Table D9. Medication adherence outcomes 1

| Author, Year  Trial Name | Medication Adherence  Outcome 1 | Description of Timing of Measurement of Adherence Outcome 1 | Data Source | N | Results |
| --- | --- | --- | --- | --- | --- |
| Bender et al., 20101  NA | Percent adherence was determined by dividing the number of inhaler puffs taken by the number of puffs prescribed to be taken each day and then averaged over the 10-week interval | 10 weeks, measured once for entire period | Other | G1: 25  G2: 25 | Mean % (SD):  G1: 64.5% (17.2)  G2: 49.1% (16.8)  F: 9.66  p: .0032 |
| Berg et al., 19972  NA | Compliance measured as a mean of number of events recorded on Chronolog inhaler vs. number of expected events based on self-report of prescription (SD)Source of data is a combination of self-report and MDI chronolog scores | Compliance calculated as a % each day at week 7 | Other | G1: 31 G2: 24 | G1: 49 (31)  G2: 32 (28)  95% CI, NR  p<0.05 |
| Berger et al., 20053 NA | Discontinued use of Avonex | Assessed at 3 months | Self-report | G1: 172 G2: 195 | G1: 2 (1.2%) discontinued G2: 17 (8.7%) discontinued 95% CI, NR p: 0.001 |
| Bogner et al., 20084 NA | Depression adherence: % of prescribed doses taken; calculated as number of doses taken divided by the number  of doses prescribed during the observation period multiplied by 100% - dichotomized with 80% threshold | Measured over 6 week study period for entire study period | MEMS | G1: 32 G2: 32 | G1: 23 (71.9) G2: 10 (31.3) 95% CI,  p: .001 |
| Bogner et al., 20105 NA | >80% adherence to an oral hypoglycemic agent | 4 times, biweekly beginning at baseline and ending at week 6 | MEMS | G1: 29 G2: 29 | **BL** G1: 10 (34.5%) G2: 6 (20.7%)  95% CI, NR p: 0.19 **EP at 6 weeks** G1: 18 (62.1%) G2: 7 (24.1%) 95% CI, NR p: 0.004 |
| Bosworth et al., 20056 V-STITCH | Change in proportion reporting overall medication adherence at 6 months between G1 and G2 | Last 6 months; 2 times (including baseline); 6 months | Self-report | G1: NR G2: NR | 0.0074 95% CI, -0.062 to 0.076 p: NR |
| Bosworth et al., 20087 TCYB  Bosworth et al., 20078 TCYB Methods paper | Increase in self-reported adherence from baseline to 6 months | Last 6 months; 1 time; 6 months | Self-report | G1: 319 G2: 317 | G1: +9% (63% to 72%) G2: +1% (67% to 68%) p=NR |
| Capoccia et al., 20049 na | Adherence to antidepressants - at 3 mo | Defined as use of antidepressants for at least 25 of the past 30 days; measured at 3, 6, 9, 12 mos | Self-report | G1: NR G2: NR | G1: 85% G2: 81% 95% CI, NR Not Significant |
| Carter et al., 200910 NA | Percentage of patients with low self-reported medication adherence (i.e., score >3) | Measured twice, once at baseline & once at 6 month follow-up | Self-report | G1: 192 G2: 210 | **BL (Mean %, SD)** G1: 17.3% (27.5) G2: 18.7% (22.0) 95% CI, NR  **6 month follow-up (Mean %, SD)** G1: 14.6% (25.4) G2: 14.7% (20.9) 95% CI, NR  P (within-group): 0.602 G2 P (within-group): 0.979 G1 |
| Chernew et al., 200811 NA | Medication Possession Ratio (MPR is number of eligible days in the quarter the person was in possession of the medication divided by the number of days in the quarter) | Measured in the pre and post periods (eight observations per patient during 2-year period) | Other | **2004 (pre)** G1:  range 919-1,245 G2:  range 3,596 - 4,185  **2005 (post)** G1:  range 1,056 - 1,306 G2:  range 3,535 - 4,072 | **Effect size (percent MPR Points)**  **ACE inhibitors/ARB** = 2.59, p<0.001  **Beta-blockers** = 3.02, p<0.001  **Diabetes drugs** = 4.02, p<0.001  **Statins** = 3.39, p<0.001  **Steroids** = 1.86, p<0.134 |
