Table D-18. Clinic BP: SMBP plus additional support versus usual care

| **Author Year****PMID** | **Base BP[[1]](#endnote-1), mmHg** | **Time-point****(Longest)** | **Intervention** | **No. Analyzed** | **Systolic Blood Pressure** | **Diastolic Blood Pressure** | **Study Quality** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Base (SD)** | **Change****(Final)** | **Net Diff****(Diff of Final)** | **95% CI** | **P Btw** | **Base (SD)** | **Change****(Final)** | **Net Diff****(Diff of Final)** | **95% CI** | **P Btw** |
| Artinian 20014011343005 | 142/91 | 3 mo | SMBP + counsel | 6 | 148.8 (13.8) | ‑24.7 | ‑25.7 | ‑40, ‑11 | nd | 90.2 (5.8) | ‑14.6 | ‑12.5 | ‑23, ‑2.3 | nd | B |
| Usual care | 9 | 142.4 (16.5) | 1 |  |  |  | 91.2 (8.7) | ‑2.2 |  |  |  |
| Binstock 1988433415798 | 151/90 | 12 mo | SMBP + contract + Rx monitor + education | 11 | 150 (nd) | ‑16 | ‑13 | nd | nd | 91 (nd) | ‑7 | ‑6 | nd | nd | C |
| Education | 32 | 151 (nd) | ‑3 |  |  |  | 90 (nd) | ‑1 |  |  |  |
| Bosworth 20094419920269 | 124/70 | 12 mo | SMBP + counsel | 159[[2]](#endnote-2) | 126 (20) | ‑4.5[[3]](#endnote-3) | ‑3.3 | ‑5.7, ‑0.8 | 0.009 | 72 (12) | ‑3.1c | ‑2.2 | ‑3.5, ‑0.8 | 0.001 | B |
| Usual care | 159[[4]](#endnote-4) | 124 (18) | 0c |  |  |  | 70 (10) | 0c |  |  |  |
| Bosworth20114521747013 | 129/77 | 18 mo | SMBP + Behavioral managements | 131 | 129 (19)  | nd | 2.2r | -2.2, 6.6 | NS | 77(12) | nd | 0.6r | -2.0, 3.3 | NS | A |
| Usual care | 124 | 128(17) | nd |  |  |  | 78(14) | nd |  |  |  |
| SMBP + Medication managements | 126 | 132(21) | nd | -1.2r | -5.7, 3.2 | NS | 78(14) | nd | -0.5r | -3.2, 2.1 | NS |
| Usual care | 124 | 128(17) | nd |  |  |  | 78(14) | nd |  |  |  |
| SMBP + Medication management + Behavioral managements | 122 | 127(21) | nd | -3.6r | -8.1, 0.9 | NS | 77(13) | nd | -1.4r | -4.0, 1.3 | NS |
| Usual care | 124 | 128(17) | nd |  |  |  | 78(14) | nd |  |  |  |
| DeJesus 20095319756162 | 149/74 | 6 mo[[5]](#endnote-5) | SMBP + 1 class | 7 | 145.4 (5.3) | ‑3.3 | 4.5 | ‑11, 20 | nd | 68.4 (11.6) | 5.7 | 8 | ‑3.5, 19.5 | nd | C |
| Usual care | 12 | 149.2 (7) | ‑7.8 |  |  |  | 73.9 (13.8) | ‑2.3 |  |  |  |
| Friedman 1996578722429 | 167/84 | 6 mo | SMBP + tele + counsel | 133 | 169.5 (nd) | ‑11.5[[6]](#endnote-6) | ‑4.7 | ‑112 2.5[[7]](#endnote-7) | NS | 86.1 (nd) | ‑5.2f | ‑4.4 | ‑8.1, ‑0.7g | 0.02 | A |
| Usual care | 134 | 167 (nd) | ‑6.8f |  |  |  | 84 (nd) | ‑0.8f |  |  |  |
| Green 20086118577730 | 152/89 | 12 mo | SMBP + Counsel + Web training | 237 | 152.2 (10.4) | ‑14.2[[8]](#endnote-8) | ‑8.9 | ‑14, ‑3.6g | <0.001 | 88.9 (8.1) | ‑7h | ‑3.5 | ‑5.6, ‑1.4g | <0.001 | A |
| Usual care | 247 | 151.3 (10.6) | ‑5.3h |  |  |  | 89.4 (8.0) | ‑3.5h |  |  |  |
| SMBP + Web training  | 246 | 152.2 (10.0) | ‑8.2h | ‑2.9 | ‑5.3, ‑0.4g | 0.02 | 89.0 (7.9) | ‑4.4h | ‑0.9 | ‑2.3, 0.5g | NS |
| Usual care | 247 | 151.3 (10.6) | ‑5.3h |  |  |  | 89.4 (8.0) | ‑3.5h |  |  |  |
| Haynes[[9]](#endnote-9) 19766373694 | nd/98 | 6 mo | SMBP + encouragement | 20 | nd | nd | nd | nd | nd | 98.5 (5.8) | ‑5.4 | ‑3.5 | ‑7.9, 0.9g | NS | C |
| Usual care | 18 | nd | nd |  |  |  | 98.3 (6.4) | ‑1.9 |  |  |  |
| Johnson 197864369673 | nd/103 | 6 mo | SMBP + home visit BP | 35 | nd | nd | nd | nd | nd | 104.2 (6.5) | ‑8.1[[10]](#endnote-10) | ‑0.5 | nd | NS | C |
| Usual care | 34 | nd | nd |  |  |  | 103.2 (10.2) | ‑7.6j |  |  |  |
| Marquez-Contreras 20096919482378 | 153/91 | 6 mo | SMBP + education | 230 | 152.9 (13.8) | ‑16.4 | 0.1 | ‑2, 2.2[[11]](#endnote-11) | nd | 89.7 (9.8) | ‑9 | 0.5 | ‑1, 2.0k | nd | C |
