse. All info was scripted in handbook for group leaders G2: Recorded information daily for 1 week following randomization and again at follow-up for treated subjects. No other intervention was given to this group aside from usual care with physician. | Asthma |
| Berger et al., 20053 NA | G1: Software-based telephone counseling intervention G2: Control arm | G1: Contacted every 2 or every 4 weeks (depending on stage of readiness and importance of the medicine) by Call Center staff who used web-based software to guide them through Motivational Interviewing - based counseling sessions. G2: Did not receive calls, but had access to Call Center staff via standard toll-free hotline mechanisms. | Avonex/Multiple Sclerosis Medication |
| Bogner et al., 20084 NA | G1: Integrated care G2: Usual care | G1: For patient, the integrated care manager provided education about depression and hypertension, emphasizing the control of depression to manage hypertension; offered encouragement and relief from stigma; helped to identify target symptoms for both conditions; explained the rationale for antidepressant and antihypertensive medication usage; assessed for side-effects and assisted in their management; assessed progress (e.g., reduction in depressive symptoms); assisted with referrals; and monitored and responded to life-threatening symptoms (e.g., chest pain, suicidality - 3, 30-minute in-person sessions and 2, 15-minute telephone-monitoring contacts during a 4-week period. G2: Usual care participants underwent the same assessments as participants in the integrated care intervention; no other differences mentioned | Depression, hypertension meds |

| Table D1. Description of intervention and comparison groups (continued) | | | |
| --- | --- | --- | --- |
| Author, Year Trial name | Groups | Interventions and Comparators | Medication Name(s)/ Class(es)/Indication(s) |
| Bogner et al., 20105 NA | G1: Integrated care G2: Usual care | G1: Integrated care intervention that addresses each factor resulting in non-adherence in a conceptual model adapted from Cooper and colleagues (source 33) through a multifaceted, culturally tailored individualized approach in which participants work with an integrated care manager to develop strategies to overcome barriers to medication adherence. The intervention integrates depression treatment with care for diabetes. G2: Usual care - existing primary care treatment | Oral hypoglycemics, antidepressants |
| Bosworth et al., 20056 V-STITCH | G1: Nurse administered intervention G2: Usual care | G1: Calls every 2 months for 24 months delivered by a nurse with research experience; at each call, nurse delivers both tailored and standard information in nine modules: literacy, hypertension knowledge, memory, social support, patient/provider communication, medication refills, missed appointments, health behaviors, and side effects. The activation frequency of each module can vary. To ensure that tailored information is standardized, the nurse uses a computerized database, which contains pre-determined scripts and tailoring algorithms. The database also tracks information discussed at each phone call. Duration of each call is recorded and database informs the nurse when the patient needs to be called again and what transpired during past phone conversations. Patients are also able to telephone nurse with questions related to hypertension.  G2: No other contact other than completing measures at baseline and follow-up. BP measurements obtained from medical records. No alterations to usual care. | Anti-hypertensive medications |
| Bosworth et al., 20087  TCYB  Bosworth et al., 20078  TCYB Methods paper | G1: Behavioral intervention  G2: Usual care | G1: Nurse conducted telephone encounters every 8 weeks where a core group of modules is potentially activated. Each call begins with the medication module where patients are queried about hypertension medication regimen (i.e., understanding the purpose of medication) and adherence to guidelines (i.e., assessing for changes to regimen). Nurse offers to give friend or family member overview of medication regimen. The adverse effects module is also activated at every call. Additional modules include memory, knowledge/risk perception, participatory decision-making, social support, knowledge, literacy, and health behaviors (i.e., smoking, weight loss, diet, etc.) are activated at specific telephone encounters. Calls are tailored to each specific patient. At end of each call, nurse asks patient for BP measurement. Patients are also allowed to call the nurse if they had any concerns regarding HTN treatment.  G2: No contact by nurse, no change in care | Antihypertensive drugs |
| Capoccia et al., 20049  na | G1: Pharmacist -primary care intervention: Enhanced care  G2: Usual Care | G1: In addition to UC, received follow-up by clinical pharmacist or pharmacy resident with the PCP and study psychiatrist. F-U was weekly phone calls for the first 4 weeks followed by phone contact every 2 weeks through week 12. During months 4–12, subjects received a phone call every other month. Subjects encouraged to visit their PCP during weeks 4 and 12. At each contact, depressive symptoms and medication-related concerns addressed by pharmacist. The initial contacts focused on support and education, medication dosage adjustment and the management of adverse effects. Med refill authorizations were provided, and access to patient assistance programs was facilitated. Also included change in time of dose administrations, change or discontinuation of AD meds, and provision of additional pharmacotherapy for insomnia or sexual dysfunction, as needed. Appts with MH providers also facilitated  G2: Encouraged to use available resources (PCPs, pharmacists, nurses, andmental health providers) | Depression |
| Carter et al., 200910 NA | G1: Intervention G2: Control | G1: Physician/clinical pharmacist collaborative model identical to intervention used in previous study (Carter #2345) G2: Patients received BP measurements at baseline, 3 and 6 months. Clinical pharmacists abstained from providing care to patients in control group. | Antihypertensive medications |
