## BP Variations -Factors affecting accuracy of blood pressure measurement

White coat effect  + 11-30 / Have someone else take measurement, use home measurements  Not determining the maximum inflation level  Deflation rate faster than 2-3 woverestimates / overestimates / overestim	Factor	Effect	How to eliminate risk
Not determining the maximum inflation level  Deflation rate faster than 2-3 mmHg per second  Failure to detect auscultatory gap  Heavy pressure on the stethoscope  Cuff too short or narrow  Cuff too long or too wide  Cuff too long or too wide  False low  Cuff applied over clothing  Back unsupported  Arm not at heart level. BP taken-Above heart level  Palse low  False high  +9-13 / unknown  Arm unsupported on firm  surface, sitting  Arm unsupported on firm  surface, sitting  Arm unsupported on firm  surface, sitting  False high  For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  both resting 5 minutes before taking measurement  False high  Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs  crossed  Caffeine/tobacco or exercise  False high  Feet not flat on floor or legs  crossed  Caffeine/tobacco or exercise  False high  Feet not flat on floor or legs  crossed  Caffeine/tobacco or exercise  False high  Feet not flat on floor or legs  crossed  Caffeine/tobacco or exercise  False high  Feet not flat on floor or legs  crossed  Caffeine/tobacco or exercise  False high  Feet not flat on floor or legs  crossed  Caffeine/tobacco	White coat effect	+ 11-30 /	Have someone else take
Not determining the maximum inflation level  Deflation rate faster than 2-3   Minderestimates yestolic or miss auscultatory gap    Deflation rate faster than 2-3   Minderestimates   Overestimates   Overesti			measurement, use home
inflation level  Deflation rate faster than 2-3  mmHg per second  Failure to detect auscultatory gap  Heavy pressure on the stethoscope  Pulse may be heard below systolic or to Zero  Cuff too short or narrow  Cuff too long or too wide  False low  Cuff not centered over brackial artery  Cuff applied over clothing  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  False high Test not deflate cuff at the pulse for inflation level  Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate outflat a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate cuff at a rate of 2-3 mmHg / second Train examiners to deflate of shold width at least 40% of arm circumference. Cuff too short or narrow  False low False low False low False low False low False low For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Take measurement  False high False high For every 1s ab			measurements
the pulse for inflation level  Deflation rate faster than 2-3 wind per second overestimates / overestimates / overestimates / a rate of 2-3 mmHg/second failure to detect auscultatory gap  Record a falsely lower systolic & determine the maximum inflation level  Heavy pressure on the stethoscope ystolic or to Zero  Pulse may be heard below systolic & determine the maximum inflation level  Heavy pressure on the systolic or to Zero  Pulse may be heard below Use light pressure to hold stethoscope in place  Choose correct cuff size - bladder length at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff of Center bladder over brachial artery  Cuff applied over clothing +5-50 / unknown Apply cuff to bare arm  Back unsupported +6-10 / unknown  Arm not at heart level. BP taken-Above heart level -Below heart level	Not determining the maximum	Underestimate systolic or	Train examiners to estimate
Deflation rate faster than 2-3 Underestimates / Train examiners to deflate overestimates / a rate of 2-3 mmHg/second Failure to detect auscultatory gap Record a falsely lower systolic & determine the maximum inflation level  Heavy pressure on the stethoscope Pulse may be heard below systolic or to Zero Stethoscope in place  Cuff too short or narrow + ½ 10 / +2-8 Leg light pressure to hold stethoscope in place  Cuff too long or too wide False low Center bladder over brachial artery  Cuff applied over clothing + 5-50 / unknown Apply cuff to bare arm  Back unsupported + 6-10 / unknown Support back (sit on chair, do not sit on exam table)  Arm not at heart level. BP taken—Above heart level—Below heart level—Below heart level—Below harm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Talking, using hand gestures or active listening  False high False	_	miss auscultatory gap	systolic, then add 20-30 mmHg to
mmHg per second Failure to detect auscultatory gap  Record a falsely lower systolic  Record a falsely lower systolic & determine the maximum inflation level  Heavy pressure on the stethoscope  Pulse may be heard below systolic or to Zero  Cuff too short or narrow  +2 10 / +2-8  Cuff too long or too wide  Cuff too long or too wide  Cuff not centered over brachial artery  Cuff applied over clothing  Arm not at heart level -Below heart level -Below heart level -Parallel to body  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  False high Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Fulse lawers Train examiners to estimate systolic & determine the maximum inflation examiners to estimate systolic & determine the maximum inflation examiners to estimate systolic & determine the maximum inflation leval usel determine the maximum inflation leval systolic & determine the maximum inflation leval systolic & determine the maximum inflation leval Use light pressure to hold stethoscope The maximum inflation leval Use light pressure to hold stethoscope in place Choose correct cuff size - bladder When in doubt use larger cuff Center bladder ower brachial aretry Center bladder bendwidth at least 80% and width at least 40% of am circumference. When in doubt use larger Choose correct cuff size - bladder When in dolow stethoscope in place Choose correct cuff set blodder When in dolow stethoscope in place Choose correct cuff set blodder When in dolow stethoscope in place Choose correct cuff set blodder When in dolow and with at least 80% and with at lea		, , ,	the pulse for inflation level
