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 200140  11343005 | US  (nd) | SMBP + Counsel | 59 | 11.5 | nd | Community | Urban African Americans, majority women | 12% (3 mo) | Pilot study, unbalanced randomization |
| Usual care |
| Artinian 200740  17846552 | 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 199942  10100064 | 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 198843  3415798 | 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 200944  19920269 | 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  201145  21747013 | 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 200147  11518836 | 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 197548  1130437 | 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 200551  15802109 | 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 200953  19756162 | 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 198255  7114339 | 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, 198556  4044205 | 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 199657  8722429 | USA  (nd) | SMBP + Tele + Counsel | 77 | 21 | 16 | Community | Older patients | 11% (6 mo) |  |
| Usual care |
| Fuchs 201058  NA | 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 201059  20032170 | 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 199160  1891656 | 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 group  No data on frequency or timing during day for SMBP  Baseline BP different between groups and not accounted for  No data on control group’s care (assume it’s usual care) |
| Usual care |
| Green 200861  18577730 | 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 200562  16280273 | Finland  (nd) | SMBP | 57.1 | 35.3 | 15.1 | Outpatient |  | 14% (6 mo) |  |
| Usual care | 14%  (6 mo) |
| Haynes 197663  73694 | Canada  (nd) | SMBP + Encouragement | nd | 100 | nd | Workplace | Steelworkers  All noncompliant with poorly controlled BP at baseline. | 0% (6 mo) | Not RCT, problem with reporting |
| Usual care | 5.3% (6 mo) |
| Johnson 197864  369673 | 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 200867  18568696  Madsen 200890  18815937 | Denmark  (2004-06) | SMBP | 56.7 | 52 | 8.8 | General Practice |  | 7% (6 mo) | Baseline ABPM carried forward if no final ABPM  No analysis for clustering of patients by 10 practitioners  For QOL: no blinding, only QOL measurement at end of study, not at baseline |
| Usual care | 4% (6 mo) |
| Marquez-Contreras 200668  16331115 | 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 & table  Unclear outcome definition  High dropout rates |
| Usual care |
| Marquez-Contreras 200969  19482378 | 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 changes  Unclear what the educational or “card” interventions were.  No data on specific monitor used |
| SMBP + Rx Monitor |
| SMBP + Education |
| Usual care |
| McManus 201070  19220913  McManus 201066  20619448 | UK  (2007-08) | SMBP + Alert + Self-titration | 66.2 | 47 | 7 | General practice |  | 11% (12 mo) |  |
| Usual care | 7% (12 mo) |
| Mehos 200071  11079287 | 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 199172  1899945 | US  (nd) | SMBP | 47 | 53 | nd | Hospital outpatient |  | 27% (12 mo) | High dropout rates, incomplete eligibility criteria |
| Usual care | 29% (12 mo) |
| Muhlhauser 199373  8467308 | 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 200975  19145785 | 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 200976  19643661 | South Korea  (nd) | SMBP + Web + Counsel | 55 | 43 | nd | Outpatient | Obese | 20% (2 mo) | Not RCT |
| Usual care | 16% (2 mo) |
| Pierce 198477  6377291 | 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 200978  20031834 | 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 200179  113888152 | 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 200480  15485755 | US  (nd) | SMBP + Counsel | 60 | 44 | 14 | Outpatient |  | 7% (6 mo) | No adjustment for two clinics. |
| Usual care | 10% (6 mo) |
| Sawicki 199581  8557972 | Germany  (1984-87) | SMBP + Education + Self-titration | 37 | 52 | 100 | Tertiary care hospital | Type 1 DM with diabetic kidney disease | 7% (60 mo) | Not RCT  Individuals 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 200682  16221935  Shea 200792  18528511  Shea 200993  19390093 | 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 visits  No details on intensity of training of telemedicine system, frequency of BP monitoring |
| Usual care | 52% (60 mo) |
| Soghikian 199283  1518317 | 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 201086  19952780 | Netherlands  (2001-05) | SMBP | 57 | 49 | 7 | Outpatient and general practice |  |  | No data about the drop out rate |
| Usual care |  |
| Varis 201087  20367560 | 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 200720  17938383 | Netherlands  (nd) | SMBP | 55 | 55 | nd | Hospital outpatient |  | 19% (12 mo) | Incomplete eligibility criteria , no power calculation |
| Usual care | 27% (12 mo) |
| Zarnke 199788  9008249 | Canada  (nd) | SMBP | 52 | 36 | nd | Community |  | nd | Very small number of drug changes. |
| Usual care | 9% (2 mo) |
| Zillich 200589  16423096 | 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)