| Chernew et al., 200811 NA | G1: Received a decrease in copayments G2: Copayments remained the same | G1: Employer-based health insurance plan implemented policy to reduce copayments for five chronic medication classes as part of a disease management program. Copays for generics were reduced to zero, copays for brand-name medications were reduced by half of previous value G2: No reduction in copays | (ACE inhibitors, ARBs, beta-blockers, diabetes medications (oral and insulin), HMG-CoA reductase inhibitors (statins), and inhaled corticosteroids |
| Choudhry et al., 201012  NA | G1: Intervention, Statins  G2: Intervention, clopidogrel  G3: No change in copayments, statin users  G4: No change in copays clopidogrel users | G1: Elimination of copayments for statins for company employees & beneficiaries with diabetes or vascular disease.  Pitney Bowes G2: Lowered copayments for all employees & beneficiaries prescribed clopidogrel.  Pitney Bowes G3: No change in copayments, statin users. BCBS of NJG4: No change in copay, clopidogrel users. BCBS of NJ | Statins, clopidogrel |
| Choudhry et al., 201113  MI FREEE | G1: Full prescription coverage  G2: Usual prescription coverage | G1: Patients had no cost sharing for any brand-name or generic statin, beta-blocker, ACE inhibitor, or ARB prescription after randomization. All copayments and coinsurance were waived at the pharmacy, as was any contribution to deductible.  G2: Patients received their usual level of prescription-drug coverate | Statins, beta-blockers, ACE inhibitors, and ARBs |
| Friedman et al., 199614 NA | G1: Patients who received telephone-linked computer system and regular medical care G2: Patients who received regular medical care alone | G1: Telephone-linked computer system - an interactive computer-based telecommunications system that converses with patients in their homes between office visits to their physicians. A supplement to usual care. TLC uses computer-controlled speech and touch tone keypad for responses. The systems ask about clinical status and gives feedback to the patient to promote adherence to treatments. G2: Regular medical care (not described) | Antihypertensives |
| Fulmer et al., 199915  NA | G1: Videotelephone reminder group  G2: Telephone reminder group  G3: Control group | G1: For 6 weeks, participants received video reminder calls to take their medications daily (Monday through Friday). The call consisted of a brief greeting and a question about whether the previous day's medication had been taken, and additional time to answer patients' questions.  G2: This group received the same intervention as G1, but via regular phone call with no video component.  G3: Received no reminder calls. | ACE inhibitors, calcium channel blockers, and other cardiac-related medications such as digoxin, diuretics, and vasodilators |
| Grant et al., 200316 NA | G1: Pharmacist-administered questionnaire and education physician feedback G2: Pharmacist-administered questionnaire only | G1: Six over the phone pharmacist-administered tasks: 1) a 13-item questionnaire to assess barriers to adherence to medications, diet, exercise; 2) detailed assessment of medication-specific regimen, use and barriers for each medication taken; 3) tailored verbal patient education based on barriers identified; 4) social service and nutrition referrals as needed; 5) email summary of barriers to physician; 6) offer in email summary to schedule follow up physician or pharmacist appointment. G2: Over the phone pharmacist-administered 13-item questionnaire to assess barriers to adherence to meds, diet, exercise; G3: set aside lab controls | Any diabetes-related medicines |
| Guthrie et al., 200117 First Myocardial Infarction (MI) Risk Reduction Program | G1: Postal and telephone reminders G2: Usual care | G1: Received first 2-week supply of pravastatin free of charge; received from physician life style recommendations and complying with medication regimen; Received telephone reminders at weeks 2 and 8 and reminder postcards at week 4 to reinforce message about coronary risk reduction; each message stressed importance of following physicians' instructions and taking medications as prescribed; reminder cards mailed at 4 and 5 months after enrollment also G2: Received first 2-week supply of pravastatin free of charge; received from physician life style recommendations and complying with medication regimen; reminder cards mailed only 4 and 5 months after enrollment; | Pravastatin |
| Hoffman et al., 200318 NA | G1: Mail-based intervention for providers and patients G2: Usual care | G1: Prescribers received letters each month listing their patients taking antidepressant drugs who were identified as nonadherent through pharmacy database claims. Patients identified as nonadherent received an intervention letter with general information reminding them of the importance of adhering to their medication regimen. G2: Usual care | Antidepressant medications |
| Hunt et al., 200819  NA | G1: Collaborative primary care-pharmacist hypertension management G2: Usual care | G1: Scheduled for an appointment in primary care clinic with a Network-employed pharmacy practitioner. Pharmacists reviewed subjects' medications and lifestyle habits, assessed vital signs, screened for adverse drug reactions, identified barriers to adherence, provided education, optimized the antihypertensive regimen, and scheduled follow up appointments if necessary. G2: Normal schedule of medical care | Antihypertensives |
| Janson et al., 200320  NA | G1: Self-management education  G2: Usual Care | G1: Included asthma education components recommended by NIH guidelines: Basic facts about asthma, role of airway inﬂammation and bronchospasm in causing airﬂow obstruction and symptoms, and the roles and actions of anti-inﬂammatory and quick relief medications were explained with models and illustrations. Skills for correct inhalation of medication from a metered-dose inhaler using a spacer and for peak ﬂow measurement were taught and practiced. At subsequent visits, subjects were shown graphs of their peak ﬂow data, emphasizing trends over time. Finally, a simple written asthma action plan, based on peak ﬂow zones, and using the “trafﬁc light” analogy  G2: Monitored peak ﬂow, symptoms, and medication use, and had the same number of study visits of the same duration. No explicit education or instruction aboutasthma, and no feedback about peak ﬂow data, symptoms, or medication adherence. All questions aboutasthma referred to the subject’s personal physician | Asthma medications: Inhaled corticosteroids, albuterol |