| Choudhry et al., 201012  NA | Proportion of days covered (i.e., estimated number of days of medication available to each patient) - Change in level (i.e., immediate impact of copayment policy) | Measured monthly over the 24-month study period | Other | Overall N: 52,631    G1: 2051  G2: 779  G3: 38,174  G4: 11,627 | Statin users  Adjusted for differences in comorbidity & demographics  G1: 3.1% increase in monthly adherence over G3, with no subsequent change in slope  95% CI, NR  p: <0.05  Matched by first fill date for eligible prescription in study timeframe  G1: 2.6% increase over G3, with no subsequent change in slope  p: <0.05  Clopidogrel users  Adjusted (all patients)  G2: 4.2% increase over G4, with no subsequent change in slope  95% CI, NR  p: <0.05  Matched by first fill date for eligible prescription in study timeframe  G1: 6.6% increase over G4, with no subsequent change in slope  95% CI, NR  p: <0.05 |
| Choudhry et al., 201113 | Mean medication possession ratio (among all patients) | Number of days for which patients had a supply of each medication class available divided by the # days they were eligible for that medication. Patients who lost eligibility before randomization or who did not fill a prescription after randomization were considered to be nonadherent. | Prescription claims records | G1: 2845 G2: 3010 | **All 3 medication classes** G1: 43.9 (33.7) G2: 38.9 (32.7) 95% CI, 5.4 (3.6-7.2) p: <0.001  **ACE inhibitor** **or ARB** G1: 41.1 (39.8) G2: 35.9 (38.1) 95% CI, 5.6 (3.4-7.7) p: <0.001  **Beta-blocker** G1:49.3 (37.5) G2: 45.0 (36.6) 95% CI, 4.4 (2.3-6.5) p: <0.001  **Statin** G1: 55.1 (37.7) G2: 49.0 (37.3) 95% CI, 6.2 (3.9-8.5) p: <0.001 |
| Friedman et al., 199614 NA | Antihypertensive medication adherence (total number of tablets, capsules, or patches dispensed minus the total number counted in the audit, divided by the number that should have been taken by each subject) | Change scores were computed using value at 6 months minus value at baseline | Pill count | G1: 133 G2: 134 | Unadjusted change from BL G1: 2.4% mean increase G2: 0.4% mean increase p= 0.29  Adjusted change from BL G1: 17.7% mean increase G2: 11.7% mean increase p= 0.03 |
| Fulmer et al., 199915 NA | Percent of prescribed medication doses taken | Adherence was monitored during a 2-week pre-intervention phase, 6-week intervention phase (time 2), and 2-week post-intervention phase (time 3) | MEMS | G1: 17 G2: 15 G3: 18 | **Average compliance rates at BL** G1: 82% G2: 76% G3: 81%  **Average compliance rates at time 3** G1: 84% G2: 74% G3: 57% (significantly decreased from baseline at p<0.04) 95% CI,  p: There was a statistically significant time effect during the course of the study from baseline to post-intervention (F=4.08, p<0.05). Over time, G1 and G2 showed enhanced compliance relative to G3. However, there was no significant difference between G1 and G2. |
| Grant et al., 200316 NA | Difference from baseline to 3-month follow up in number of days in the last 7 that no doses were missed | 7 days; two measures; baseline and 3 months measures | Self-report | G1: 61 G2: 54 | G1: 0.1 (1) G2: 0.1 (0.4) 95% CI,  p: 0.8 |
| Guthrie et al., 200117 First Myocardial Infarction (MI) Risk Reduction Program | Medication compliance survey: patient currently taking pravastatin as prescribed, % | NR; 2 times; 3 months | Self-report | G1: 3635 G2: 913 | At 6 months G1: 79.7 G2: 77.4 95% CI, NR p: NR |