Failure to detect auscultatory gap systolic systolic systolic determines to estimate systolic determines the maximum inflation level  Heavy pressure on the stethoscope systolic or to Zero stethoscope in place  Cuff too short or narrow + 2 10 / +2-8  Cuff too long or too wide False low Selight at least 80% and width at least 40% of arm circumference. When in doubt use larger cuff or the stery determined artery artery  Cuff applied over clothing + 5-50 / unknown Apply cuff to bare arm  Back unsupported + 6-10 / unknown Support back (sit on chair, do not sit on exam table)  Arm not at heart level. BP taken-Above heart level False low False high + 9-13 / unknown False high + 9-13 / unknown  Arm unsupported on firm surface, sitting Arm unsupported on firm surface, sitting False low for examptor on active listening  Not resting 5 minutes before taking measurement  Feel not flat on floor or legs crossed  Caffeine/tobacco or exercise + 6-20 / unknown Empty bladder before  Full bladder + > 10-15 / +10  Take acquired to determine the maximum inflation level Use lettermine the maximum inflation level Use lettermine the maximum inflation level Use light pressure to hold stethoscope in place  Choose correct cuff size - bladder length at least 80% and width at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Choose correct cuff size - bladder length at least 80% and width at lea	Deflation rate faster than 2-3	Underestimates /	Train examiners to deflate cuff at
gap systolic systolic systolic determine the maximum inflation level  Heavy pressure on the stethoscope systolic or to Zero stethoscope in place  Cuff too short or narrow	mmHg per second	overestimates	a rate of 2-3 mmHg/second
Heavy pressure on the stethoscope  Pulse may be heard below systolic or to Zero  Stethoscope in place  Cuff too short or narrow  Light pressure to hold stethoscope in place  Cuff too short or narrow  Light too short or narrow  Light too short or narrow  Light too long or too wide  Light at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Cuff not centered over brachial artery  Light applied over clothing  Light pressure to hold stethoscope in place  Choose correct cuff size - bladder  Length at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Center bladder over brachial artery  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Arm not at heart level. BP taken-  Above heart level  Below heart level  False low  False low  False low  For every 1" above or below heart level, the reading may be off by 2mmHg  Arm unsupported on firm  Surface, stitting  Arm unsupported on firm  Surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  False high  Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Fall bladder  Full bladder  Full bladder  Pulse may be heard below  Choose correct cuff size - bladder below  Choose correct cuff size - bladder  Look of arm circumference.  When in doubt use larger cuff  Center bladder  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Apply cuff to bare arm  False low  False low  False low  For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Taking using hand gestures or active listening  No talking during measurement  False high  Take measurement after 5 minute rest or at end of visit  False high  False high  Take measurement after 5 minute rest or at end	Failure to detect auscultatory	Record a falsely lower	Train examiners to estimate
Heavy pressure on the stethoscope  Pulse may be heard below systolic or to Zero  Stethoscope in place  Cuff too short or narrow  Light pressure to hold stethoscope in place  Cuff too short or narrow  Light too short or narrow  Light too short or narrow  Light too long or too wide  Light at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Cuff not centered over brachial artery  Light applied over clothing  Light pressure to hold stethoscope in place  Choose correct cuff size - bladder  Length at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Center bladder over brachial artery  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Arm not at heart level. BP taken-  Above heart level  Below heart level  False low  False low  False low  For every 1" above or below heart level, the reading may be off by 2mmHg  Arm unsupported on firm  Surface, stitting  Arm unsupported on firm  Surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  False high  Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Fall bladder  Full bladder  Full bladder  Pulse may be heard below  Choose correct cuff size - bladder below  Choose correct cuff size - bladder  Look of arm circumference.  When in doubt use larger cuff  Center bladder  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Apply cuff to bare arm  False low  False low  False low  For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Taking using hand gestures or active listening  No talking during measurement  False high  Take measurement after 5 minute rest or at end of visit  False high  False high  Take measurement after 5 minute rest or at end	gap	systolic	systolic & determine the maximum