| Janson et al., 200921 NA | G1: Individualized self-management educational intervention G2: Self-monitoring alone | G1: Standardized components regarding asthma facts and medication actions, as well as individualized components: verbal and graphic interpretation of spirometric results, peak ﬂow trends, metered dose inhaler technique errors, and results of allergen skin testing, along with speciﬁc strategies for control of personally relevant environmental exposures. Peak ﬂow monitor of the intervention participants was adjusted to reveal how daily readings compared with individual personal best values. Zones based on a ‘‘trafﬁc light’’ analogy were displayed on the monitor face and correlated to a simple written action plan. The action plan was not personalized G2: Self-monitoring alone. | (ICS |
| Johnson et al., 200622  NR | G1: Pro-Change Program for Cholesterol Medication  G2: Control | G1: Based on transtheoretical model (TTM) for change; a computer-generated, individualized, stage-matched expert system intervention and stage-matched manual for adherence to lipid lowering medication. At baseline, expert system provides feedback on how a participant's responses compare to the responses of a sample of successful individuals making the same behavior change (normative feedback) for each TTM construct. At follow-up, the system provided printed intervention reports with normative and its own previous responses for each of the TTM constructs. Feedback is compiled into a single 4-5 page report mailed within 1 week of assessment. Feedback also refers participant to the self-help manual for adherence organized by stages of change which provides more in-depth information and stage-matched exercises. Feedback report also contains brief stage-matched guidance regarding stage of change for moderate exercise and dietary fat reduction.  G2: Did not receive intervention materials | Lipid medications |
| Johnson et al., 200623  NR | G1: Pro-Change Program for High BP Medication  G2: Control | G1: based on transtheoretical model for change; a computer-generated, individualized, stage-matched expert system intervention and stage-matched manual for adherence to antihypertensives. At baseline, expert system provided normative (compared to others) printed intervention reports based on response to baseline assessment. At follow-up, system provided printed intervention reports with normative and ipsative (compared to self) feedback on stages of change; decisional balance; processes of change (POC); self- efficacy; and strategies. The self-help manual reinforced principles and POC that were most appropriate for individual's current stage of change. Manual contains stage-matched exercises to help participant better understand and make use of behavioral strategies suggested in report. These materials were mailed to participants during assessment periods.  G2: NR | Anti-hypertensive medications |
| Katon et al., 199524 NA | G1: Collaborative care G2: Usual care | G1: Prior to PCP visit, patients received 2 brief booklets (one on biology of depression and how antidepressants work, and one on CBT techniques for managing depression) and a videotape with similar material covered in doctor-patient vignettes. They also completed a doctor-patient questionnaire to bring to their first PCP visit. Physicians had a half-day didactic on depression treatment, monthly case conferences, and case-by-case consultation with study psychiatrists. Patients had 2 psychiatric visits--psychiatrist provided education to patients about antidepressant treatment and worked with PCPs to change dosage when needed. Psychiatrist monitored pharmacy refill data and notified PCP about premature discontinuation. G2: Patients received treatment for depression from their PCP, and could refer themselves or be referred to a mental health clinic. | Anti-depressant medication |
| Katon et al., 199625 NA | G1: Collaborative care (intervention) G2: Usual care by primary care physicians (control) | G1: A multifaceted structured intervention targeting the patient, physician, and process of care. This included a collaborative model of care provided by both a primary care physician and 1 of the 2 study psychologists and included both behavioral treatment to manage depression and counseling to improve adherence. Patients also received a brief booklet on the biology of depression and how antidepressant medications work and another booklet on simple cognitive behavior techniques for managing depression and a 20-minute video tape to take home and view with their spouses. G2: Patients received treatment for depression from their primary care physician. This usually included prescription of an antidepressant, 2 to 3 visits over the first 3 months of treatment, and the option to refer to mental health services. | Antidepressant medications |
| Katon et al., 199926 NA  Katon et al., 200227 NA | G1: Depression persistence intervention G2: Usual care | G1: Multifaceted intervention targeting patients, physicians, and process of care; Patients received education (book & videotape); 2 scheduled visits with a psychiatrist and additional visits as needed; brief telephone calls between visits; psychiatrist helped primary care provider and patient adjust dosages/medication when side effects or inadequate response to treatment occurred; PCPs received immediate updates about their patient's progress. G2: Usual care; typically prescription of an antidepressant medication, 2-3 visits over the first 6 months of treatment, and an option to refer to mental health services. | Antidepressant medications |