| Hoffman et al., 200318 NA | Percent adherence, first observation after 1 month of therapy | Patients with < 10 gap days in the initial month of therapy; measured once at 1 month | PRD | G1: 4899 G2: 4665 | G1: 58.9 G2: 57.4 95% CI, NR p: 0.136 |
| Hunt et al., 200819  NA | Proportion of subjects reporting high medication adherence at study end | One time at end of study | Self-report | G1: 142 G2: 130 | G1: 67% (N = 95/142) G2: 69% (N = 90/130) 95% CI, NR p: 0.771 |
| Janson et al., 200921 NA | Mean change % adherence; numerator was capped at the prescribed doses per day to avoid overestimation of adherence to greater than 100% per day. Percent adherence (taken/prescribed) | Measured biweekly during 4-week intervention (T0-T1); measured at 4-week intervals for following 14 weeks of observation (T1-T2) | Other | NR | **T0-T1** G1: -0.18 G2: -1.40 p: 0.72  **T1-T2** G1: -4.28 G2: -4.41 p: 0.97 |
| Janson et al., 200320  NA | ICS adherence (number of puffs recorded daily in the diary divided by the number of puffs prescribed) % (SD) Source of data was self-report supplemented by medication monitors | Assessed at baseline, and end of week 1, 2, 5, 7; time frame for baseline measurement was one week; time frame for final measurement NR | Other | G1: 33 G2: 32 | G1: 91 (32)  G2: 62 (38)  95% CI, NR  p: NR |
| Johnson et al., 200623  NR | Behavioral measure of non-adherence [Data source: 5-item survey measuring frequency of various form of non-adherence] | Last 6 months; 4 times every 6 months (0,6,12, and 18 months) | Self-report | G1: NR  G2: NR | **BL**  G1: in figure only  G2: in figure only  95% CI, NR  P>0.05  **6 months**  G1: in figure only  G2: in figure only  95% CI, NR  P>0.05  **12 months**  G1: in figure only  G2: in figure only  95% CI, NR  P<0.01  **18 months**  G1: in figure only  G2: in figure only  95% CI, NR  P<0.001 |
| Johnson et al., 200622 NR | Pre-action sample only Reaching Action (A) or M (Maintenance) stage for adherence, % [Data source: complete case analysis evaluating Stage of Change] | Last 6 months; 4 times every 6 months (0,6,12, and 18 months) | Self-report | **BL** Overall N: 205 G1: NR G2: NR **6 months** Overall N: 190 G1: NR G2:NR **12 months** Overall N: 172 G1: NR G2: NR **18 months** Overall N: 173 G1:NR G2: NR | **BL** G1: in figure only G2: in figure only OR: NR p:NR **6 months** G1: 55.3% G2: 40.0% OR=1.80 P<0.05 **12 months** G1: in figure only G2: in figure only OR: NR p=0.057 **18 months** G1: 56.0% G2: 37.8% OR: NR P<0.01 |
| Katon et al., 199524  NA | % receiving adequate dosage of antidepressants for ≥30 days (details NR) | During continuation phase of treatment (3-7 months) | PRD | **Major depression group** N=91  **Minor depression group** N=126 | **Major depression group**  G1: 87.8  G2: 57.1  95% CI, NR  p: <0.001  **Minor depression group**  G1: 88.1  G2: 47.8  95% CI, NR  p: <0.001 |
| Katon et al., 199625  NA | Medication adherence - telephone interview asking if they were still taking antidepressants and considered adherent if they reported taking medication at least 25 out of last 30 days | Measured at 1-month follow up | Other: self-report, verified with data from pharmacy refills, at 1 and 4 months the K statistic was 0.83 and 0.90 respectively. | G1: 76  G2: NR | **Major Depression Group at 1-month follow up (% adherent)**  G1: 85%G2: 63%p=0.06  **Minor Depression Group at 1-month follow up (% adherent)**  G1: 81%G2: 67%p=.13 |
