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Royal Cornwall Hospitals NHS Trust

Management of Hypertensive Disorders of Pregnancy Clinical Guideline

V3.0

February 2023

1. Aim/Purpose of this Guideline

1.1. Hypertensive disorders carry significant risks to maternal health and remain one of the leading causes of maternal mortality; they also carry a risk for the baby in terms of perinatal mortality, pre-term birth and low birth weight. This guideline aids the diagnosis, classification and management of the hypertensive disorders of pregnancy.

NB: For the acute management of Severe Pre-eclampsia see the Severe Pre- eclampsia guideline.

1.2. This version supersedes any previous versions of this document.

1.3. This guideline makes recommendations for women and people who are pregnant. For simplicity of language the guideline uses the term women throughout, but this should be taken to also include people who do not identify as women but who are pregnant, in labour and in the postnatal period. When discussing with a person who does not identify as a woman please ask them their preferred pronouns and then ensure this is clearly documented in their notes to inform all health care professionals.

Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation

The Trust has a duty under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

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2. The Guidance

2.1. **Definitions**

- Chronic Hypertension: Hypertension present at booking or before 20 weeks gestation
- Gestational Hypertension: Hypertension that develops after 20 weeks with **no significant** proteinurea
- Pre-eclampsia: New hypertension developing after 20 weeks with one or more of the following new onset conditions (New 2023):

- significant proteinuria (see below 2.4.2.1)
- renal involvement (creatinine ≥ 90)
- liver involvement (ALT ≥ 40IU/l)
- haematological abnormalities (thrombocytopenia)
- uteroplacental dysfunction (SGA EFW <10th centile, abnormal UMA doppler, IUFD)

2.2. Risk Factors

2.2.1. HIGH

- Hypertensive disease in a previous pregnancy
- Chronic renal disease
- Auto-immune disease (SLE, lupus, Antiphospholipid syndrome)
- Existing Diabetes (Type I or II)
- Chronic Hypertension

2.2.2. MODERATE

- First pregnancy
- Age ≥ 40,
- Family history of pre-eclampsia
- Pregnancy interval ≥ 10 years
- BMI ≥ 35 at first visit
- Multiple pregnancy

2.3. Reducing the Risk

One high risk factor or **Two** (or more) moderate factors.

Advise **Aspirin** 150mg daily (to be taken at night) from 12 weeks gestation until **birth.**

2.4. Antenatal Management

2.4.1. Community Referral Guidance

Community monitoring of blood pressure and proteinuria		
Description	Definition	Action by midwife or general practitioner
Consider transfer into hospital by ambulance if significantly raised BP or symptomatic. This should be based on an individual assessment. If there is uncertainty discuss with a Community Team Lead or the referring hospital.		
New hypertension without proteinuria	BP ≥ 140/90 and < 150/100 mmHg on 2 readings at least 10 minutes apart	Refer for hospital step-up assessment within 48 hours or recheck in the community within 48 hours and refer into hospital if still raised
	Diastolic ≥90 and <100 mm Hg with any significant symptom	Refer for same day hospital assessment
	Systolic ≥160 mm Hg	Refer for same day hospital assessment
	Diastolic ≥100 mm Hg	Refer for same day hospital assessment
New hypertension with proteinuria	Diastolic ≥90 mm Hg and new proteinuria ≥+ on dipstick	Refer for same day hospital assessment
	Diastolic ≥110 mm Hg and new proteinuria ≥+ on dipstick	Arrange immediate admission
	Systolic ≥170 mm Hg and new proteinuria ≥+ on dipstick	Arrange immediate admission
	Diastolic ≥90 mm Hg and new proteinuria ≥+ on dipstick and significant symptom	Arrange immediate admission
New proteinuria without hypertension	Reading on dipstick:	
	+	Repeat pre-eclampsia assessment in community within one week
	≥++	Send PCR and MSU to lab and refer for hospital assessment within 48 hours
	≥+ with significant symptoms	Refer for same day hospital assessment
Maternal symptoms or fetal signs and symptoms without hypertension or proteinuria	Symptoms along with diastolic blood pressure <90 mm Hg and trace or no protein:	
	Headache, visual disturbances, or both	Follow RCHT protocols for investigation. Consider reducing interval before next assessment
	Epigastric pain	Refer for same day hospital assessment
	Reduced movements or small for gestational age infant	Follow RCHT protocols for investigation. Consider reducing interval before next full pre-eclampsia assessment

2.4.2. **Initial assessment (New 2023)**

2.4.2.1. Minimum of 3 BP readings over at least 30 minutes period using appropriately sized cuff with an electronic validated machine with the women at rest.