| Katon et al., 200128  NA  Ludman et al., 200329 NA  Van Korff et al., 200330 NA | G1: Depression relapse prevention program G2: Usual care | G1: Intervention patient educated about effective management of chronic/recurrent depression (included a book and videotape); had 2 in-person visits with a depression prevention specialist; contacted by telephone (3 times) and personalized mailings (4 times) for continued monitoring of depressive symptoms and patient adherence; cognitive behavioral components (stand-alone interventions; stress reduction; self-monitoring; tracking of symptoms; self-care plans. Depression prevention specialists communicated with PCP regarding situations requiring clinical attention.  G2: Usual care; typically a prescription of an antidepressant medication, 2 to 4 visits over the first 6 months of treatment, and an option to refer to mental health services. | Antidepressant medications |
| Lee et al., 200631 FAME | G1: Pharmacy care program G2: Usual care | G1: All received intervention during phase 1 prospective observational phase. Contained 3 elements: individualized medication education (using standardized scripts teaching drug names, indications, strengths, adverse effects, and usage instructions); medications dispensed using an adherence aid (blister packs); and regular follow-up with clinical pharmacists every 2 months. Initial visit was 1 hour, subsequent visits scheduled for 30 minutes. After conclusion of phase 1, continued to meet with clinical pharmacist every 2 months, continued to receive medications in blister packs, and continued mediation education as needed. G2: Returning to pre-study status of medication provision after conclusion of phase 1; medication education and blister-packed medications not provided; in phase 2, all medications provided in new pill bottles with a 90-day supply and 1 refill prescription | Multiple, not specified (4 or more meds) |
| Lin et al., 200632  NA | G1: Individualized management of depression  G2: Consult primary care physician | G1: Individualized management of depression care according to patient preference and treatment response, using one of 2 evidence-based treatments: antidepressant medication or problem-solving treatment; Involved a stepped care approach that augmented pharmacotherapy, problem-solving treatment, or both with psychiatric consultations and group and community services  G2: Advised to consult their primary care physician regarding depression treatment | Oral hypoglycemic agents, antihypertensive agents, and lipid-lowering medications |
| Maciejewski et al., 201033  NA | G1: BCBS North Carolina Value-based insurance design  G2: Nonparticipants | G1: Generic copayments waived only for Blue Cross Blue Shield of North Carolina (BCBSNC) participants in value-based insurance program; in addition, copayments for brand-name medications to treat diabetes, hypertension, hyperlipidemia, and congestive heart failure lowered from tier 3 to tier 2 for all of the insurer's enrollees  G2: No reductions in generic copayments; copayments for brand-name medications to treat diabetes, hypertension, hyperlipidemia, and congestive heart failure lowered from tier 3 to tier 2 for all of the insurer's enrollees | Medications for diabetes, hypertension, hyperlipidemia, and congestive heart failure |
| Mann et al., 201034  The Statin Choice | G1: Statin Choice Decision Aid  G2: American Diabetes Association (ADA) print material | G1: 6 min provider-led discussion of patient's tailored risks and benefits from using or not a statin. Uses Statin Choice Decision Tool to complete 4 discrete steps: 1) discuss patient's underlying heart attack risk factors; 2) discuss patient's risk of heart attack over 10 yrs with and without statin; review risks of taking statin; 4) offer choices. Received one of three versions depending on which of three risk categories they were in: <15%; 15-30%; >30%. Risk determined using data from med records.  G2: Printed material from ADA about how to reduce cholesterol through dietary modifications | Statins |
| Montori et al., 201135  NA | G1: Intervention  G2: Control | G1: Intervention patients  received a decision aid (a tailored pictographic 10-year fracture risk estimate, absolute risk reduction with  bisphosphonates, side effects, and out-of-pocket cost) in addition to usual care (review of bone mineral  density results without fracture risk calculation or graphic  representation of treatment benefit)  G2: Control patients received a standard brochure in addition to usual care | Biphosphonate |
| Murray et al., 200736 NA | G1: Pharmacist-led intervention G2: Usual Care | G1: Pharmacist-led intervention providing patient-centered verbal instructions and written materials (literacy sensitive) about meds, icons on medication bottles/lids, monitoring of medication use. The pharmacist contacted clinicians as needed and was trained by a multidisciplinary team. G2: Received prescriptions from pharmacists (these pharmacist did not receive specialized training from multidisciplinary team) who rotated through study pharmacy but didn't have access to pt-centered study materials. No contact with intervention pharmacist other than initial medication history. | Multiple HF meds  (median of 10-11) |
| Nietert et al., 200937 NA | G1: "Phone Patient" Intervention G2: "Fax Physician" Intervention G3: Usual care | G1: "Phone Patient" intervention - Grocery store pharmacists contacted overdue patients by telephone and reminded patients they were overdue, asked why patients were overdue, reminded them of the importance of taking their medication, and, when possible, helped patients find ways to overcome barriers to adherence in the future G2: "Fax Physician" intervention - Grocery store pharmacists faxed information to prescribing physicians about the study, written prompts to assist patients with adherence, and instructions to return patient disposition codes to store pharmacies via fax G3: Usual care = filling prescriptions when requested by patients and arranging payment | Medications for any 1 of 6 chronic diseases |
| Okeke et al., 200938 N-A | G1: Intervention G2: Usual care | G1: Educational video stressing importance of drop-taking and suggesting strategies to improve adherence, discussion of barriers and strategies with study coordinator, reminder phone calls (weekly for 1st month then once every other week for next 2 months), use of a dosing aid with audible and visible alarms. G2: Controls were told that it is important to take their eye drops as prescribed, but had no other intervention. | Glaucoma medication--travoprost (prostaglandin analog) |