| Katon et al., 199926  NA  Katon et al., 200227  NA | Percent adherent to antidepressant medication | Patients report medication adherence; questions asked not specified. Considered adherent if medication taken for at least 25 of the previous 30 days; assessed at 1, 3, and 6 months(Reported in 9123) | Self-report | G1: 114  G2: 114 | **At 1-month**  G1: 77.4%  G2: 69.2%  Chi-square: 1.38  p: 0.24  **At 3 months**:  G1: 78.6%  G2: 62.1%  Chi-square: 5.52  p: 0.02  **At 6 months**: G1: 73.2%  G2: 50.5%  Chi-square: 9.53  p: 0.002 |
| Katon et al., 200128  NA  Ludman et al., 200329  NA  Van Korff et al., 200330  NA | Percent patients who filled AD prescriptions (Katon et al.) | Measured at 3, 6, 9, 12 months | PRD | G1: NR  G2: NR | **Across 12-months**: Adjusted OR forG1:G2, 1.91  95% CI, (1.37, 2.65)  p: < 0.001% patients (95% CI)  **0-3 m**:  G1: 80.7 (75.1-86.3)  G2: 65.6 (58.8-72.4)  **3-6m**:  G1: 71.9 (65.5-78.2)  G2: 58.2 (51.2-65.2)  **6-9m**:  G1: 68.4 (61.8-75.0)  G2: 55.6 (48.5-62.7)  **9-12m**:  G1: 63.2 (53.3-70.0)  G2: 49.7 (42.6-56.9) |
| Lee et al., 200631 FAME | % medication adherence at 14 months (proportion of pills taken), mean (SD) | Total timeframe of 6 month average (months 8-14);  G1 - 3 pill counts every 2 months; G2 - 1 pill count at the end of 6 months | Pill count | G1: 83 G2: 76 | G1: 95.5 (7.7) G2: 69.1 (16.4) 95% CI, NR P<0.001 |
| Lin et al., 200632  NA | Percentage of days nonadherent | Measured 2 times over a 12-month period | PRD | Oral hypoglycemic agent  **BL**  G1: 103  G2: 103  **EP**  G1: 103  G2: 103  ACE inhibitor  **BL**  G1: 54  G2: 65  **EP**  G1: 59  G2: 52  Lipid-lowering agent  **BL**  G1: 50  G2: 52  **EP**  G1: 54  G2: 63 | Oral hypoglycemic agent  **BL** (%) (Mean (SD))  G1: 19.8% (21.3%)  G2: 22.9% (24.0%)  95% CI, NR  p: NS  **EP** (%) (Mean (SD))  G1: 28.2% (28.9%)  G2: 24.0% (24.7%)  95% CI, NR  p: <0.03  ACE inhibitor  **BL** (%) (Mean (SD))  G1: 27.4% (27.1%)  G2: 29.7% (29.3%)  95% CI, NR  p: NS  **EP** (%) (Mean (SD))  G1: 24.2% (22.7%)  G2: 18.9% (17.4%)  95% CI, NR  p: NS  Lipid-lowering agent  **BL** (%) (Mean (SD))  G1: 29.3% (26.7%) G2: 24.5% (23.0%)  95% CI, NR  p: NS  **EP** (%) (Mean (SD))  G1: 28.8% (27.1%)  G2: 27.7% (24.0%)  95% CI, NR  p: NS |
| Maciejewski et al., 201033 | Percent change in medication possession ratio (MPR) from baseline (adherence differences between G1 and G2)  Unmatched analysis | 24 monthly assessments: 12 in the pre-intervention period and 12 in the post-period | Other | **Diuretics** Overall N: NR G1: 15605 G2: 9137 **ACE Inhibitors** Overall N: NR G1: 14250 G2: 7668 **Statins** Overall N: NR G1: 18346 G2: 10162 **Beta Blockers** Overall N: NR G1: 11137 G2: 6343 **Calcium Channel Blockers** Overall N: NR G1: 7191 G2: 4099 **Metformin** Overall N: NR G1: 5077 G2: 2826 **ARBS**  Overall N: NR G1: 7445 G2: 4514 **Cholesterol Absorption Inhibitors** Overall N: NR G1: 4019 G2: 2291 | **Metformin**: 3.80% p: <0.001  **Diuretics**: 3.26% p: <0.001  **ACE inhibitors**: 2.87% p: <0.001  **Beta-blockers**: 2.48% p: <0.001  **Statins**: 1.81% p: <0.001  **Calcium-channel blockers**: 1.46% p: <0.01  **ARBS:** -0.10% p: NS  **Cholesterol absorption inhibitors**: -1.04% p: NS |
