NICE National Institute for Health and Care Excellence

Appendix A: Stakeholder consultation comments table

2022 surveillance of recommendations relating to postural and orthostatic hypotension in NG136 Hypertension in adults: Diagnosis and management (2019) and CG109 Transient loss of consciousness in over 16s (2014)

Consultation dates: 23rd November to 6th December 2022

1. "Do you agree with the proposed changes of recommendations? Please could let us know if you agree or disagree (yes/no) and provide comments to support your answer."			
Stakeholder	**Overall response**	**Comments**	**NICE response**
Diabetes UK	Yes	We welcome a review of the latest evidence and guidelines, and the proposal that standardised measurement criteria and terminology will be used across all NICE guidelines. It is pleasing to note the new criteria for measuring blood pressure in the recommendation, in line with international consensus, which will help ensure	Thank you for your comments.

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		postural hypotension cases are not missed. We welcome too the recommendation that if measuring blood pressure in the lying down position in general practice is not possible, then an option to do this seated if lying down is provided.	
British and Irish Hypertension Society	No	No We appreciate the need to standardise the guidelines, with homogenised terminology, standardised measurement criteria and agree with using only one term 'postural hypotension' in all NICE guidelines. However, there is an important distinction between the two guidelines in that one covers patients that by definition actually have transient loss of consciousness (TLOC), whereas the patients with hypertension most often have symptoms of dizziness or pre-syncope without actually having TLOC. Although measuring lying to standing blood pressure (BP) is considered more accurate, and measuring sitting to stand BP may miss patients with mild postural hypotension, measuring lying to standing BP may not be feasible in primary care setting and may be impractical for some patients. Currently, Nurses and pharmacists play a significant role in the management of hypertension in the primary care and often in non-formal clinical settings. As such they	Thank you for your comments. Although the situation of the TLOC and hypertension guidelines are different, both involve the identification of possible postural hypotension in people with suspected signs and symptoms. Therefore, the general feedback is that there are more benefits than disadvantages for standardising the terminology. We appreciate that it may not always be possible to take blood pressure in the supine position. Therefore, the proposed recommendations made a provision for this situation. The last sentence of the suggested recommendation 1.1.5 of the hypertension guideline (NG136) reads: *"If it is inconvenient to take the blood pressure measurement in the supine position, a seated position may be considered."* However, if there is a clinical suspicion of postural hypotension but the thresholds were not met when the blood pressure was taken in the seated to standing positions, the precautions in recommendation 1.16 would apply. We would

		may not have access to a bed or couch to allow lying BP to be assessed. We suggest that in patient with hypertension and symptoms of dizziness, the recommendation says: Recommendations 1.1.5 and 1.16 and recommendation 1.2.1.1: Position: 'Seated to standing BP measurement is acceptable, but if feasible, lying to standing measurements should be undertaken'. Duration of standing before measurement: We would agree that duration of standing measurement should be extended to 3 mins. Threshold of difference between standing vs supine or seated: We would suggest a threshold of 'systolic blood pressure (SBP) of >20 mmHg and diastolic blood pressure difference of > 10 mmHg' for diagnosis of postural hypotension. This is the accepted definition by almost all Societies and is the most used in the published literature. Lowering the threshold will lead to many more people being labelled as having postural hypotension and may mean antihypertensive therapy is reduced – increasing stroke risk. We would also in addition suggest that there's a recommendation to 'document of heart rate (HR) change along with BP change'. This can be easily justified as HR is almost always	expect clinicians to take pragmatic decisions, such as recommending for the patient to be seen in a clinic where the blood pressure can be measured in the recommended positions. The recommendations have been amended to provide a safety net and address the concerns that these patients would have otherwise been considered as not having postural hypotension, despite never having a supine-to-standing up blood pressure measurement taken. The new recommendation 1.1.6 in the NICE hypertension guideline (NG136) now reads: *If the systolic blood pressure falls by 20 mmHg or more, **or** if the diastolic blood pressure falls by 10 mmHg or more when the person is standing:* • *consider likely causes, including reviewing current medications* • *manage appropriately (for example, see NICE guideline on falls in older people: assessing risk and prevention)* • *consider referral to specialist care if symptoms of postural hypotension persist.* *If the blood pressure drop is less than the specific thresholds despite a suggestive history:* • *repeat the measurements with the person in the supine position if the first measurement was taken while seated* • *refer the per*son for further specialist cardiovascular assessment.