| Pearce et al., 200839  Cardiovascular Risk Education and Social Support (CaRESS) Trial | G1: 50  G2 (intervention group B): 58  G3: 91 | G1: An intervention that fostered the involvement of a relative or friend as a support person in the control of cardiovascular risk factors in patients with type 2 diabetes. It consisted of one patient/support person education session with a Registered Nurse patient educator with attendance of the support person followed by the mailing of 4 quarterly "newsletters" about cardiovascular risk factor control.  G2: Same as G1  G3: An individual patient education session with a Registered Nurse patient educator, followed by the same 4 quarterly patient newsletters as sent to intervention group patients, but without formal involvement of a support person in the study. | Antidiabetic medications |
| Powell et al., 199540 NA | G1: Intervention G2: Control | G1: Subjects mailed one of four educational videotape programs presenting information on the patients' inferred disease/condition process, suggesting behavior changes, how their prescribed drug works, & why adherence is important G2: Received no educational materials | Benazepril, metoprolol, simvastatin, transdermal estrogen |
| Powers et al., 2011{Powers, 2011 #13813  NA | G1: personalized risk-communication  G2: risk factor education control group | G1: received standard risk factor education and information based on their personal Framingham CHD and stroke risk score; personalized information was presented verbally and in graphic form representing the patient's risks; average and optimal CHD and stroke risks based on published estimates for their 5- year age group also presented in graphical form with their estimated risk; presented with potential strategies to improve their risk through risk factor modification such as medication and patient lifestyle factors. A copy of the patient's personal risk information was also provided to the primary care provider.  G2: received written patient education materials from the American Heart Association/American Stroke Association entitled “Are You at Risk of Heart Attack or Stroke?” which reviewed risk factors and how these factors can be improved but did not provide personalized estimates of individual risk; a research assistant verbally reviewed the information s and answered any questions at the initial visit. | NR |
| Pyne et al., 201141 HIV Translating Initiatives for Depression Into Effective Solutions (HITIDES) | G1: Collaborative care G2: Usual care | G1: Collaborative care model with HIV and mental health clinicians; included participant education and activation, assessment of treatment barriers and possible resolutions, depression symptoms and treatment monitoring, substance abuse monitoring, and instruction in self-management; intervention used 5-step stepped care model: watchful waiting, (2) depression care team treatment suggestions (counseling or pharmacotherapy, considering participant preference), (3) pharmacotherapy suggestions after review of depression treatment history by the clinical pharmacist, (4) combination pharmacotherapy and specialty mental health counseling, and (5) referral to specialty mental health. Study team communicated with clinicians via electronic medical records and with patients via phone. G2: HIV health care providers received 1 hour of HIV and depression training. Patients were screened for depression at baseline and delivered results to HIV clinicians at most clinic visits | Antidepressant medications, HIV medications |
| Rich et al., 199642  NA | G1: Multidisciplinary intervention  G2: Usual care | G1: Received comprehensive teaching about congestive heart failure and its management using a 15-page teaching guide prepared by study team; patients seen daily by study nurse through remainder of hospital stay; importance of compliance with medications and diet emphasized repeatedly; seen by a registered dietician and a social services representative; shortly before discharge, geriatric cardiologist reviewed patient's medications and made specific recommendations to simplify and consolidate a regimen by minimizing both the number of medications and dosing frequently; final choice of medications was decided by PCP; following discharge, patient seen by hospital's homecare department and regularly contacted by study nurse  G2: Received conventional care under discretion of regular physician; received all standard hospital services, including teaching and pre-discharge medication instructions. | Various HF medications |
| Rickles et al., 200543 NA | G1: Pharmacist-guided education and monitoring (PGEM) G2: Usual care | G1: Pts. received 3 calls, baseline and at 1 and 2 mos; 1st: assessed the patient’s AD med knowledge and beliefs, adverse effects and other concerns, treatment goals or areas in which they hoped the medication would help, and how the medication was being used during the week before the telephone call. Study pharmacists probed, provided education, asked patients to rate the severity of their concerns, and made recommendations on how to handle any adverse effects, difficulties remembering or paying for medications, and other concerns. Pharmacists expected to follow up on any indication of medication non-adherence. For calls 2 and 3, study pharmacists used the monitoring tool to guide their follow-up on any issues or concerns identified in earlier calls; also reviewed current adherence, whether any new adverse effects and concerns had developed, and progress in pts' medication goals. The pharmacist made new recommendations to patients as needed. G2: Educ and monitoring typical at the study pharmacies. | Depression |
| Ross et al., 200444 NR | G1: Online medical record access G2: Control | G1: Participants given user name and password to SPPARO online medical record site and received a user guide for the system; SPPARO contains medical record (clinical notes, laboratory reports, and test results), an educational guide (online version of printed materials all patients in heart failure practice receive at first visit), and a messaging system (allowed patients to exchange secure messages with the nursing staff). G2: Continued to receive standard care; offered use of SPPARO after study was completed as incentive to participate | Various |