| Usual care | 255 | 153.2 (12) | ‑16.5 |  |  |  | 91.01 (7.9) | ‑9.5 |  |  |  |
| SMBP + Rx monitor | 215 | 152.9 (14.6) | ‑16.9 | ‑0.4 | ‑2.6, 1.8k | nd | 90.9 (8.8) | ‑10.7 | ‑1.2 | ‑2.6, 0.2k | nd |
| Usual care | 255 | 153.2 (12) | ‑16.5 |  |  |  | 91.0 (7.9) | ‑9.5 |  |  |  |
| SMBP + education + Rx monitor | 221 | 152.5 (14.1) | ‑18.9 | ‑2.4 | ‑4.5, ‑0.3k | nd | 90.4 (8.4) | ‑11.2 | ‑1.7 | ‑3.1, ‑0.3k | nd |
| Usual care | 255 | 153.2 (12) | ‑16.5 |  |  |  | 91.0 (7.9) | ‑9.5 |  |  |  |
| McManus 20107019220913 | 152/84 | 12 mo | SMBP + alert + self-titration | 234 | 151.9 (nd) | ‑17.6 | ‑5.4[[12]](#endnote-12) | ‑8.5, ‑2.4 | 0.0004 | 85.2 (nd) | ‑7.5 | ‑2.7l | ‑4.2, ‑1.1 | 0.001 | A |
| Usual care | 246 | 152 (nd) | ‑12.2 |  |  |  | 84.7 (nd) | ‑4.8 |  |  |  |
| Muhlhauser 1993738467308 | 163/100 | 18 mo | SMBP + education | 86 | 162 (14) | ‑8 | ‑5 | ‑10, 0 | 0.071 | 100 (7) | ‑6 | ‑4 | ‑7, ‑1 | 0.018 | C |
| Usual care | 74 | 161 (13) | ‑3 |  |  |  | 98 (7) | ‑2 |  |  |  |
| Parati 20097519145785 | 149/89 | 6 mo | SMBP + reminder | 187 | 148.4(12.6) | -10.9 | -0.2 | -3.7, 3.3k | NS | 88.7(7.4) | -5.1 | 0.4 | -1.8, 2.6k | NS |  |
| Usual care | 111 | 148.7(11.7) | -10.7 |  |  |  | 88.8(8.6) | -5.5 |  |  |  |
| Rinfret 20097820031834 | 162/90 | 12 mo | SMBP + alert + Rx monitor | 111 | 162 (16) | ‑18.7 | ‑4.9 | ‑9.8, 0g | 0.05 | 91 (12) | ‑9.1 | ‑3.5 | ‑6.4, ‑0.6g | 0.02 | C |
| Usual care | 112 | 162 (17) | ‑13.8 |  |  |  | 90 (12) | ‑5.6 |  |  |  |
| Rudd 20048015485755 | 155/87 | 6 mo | SMBP + counsel | 69 | 155.9[[13]](#endnote-13) (19.9) | ‑14.2 | ‑8.5 | ‑15, ‑2g | <0.01 | 86.3m (10) | ‑6.5 | ‑3.1 | ‑6.2, ‑0.01g | <0.05 | B |
| Usual care | 68 | 154.8m (17.3) | ‑5.7 |  |  |  | 87.4m (9.1) | ‑3.4 |  |  |  |
| Artinian 20074117846552 | 156/89 | 12 mo | SMBP + Telecounseling | 167 | 156.8(19.6) | -11.8 | -4 | nd | <0.0001 | 89.5(14) | 83.8 | -0.8 | nd | <00001 | A |
| Enhanced usual care | 169 | 155.9(19.2) | -7.8 |  |  |  | 88.4(13) | 83.5 |  |  |  |
| Earle 20105420597833 | 132/77 | 6 mo | SMBP + letters | 72 | 130.5(15.1) | -6.5 | -8.6 | nd | nd | 76.9(9.4) | -2.6 | -4.7 | nd | nd | C |
| Usual care | 65 | 131.8(19.7) | 2.1 |  |  |  | 76.6(11.3) | 2.1 |  |  |  |
| Shea 20068216221935 | 142/71 | 12 mo | SMBP + Web + counsel | 697 | 142.1 (23.1) | ‑4.7 | ‑3.4j | ‑5.5, ‑1.4g | 0.001 | 71.4 (11.2) | ‑3 | ‑1.9j | ‑3.1, ‑0.8g | <0.001 | A |
| Usual care | 709 | 141.8 (23.4) | ‑1.1 |  |  |  | 70.9 (10.4) | ‑0.9 |  |  |  |
| Zillich 20058916423096 | 152/85 | 3 mo | SMBP + counsel | 64 | 151.5 (15.6) | ‑13.4 | ‑4.5[[14]](#endnote-14) | ‑10, 1.2g | NS | 85.3 (11.6) | ‑8.8 | ‑3.2n | ‑6.1, ‑0.3g | 0.03 | B |
| Pharmacist BP | 61 | 151.6 (12.9) | ‑9 |  |  |  | 85.3 (10.7) | ‑5.6 |  |  |  |
| **Nonrandomized studies** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gran 1991601891656 | 156/96 | 24 mo | SMBP + lifestyle interventions | 122[[15]](#endnote-15) | 150.6 (13.4) | ‑9.3 | ‑9.9 | ‑2.9, 0.7 | nd | 95.2 (5.8) | ‑3.8 | ‑0.9 | ‑2.6, 0.8 | nd | C |
| Usual care | 82 | 155.5 (12.8) | 0.6 |  |  |  | 96.3 (6.1) | ‑2.9 |  |  |  |
| Park 20097619643661 | 134/91 | 2 mo | SMBP + Web + counsel | 28 | 135.7 (8.8) | ‑9.1 | ‑11.9 | ‑‑19, ‑4.8g | 0.001 | 90.4 (6.7) | ‑7.2 | ‑7.6 | ‑12, ‑3.1g | 0.001 | B |
| Usual care | 21 | 133.9 (9.3) | 2.8 |  |  |  | 91 (9.9) | 0.4 |  |  |  |
| Sawicki 1995818557972 | 143/87 | 60 mo | SMBP + education + self‑titration | 34 | 154[[16]](#endnote-16) (19) | ‑3.7 | ‑19.1 | ‑33, ‑5.2g | 0.007 | 92[[17]](#endnote-17) (12) | ‑5.8 | ‑6.1 | ‑13, 0.9g | 0.088 | C |
| Usual care | 25 | 143p (22) | 15.4 |  |  |  | 87q (11) | 0.3 |  |  |  |