		measured along with BP, but frequently not documented and the changes in HR in conjunction with BP is extremely useful in determining the cause of postural hypotension, for example non-drug related postural hypotension resulting for autonomic failure. This would further help decide on management and we would suggest the following aspect be mentioned under management: 'Note the change in HR along with the change in BP. A reduced or lack of change in HR with a drop in BP may point to dysautonomia or a cardiac cause. Whereas excessive rise in HR mat result from volume loss/dehydration, or other postural intolerance syndromes such as postural orthostatic tachycardia syndrome. Referral to a specialist is indicated'.	Thank you for your suggestions about the measurement methods and criteria. Considering the context of these recommendations, we have tried to balance the concerns about implementation versus recommending techniques and definitions which may be more sensitive and specific but more challenging to implement. We had included the additional information about diastolic blood pressure in the recommendation. However, we were unable to add further information about heart rates at this point as this is out of scope for this specific review, but will log this for future considerations. .e.
The Newcastle upon Tyne Hospitals NHS Trust	Yes	1. Overall the proposed changes are a step in the right direction. 2. There is increasing evidence that an early standing BP is more clinically meaningful. I believe it should recommend standing BP at one and three minutes at least if possible. 3. A systolic BP drop of 20 is simplistic especially in populations with hypertension. A drop from 190 to 170 is not postural hypotension. BP is more variable at higher levels. 4. You divert people to the falls guideline for	Thank you for your comments and suggestions. We have carefully considered all of them. We had considered the suggestion on timing of standing blood pressure measurement. Since the optimal of timing for measuring standing blood pressure differs for different populations or underlying causes of postural hypotension, and there are other considerations such as practicability and mobility of patients, we have amend the recommendation to 'at least 1 minute' to provide a minimum standard.

		information on how to manage orthostatic hypotension. However, there is no treatment recommendation for OH within that guideline. 5. Moving away from the term orthostatic hypotension creates more inconsistency as the international consensus on OH, the ESC syncope guidelines and the world falls guidelines all use the term orthostatic. I think it is an error for NICE to move away from the rest of the community on this. 6. You recommend standing BP being the target for hypertension treatment, but do you think this is appropriate for people with autonomic failure who have a seated BP of 220 and a standing BP of 60?	The new recommendation 1.1.5 in the NICE hypertension guideline (NG136) now reads: 1.*1.5 In people with suspected postural hypotension (with symptoms such as falls or postural dizziness):* • *measure blood pressure with the person in the supine position* • *measure blood pressure again with the person standing for at least 1 minute before the measurement.* *If it is inconvenient to take the blood pressure measurement in the supine position, a seated position may be considered.* As with most recommendation, there will be circumstances where the recommendation does not apply to all clinical situations, and clinical judgements should be exercised. We have recorded in our issues log regarding a gap in our portfolio on management of postural hypotension. We noted that there are different preferences over different terminology. However, most of our respondents have suggested the use of 'postural hypotension' because it is easily understood by patients, lay people and non-specialist health and care workers. We have noted the concerns about standing BP as the target hypertension treatment in our issues log and will monitor this area in our surveillance.