| Rudd et al., 200445 NA | G1: Usual care + nurse care management G2: Usual care only | G1: At baseline, nurse counseled on correct use of automated BP device, regular return of the automatically printed BP reports, tips for enhancing drug adherence, and recognizing potential drug side effects; printed materials extended this instruction and patients confirmed ability to use BP device; nurse initiated follow-up phone contacts at 1 week, and 1,2, and 4 months; during each call, nurse asked about each medication dosage and any problems experience since previous contact; encouraged patients to telephone anytime during regular hours with questions or concerns; contacted physicians to obtain permission to initiate any new BP drug but not any changes in dosage; medication adjustments made according to patient's current medications, lab values, and BP measurements; when 80% of home BP readings met goal of 130/85, no further changes made to therapy; when <80% home BP readings met goal, nurse increased drug dosage to max level recommended for each drug or added drugs according to protocol G2: NR | Anti-hypertensive medications |
| Rudd et al., 200946  NA | G1: Individualized Care Group (and Plain English Material Group)  G2: Standard Care Group | G1: Individualized Care received standard rheumatology care; a notebook containing Arthritis Foundation pamphlets written in plain language (5-8th grade on SMOG), examples of medicine calendars, and a map of the hospital; and 2 appointments with a health educator, each after a rheumatology appointment. Originally there were 2 intervention groups (Individualized Care and Plain English Material), but due to slow recruitment the latter was absorbed into the former. 13 participants received only the plain English materials and are included with the Individualized Care arm in some analyses but excluded in others.  G2: Received standard rheumatology care and a notebook containing Arthritis Foundation pamphlets (11-15th grade on SMOG), examples of medicine calendars, and a map of the hospital. | Arthritis medications (not specified) |
| Schaffer et al., 200447 NA | G1: Audio-tape and education brochure G2: Audio-tape only  G3: Brochure only G4: Standard provider education | G1: “Bob’s Lung Story” (Lelko, 1999) is a 30-minute audiotape w/ five NAEPP topics. The storyline repeatedly incorporates key components of PMT (vulnerability, severity, self-efficacy, and response efficacy), as substantiated by a published protection motivation theorist and models the development of protection motivation (adherence behavior) as the protagonist, Bob, moves through an acute asthma episode, diagnosis, confusion with medication use, and finally mastery of his asthma symptoms through medication adherence. Asthma-related lyrics set to popular tunes enhance memory, while emphasizing key points of asthma management. Plus book (described in G3)  G2: Tape only.  G3: Book only: 12-page booklet that covers the same NHLBI-recommended topics as the audiotape but does not presents as part of a larger narrative. G4: Whatever education was provided by the participant’s asthma care provider | Asthma |
| Schectman et al., 199448  NA | G1: Telephone contact  G2: Control | G1: Certified medical assistant made calls at 3, 7, 14, 21, and 28 days following clinic visit; subjects asked whether any problems were experience with medication; adverse events were discussed and solutions offered to minimize toxicities; when adverse events severe or could not be properly evaluated or prescription drug necessary to control adverse event, additional telephone contact arranged with physician or clinical pharmacist  G2: No telephone contact | Niacin or bile acid sequestrants (BAS) |
| Schneider et al., 200849 N-A | G1: Study group G2: Control group | G1: Received lisinopril in a daily-dose adherence package, blister packaged with four rows of seven tablets, with more space for patient information such as what to do if a dose is missed G2: Received lisinopril in traditional bottles of loose tablets | Lisinopril |
| Schnipper et al., 200650 NA | G1: Pharmacist intervention G2: Usual care | G1: On the day of hospital discharge, a pharmacist reviewed each patient's discharge medication regimens with their pre-admission regimens and resolved discrepancies with a medical team; screened patient for previous drug-related problems (such as non-adherence), and reviewed the medication directions with the patient. During a follow-up phone call at 5 days post-discharge, pharmacist compared prescribed regimen with patient's self-reported medication list, screened for and resolved drug-related problems, and communicated results to patient's PCP. G2: Routine review of medication orders by a ward-based pharmacist and medication counseling by a nurse at the time of discharge. | Medications for multiple conditions |
| Simon et al., 200651 na | G1: Telephone care management G2: UC | G1: 3 phone contacts - each contact included a brief, structured assessment of current depressive symptoms, current use of AD medication, and AD side effects. During phone contacts, care managers followed specific scripts to address concerns regarding side effects and used scripted motivational enhancement techniques to address common reasons for discontinuing medication. The treating psychiatrist received a structured report of each contact, including a summary of the clinical assessment and algorithm based recommendations regarding antidepressant medication adjustment. If a change in treatment was recommended, the care manager contacted the psychiatrist to facilitate doctor-patient communication and follow-up. Care managers also provided as-needed crisis intervention and care coordination.  G2: All participants were contacted for blinded telephone outcome assessments three and six months after being randomly assigned to the study groups. | Depression medications |
| Sledge et al., 200652 N-A | G1: Primary Intensive Care G2: Usual care | G1: Comprehensive interdisciplinary medical and psychosocial assessment (2-3 hour visit, lifetime medical chart review, supplemental information from case manager, report to PCP), and ambulatory case management for 1 year in addition to usual care. G2: Usual care directed by their PCP, including psychiatric consultation which was available on-site if requested by the PCP. | Medications for multiple conditions |