2.4.2.2. Urinalysis and if ≥ 1+ protein on dipstick, a urine protein/creatine ratio (PCR) should be requested (see 2.4.3.1.)

2.4.3. **Diagnostic tests (New 2023)**

2.4.3.1. **Significant proteinuria**

Do not use first morning urine collection to quantify proteinuria

- An MSU should always be performed in case of proteinuria to exclude UTI
- significant proteinuria is defined as ≥ 30mg/mmol. However, PCR ≤ 50mg/mmol should be considered borderline and in case of other reassuring features, a repeat test within 48-72h should be considered

2.4.3.2. Placental Growth Factor (PLGF) – perform in women presenting >20 weeks and less than 35 weeks if diagnosis of pre eclampsia is unclear (see PLGF flow chart appendix 5)

2.4.3.3. Growth scans schedule – depending on diagnosis and assessment

2.4.4. **Chronic Hypertension**

- Refer women with chronic hypertension for consultant lead care. If the hypertension is due to underlying renal pathology refer to maternal medicine.
- Offer pregnant women with chronic hypertension advice on weight management, exercise, healthy eating and lowering the amount of salt in their diet.
- Advise stopping ACE inhibitors, Angiotension II Receptor Blockers and diuretics on notification of pregnancy if these have not been stopped pre-pregnancy and offer alternatives.
- Continue treatment, if safe to do so unless blood pressure is <110/70 or the woman has symptomatic hypotension.
- Offer hypertensive treatment to women who have chronic hypertension (and are not already on treatment) if they have a sustained systolic BP of 140mmHg or higher OR a sustained diastolic BP of 90 mmHg or higher.

- Aim for a target blood pressure of ≤ 135/85mmHg.
- If antihypertensives are required a full discussion with the women regarding the risks and benefits of antihypertensive treatment should occur and should be documented (See Appendix 4 for patient information on antihypertensives) (New 2023).
- First line antihypertensives (New 2023):
  - Labetalol 200mg BD increasing to a maximum of 600mg QDS (contraindication severe asthma or Diabetes Typ1/2) -neonatal blood glucose (BG) monitoring if given in 3rd trimester or during labour at any dose.
  - Nifedipine MR 10mg BD increasing to a maximum of 40mg BD
  - Methyldopa 250-1000mg TDS if Labetalol or Nifedipine are not adequate
- BP should be checked within a week after any change of medication
- Antenatal visits based on individual needs
- Routine ultrasound – dating scan, anomaly scan plus additional fetal growth scans minimum 4 weekly from 28/40.
- Consider Home Blood Pressure Monitoring (HBPM) and adjust antenatal visits if appropriate. (New 2023)

2.4.5. Gestational Hypertension

In women with gestational hypertension, a full assessment should be carried out in Day Assessment. Consider underlying risk factors when planning ongoing care and monitoring. A plan should be documented in the notes including frequency of monitoring and thresholds for further review in secondary care.

2.4.6. Management of Hypertension: BP of 140/90 – 159/109 mmHg

- Do not admit routinely- though may be useful when initially commencing antihypertensives.
- Commence pharmacological treatment if BP remains above 140/90 mmHg.
- Aim for a BP 135/85 mmHg or less once treatment commenced.
- Monitor BP once or twice a week – consider HBPM.
- Repeat protein dipstick with every BP measurement
- Measure FBC, LFT and U&E's at presentation and then weekly.

- Carry out a growth scan of the fetus at diagnosis and repeat 2-4 weekly dependant on individual clinical need.

- Carry out a CTG if clinically indicated

2.4.7. **Management of Severe Hypertension BP of 160/110 mmHg or more**

- Admit, until blood pressure stable

- Commence pharmacological treatment

- Aim for a BP of 135/85 or less.

- Repeat BP every 15-30 mins until less than 160/110 mmHg, then reduce stepwise to 4 hourly depending on BP measurements whilst an inpatient

- If proteinuria not previously diagnosed, undertake urine dipstick for protein daily whilst an inpatient

- Once BP stable manage as above for gestational hypertension.

2.5. **Timing of birth for Chronic Hypertension and Gestational Hypertension**

2.5.1. Well controlled blood pressure DO NOT offer birth before 37 weeks unless there is another clinical indication. After 37 weeks timing agreed between woman and senior obstetrician and will depend on maternal/fetal condition.

2.5.2. Refractory severe hypertension – (e.g. needing more than 2 antihypertensives on maximum dose) senior obstetric involvement is required. Consider delivery after course of steroids (if required and if time permits).