| Mann et al., 201034 The Statin Choice | % of participants with good adherence at 3 months using Morisky 8-item scale (NOTE: calculated % with "good adherence" without information re: how this was defined using the scale; other studies have used cut-off of <6) | Ever, yesterday, 2 weeks, sometimes (used Morisky 8-item scale which uses all these time frames); measured TWICE; at 3 and 6 months over the phone; | Self-report | G1: NR G2: NR | G1: NR G2: NR 95% CI,  p: No significant difference reported between groups for overall 70% with "good adherence" for whole group at 3 months |
| Montori et al., 201135 | Adherence: >80% days covered | Measured at 6 months | PRD | G1: 23 G2: 19 | G1: 100% G2: 74% 95% CI, NR p: 0.009 |
| Murray et al., 200736  NA | "Taking Adherence": % of prescribed medication doses taken based on physician's prescription | During intervention period (9 mos)Frequency: continuous daily MEMS monitoringDuration between measures: 12 to 24 hours, depending on med frequency | MEMS | G1: 122  G2: 192 | Proportion (95% CI)  G1: 78.8% (74.9-82.7)  G2: 67.9% (63.8-72.1)  Difference: 10.9% (5.0-16.7)  p: NR |
| Nietert et al., 200937 NA | Time-to-refill (days) | NR | PRD | G1: 1018 G2: 1016 G3: 1014 | Unadjusted G1: Median (interquartile range or IR) = 108 (39-257) G2: Median (IR) = 116 (37-257) G3: Median (IR) = 106 (31-257) (257 represents a lower bound than 75th percentile because of amount of censoring present) 95% CI, NR p: NR  Adjusted G1: Hazard ratio (HR, 97.5% CI) = 0.93 (0.82-1.06) G2: HR, 98.3% CI = 0.87 (0.76-1.00) G3: HR, 95% CI = 0.93 (0.83-1.05) 95% CI, NR p: NR |
| Okeke et al., 200938 NA | Proportion of prescribed doses taken | Dosing aids were downloaded after the observational cohort period (capturing data for a 3 month period) and at the end of the RCT (capturing data for a 3 month period) | Other | G1: 35 G2: 31 | G1: adherence rate (SD) 0.73 (0.22) G2: adherence rate (SD) 0.51 (0.30) 95% CI, NR p: 0.001 |
| Pearce et al., 200839  Cardiovascular Risk Education and Social Support (CaRESS) Trial | Medication adherence (unspecified) | 3 times for G2, and 2 times for G1 and G3 over a 12-month period | Self-report | G1: 50 G2: 58 G3: 91 | **BL**  High (%):  G1: 50.0%  G2: 29.8%  G3: 41.8%  Medium (%):  G1: 42.0%  G2: 63.2%  G3: 49.5%  Low (%):  G1: 8.0%  G2: 7.0%  G3: 8.8%  95% CI, NR  P (G1 vs. G2 vs. G3): 0.1584  P (G1 + G2 vs. G3): 0.4358  **EP**  High (%):  G1: NR,  G2: NR,  G3: NR  Medium (%): G1: NR,  G2: NR,  G3: NR  Low (%):  G1: NR,  G2: NR,  G3: NR |
| Powell et al., 199540  NA | Medication possession ratio (MPR) | Refill data collected over a 9-month period | PRD | G1: 1993 G2: 2253 | **Overall**  G1: 0.70 (0.23)  G2: 0.70 (0.28)  95% CI, NR  p: NR  **Benazepril** (Mean (SD))  G1: 0.71 (0.25)  G2: 0.72 (0.26)  95% CI, NR  p: NR  **Transdermal estrogen** (Mean (SD))  G1: 0.60 (0.32)  G2: 0.58 (0.32)  95% CI, NR  p: NR  **Metoprolol** (Mean (SD))  G1: 0.74 (0.27)  G2: 0.73 (0.28)  95% CI, NR  p: NR  **Simvastatin** (Mean (SD))  G1: 0.73 (0.26)  G2: 0.70 (0.28)  95% CI, NR  p: NR |
| Powers et al., 201168 | Self reported med adherence measured by Morisky scale | 3 months; 1 time; 3 months | Self-report | G1: 44 G2: 45 | G1: 46% G2: 49% 95% CI, NR p: 0.55 |
| Pyne et al., 201141 HIV Translating Initiatives for Depression Into Effective Solutions (HITIDES) | Antidepressant regimen adherence - at 6 months; | Each measurement is percentage adherence over previous 4 days (i.e. total number of prescribed pills taken divided by total number of prescribed; transformed to dichotomous outcome with cutpoint at >=80%). 3 measurements taken: baseline, 6-month and 12-months. | Self-report | G1: 66 G2: 72 | G1: 78.8% G2: 69.4% OR (95%CI):  1.60 (0.74 to 3.45)  Adjusted OR (95%CI):  1.65 (0.75 to 3.62) Adjusted p: 0.22 |