Systolic or to Zero  Cuff too short or narrow  *2 10 / +2-8  Choose correct cuff size - bladder length at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Cuff not centered over brachial artery  Cuff applied over clothing  Back unsupported  Arm not at heart level. BP takenAbove heart level -Below heart level -Parallel to body  Arm unsupported on firm surface, sitting  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Full bladder  Cuff too long or too wide  False low For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  * > 10 / +2-8  Choose correct cuff size - bladder length at least 80% and width at least 80% and width at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Center bladder over brachial artery  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Adjust table or chair so arm rests on firm surface at heart level  For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Take measurement  Take measurement after 5 minute rest or at end of visit  Full bladder  * > 10 - 15 / +10  Empty bladder before		,	•
Systolic or to Zero  Cuff too short or narrow  *2 10 / +2-8  Choose correct cuff size - bladder length at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Cuff not centered over brachial artery  Cuff applied over clothing  Back unsupported  Arm not at heart level. BP takenAbove heart level -Below heart level -Parallel to body  Arm unsupported on firm surface, sitting  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Full bladder  Cuff too long or too wide  False low For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  * > 10 / +2-8  Choose correct cuff size - bladder length at least 80% and width at least 80% and width at least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Center bladder over brachial artery  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Adjust table or chair so arm rests on firm surface at heart level  For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Take measurement  Take measurement after 5 minute rest or at end of visit  Full bladder  * > 10 - 15 / +10  Empty bladder before	Heavy pressure on the	Pulse may be heard below	Use light pressure to hold
Cuff too short or narrow  Least 40% of arm circumference.  When in doubt use larger cuff Cuff not centered over brachial artery  Cuff applied over clothing  Least 40% of arm circumference.  When in doubt use larger cuff Center bladder over brachial artery  Cuff applied over clothing  Least 40% of arm circumference.  When in doubt use larger cuff Center bladder over brachial artery  Center bladder over brachial seast 40% of arm circumference.  When in doubt use larger cuff  Center bladder over brachial least 80% and width at least 40% of arm circumference.  When in doubt use larger cuff  Center bladder over brachial artery  Center bladder over brachial artery  When in doubt use larger cuff  Center bladder over brachial east 40% of arm circumference.  When in doubt use larger cuff  Center bladder over brachial artery  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Adjust table or chair so arm rests on firm surface, do not heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Not talking at a least 40% of arm creating artery  For every 1" above or below heart level, the reading may be off by 2mmHg  Rest	• •	,	,
least 40% of arm circumference.   Cuff too long or too wide   False low   When in doubt use larger cuff	·		Choose correct cuff size - bladder
least 40% of arm circumference.   Cuff too long or too wide   False low   When in doubt use larger cuff	Cuff too short or narrow	+ > 10 / +2-8	length at least 80% and width at
Cuff not centered over brachial artery  Cuff applied over clothing + 5-50 / unknown  Back unsupported + 6-10 / unknown  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Arm not at heart level. BP taken-  -Above heart level -Below heart level -Parallel to body + 9-13 / unknown  Arm unsupported on firm surface, sitting + 1-7 / +5-11  Arm unsupported on firm surface, standing Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  False high + 2-8 /  Caffeine/tobacco or exercise  False high - 4-20 / unknown  Center bladder over brachial artery  Apply cuff to bare arm  Support back (sit on chair, do not sit on exam table)  Adjust table or chair so arm rests on firm surface at heart level  For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Not talking during measurement  Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs  crossed  Caffeine/tobacco or exercise  + 6-20 / unknown  Empty bladder before		_	
Cuff not centered over brachial artery  Cuff applied over clothing	Cuff too long or too wide	False low	When in doubt use larger cuff
Cuff applied over clothing + 5-50 / unknown Apply cuff to bare arm  Back unsupported + 6-10 / unknown Support back (sit on chair, do not sit on exam table)  Arm not at heart level. BP taken- Above heart level Below heart level Palse high Parallel to body Palse high Portale, sitting Parm unsupported on firm surface, sitting Parm unsupported on firm surface, sitting Parm unsupported on firm surface, standing Palking, using hand gestures or active listening Palse high Pal			