2.6. **Pre-eclampsia**

The woman should be seen on the same day concerns of pre-eclampsia were identified in Day Assessment Unit by the midwifery team and registrar on call**.**

2.6.1. **Hypertension of 140/90 – 159/109 mmHg and proteinuria**

- Admit to hospital for surveillance and any interventions needed if there are concerns for the wellbeing of the woman or baby. Concerns could include any of the following:

  - sustained systolic blood pressure of 160 mmHg or higher

  - any maternal biochemical or haematological investigations that cause concern

  - signs of impending eclampsia

  - signs of impending pulmonary oedema

- other signs of severe pre-eclampsia
- suspected fetal compromise, e.g. SGA
- any other clinical signs that cause concern

- Offer pharmacological treatment if BP over 140/90mmHg
- Aim for a BP of 135/85mmHg or less
- Repeat BP every 4 hours as an inpatient, and at least every 48 hours if plan made to manage as an outpatient by a senior obstetrician.
- Only repeat protein measurement if marked change in clinical condition suggests the possibility of a progression to nephrotic levels of proteinuria or there is uncertainty over the diagnosis (previously borderline elevated PCR).
- Most women with pre-eclampsia will be inpatients and will already be prescribed LMWH
- Measure FBC, U&E, LFT's twice a week
- Perform a CTG at diagnosis and then if clinically indicated
- Carry out an ultrasound of the fetus at diagnosis and if normal every 2 weeks, any abnormal scan requires senior obstetrician input.
- The decision for outpatient management should only be made by a senior obstetrician. Monitoring should take place every 48 hours in the day assessment unit with obstetric review to ensure outpatient management remains appropriate. Women who have a UPCR >300 should be commenced on LMWH. Bloods should be repeated at alternate visits.

2.6.2. **Severe** – Severe Pre-eclampsia is pre-eclampsia with severe hypertension and/or with symptoms, and/or biochemical and/or haematological impairment **Please refer to** Eclampsia and Severe Pre-eclampsia Clinical Guideline (cornwall.nhs.uk)

2.7. Timing of Birth

2.7.1. Once a woman has completed 37 weeks of gestation birth should be initiated within 24-48 hours with a diagnosis of pre-eclampsia.

2.7.2. Prior to 37 weeks continue surveillance unless indications for early birth. There should be a clear plan documented in the patient's notes of possible indicators for early birth by a senior obstetrician.

2.7.2.1. Thresholds for considering early birth could include (but are not limited to);

- Inability to control maternal BP despite using 3 or more classes of antihypertensive in appropriate doses

- Maternal pulse oximetry < 90%
- Progressive deterioration in blood tests
- Ongoing neurological features
- Placental abruption/PV bleeding
- Reversed end-diastolic function in the umbilical artery doppler velocity
- Abnormal CTG
- Co-morbidities

2.7.2.2. An Obstetric consultant should be coordinating any considered preterm delivery.

2.7.2.3. When considering the option of planned early birth, take into account the woman's and baby's condition, risk factors (such as maternal comorbidities, multi-fetal pregnancy) and availability of neonatal unit beds.

2.7.2.4. Ensure the anaesthetic team are included in discussion regarding planned delivery of a woman with pre-eclampsia

2.7.2.5. Discuss with the neonatal team if the woman is pre 37 weeks of gestation or there are other concerns regarding the fetus.

2.7.2.6. Consider corticosteroids and magnesium sulphate where indicated in preterm delivery.

2.8. **Intrapartum care for Chronic Hypertension, Gestational Hypertension or Pre-eclampsia**

2.8.1. These women are high risk and require an obstetric review within 30 minutes of arrival on delivery suite and this must be documented in the notes. If the obstetric team are unavailable, it must be clearly documented in the notes why and when a review is expected. The co-ordinator should review the patient to assess the urgency. If a Dr is required urgently, immediate escalation to the Obstetric Consultant on call should take place. Until the review happens the co-ordinator should be kept up to date with any changes.

2.8.2. All women who are assessed as high risk must be reviewed by an obstetrician a minimum of 6 hourly and this must be documented by them in the notes. If this timeframe then the reason must be documented in the notes and the coordinator informed.

