Table D-3. Study characteristics: Key Question 1

| **Author Year****PMID** | **Country****(Enrollment Years)** | **Interventions[[1]](#endnote-1)** | **Age, y Mean** | **Male, %** | **DM, %** | **Setting** | **Other Patient Characteristics** | **Dropout[[2]](#endnote-2), % (Timepoint)** | **Other Quality Issues** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Artinian 20014011343005 | US(nd) | SMBP + Counsel | 59 | 11.5 | nd | Community  | Urban African Americans, majority women | 12% (3 mo) | Pilot study, unbalanced randomization |
| Usual care |
| Artinian 20074017846552 | US(2002-04) | SMBP + Counsel | 60.2 | 30.1 | 25.8 | General practice  | Urban African Americans, majority women | 14% (12 mo) |  |
| Enhanced usual care | 12% (12 mo) |
| Bailey 19994210100064 | Australia(nd) | SMBP  | 54 | 48 | nd | General practice |  | 3% (8 wk) | No power calculation, not clear how many patients in each group and how many analyzed, interventions poorly defined, outcomes not clearly defined |
| Usual care | 3% (8 wk) |
| Binstock 1988433415798 | US(nd) | SMBP + Contract + Rx monitor + Education | nd | 40 | nd | nd |  | nd | No data frequency of SMBP and device type, sparse information on baseline characteristics, no statistical testing done, no information on dropouts |
| SMBP + Education | nd |
| Education | nd |
| Bosworth 20094419920269 | US(2004-05) | SMBP + Counsel | 61 | 34 | 36 | Hospital outpatient |  | 31% (24 mo) | Dropout rate, numbers in the figure do not always match the numbers reported in the text |
| SMBP | 28% (24 mo) |
| Counsel | 22% (12 mo) |
| Usual care | 19% (24 mo) |
| Bosworth 20114521747013 | US(2006) | SMBP + Medication management + Behavioral management | 64 | 92 | 43 | Hospital outpatient | Predominantly male  | 17% (18 mo) |  |
| SMBP + Medication management | 15% (18 mo) |
| SMBP + Behavioral management | 11% (18 mo) |
| Usual care | 16% (18 mo) |
| Broege 20014711518836 | US(nd) | SMBP | 73 | 65 | nd | Hospital outpatient | Age ≥65 | 15% (3 mo) | Small sample size. Short period of followup. Heterogeneous mix of previously treated and untreated patients.  |
| Nurse BP |
| Carnahan 1975481130437 | US(nd) | SMBP | 56.9 | 98 | nd | Outpatient |  | 3% (6 mo) | Sparse baseline data, little explanation of intervention group details |
| Usual care |
| Dalfo i Baque 20055115802109 | Spain(nd) | SMBP | 62 | 42 | 20 | General practice |  | nd | Unclear, inadequate reporting to check or calculate estimates. Text and table do not match. High drop out for surveys. Surveys not defined or referenced properly. |
| Usual care | nd |
| DeJesus 20095319756162 | US(nd) | SMBP + 1 class | 17% ≤60; 83% >60 | 58 | 63 | General practice | Diabetic | 63% (6 mo) | Very high dropout rate, no data on SMBP frequency, unclear how baseline measurements were obtained for ITT analysis |
| 1 class | 71% (6 mo) |
| Usual care | 33% (6 mo) |
| Earp 1982557114339 | US(1975-76) | SMBP + Counsel | 47 | 49 | nd | Hospital outpatient | Predominantly African-American | 44% (24 mo) | Unclear descriptions of intervention groups, no data on device type or instructions for use, high dropout rate |
| Counsel | 39% (24 mo) |
| Usual care | 40% (24 mo) |
| Fitzgerald, 1985564044205 | Ireland(nd) | SMBP | 54.3 | 57 | nd | Hospital outpatient or general practice | Uncomplicated hypertension | 17% (9 wk) | Results poorly reported. Imprecise figure only. |
| Usual care |
| Freidman 1996578722429 | USA(nd) | SMBP + Tele + Counsel | 77 | 21 | 16 | Community | Older patients | 11% (6 mo) |  |
| Usual care |
| Fuchs 201058NA | Brazil(2002-05) | SMBP | nd | nd | nd | nd | nd | 11% (8 wk) | Quality was not graded due to insufficient data (study published only as conference abstract) |
| Usual care |
