**Tables 1, 2, 4, 6 and 9**

***20 November, 2015***

Table 1. Characteristics of Included Studies

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| First author, Year | Study population | Comparison groups | Age (mean), age range | Female (%) | Race/ethnicity |
| Vevoort, 1999 | Research visit | clinic to ambulatory | 28 | 52 |  |
| Stergiou, 2010 | Research visit | home to ambulatory | 53 | 43 |  |
| Shimbo, 2009 | Research visit | home to ambulatory | 52 | 54 | Race % White (Non-Hispanic) 60.7 % White (Hispanic) 9.2 % Black (Non-Hispanic) 17.5 % Black (Hispanic) 1.7 % Asian/Indian/Pacific Islander 6.1 % Native American/Alaskan Native 0.4 % Other 4.3 |
| Sega, 1997 | Research visit | home to ambulatory | NA ( 69 , NA ) | 46 |  |
| Myers, 2010 | Primary care | automated office to ambulatory | 57 | 52 |  |
| Mengden, 2000 | Secondary care | home to ambulatory | 59 | 40 | German |
| Mancia, 2009 | Other (specify below) | home to ambulatory | 44 | 57 | European/Italian |
| Imai, 1999 | Other (specify below) | clinic to ambulatory  clinic to home  home to ambulatory | 56 | NA |  |
| Bottini, 1992 | Research visit |  | NA | NA |  |
| Andreadis, Emmanuel, 2012 | Research visit | clinic to ambulatory  automated office to ambulatory | 53 | 52 | Not reported. |
| Viera, Anthony, 2010 | Research visit |  | 49 ( 30 , NA ) | 56 | Black: 36% White: 62% Other: 2% Hispanic: 2% |
| Stergiou, 2000 | Other (specify below) | home to ambulatory | 48 | 45 | Doesn’t specify. Non-American sample. |
| Lehmkuhl, 2005 | Primary care | clinic to ambulatory | 50 | 39 |  |
| Stergiou, 2002 | Research visit | clinic to ambulatory  home to ambulatory | 48 | 45 |  |
| Prisant, 1992 | Primary care |  | 47 | 62 | 63% white (46 patients) 34% black (25 patients) 1 Asian patient |
| Brueren, 1997 | Primary care | home to ambulatory | 52 ( 20 , 75 ) | 49 |  |
| Lehmkuhl, 2005 | Research visit | clinic to ambulatory | 50 | 39 | unknown |
| Dieterle, 2010 | Secondary care | clinic to ambulatory | 53 ( 25 , 82 ) | 42 |  |
| Sega, 1994 |  |  | NA | NA |  |
| Stergiou, 2004 |  | home to ambulatory | 48 | 45 |  |
| Mule, 2002 | Secondary care | home to ambulatory | 42 | 47 | Not specified |
| Bayo, 2006 | Primary care | home to ambulatory | 58 | 59 | not reported |
| Schetini, 1999 | Secondary care | clinic to ambulatory  clinic to home  home to ambulatory  automated office to ambulatory | 47 ( 20 , 88 ) | 58 | Not defined but population completely from Uruguay |
| White, WB, et al, 1994 | Secondary care | clinic to ambulatory | 44 ( 23 , 65 ) | 15 | Not specified |
| Giancarlo Cesana, 1991 | Primary care | clinic to ambulatory  clinic to home  home to ambulatory | NA | NA |  |
| Urs Mueller, 1997 | Research visit |  | 50 | 63 |  |
| Sang-Kyu Kim, 2011 | Research visit | clinic to ambulatory | 35 | 28 |  |
| Inger Enstrom, 1992 | Research visit | clinic to ambulatory  home to ambulatory | 53 | 0 |  |
|  | | | | | |