| Rich et al., 199642 NA | Overall compliance rates by method 1: percentage of pills taken correctly for each current medication determined by pill count at home visit by pharmacist or trained pharmacy assistant, then averaged | 30 days +/- 2 days after discharge; 1 time; NA | Pill count | G1: 80  G2: 76 | Overall: 84.6% +/- 15.1%  G1: 87.9 +/- 12.0%  G2: 81.1 +/- 17.2%  95% CI, NR  p: 0.003 |
| Rickles et al., 200543  NA | % omitted antidepressant doses at 3 months | 2 measurements, each for 3 month time period | PRD | G1: 28 G2: 32 | N (Mean ± SD)  G1: 28 (18.1 ± 23.5)  G2: 32 (18.7 ± 22.1)  NS |
| Ross et al., 200444  NR | Medication adherence score (scored 0-4)[questions derived from Morisky] | NR; 3 times (including baseline); 6 months | Self-report | G1: NR G2: NR | **6 months**  G1: 3.5  G2: 3.4  Difference (CI): +0.1 (-0.2 to 0.4)  p: NR  **12 months**  G1: 3.6  G2: 3.4  Difference (CI): +0.2 (-0.1 to 0.6)  p: 0.15 |
| Rudd et al., 200445 NA | Rate of daily adherence (average number of days on which patient's took the correct number of doses as prescribed) at 6 months, mean (SD) | 1 day; daily ; 6 months | MEMS | G1: NR G2: NR | G1: 80.5% (23.0%)  G2: 69.2% (31.1%)  95% CI, NR p: 0.03 |
| Rudd et al., 200946 NA | Mean score on adherence to treatments scale (0=best, 3=worst) | Measured at baseline, 6 and 12 months; self-report period NR | Self-report | **BL** G1: 51 G2: 63  **6 mos** G1: 49 G2: 57  **12 mos** G1: 48 G2: 57 | **BL** mean (SD) score (0=best, 3=worst) G1: 0.40 (0.40) G2: 0.30 (0.37)  **6 mos** mean (SD) G1: 0.23 (0.28) G2: 0.24 (0.32)  **12 mos** mean (SD) G1: 0.17 (0.25) G2: 0.18 (0.30) |
| Schaffer et al., 200447 NA | Pharmacy adherence % (days of medication dispensed (number of doses dispensed divided by daily dosage), divided by the number of days between refill and date of study visit ) for past 3 mo. | Baseline, 3, 6 mo; 3 month time frame | PRD | G1: 11 G2: 10 G3:12 G4:13 | % (SD) G1:  Pre: 0.41 (0.42) 3 mo: 0.53 (0.41) 6 mo: 0.77 (0.24)  G2: Pre: 0.32 (0.39) 3 mo: 0.40 (0.32) 6 mo: 0.48 (0.38)  G3: Pre: 0.62 (0.34) 3 mo: 0.73 (0.23) 6 mo: 0.77 (0.24)  G4 : Pre: 0.62 (0.40) 3 mo: 0.42 (0.39) 6 mo: 0.40 (0.44)  BL-3 mo:  G4 vs. G2 p = .4  G4 vs. G3 p = .02\*  G4 vs. G1 p = .07  Pre-6 mo: G4 vs. G2 p = .17 G4 vs. G3 p = .02\* G4 vs. G1 p = .04\* |
| Schectman et al., 199448 NA | Answer at 2 months to interview question: "During the past week, how many doses of your medication have you missed?" | 7 day timeframe; 3 times total every 2 months | Self-report | **Niacin**: G1: 40 G2: 40  **BAS**: G1: 18 G2: 22 | **Niacin**: G1: 76 +/-5 G2: 77 +/- 6 95% CI, NR p: 0.85  **BAS**:  G1: 76 +/- 7 G2: 60 +/- 9 95% CI, NR p: 0.14 |
| Schneider et al., 200849  NA | Percentage of patients who had prescriptions refilled on time (±5 days of due date) | Calculated for all previous months at 6 month and 12 month follow-ups | PRD | G1: 47 G2: 38 | Mean (SD)  G1: 80.4 (21.2)  G2: 66.1 (28.0)  95% CI, NR  p: 0.12 |
| Schnipper et al., 200650 NA | Medication adherence score on previous day | Whether patient took each medication exactly as prescribed on previous day | Self-report | G1: 92 G2: 84 | 0-100, 100 represents complete adherence with all medications G1: 88.9 (0.71-1.00) G2: 87.5 (0.73-1.00) 95% CI, NR p: 0.91 |