Pots UK charity	No	No We agree that an update is necessary, but we do not fully agree with the proposed changes. Our first concern is that the committee who are reviewing the name, definition and testing for orthostatic hypotension are hypertension experts. We do not know their individual expertise but they may not be experts in orthostatic hypotension. We recommend that orthostatic hypotension experts be involved in these important changes ego autonomic neurologists, medicine for elderly (often with interest in falls and access to a tilt table), GPs with an interest, or cardiologists with interest in syncope. We agree that a consistent terminology should be used but feel strongly that 'orthostatic hypotension' be chosen. Postural refers to any position and could also mean sitting or lying down. Orthostatic refers to upright position and is therefore more correct. We do not agree that postural is more commonly used. The European Society of Cardiology, British Geriatric Society and American Autonomic Society, all of whom have a special interest in this area, tend to use 'orthostatic hypotension' in their guidance. https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Syncope-Guidelines-on-	Thank you for your comments. We had further validated the proposed changes with additional topic experts with the appropriate topic expertise. There is a strong preference for the term of 'postural hypotension' and standardisation of terminology across NICE guideline. This is because 'postural' is much more easily understood by patients and lay people. Thank you for suggesting adding the threshold for diastolic blood pressure. We have now added that to recommendation 1.1.6. We had considered the suggestion on timing of standing blood pressure measurement. Since the optimal of timing for measuring standing blood pressure differs for different populations or underlying causes of postural hypotension, and there are other considerations such as practicability and mobility of patients, we have amended the recommendation to 'at least 1 minute' to provide a minimum standard. Recommendation 1.1.5 of the NICE hypertension guideline (NG136) now reads: *In people with suspected postural hypotension (with symptoms such as falls or postural dizziness):* • *measure blood pressure with the person in the supine position*

		Diagnosis-and-Management-of https://n.neurology.org/content/46/5/1470 https://www.bgs.org.uk/resources/cardiovascular-care-in-the-older-adult-patient-information#anchor-nav-orthostatic-hypotension https://bestpractice.bmj.com/topics/en-gb/972 The AAS and ESC committees are made up of some of the most well-known and respected clinicians internationally with an interest on OH. Regarding the definition, we agree that a drop in BP of 20 mmHg is correct, but most consensuses also include a drop of 10 mmHg in diastolic BP. The ESC also include a drop on systolic BP to below 90mmHg. https://www.acc.org/latest-in-cardiology/ten-points-to-remember/2018/04/04/15/09/practical-instructions-for-the-2018-esc-guidelines-for-syncope. Regarding the active stand test, we agree that ideally this should be undertaken with the patient initially in the supine position. Some severely affected patients drop their BP on sitting and so it may already be at a lower level and the difference when standing may therefore be underestimated. Consider adding in a recording on immediate	• *measure blood pressure again with the person standing for at least 1 minute before the measurement.* *If it is inconvenient to take the blood pressure measurement in the supine position, a seated position may be considered.* We have noted and logged in our issues log about a gap in our portfolio on management of postural hypotension. We have noted the recommendation related to orthostatic intolerances in long covid patients and logged the potential gap in guidance this area for future considerations in guideline development.

		standing and at one minute, 2 minutes and 3 minutes. If early recordings are not made, then initial orthostatic hypotension may be missed - if severe or prolonged this can be a cause of falls in older patients or syncope. Please note that delayed orthostatic hypotension is not mentioned in the proposed guidance. Recommend using a battery-operated sphygmomanometer (or beat to beat recordings if available) so that the patients can be monitored more easily (as some will faint during the test) and recordings can be made rapidly if the patient becomes symptomatic. The new proposal management section refers readers to the NICE guideline on falls in older people: assessing risk and prevention falls. The content of the falls guideline does not really address the management of OH. It fails to mention key areas including fluid and salt intake, compression, postural manoeuvres to relieve symptoms or prevent fainting, or elevation of head of bed. Referring readers to this guidance means that some important therapeutic opportunities for patients may be missed. Please note that OH is also included in the Long-term effects of Covid-19 NICE guideline but is not on this	

		list of guidelines that include mention of OH in this review. Lastly, and perhaps most importantly, we would ask NICE to consider developing a separate guideline on orthostatic hypotension (or preferably syndromes of orthostatic intolerance). It is a very common condition, affecting over 20% of older people (even more common in dementia patients and in nursing homes), and is associated with significant morbidity and mortality. However, it is often missed or inadequately managed. IT os becoming more common for clinicians to seek information about OH and other orthostatic intolerance syndromes due to the link with ME/CFS and long covid. We do not believe that the Hypertension guideline is an appropriate setting for guidance about orthostatic hypotension-the pathophysiology and management are very different (the main association being that overtreatment with antihypertensives can cause OH, but the investigation and management of this is different to that of other types of OH). Although perhaps more relevant in the TLoC guide, many patients with OH do not faint, and therefore separate guidance would be able to address the detail necessary to help clinicians manage this condition.	