2.8.3. **Hypertension** (reading of 140/90mmHg - 159/109 mmHg)

- Measure blood pressure hourly
- Continue antenatal antihypertensive therapy

- Check FBC, U&E, LFT's as appropriate
- If blood pressure stable, do NOT limit second stage
- Continuous CTG
- Oxytocin to be used as per protocol

2.8.4. **Severe Hypertension** (reading of ≥ 160/110mmHg – for severe please see Severe Pre-eclampsia Guideline)

- Manage as above, but measure blood pressure continually and have a low threshold for operative delivery if the blood pressure is not responsive to initial therapy

2.9. **Postnatal Blood Pressure Management**

2.9.1. **Chronic Hypertension**

- Daily BP for the first 2 days after birth
- BP check at least once between day 3 and 5
- BP check as clinically indicated if antihypertensive treatment is being modified
- Aim to keep BP below 140/90 mmHg
- Continue treatment if required
- Offer a review with a specialist or GP at 2 weeks postnatally and 6-8 weeks
- If on methyldopa ensure this is switched to an alternative within 2 days of the woman giving birth

2.9.2. **Gestational Hypertension**

- Daily BP for the first two days after birth
- BP check at least once between day 3 and 5
- BP check as clinically indicated if antihypertension treatment is changing
- If on methyldopa ensure this is switched to an alternative within 2 days of the woman giving birth
- Reduce treatment if BP falls below 130/80 mmHg
- In women who didn't commence treatment antenatally, if their BP exceeds 150/100mmHg postnatally commence treatment

- Women should be discharged to the community with a written care plan which they can show to their Midwife and GP – this must include;
    - who will provide follow up care
    - frequency of BP monitoring required
    - thresholds for reducing or stopping treatment
    - indications to refer to primary care for a review
- women should be reviewed by their GP at 2 weeks and 6-8 weeks postnatally.

2.9.3. **Pre-eclampsia**

- Offer women discharge to community care if they have no ongoing signs of pre-eclampsia, blood pressure is below 150/100 (either with or without treatment) and blood results are stable or improving**.**
- Repeat BP at least 4 hourly as an inpatient
- At least once between day 3-5
- Alternate days for up to 2 weeks until stable or the woman is off treatment **by Midwife, GP, practice nurse, MSW.**
- If on methyldopa ensure this is switched to an alternative within 2 days of the woman giving birth
- Ask about severe headache and epigastric pain every time BP is taken
- Commence antihypertensive if BP exceeds 150/100
- Reduce antihypertensive treatment if BP falls below 130/80
- Check bloods at 48hrs after birth or step down of higher level care and only repeat if abnormal
- Women should be discharged to the community with a written care plan which they can show to their Midwife and GP – this must include – who will provide follow up care, frequency of BP monitoring required, thresholds for reducing or stopping treatment, indications to refer to primary care for a review and self-monitoring of symptoms
- Review with their GP at 2 weeks postnatally and 6-8 weeks.
- Offer a urine dip at 6 weeks – if they still have proteinuria then recommend a review with their GP at 3 months post birth to assess kidney function.

2.9.4. **Antihypertensive and Breastfeeding Advice**

- Explain that antihypertensives can pass into breast milk – however the levels are very low and unlikely to have any clinical effect
- When treating women in the post-natal period it is reasonable to continue their antenatal treatments if blood pressure is stable.
- Explain that disclaimers from manufacturers are not usually because of any specific safety concerns – more than most medicines are not tested in pregnancy or breastfeeding
- On discharge advise women to monitor their babies for drowsiness, lethargy, pallor, cold peripheries or poor feeding and to highlight to a healthcare professional their concerns and that they are taking an antihypertensive. Offer low threshold for referral in the postnatal period to Infant Feeding Team support services**.**
- Offer enalapril to treat hypertension in the postnatal period, especially as taken once daily only, with monitoring of maternal renal function. (New 2023)
- For women of black African or Caribbean family origin consider nifedipine or amlodipine (if this has previously been successful in this woman)
- If BP is not controlled on a single agent consider a combination of enalapril, nifedipine or atenolol/labetalol based on contraindications, how combinations are tolerated and what has worked previously.
- Avoid using diuretics, angiotensin receptor blockers to treat hypertension in the postnatal period
- Women who are not planning to express or breastfeed can be treated in primary care as per the adult hypertension NICE guidelines.

2.9.5. **Labetalol and the neonate**

Babies born to a mother who has been treated with labetalol in the antenatal period are at an increased risk of developing neonatal hypoglycaemia. Observe for this closely and follow the neonatal hypoglycaemia guideline if indicated.

2.10. **Advice regarding future pregnancies and long-term health implications and Advice regarding recurrence rates of hypertensive disorders of pregnancy**

2.10.1. The overall future recurrence risk is 1 in 5

2.10.2. Consider pre-pregnancy counselling in woman who have delivered before 34 weeks due to hypertensive disorders of pregnancy

2.10.3. Advise woman who have had a hypertensive disorder of pregnancy that this is associated with an increased risk of hypertension and cardiovascular disease later in life.