| Simon et al., 200651 na | Filled prescriptions for at least 90 days of continuous antidepressant treatment at a minimally adequate dose | Measured once at 6 months | PRD | G1: 98 G2: 97 | G1: 63 (64%) G2: 53 (55%) Chi-squared: 1.88 p: .17 |
| Sledge et al., 200652 NA | Medication adherence score | NR | Self-report | G1: NR G2: NR | G1: NR G2: NR 95% CI, NR p: NR, text states that there was no significant difference between groups |
| Smith et al., 200853 NR | Absolute increase in proportion of days covered per month for the entire follow-up period of 9 mos. | last 30 days; 9 times; 1 month apart | PRD | G1: 426 G2: 410 | G1: 4.3% mean absolute increase in days covered per month compared to G2 p= 0.04 |
| Solomon et al., 199854 na  Gourley et al., 199855 NA | Self-report of compliance comparing Visit 1 and Visit 5 in HTN group | Visit 1: baseline Visit 5: between 4 and 6 months | Self-report | G1: 62 G2: 70 | G1:  Visit 1: 0.63 (SD 0.111) Visit 5: 0.23 (SD 0.054) CI: NR p <0.05 G2:  Visit 1: 0.60 (0.87) Visit 5: 0.61 (0.94) 95% CI NR  p NR |
| Stacy et al., 200956 NA | 6 month point prevalence persistency: subject being in possession of a statin at the end of the 180-day observation period | 6 months from baseline; 1 time; NA | PRD | G1: 253 G2: 244 | G1: 70.4% G2: 60.7%  Unadjusted OR (90% CI): 1.54 (1.13-2.10)  Adjusted OR (90%CI): 1.64 (1.19-2.26) p: <0.05 |
| Taylor et al., 200357 NA | Compliance | At 12 months: Took ≥80% of all medications in past month (number of self-reported missed doses in past month of each med were divided by total prescribed doses for that month; %s for all meds were averaged together) | Self-report | G1: 33 G2: 36 | Mean (SD) compliant patients G1: 100 G2: 88.9 (6.3) 95% CI, NR p: 0.115 |
| Vivian et al., 200258  NA | Compliance survey at 6 months: how often do you forget to take your medication (forgets>=once/wk)? (%) | Varied b/t groups; compliance measured in G1 at monthly visits, only measured at baseline and study end for G2 | Self-report | G1: 26 G2: 27 | G1: 68%  G2: 48%  95% CI, NR  p: 0.252 |
| Waalen et al., 200959  NA | Percentage of women using osteoporosis medication | Measured at 1 year and 30 days from entry into study using pharmacy database | PRD | G1: 109 G2: 102 | G1: 68.8% filled rx  G2: 45.1% filled rx  95% CI, NR  p: <0.001 |
| Wakefield et al., 201160  NA | Adherence [measured by 2 scales: Self-Reported Medication Taking Scale for HTN and DM validated regimen adherence scale addressing medication, diet, exercise, and BG testing] | 12 months; 1 time; NA | Self-report | G1: NR G2: NR G3: NR | G1: NR G2: NR G3: NR 95% CI,NR  p: NR Adherence improved in all 3 groups but no signifcant difference between groups |
| Weinberger et al., 200261 NA | Single item indicator for proportion of noncompliance (Inui et al.) - adjusted OR at 12 months comparing 1)Pharm Care to peak flow monitoring and 2) Pharm care vs. Usual care | Assessed at baseline, 6 and 12 months; time frame is previous 2 months | Self-report | Overall N: 898 G1: 356 G2: 296 G3: 246 | Pharm Care vs. Peak Flow monitoring (G1 vs. G2): aOR: 0.81 (0.58-1.12)  Pharm Care vs. Usual Care (G1 vs. G3): aOR: 1.09 (0.80-1.49) |
| Weymiller et al., 200762 Statin Choice Randomized Trial  Jones et al., 200963 Statin Choice Randomized Trial | Post-intervention adherence (i.e., not missing any doses) in the last week | Measured once at 3 months after the intervention; measured only among those taking statins; | Self-report | G1: 33  G2: 29 | G1: 31 G2: 23 Odds ratio: 3.4 95% CI, 1.5-7.5 p: NR  *<<Note: article reports number of people in each group who missed 1 or more doses in the last week, the numbers above are the people who did not miss a dose, i.e. those who were adherent>>* |