Table 2. Studies Comparing Mean Office BP to Mean Ambulatory BP Monitoring

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Ambulatory | |  | Clinic | |
| Author, year |  | Count | Mean |  | Count | Mean |
| Andreadis, Emmanuel, 2012 |  | 6 (3/visit x 2 visits) | 136/87 (awake); 132/83 (24-hour) |  | 6 (3/visit x 2 visits) | 163/96 |
| Dieterle, 2010 |  | 2 | 134/83 |  | 2 | 153/96 |
| Giancarlo Cesana, 1991 |  | 3 |  |  | 3 |  |
| Imai, 1999 |  | 2 | 127.5/71.5 |  | 2 | 128.1/74.5 |
| Inger Enstrom, 1992 |  | 2 x 3 visits |  |  | 2 x 3 visits |  |
| Lehmkuhl, 2005 |  | 6 measurements 3 on one day and 3, 3 days later | control 138 |  | 6 measurements 3 on one day and 3, 3 days later | 141/92 |
| Sang-Kyu Kim, 2011 |  | 2 | 129.6/82.5 |  | 2 | 120/72 |
| Schetini, 1999 |  | 3 | 118/72; 121/77 day; 107/64 night |  | 3 | 124/79 (MD); 123/78 (RN) |
| Stergiou, 2002 |  |  | 133/85 |  |  |  |
| Vevoort, 1999 |  | 10 | 120.9/120.4 |  | 10 | 113.4/65.0 |
| White, WB, et al, 1994 |  | 3 visits | 155/95 |  | 3 visits | 168/110 |
|  | | | | | | |

Table 4. Studies Comparing Mean Office BP to Mean Home BP Monitoring

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Clinic | |  | Home | |
| Author, year |  | Count | Mean |  | Count | Mean |
| Giancarlo Cesana, 1991 |  | 3 |  |  |  |  |
| Imai, 1999 |  | 2 | 128.1/74.5 |  | 56 | 118.7/74.8 |
| Schetini, 1999 |  | 3 | 124/79 (MD); 123/78 (RN) |  | 3 | 125/78 |
|  | | | | | | |

Table 6. Studies Comparing Mean Home BP to Mean Ambulatory BP Monitoring

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Ambulatory | |  | Home | |
| Author, year |  | Count | Mean |  | Count | Mean |
| Bayo, 2006 |  |  | 130.4/ 77.7 |  | 18 | 137.4/82.1 |
| Brueren, 1997 |  |  | 143/91 |  | 16 (2 in morning, 2 in evening) | 140/90 |
| Giancarlo Cesana, 1991 |  | 3 |  |  |  |  |
| Imai, 1999 |  | 2 | 127.5/71.5 |  | 56 | 118.7/74.8 |
| Inger Enstrom, 1992 |  | 2 x 3 visits |  |  | 6 x 3 days |  |
| Mancia, 2009 |  |  | 112.8/70.4 |  | 2 | 112.6/70.8 |
| Mengden, 2000 |  |  | 141.2/83.9 |  | 20 | 143.4/84.0 |
| Mule, 2002 |  |  | 136.0/88.9 |  | 18 | 141.4/93.4 |
| Schetini, 1999 |  | 3 | 118/72; 121/77 day; 107/64 night |  | 3 | 125/78 |
| Sega, 1997 |  |  | 127.6/77.0 |  | 2 | 138.2/78.0 |
| Shimbo, 2009 |  |  | 135/83 |  | 12 | 133/82 |
| Stergiou, 2000 |  |  | 139.5/91.4 |  | 24 | 138.7/89.3 |
| Stergiou, 2002 |  |  | 133/85 |  | 12 | 142/92 |
| Stergiou, 2004 |  |  | 142.4/91.5 |  | 24 | 139.3/91.1 |
| Stergiou, 2010 |  |  | 138.0/89.5 |  | 10.8 | 137.9/88.0 |
|  | | | | | | |

**Table 9. Reproducibility**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | Ambulatory | |  | Clinic | |  | Home | |  | Other | |
| Author, year | How far apart? |  | Count | Mean |  | Count | Mean |  | Count | Mean |  | Count | Mean |
| Bottini, 1992 | 1 |  |  |  |  |  |  |  |  |  |  | NA | NA |
| Lehmkuhl, 2005 | 2 |  | 6 measurements 3 on one day and 3, 3 days later | control 138 |  | 6 measurements 3 on one day and 3, 3 days later | 141/92 |  |  |  |  | NA | NA |
| Prisant, 1992 |  |  |  |  |  |  |  |  |  |  |  | NA | NA |
| Stergiou, 2000 |  |  |  | 139.5/91.4 |  |  |  |  | 24 | 138.7/89.3 |  | 72 | 139.1/90.9 |
| Urs Mueller, 1997 | 0 |  | 3 mins interval x 30-45 mins |  |  | 3 mins interval x 30-45 mins |  |  |  |  |  | NA | NA |
| Viera, Anthony, 2010 | 7 |  | 12 | First daytime: 152/90; Second daytime: 148/88 |  | 12 | Visit 1: 137/83; Visit 3: 135/81 |  | 30 | First: 135/83; Second: 134/82 |  | NA | NA |
|  | | | | | | | | | | | | | |