2.10.4. Advise woman to reduce their risk by avoiding smoking and maintaining a healthy weight

2.11. Management of pregnancy with pre-eclampsia (NICE, 2019)

	Degree of hypertension	
	Hypertension: **blood pressure of 140/90–159/109 mmHg**	**Severe hypertension:** **blood pressure of 160/110 mmHg or more**
Admission to hospital	Admit if any clinical concerns for the wellbeing of the woman or baby	Admit, but if BP falls below 160/110 mmHg then manage as for hypertension
Antihypertensive pharmacological treatment	Offer pharmacological treatment if BP remains above 140/90 mmHg	Offer pharmacological treatment to all women
Target blood pressure once on antihypertensive treatment	Aim for BP of 135/85 mmHg or less	Aim for BP of 135/85 mmHg or less
Blood pressure measurement	At least every 48 hours, and more frequently if the woman is admitted to hospital	Every 15–30 minutes until BP is less than 160/110 mmHg, then at least 4 times daily while the woman is an inpatient, depending on clinical circumstances
Dipstick proteinuria testing [a]	Only repeat if clinically indicated, for example, if new symptoms and signs develop or if there is uncertainty over diagnosis	Only repeat if clinically indicated, for example, if new symptoms and signs develop or if there is uncertainty over diagnosis
Blood tests	Measure full blood count, liver function and renal function twice a week	Measure full blood count, liver function and renal function 3 times a week
Fetal assessment	Offer fetal heart auscultation at every antenatal appointment Carry out ultrasound assessment of the fetus at diagnosis and, if normal, repeat every 2 weeks	Offer fetal heart auscultation at every antenatal appointment Carry out ultrasound assessment of the fetus at diagnosis and, if normal, repeat every 2 weeks Carry out a CTG at diagnosis and then only if clinically indicated

	Degree of hypertension	
	Hypertension: **blood pressure of 140/90–159/109 mmHg**	**Severe hypertension:** **blood pressure of 160/110 mmHg or more**
	Carry out a CTG at diagnosis and then only if clinically indicated	
[a] Use an automated reagent-strip reading device for dipstick screening for proteinuria in a secondary care setting. Abbreviations: BP, blood pressure; CTG, cardiotocography.		

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	The audit will take into account record keeping by obstetricians and midwives. Any woman with a hypertensive disorder in pregnancy/during the postnatal period. • Was Aspirin prescribed to women with: one high risk factor or two (or more) moderate factors? • Was antihypertensive medication prescribed appropriately? • Was BP measured every 4 hours as an inpatient? • Was IOL offered to women at 37 weeks within 24-28 hours? • Was BP measured hourly in labour? • Were daily BP's measured postnatally until day 3 if discharged? • Day 3-5 BP measured?
Lead	Dr Sophie Haynes, Consultant Obstetrician
Tool	Audit and review tool using patient documentation.
Frequency	• This audit will be added to the rolling audit programme and will take place every three years 1% of all women who have had a hypertensive disorder
Reporting arrangements	Reported through the Maternity Risk Management Forum and Audit meetings
Acting on recommendations and Lead(s)	Dr Sophie Haynes, Consultant Obstetrician

Information Category	Detail of process and methodology for monitoring compliance
Change in practice and lessons to be shared	Any lessons learnt will be fed back through the Maternity Risk Management Forum and shared in the monthly Risk Management Newsletter

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion and Human Rights Policy' or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Management of Hypertensive Disorders of Pregnancy Clinical Guideline V3.0
This document replaces (exact title of previous version):	Management of Hypertensive Disorders of Pregnancy Clinical Guideline V2.3
Date Issued/Approved:	February 2023
Date Valid From:	February 2023
Date Valid To:	February 2026
Directorate / Department responsible (author/owner):	Dr Kristin Fiedler
Contact details:	01872 25 29 37
Brief summary of contents:	Hypertensive disorders carry significant risks to maternal health and remain one of the leading causes of maternal mortality; they also carry a risk for the baby in terms of perinatal mortality, pre-term birth and low birth weight. This guideline aids the diagnosis and classification of the hypertensive disorders of pregnancy and guides management of these.
Suggested Keywords:	Hypertension, Pre-eclampsia, eclampsia, Labetalol, PET, hypertensive, toxaemia, LFTs, breast feeding, blood pressure, BP, proteinuria, gestational, Methyldopa, chronic, severe, mmHg, anti-hypertensive
Target Audience:	RCHT: Yes CFT: No CIOS ICB: No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Midwifery Guidelines Group
General Manager confirming approval processes:	Caroline Chappell