| Smith et al., 200853 NR | G1: Mailed communications to patients and primary care providers G2: Usual care | G1: Patients received 2 mailed communications approximately 2 months apart stressing the importance of lifetime use of beta blockers following MI and also that adverse effects can be managed and the importance of remembering to refill their prescription. They also included a brief mention of other therapies (statins, ACEIs, and aspirin). Both mailings included a wallet card with suggested questions to ask their clinician, space to list their medications, and space to record additional queries. Primary care clinicians of patients randomized to the intervention arm received sample materials and a letter alerting them that their patients with MI would be receiving materials developed with input from patients and clinicians in primary care and cardiology. The letters asked the primary care clinicians to support the initiative and reminded them of guidelines on lifetime use of beta blockers following MI.  G2: Neither patients or clinicians in this group contacted | Beta blockers |
| Solomon et al., 199854 NA  Gourley et al., 199855 NA | G1: Pharmaceutical care (HTN and COPD subgroups) G2: Traditional pharmacy care (HTN and COPD subgroups) | G1: Pharmaceutical care intervention group underwent a six month treatment period with scheduled visits at enrollment and then at 4-6 week intervals to total 5 visits with an assigned pharmacist; the intervention also consisted of standardized patient assessment activities and a series of regularly scheduled therapeutic and educational interventions designed for optimal disease management.  G2: The traditional pharmacy care control group had only two visits, one at baseline and one at 6 months; they did not have access to the primary pharmacy caregivers and received no supplemental education or assessment of needs beyond what was customarily offered at each site. Traditional pharmacy care ranged from non-standardized interventions to distribution of product only. | Dihydropyridine or dihydropyridine and diuretic therapy for hypertensives; At least 1 metered dose inhaler for the treatment of COPD for those with COPD. |
| Stacy et al., 200956 NA | G1: Experimental G2: Enhanced Care Control | G1: Received up to 3 separate tailored behavioral support interventions delivered via an interactive voice recognition (IVR) system coupled with tailored print material receive through the mail. Calls provided highly tailored messages that specifically reinforced adherence/persistence with statins using a combination of behavioral science theories and techniques. Subsequent calls referred to health plan website for info. on dyslipidemia, risk reduction, and lipid lowering drugs. Mail provided tailored messages to enhance commitment, improve communication w/ health care team, and address adherence barriers. G2: Received non-tailored behavioral advice from a single IVR call at baseline, coupled with an untailored, generic, self-help cholesterol management guide received through the mail. Guide provided educational material on cholesterol and lipid values, a brief knowledge quiz, and an untailored action plan but did not address medication adherence. | Statin |
| Taylor et al., 200357  NA | G1: Pharmaceutical care  G2: Standard care | G1: Patients in the intervention group received usual medical care, along with pharmacotherapeutic interventions by a pharmacist during regularly scheduled office visits. A patient typically met with a pharmacist for 20 minutes before seeing a physician. Interventions included clinical services and patient education but not dispensing. Pharmacists reviewed medical records and provided comprehensive individualized patient education that included a brief review of the disease, important lifestyle modifications, written materials, and basic drug information. Therapeutic recommendations were communicated to physicians through discussions or progress notes. In addition, the pharmacists monitored patients’ responses to drugs and attempted to improve compliance by consolidating medication regimens, reducing dosage frequency, devising medication reminders, and teaching patients techniques for remembering.  G2: Standard medical care without pharmaceutical care. | Medications for multiple conditions (unspecified) |
| Vivian et al., 200258 NA | G1: Clinical pharmacist intervention G2: Control | G1: Patients saw clinical pharmacist once/month at a pharmacist-managed hypertension clinic; pharmacist had prescribing authority and made appropriate therapy changes for BP in accordance to JNC VI guidelines; did not make any changes to other drugs that may adversely affect BP; drug counseling (on side effects, recommend lifestyle changes, and assessment of compliance) provided at each visit; allowed to receive care for comorbid conditions from PCPs but could not make changes to antihypertensive drug regimens G2: Received traditional pharmacy services (dispensing, brief counseling about drugs, review of drug profiles); no monthly visits to pharmacist-managed hypertension clinic; received care from PCPs as needed at least once a year | Antihypertensive medications |
| Waalen et al., 200959  NA | G1: "Virtual" osteoporosis clinic  G2: Usual care | G1: Patients received care from a PA under the supervision of a preventive medicine physician. Patients were given prescriptions for vitamin D with or without calcium depending on their vitamin D levels. They received educational handouts in a one-time mailing. They had an open-ended phone discussion with the osteoporosis clinic about osteoporosis treatment, and then monthly calls until the patient started taking the medication and reported no problems. They were given a 3-month prescription for a second-generation bisphosphonate. Patients who needed help paying for the med were assisted in obtaining the drug from the study sponsor (Merck).  G2: Patients received a referral to their usual primary care physician and were told they would be contacted by the PCP for follow-up. All subsequent evaluation and treatment were performed by the PCP, and no further contact with the patient was initiated by the osteoporosis clinic until the end of the study. | Osteoporosis medication |
