



Evidence for Treatment Target of <140/90 mmHg in the Elderly

- **Question A: At what SBP should pharmacotherapy be started in people >65 years old?**
 - Evidence supports initiating pharmacotherapy at a SBP ≥ 160 mmHg.
 - Major trials enrolled elderly patients only if they had SBP ≥ 160 mmHg. Therefore the current guideline recommendations on initiating therapy at SBP values between 140 and 159 mmHg in the elderly are **uncertain** and not based on results from trials.
 - CHEP recommends to strongly consider therapy at SBP level 140 to 159 mmHg in the general population and stipulates that target organ damage be present (**Grade C**).
 - This recommendation is extrapolated to the elderly.
- **Question B: What should the SBP treatment target be in people >65 years old?**
 - Evidence supports a SBP target of <160 mmHg in the elderly.
 - The 2011 ACCF/AHA Consensus document states that in the elderly the generally recommended BP goal of <140/90 is based on **expert opinion** rather than on data from RCTs.
 - Evidence addressing a SBP target of <140 mmHg is limited.
 - The only trial that randomized patients to different blood pressure targets in the elderly (SBP <140 mmHg vs 140 to 160 mmHg) showed **no** statistically significant **difference** between groups in any outcome.
- RCTs exclude the frail elderly. Thus, recommendations for BP treatment are based on **local expert consensus**.

Local Expert Consensus on Treatment of Hypertension in the Frail Elderly

Considerations before treating:

- Carefully review the risks and potential, but unproven, benefits.
- Do not make treatment decisions based only on supine measurements.

Measuring blood pressure

- When measuring BP, take readings when sitting.
- To evaluate orthostasis, measure BP lying, then immediately on standing and after 2 minutes. Ask the patient if they feel lightheaded or dizzy when standing.

Starting treatment:

- Consider starting treatment when SBP is ≥ 160 mmHg.
- Target SBP to **140 to 160** mmHg while sitting as long as
 - There is no orthostatic drop to <140 mmHg using the technique described above.
 - There are no adverse effects from treatment that affect quality of life.
- In the very frail with short life expectancy, a target SBP of 160 to 190 mmHg may be reasonable.
- The blood pressure target does not need to change when there is a history of diabetes.
- In general, use no more than 2 medications.

Stopping treatment:

- If sitting SBP is <140 mmHg, medications can be tapered and discontinued.
- However before discontinuation, consider if the medications are treating additional conditions such as rate control for atrial fibrillation or symptomatic control of heart failure.