Information Category	Detailed Information
Name of Governance Lead confirming approval by specialty and care group management meetings:	Caroline Amukusana
Links to key external standards:	None
Related Documents:	• National Institute for Health and Clinical Excellence (NICE 2019) Hypertension in pregnancy: diagnosis and management - NICE guideline, London: NICE • Thomas W.Hale, 2019. Medications and Mothers Milk: Hale Publishing, Amarillo, 2019
Training Need Identified?	No
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Midwifery and Obstetrics

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
5th December 2013	1.0	Initial Issue	Dr Aylur Rajasri Consultant Obstetrician
12th January 2017	1.0	No changes and will be reviewed new publication of NICE guidance 2017 in circulation and to consider merging with eclampsia guideline	Dr Aylur Rajasri Consultant Obstetrician
October 2019	V2.0	Full update to include most recent NICE guidance and breastfeeding input	Dr Sophie Haynes, Obstetric Consultant and Helen Le Grys Obstetric Registrar
November 2019	V2.1	2.9.5 Addition re labetalol and increase risk of neonatal hypoglycaemia.	Dr Sophie Haynes, Obstetric Consultant and Helen Le Grys Obstetric Registrar

Date	Version Number	Summary of Changes	Changes Made by
January 2020	V2.2	2.6.1 Addition re management of women with UPCR >300.	Dr Sophie Haynes, Obstetric Consultant and Dr Rob Holmes, Obstetric Consultant
May 2020	V2.3	Addition of 2.8.1 and 2.8.2 about Dr assessments and frequency of reviews	Julie Walton Audit Midwife
February 2023	V3.0	Full version update. All new additions labelled ‘New 2023’ Addition of new Trust template	Kristin Fiedler, Consultant Obstetrician

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Management of Hypertensive Disorders of Pregnancy Clinical Guideline V3.0
Directorate and service area:	Obs and Gynae Directorate
Is this a new or existing Policy?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Dr Sophie Haynes
Contact details:	01872 252937

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	To give guidance to obstetricians and midwives upon the diagnosis, classification and management of women with hypertensive disorders during pregnancy and the post-natal period.
2. Policy Objectives	Ensure timely diagnosis and management of hypertensive disorders in pregnancy. To ensure the correct follow up for women with hypertensive disorders during the post-natal period.
3. Policy Intended Outcomes	Safe treatment and management of hypertensive disorders in pregnant and newly delivered women.
4. How will you measure each outcome?	Compliance Monitoring Tool.
5. Who is intended to benefit from the policy?	All pregnant women with hypertension during pregnancy and the postnatal period.

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/ groups:** Midwifery Guidelines Group Care Group Board
6c. What was the outcome of the consultation?	Agreed
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff or patient surveys:** No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	

Protected Characteristic	(Yes or No)	Rationale
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Dr Sophie Haynes

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis

Appendix 3. Likelihood of recurrence of hypertensive disorders of pregnancy (NICE, 2019)

	Type of hypertension in previous or current pregnancy		
Prevalence of hypertensive disorder in a future pregnancy	**Any hypertension in pregnancy**	**Pre-eclampsia**	**Gestational hypertension**
Any hypertension	Approximately 21% (1 in 5 women)	Approximately 20% (1 in 5 women)	Approximately 22% (1 in 5 women)
Pre-eclampsia	Approximately 14% (1 in 7 women)	Up to approximately 16% (1 in 6 women) If birth was at 28–34 weeks[a]: approximately 33% (1 in 3 women) If birth was at 34–37 weeks: approximately 23% (1 in 4 women)	Approximately 7% (1 in 4 women)
Gestational hypertension	Approximately 9% (1 in 11 women)	Between approximately 6 and 12% (up to 1 in 8 women)	Between approximately 11 and 15% (up to 1 in 7 women)
Chronic hypertension	Not applicable	Approximately 2% (up to 1 in 50 women)	Approximately 3% (up to 1 in 34 women)
[a] No evidence was identified for women who gave birth at less than 28 weeks, but the committee agreed that the risk was likely to be at least as high, if not higher, than that for women who gave birth between 28 and 34 weeks.			