| Wakefield et al., 201160  NA | G1: High intensity nurse- managed home telehealth intervention  G2: Low intensity nurse- managed home telehealth intervention  G3: Usual care | G1: using the home telehealth device, pts entered BP and BG and responded to standardized questions. Pts then received appropriate automated responses depending on how they answered the device prompt. Pt data downloaded and made available for the nurse to review who determined whether the subject needed additional health information, increased monitoring, compliance strategies, problem resolution facilitation, or contact with the subject’s physician. Study team developed algorithm based guidelines programmed into device. Schedule established for each prompt set so that subjects received both standard prompts each day and a rotation of questions and educational content.  G2: Same as G1 excpet responded to a smaller subset of questions; did not use branching algorithm, rather used yes/no or multiple choice responses.  G3: scheduled follow-up appointments w/ the primary care clinic in usual manner; had access to their nurse care manager | NR |
| Weinberger et al., 200261  NA | G1: Pharmaceutical Care Program  G2: Peak Flow Monitoring Control Group  G3: Usual Care Control Group | G1: Broadly included Pharmacist training (interpretation of patient-specific data, technique to measure peak flow, instructions on counseling), availability of patient specific data via computer (patient background, contact info, peak flow rates, ED/hospital visits, medication/med possession ratio), written patient education materials for handouts to patients, resource guide for pharmacists, and implementation of "pragmatic strategies" to encourage pharmacists to implement program.  G2: Pharmacist training in reactive airway disease, diabetes, HTN; patient given peak flow meter, trained on its use, and monthly calls to elicit peak flows; data not provided to pharmacists  G3: Same pharmacist training in G2, patient not given peak flow meter | Meds for reactive airway disease (i.e. COPD or asthma) |
| Weymiller et al., 200762 Statin Choice Randomized Trial  Jones et al., 200963 Statin Choice Randomized Trial | G1: Decision Aid G2: Control  G1 (Statin Choice before visit): 26 G2 (Statin Choice during visit): 26 G3 (Control before visit): 23 G4: (Control during visit): 23 | G1: The one-page *Statin Choice* decision aid which included the patient's name, cardiovascular risk factors, and 1 of 3 levels of baseline 10-year cardiovascular risk (risk levels specified in article). It also showed the absolute risk reduction associated with taking statins and the potential disadvantages. Patients were prompted to express their readiness to take statins, discuss the issues with their primary care clinician or another important person, or delay the decision until another time. In addition, a multiple-page pamphlet was included that provided detail with visual links to the tailored one-page version, facilitating patient review of the material after the visit. G2: A Mayo Clinic standard educational pamphlet which defined lipid disorders and provided dietary guidelines for control of cholesterol, along with general statements encouraging exercise and smoking cessation. | Statins |
| Williams et al., 201064 NA | G1: Patients in practices where MDs were instructed how to access and interpret electronic adherence data G2: Patients in usual care, included education | G1: Physicians receive electronic adherence data and speciﬁc instructions on how to interpret that data G2: Both groups received an audio compact disc, digital video disc, and booklet (all had same content) on the most recent national asthma guidelines and methods for discussing medication nonadherence with their patients; material emphasized a non-confrontational approach to discussing adherence and included ways to identify barriers to taking medication, tips to help patients remember to take their medication, and methods to promote patient self-efﬁcacy. | ICS |
| Wilson et al., 201065  Better Outcomes of Asthma Treatment (BOAT); note that there is online supplemental material for methods and timeline | G1: Shared decision making  G2: Clinical decision making  G3: Usual care | G1: SDM: At study visits, care managers provide information and share decision-making responsibility with patients; treatment decisions negotiated by incorporating patient preferences and goals. Barriers to adherence addressed using motivational techniques. Progress was assessed at subsequent study visits and in three brief phone calls; medications adjusted as necessary. For care managers who are not licensed to prescribe, physicians reviewed and wrote prescriptions. Study care managers document each patient encounter in medical charts where it is available to patient's physician.  G2: CDM – Identical to SDM in process except study care managers only recommend new treatment regimens based on guidelines, without identifying patient goals/preferences or negotiating treatments/decisions.  G3: Usual Care: stepped care approach to medications with the aim of long-term asthma control. | Asthma medications |
| Wolever et al., 201066  NA | G1: 6 months integrative health coaching G2: Usual care | G1: 6 months of integrative health coaching, a personalized intervention that assists people in identifying their own values and vision of health, followed by a follow-up visit  G2: Those randomized to the control group received no materials or correspondence during the 6-month period | Oral diabetes medication |
| Zhang et al., 201067 NA | G1: Medicare Part D prescription drug coverage G2: Medicare Part D prescription drug coverage G3: Medicare Part D prescription drug coverage G4: Remained on retiree health benefit coverage | G1: No drug coverage prior to Medicare Part D G2: Some drug coverage prior to Medicare Part D with a $150 quarterly cap on plan payment G3: Some drug coverage prior to Medicare Part D with a $350 quarterly cap on plan payment G4: Comparison group, which was covered by retiree health benefits had no deductible, paid copayments of $10 - $20 per monthly prescription | Hyperlipidemia, diabetes, and hypertension medications |