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Back unsupported + 6-10 / unknown Support back (sit on chair, do not sit on exam table)  Arm not at heart level. BP taken- Above heart level Below heart level False low False high Parallel to body + 9-13 / unknown  For every 1" above or below heart level, the reading may be off by 2mmHg  Arm unsupported on firm surface, sitting + 1-7 / +5-11  Arm unsupported on firm surface, standing + 6-8 /  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  False high Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise + 6-20 / unknown  Empty bladder  Empty bladder before  Empty bladder before	•	+ 5-50 / unknown	,
Arm not at heart level. BP taken- Above heart level Below heart level Parallel to body  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  False high For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  Not talking during measurement  False high Take measurement after 5 minute rest or at end of visit  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  False high  Advise to avoid for 30 min. before measurement  Empty bladder  False here  Advise to avoid for 30 min. before measurement  Empty bladder before	•		
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-Above heart level -Below heart level -Parallel to body  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  False low False low False high For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  No talking during measurement  Take measurement after 5 minute rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Full bladder  Full bladder  False low False high For every 1" above or below heart level, the reading may be off by 2mmHg  Rest arm on firm surface, do not hold patient's arm  No talking during measurement  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder before			
-Below heart level -Parallel to body  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  False high + 9-13 / unknown  + 1-7 / +5-11  Rest arm on firm surface, do not hold patient's arm  No talking during measurement  Take measurement after 5 minute rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder  Empty bladder before		6.1.1	
-Parallel to body  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  False high   False high   False high   False high   Sit with feet flat on the floor    Advise to avoid for 30 min. before measurement  Empty bladder before			For every 1" above or below heart
Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  + 9-13 / unknown  Rest arm on firm surface, do not hold patient's arm  No talking during measurement  Take measurement after 5 minute rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder before		_	
Arm unsupported on firm surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  Arm unsupported on firm + 1-7 / +5-11  Rest arm on firm surface, do not hold patient's arm  No talking during measurement  Take measurement after 5 minute rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder before	-Parallel to body	+ 9-13 / unknown	
surface, sitting  Arm unsupported on firm surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  Rest arm on firm surface, do not hold patient's arm  No talking during measurement  Take measurement after 5 minute rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder before	Arm unsupported on firm	4.7.7.5.44	
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Surface, standing  Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  To take measurement after 5 minute rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder before	Arm unsupported on firm		hold patient's arm
Talking, using hand gestures or active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  False high  + 7-10 / +10  Take measurement after 5 minute rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder before	• •	+ 6-8 /	·
active listening  Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  False high  F		7.10 / 10	No talking during measurement
Not resting 5 minutes before taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  False high  + 2-8 /  Caffeine/tobacco or exercise  False high  + 2-8 /  Caffeine/tobacco or exercise  False high  + 2-8 /  Advise to avoid for 30 min. before measurement  Empty bladder before	3. 3	+ /-10 / +10	
taking measurement  Feet not flat on floor or legs crossed  Caffeine/tobacco or exercise  Full bladder  False nigh  rest or at end of visit  Sit with feet flat on the floor  Advise to avoid for 30 min. before measurement  Empty bladder before		<b>c</b> 1. 1:1	Take measurement after 5 minute
Feet not flat on floor or legs crossed  + 2-8 /  Caffeine/tobacco or exercise  + 6-20 / unknown  Full bladder  + > 10-15 / +10  Sit with feet flat on the floor Advise to avoid for 30 min. before measurement  Empty bladder before	5	raise high	rest or at end of visit
crossed + 2-8 /  Caffeine/tobacco or exercise + 6-20 / unknown Advise to avoid for 30 min. before measurement  Full bladder + > 10-15 / +10  Empty bladder before		0.0.4	
Full bladder + 6-20 / unknown measurement  +> 10-15 / +10	_	+ ∠-ŏ /	
Full bladder + > 10-15 / +10  Empty bladder before	Coffeine Ash	. 4 20 /	Advise to avoid for 30 min. before
Full bladder $ +\rangle 10-15/+10$	Catteine/Todacco or exercise	+ U-ZU / UNKNOWN	measurement
Full bladder $ +\rangle 10-15/+10$	E 11.1. 1.1.	10.15 / 10	Empty bladder before
—   measurement	rull bladder	+-> 10-12 \ +10	measurement