| Godwin 20105920032170 | Canada(2002-05) | SMBP | 68.8 | 48.7 | 29 | General practice |  | 12% (12 mo) | High and uneven loss to followup: control 21% vs intervention 12% |
| Usual care | 21% (12 mo) |
| Gran 1991601891656 | Sweden(1986) | SMBP + Lifestyle interventions | 51.3 | 31 | nd | Clinic |  | 11% (24 mo) | Not RCT.Selection bias. Control group were hypertensive patients who did not agree to take part in any intervention,Adoption of SMBP was optional in intervention groupNo data on frequency or timing during day for SMBPBaseline BP different between groups and not accounted forNo data on control group’s care (assume it’s usual care) |
| Usual care |
| Green 20086118577730 | US(2005) | SMBP + Counsel + Web training | 59.1 | 47.8 | 0 | Primary care clinics | No DM, CVD, kidney disease or other serious diseases | 9.1% (12 mo) |  |
| SMBP + Web training | 5% (12 mo) |
| Usual care | 4.2% (12 mo) |
| Halme 20056216280273 | Finland(nd) | SMBP | 57.1 | 35.3 | 15.1 | Outpatient |  | 14% (6 mo) |  |
| Usual care | 14%(6 mo) |
| Haynes 19766373694 | Canada(nd) | SMBP + Encouragement | nd | 100 | nd | Workplace | SteelworkersAll noncompliant with poorly controlled BP at baseline. | 0% (6 mo) | Not RCT, problem with reporting |
| Usual care | 5.3% (6 mo) |
| Johnson 197864369673 | Canada(nd) | SMBP + Home visit BP | 53 | 60 | nd | Home (recruited from screening in shopping centers) |  | 3% (6 mo) | No information on frequency or other instructions given to SMBP group. No definition of compliance and “strength of therapy” outcomes. |
| SMBP | 3% (6 mo) |
| Home visit BP |
| Usual care |
| Madsen 20086718568696Madsen 20089018815937 | Denmark(2004-06) | SMBP | 56.7 | 52 | 8.8 | General Practice |  | 7% (6 mo) | Baseline ABPM carried forward if no final ABPMNo analysis for clustering of patients by 10 practitionersFor QOL: no blinding, only QOL measurement at end of study, not at baseline |
| Usual care | 4% (6 mo) |
| Marquez-Contreras 20066816331115 | Spain(nd) | SMBP | 59 | 51 | nd | Primary care (hospital outpatient) |  | 20% (6 mo) | SMBP group had more diseases than control, unclear reporting with discrepancies between text & tableUnclear outcome definitionHigh dropout rates |
| Usual care |
| Marquez-Contreras 20096919482378 | Spain(2006-07) | SMBP + Education + Rx monitor | 62 | 45 | nd | General practice | Uncontrolled on single drug therapy | 17% (6 mo) | Unclear what the baseline number of drugs were. Patients withdrawn in failed to take drugs >20%. Unclear methods sentence about not advising drug changesUnclear what the educational or “card” interventions were.No data on specific monitor used |
| SMBP + Rx Monitor |
| SMBP + Education |
| Usual care |
| McManus 20107019220913McManus 20106620619448 | UK(2007-08) | SMBP + Alert + Self-titration | 66.2 | 47 | 7 | General practice |  | 11% (12 mo) |  |
| Usual care | 7% (12 mo) |
| Mehos 20007111079287 | US(nd) | SMBP | 58 | 38 | 22 | Hospital outpatient clinic |  | 10% (6 mo) | Randomization with a deck of cards. Uneven baseline characteristics between groups |
| Usual care |
| Midanik 1991721899945 | US(nd) | SMBP | 47 | 53 | nd | Hospital outpatient |  | 27% (12 mo) | High dropout rates, incomplete eligibility criteria |
| Usual care | 29% (12 mo) |
| Muhlhauser 1993738467308 | Germany(nd) | SMBP + Education | 51 | 43 | nd | General practice |  | 20% (18 mo) | Intervention group, as analyzed, included both patients that had agreed to SMBP + education and those that presumably did not agree to participate. Dropout rate was high in both groups, and over 20% in usual care group. SMBP portion of intervention was not described. |
| Usual care |
| Parati 20097519145785 | Italy(nd) | SMBP + Reminder | 58.1 | 54.1 | nd | General practice |  | 9% (6 mo) | Analysis reported as ITT but is actually per protocol, the interventions are not clearly defined, did not account for multiple centers (within center correlations) |