		(please note potential CIO-the of author of this consultation feedback is a member of the LTE covid - 19 NICE guideline, and has written guidance on orthostatic hypotension for the RCGP)	
UK Kidney Association	Yes	Yes. One group of patients who do often suffer from postural hypotension are patients receiving haemodialysis for kidney failure. As many as 55% of haemodialysis patients suffer from diabetes (24th UK Renal Registry Report 2021) and as such many of them have known/ undiagnosed autonomic neuropathy. Postural hypotension in these patients is often precipitated by excessive fluid removal during dialysis treatment, and is managed successfully with effective fluid volume management with or without reduction in antihypertensive medication. We believe this should be captured within this surveillance proposal consultation document	Thank you for your comments. We logged this as a potential issue in the haemodialysis population for future updates and surveillance in the chronic kidney disease guideline (NG203).
NHS England	Yes	Yes	Thank you for your comments.

2. Are you aware of any evidence or ongoing trials on postural hypotension? If so please provide details.			
Stakeholder	**Overall response**	**Comments**	**NICE response**
Diabetes UK	NA	*No answer provided*	Thank you for your comments.
British and Irish Hypertension Society	No	no	Thank you for your comments.
The Newcastle upon Tyne Hospitals NHS Trust	Yes	Droxidopa and midodrine	Thank you for your comments.
PoTS UK charity	Yes	There are a number of studies investigating autonomic dysfunction in Long Covid. These include assessing patients for orthostatic hypotension.	Thank you for your comments.
UK Kidney Association	No	No	Thank you for your comments.
NHS England	No	No	Thank you for your comments.

3. Do you have any comments on equality issues? If so please explain			
Stakeholder	**Overall response**	**Comments**	**NICE response**
Diabetes UK	NA	*No answer provided*	Thank you for your comments.
British and Irish Hypertension Society	Yes	As mentioned above, though measuring lying to standing BP is considered more accurate, and measuring sitting to stand BP may miss patients with mild postural hypotension, measuring lying to standing BP may not be feasible in primary care setting and may be impractical for some patients. Currently, Nurses and pharmacists play a significant role in the management of hypertension in the primary care and often in non-formal clinical settings. As such they may not have access to a bed or couch to allow lying BP to be assessed. It's also not feasible for many older patients to undergo this exercise, so flexibility in the guidance is welcome	Thank you for your comments. We have made provision in the recommendation for r the measurement of blood pressure in the seated position, if it is inconvenient to measure it in the supine position to account for the circumstances where lying down is difficult. However, we are also emphasising that if a patient's blood pressure drop does not meet the thresholds when it is measured in the seated position, the patient should be reassessed if the patient has symptoms. In settings where the supine position is impossible, arrangements should be made to get it assessed properly, such as visiting their GPs. We believe this the best approach of balancing of not missing patients who are most at risk of postural hypotension against implementation challenges.
The Newcastle upon Tyne Hospitals NHS Trust	Yes	Yes. As orthostatic hypotension is MUCH more common in older populations, populations with multiple	Thank you for comments.

		conditions and polypharmacy I am surprised you did not have a geriatrician expert providing input.	
PoTS UK charity	Yes	We agree that it can be difficult to undertake a stand test in frail patients with poor mobility, especially when a single clinician visits them at home and there is no assistance available to help them stand and simultaneously make BP measurements. It is often assumed that OH only occurs in older people and therefore it can be overlooked in the young eg in patients with ME/CFS, long covid, hypermobile EDS, Addisons disease. This means that the may not have access treatment, and can rarely be fatal as in endocrine disorders.	Thank you for your comments. We have tried to balance making provisions for when lying down or standing measurement is difficult versus not having any proper assessments done (which could further the inequality). The recommendations we are currently amending are mainly for those who have their blood pressure assessed but have a history suggestive of postural hypotension, patients who have experienced a transient loss of consciousness (TLoC), and in specific populations who may experience postural hypotension as a symptom or complication of another condition. There are recommendations to monitor or look out for 'postural' or 'orthostatic' hypotension in guidelines about specific conditions. We have logged this potential equality issue in relevant guideline.
UK Kidney Association	No	No	Thank you for your comments.
NHS England	No	No	Thank you for your comments.

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