| Williams et al., 201064  NA | Percent adherence to ICS at end of study; all adherence measures constructed as follows: linked electronic prescription information with ﬁll information from pharmacy claims data to estimate the number of days that a given ﬁll of an ICS would last (i.e., days supplied). This was calculated by dividing the canister size (i.e., puffs per canister) as derived from National Drug Codes in pharmacy claims by the dosage information (i.e., puffs per day). The calculated days of supply was then used to estimate adherence as a continuous measure of medication availability equal to the cumulative days of supply divided by the number of days of observation. This estimates the proportion of time that the patients took their medication. | Once, end of study, measured for past 3 months of intervention | Other | G1: 1335  G2: 1363 | Mean +/- SE:  G1: 21.3 +/- 2.5  G2: 23.3 +/- 2.2  95% CI, NR  p: .553 |
| Wilson et al., 201065  Better Outcomes of Asthma Treatment (BOAT) | Medication acquisition at Year 1 - all asthma meds; Fill/reﬁll adherence was measured using a continuousmedication acquisition (CMA) index for each year, calculated as the total days’ supply acquired in a given year divided by 365 days | Follow-up year 1, continuous measure for entire year | PRD | G1: 204  G2: 204  G3: 204 | G1: 0.67  G3: 0.46;  p: 0.0001  Group difference: 0.21  95% CI, 0.13-0.28  G1: 0.67  G2: 0.59;  p: .0029  Group difference: 0.08  95% CI, 0.01-0.15  G2: 0.59  G3: 0.46  p: .0008  Group difference: 0.13  95% CI, 0.05-0.20 |
| Wolever et al., 201066 NA | Morisky Adherence Scale | 6 months | Self-report | G1: 27 G2: 22 | G1: Pre (Mean, SD) = 6.7 (0.96), Post (Mean, SD) = 7.2 (0.97) Change Over Time (P) = 0.004  G2: Pre (Mean, SD) = 6.7 (1.25), Post (Mean, SD) = 6.9 (1.25)  Change Over Time (P) = NS 95% CI, NR p: NR |
| Zhang et al., 201067 (cont'd)  NA | Medication Possession Ratio | Pre and post Part D | Other | **Hyperlipidemia** G1: 418 G2: 647 G3: 5093 G4: 3027  **Diabetes** G1: 247 G2: 304 G3: 2214 G4: 1253  **Hypertension:** G1: 980 G2: 1234 G3: 8380 G4: 4141A | **Hypertension** Unadjusted  G1 Pre: 62.4; Post: 75.2  G2 Pre: 81.1; Post: 82.6  G3 Pre: 82.7; Post: 83.7  G4 Pre: 85.1; Post: 84.0 Multivariate 2-year Part D Effect, estimate (95% CI)  G1: 13.5 (18.6,25.0)  G2: 2.6 (1.2, 4.1)  G3: 2.5 (1.7, 3.2)  G4 Ref  % Change, Estimated Effects/pre Value (95% CI)  G1: 21.8 (18.6, 25.0)  G2: 3.2 (1.5, 5.0)  G3: 3.0 (2.0, 3.9) |
| Zhang et al., 201067 NA  (Cont’d) | See above | See Above | See Above | See Above | **Hyperlipidemia**  Unadjusted G1 Pre: 47.3; Post: 59.9 G2 Pre: 57.6; Post: 63.3 G3 Pre: 62.3; Post: 65.1 G4 Pre: 74.4; Post: 73.0  Multivariate 2-year Part D Effect, estimate (95% CI) G1: 13.4 (10.1, 16.8) G2: 7.3 (4.8, 9.8) G3: 4.4 (3.3, 5.6) G4 Ref  % Change, Estimated Effects/pre Value (95% CI) G1: 28.5 (21.4, 35.8) G2: 12.6 (8.3, 17.0) G3: 7.1 (5.3, 9.1)  **Diabetes** (Unadjusted) G1 Pre: 57; Post: 69.6 G2 Pre: 77.3; Post: 76.2 G3 Pre: 75.4; Post: 73.3 G4 Pre: 81.8; Post: 78.2  Multivariate 2-year Part D Effect, estimate (95% CI) G1: 17.9 (13.7, 22.1) G2: 4.5 (1.0, 7.9) G3: 3.6 (1.8, 5.3) G4 Ref  % Change, Estimated Effects/pre Value (95% CI) G1: 31.4 (24.0, 38.8) G2: 5.8 (1.3, 10.3) G3: 4.8 (2.4, 7.1) |