	Type of hypertension in current or previous pregnancy			
Risk of future cardiovascular disease [a, b]	**Any hypertension in pregnancy**	**Pre-eclampsia**	**Gestational hypertension**	**Chronic hypertension**
Major adverse cardiovascular event	Risk increased (up to approximately 2 times)	Risk increased (approximately 1.5–3 times)	Risk increased (approximately 1.5–3 times)	Risk increased (approximately 1.7 times)

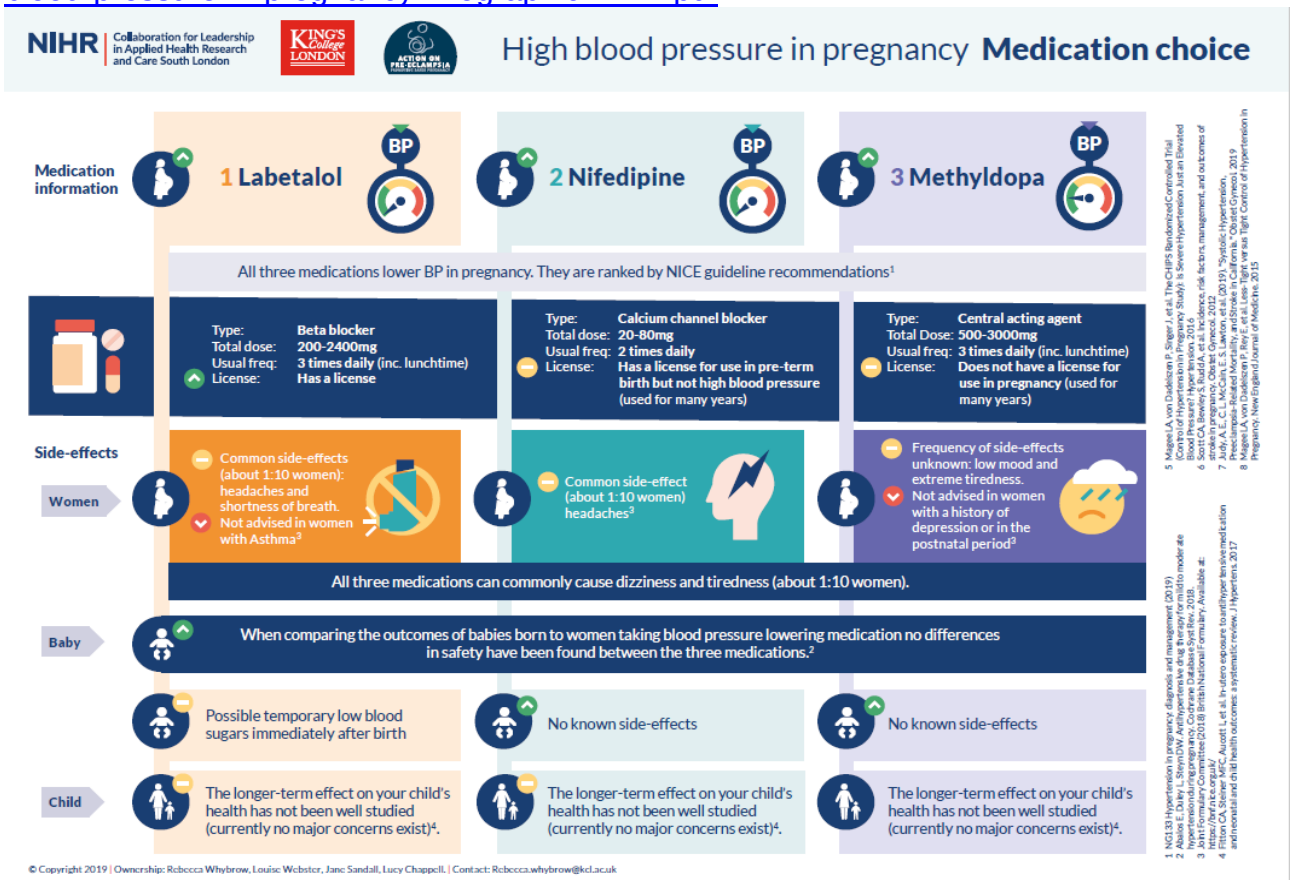
	Type of hypertension in current or previous pregnancy			
Risk of future cardiovascular disease [a, b]	**Any hypertension in pregnancy**	**Pre-eclampsia**	**Gestational hypertension**	**Chronic hypertension**
Cardiovascular mortality	Risk increased (up to approximately 2 times)	Risk increased (approximately 2 times)	(no data)	(no data)
Stroke	Risk increased (up to approximately 1.5 times)	Risk increased (approximately 2–3 times)	Risk may be increased	Risk increased (approximately 1.8 times)
Hypertension	Risk increased (approximately 2–4 times)	Risk increased (approximately 2–5 times)	Risk increased (approximately 2–4 times)	(not applicable)