| Usual care |
| Park 20097619643661 | South Korea(nd) | SMBP + Web + Counsel | 55 | 43 | nd | Outpatient | Obese | 20% (2 mo) | Not RCT |
| Usual care | 16% (2 mo) |
| Pierce 1984776377291 | Australia(1977-78) | SMBP + Education | 58 | 38 | nd | General practice |  | 2% (12 mo) | Dropout>20%, compliance outcome by survey, lack of statistical comparisons between study groups |
| SMBP |
| Education |
| Usual care |
| Rinfret 20097820031834 | Canada(2004-07) | SMBP + Alert + Rx Monitor | 57 | 54 | 10 | Primary care |  | ABPM ≥16%Office ≥14%(12 mo) | Large dropout rates. |
| Usual care | ABPM 22%Office 16%(12 mo) |
| Rogers 200179113888152 | US(1999-2000) | SMBP | 60.3 | 55.7 | 26.3 | Outpatient |  | 0.7% (11 wk) | Exact time point for outcome measurement by ABPM is not clear, at least 8 weeks, median 11 weeks. |
| Usual care | 10% (11 wk) |
| Rudd 20048015485755 | US(nd) | SMBP + Counsel | 60 | 44 | 14 | Outpatient |  | 7% (6 mo) | No adjustment for two clinics. |
| Usual care | 10% (6 mo) |
| Sawicki 1995818557972 | Germany(1984-87) | SMBP + Education + Self-titration | 37 | 52 | 100 | Tertiary care hospital | Type 1 DM with diabetic kidney disease | 7% (60 mo) | Not RCTIndividuals in intensive treatment group were those living closer to the study center and had more followup visits over the course of the observation. |
| Usual care | 4% (60 mo) |
| Shea 20068216221935Shea 20079218528511Shea 20099319390093 | USA(2000-02) | SMBP + Web + Counsel | 70 | 37.9 | 100 | Primary care physician | Diabetic, underserved | 18% (12 mo) | ITT analysis unclear. Numbers inconsistent between table and text. Baseline values carried forward as final values for a large number of patients during follow up visitsNo details on intensity of training of telemedicine system, frequency of BP monitoring |
| Usual care | 52% (60 mo) |
| Soghikian 1992831518317 | US(1984-85) | SMBP | 54.7 | 50.2 | nd | Hospital outpatient |  | 7% (12 mo) |  |
| Usual care | 12% (12 mo) |
| Stahl 198485 6742256 | US(nd) | SMBP | 48 | 43 | nd | Hospital outpatient | Inner city Indianapolis (low income and Black) | 8.3% (12 mo)[23% (36 mo] | Not RCT. Some potential for bias in randomization based on ability to self measure or availability of family. |
| Family BP | 2.5% (12 mo)[31% (36 mo] |
|  |  |  |  |  |  |  |  |  |  |
| Van Onzenoort 20108619952780 | Netherlands(2001-05) | SMBP | 57 | 49 | 7 | Outpatient and general practice |  |  | No data about the drop out rate |
| Usual care |  |
| Varis 20108720367560 | Finland(nd) | SMBP | nd | 37.6 | 5.7 | Outpatient |  | 14% (52 wk) | The numbers of patients randomized to each group were uneven |
| Usual care | 20% (52 wk) |
| Verberk 20072017938383 | Netherlands(nd) | SMBP | 55 | 55 | nd | Hospital outpatient |  | 19% (12 mo) | Incomplete eligibility criteria , no power calculation |
| Usual care | 27% (12 mo) |
| Zarnke 1997889008249 | Canada(nd) | SMBP | 52 | 36 | nd | Community |  | nd | Very small number of drug changes. |
| Usual care | 9% (2 mo) |
| Zillich 20058916423096 | US(nd) | SMBP + Counsel | 66.1 | 61 | 20 | Pharmacy |  | 11% (3 mo) |  |
| Pharmacist BP | 2% (3 mo) |

ABPM = ambulatory blood pressure monitoring; BP = blood pressure; DM = diabetes mellitus; nd = no data; RCT = randomized controlled trial; SMBP = self-measured blood pressure.

1. For details, see “Interventions” table (Table D-2). [↑](#endnote-ref-1)
2. For blood pressure outcomes in the whole study at “primary” timepoint (longest reported timepoint with <20% dropout, except as noted). In square brackets is the dropout rate for the longest reported timepoint. Any substantial differences in dropout rates across study arms are noted. [↑](#endnote-ref-2)