BP = blood pressure; CI = confidence Interval; nd = no data; NS = not significant; P Btw = P-value between groups; SD = standard deviation; SMBP = self-measured blood pressure.

1. Mean clinic blood pressure control arm, unless otherwise indicated. [↑](#endnote-ref-1)
2. ITT, actual number at 12 mo: 122. [↑](#endnote-ref-2)
3. Estimated from Figure 2 in paper. [↑](#endnote-ref-3)
4. ITT, actual number at 12 mo: 131. [↑](#endnote-ref-4)
5. Per protocol analysis; ITT analysis also reported, with similar results. [↑](#endnote-ref-5)
6. Adjusted for age, sex, baseline adherence, baseline BP. [↑](#endnote-ref-6)
7. Estimated from P-value. [↑](#endnote-ref-7)
8. Adjusted for baseline value, sex, baseline home BP monitor, clinic site. [↑](#endnote-ref-8)
9. Quasi-RCT. [↑](#endnote-ref-9)
10. Adjusted for baseline value. [↑](#endnote-ref-10)
11. Calculated from reported data. [↑](#endnote-ref-11)
12. Adjusted for sex, general practice, baseline SBP >150, DM, and chronic kidney disease status. [↑](#endnote-ref-12)
13. Estimated from Fig 1 in paper. [↑](#endnote-ref-13)
14. Adjusted for treatment group, age, sex, dyslipidemia, baseline SBP. [↑](#endnote-ref-14)
15. Only 73% used SMBP. [↑](#endnote-ref-15)
16. Based on original sample of 45. [↑](#endnote-ref-16)
17. Based on original sample of 46.

r Estimated from a longitudinal data model with an unstructured covariance matrix.

s Additional intervention only instituted whenever mean BP exceeds threshold over a period of 2 weeks. [↑](#endnote-ref-17)