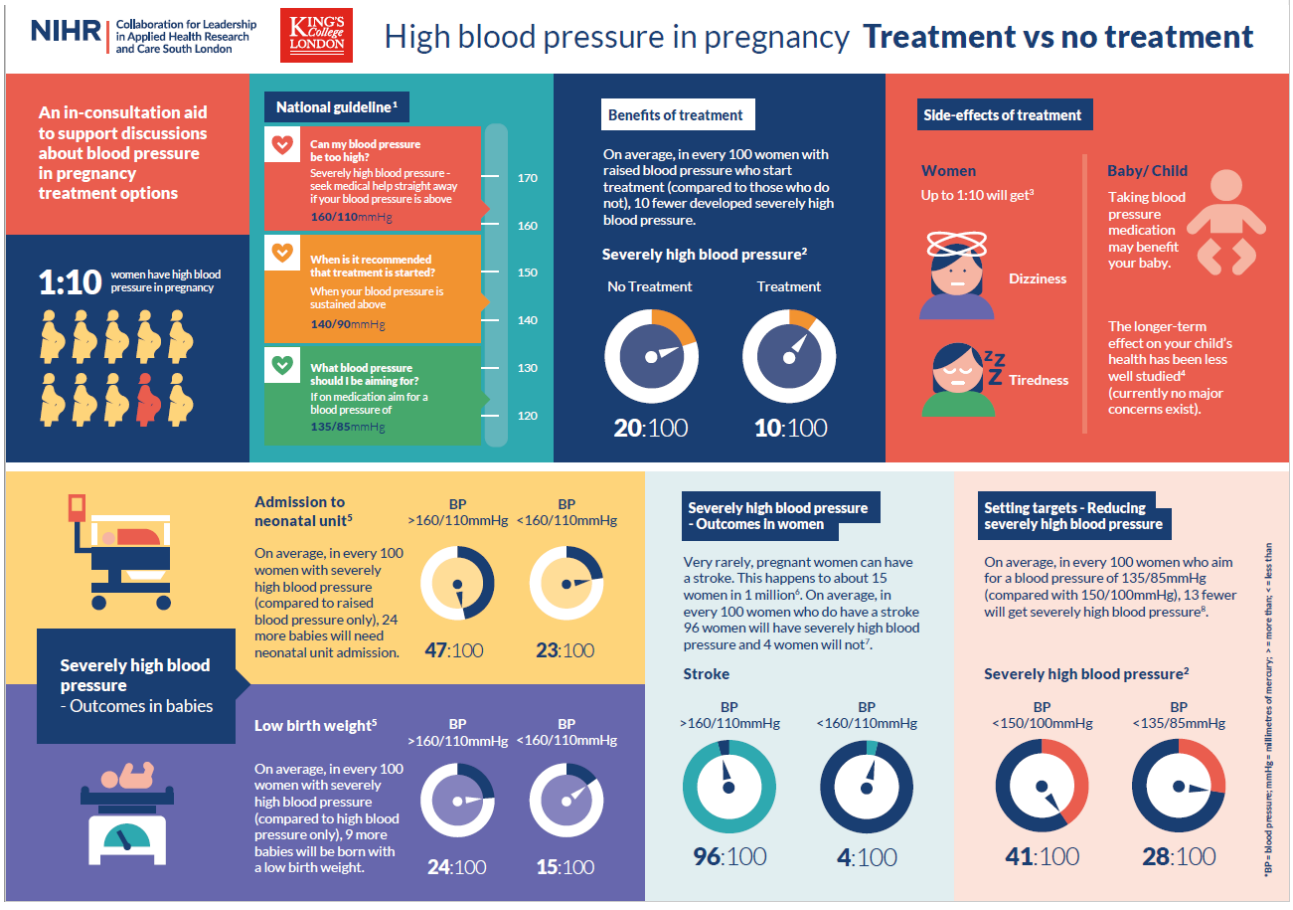
[a] Risks described are overall estimates, summarised from risk ratios, odds ratios and hazard ratios.

[b] Increased risk is compared to the background risk in women who did not have hypertensive disorders during pregnancy. Absolute risks are not reported, because these will vary considerably, depending on the follow-up time (range from 1 to 40 years postpartum).

Appendix 4. High blood pressure in pregnancy

Available at- https://action-on-pre-eclampsia.org.uk/wp-content/uploads/2019/11/High-blood-pressure-in-pregnancy-infographic-WEB.pdf





Appendix 5. PIGF flowchart