NHS London Clinical Networks

Networked Maternal Medicine Services in London

This document offers guidance in the management of women with underlying medical conditions in pregnancy. Depending on the complexity of the condition the relative contribution of the maternal medicine hub and local maternity centres may change.

London Maternity Clinical Network
December 2021

Medical conditions categories

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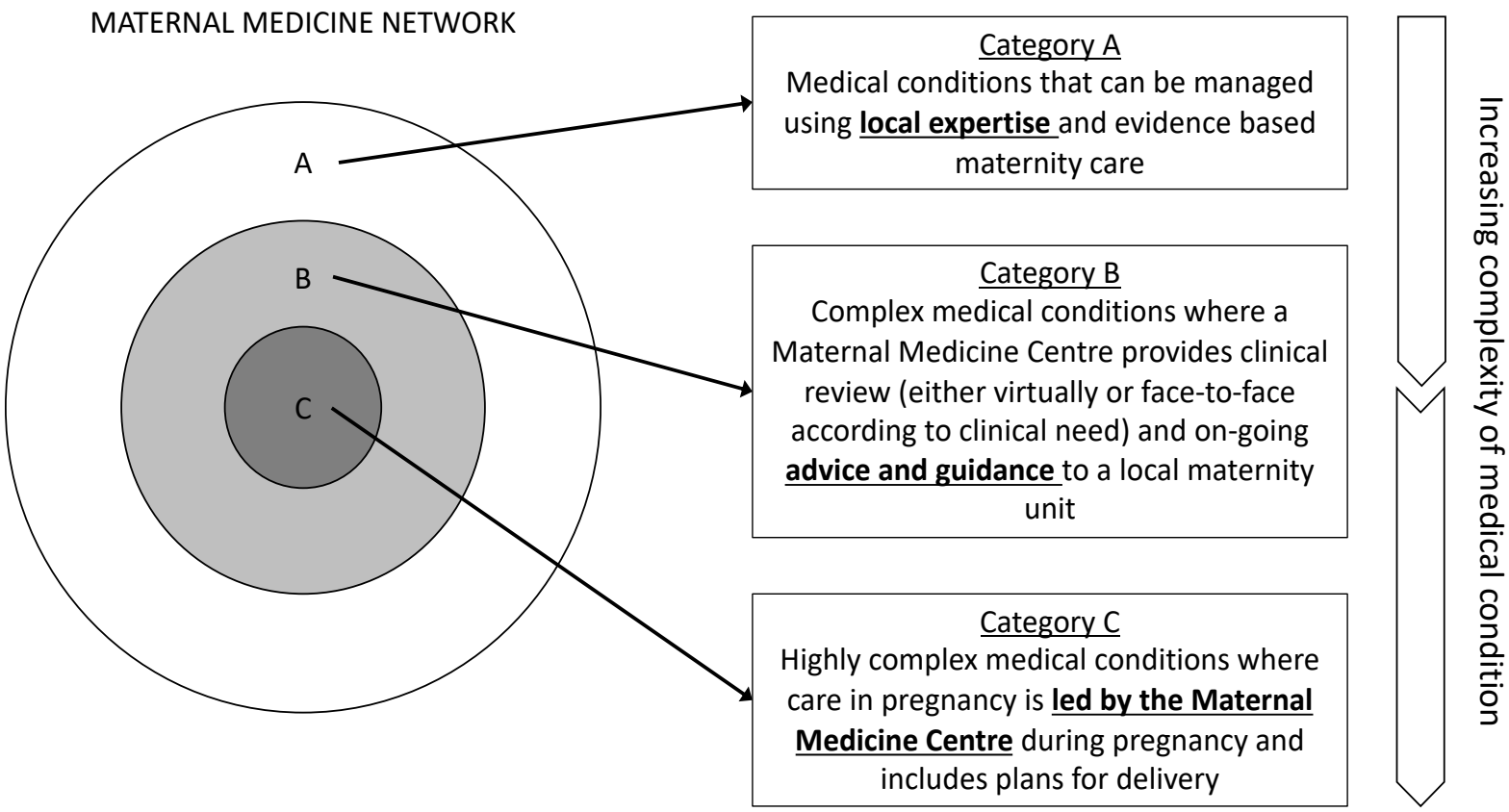
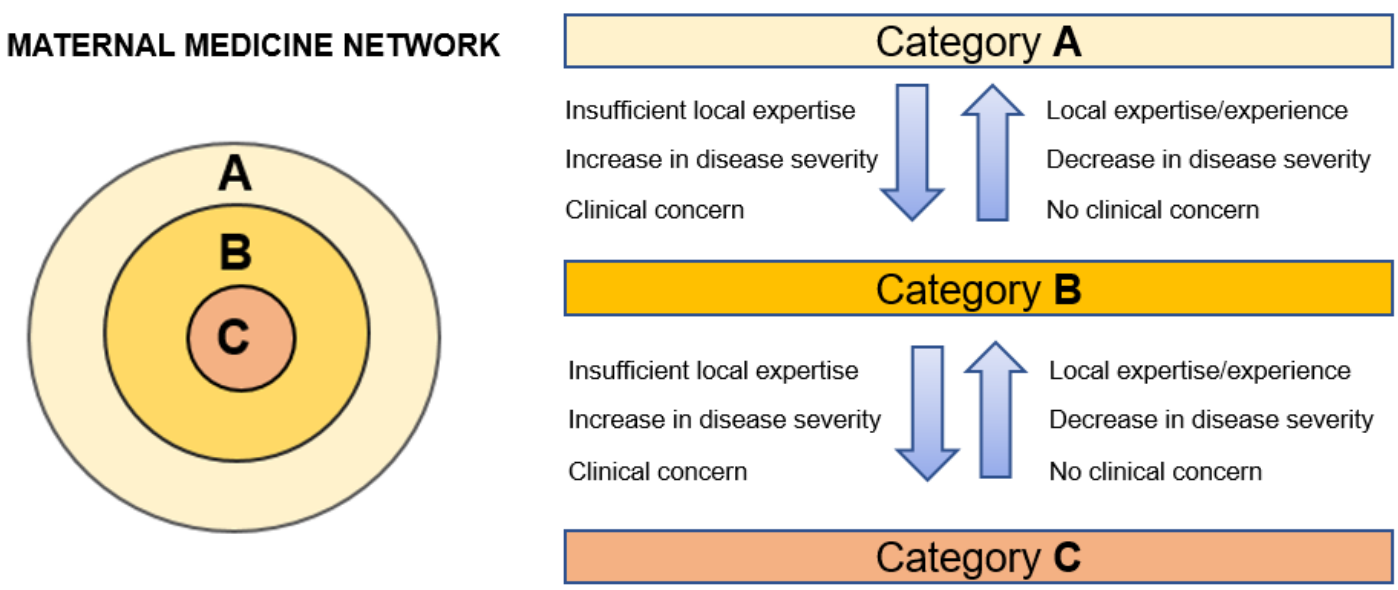
The maternal medicine network is made up of:

- Maternal medicine centres (hub)
- Local maternity centres (spoke)

Medical conditions are classified as category A, B or C, depending on complexity:



These categories are a guide only. They can be modified according to local expertise and experience. Where local expertise is sufficient, a condition may move from category C to B, or B to A. An example would be epilepsy, where there may be a local joint obstetric epilepsy clinic including a neurologist with expertise in epilepsy in pregnancy, in which case care could remain at a local centre. Where local expertise is insufficient, when a condition progresses or increases in severity during pregnancy, or when there is clinical concern, a condition should move from category A to B, or B to C:



Pan-London Pathways

The medical conditions on this page are commissioned services that may not align with maternal medicine networks. Each maternal medicine network will need to agree the provision of these services for pregnancy as care may be affected by the availability of co-located maternity and neonatal services. Each network should provide a list of the centre(s) offering specialist management for the above conditions including information and contact details for co-located maternity services. Whenever possible, pregnant or postpartum women presenting with these conditions should have access to the same specialist medical care as non-pregnant patients, with a plan made for safe obstetric and neonatal management.

ST-Elevation Myocardial Infarction

Primary percutaneous coronary intervention (PCI) centres reduce morbidity and mortality from myocardial infarction. Each network should provide a list of the primary PCI centres both within and geographically close to their network including information and contact details for co-located maternity services. If the nearest primary PCI centre is not co-located with obstetric care, a plan for timely and appropriate management of myocardial ischaemia with appropriate provision of maternity care is required. Pregnant patients ≥ 20 weeks gestation meeting criteria for the STEMI or HR ACS pathway should be conveyed to the nearest Heart Attack Centre that has onsite obstetrics (the only HACs which do NOT have obstetrics are Harefield and Bart's). Pregnant patients of gestation < 20 weeks should be conveyed to the nearest HAC.

Pulmonary Hypertension

Pulmonary hypertension is an extremely high-risk condition in pregnancy. Treatment often involves multi agent targeted therapies that require prescription and oversight by a nationally commissioned PH centre.
Pregnant women with PH should be referred to and managed by one of the centres below, all of which have co-located maternity units and Level 3 neonatal services:

- Imperial (non-CHD related PH), contact Rachel Davies
- Guy's and St. Thomas' and Royal Brompton Hospitals, St. Thomas' site (CHD and non-CHD related), contact Hannah Douglas or Laura Price
- St Georges (if already under their care), contact Brendan Madden.

Acute Stroke

Hyperacute stroke units (HASUs) were commissioned to improve the care for patients with acute stroke. They are able to thrombolyse and use clot retrieval for patients with acute ischaemic strokes. Each network should provide a list of the HASUs both within and geographically close to their network including information and contact details for co-located maternity services. If the nearest primary HASU is not co-located with obstetric care, a plan for timely and appropriate management of acute stroke with appropriate provision of maternity care is required.

Neurosurgery

Neurosurgical centres are able to offer intervention for haemorrhagic stroke and other causes of cerebral haemorrhage presenting in pregnancy. The neurosurgical units in London are :-

- Charing Cross (no co-located obstetric unit)
- Royal Free Hospital (co-located obstetric unit, Level 1 neonatal care)
- Royal London (co-located obstetric unit, Level 3 neonatal care) or
- Queen's Hospital, Romford (co-located obstetric unit, Level 2 neonatal care)
- King's College Hospital co-located obstetric unit, (co-located obstetric unit, Level 3 neonatal care)
- St Georges (co-located obstetric unit, Level 3 neonatal care)

Acute Liver Failure

Women with liver failure in pregnancy/post-partum can be referred to:

- Royal Free Hospital (co-located obstetric unit, Level 1 neonatal care)
- King's College Hospital (co-located obstetric unit, Level 3 neonatal care)

Maternal Medicine Networks in London

NORTH EAST LONDON			
Maternal Medicine Centre	Royal London Hospital	Tower Hamlets E1	020 7377 7000
Local Maternity Centre	Homerton University Hospital	Hackney E9	020 8510 5555
Local Maternity Centre	Newham University Hospital	Newham E13	020 7476 4000
Local Maternity Centre	Queen's Hospital	Havering RM7	0330 400 4333
Local Maternity Centre	Whipps Cross University Hospital	Waltham Forest E11	020 8359 5522
Local Maternity Centre	Barnet Hospital	Barnet EN5	020 8216 4600
NORTH CENTRAL LONDON			
Maternal Medicine Centre	University College Hospital	Camden NW1	020 3456 7890
Local Maternity Centre	North Middlesex Hospital	Enfield N18	020 8887 2000
Local Maternity Centre	Royal Free Hospital	Camden NW3	020 7794 0500
Local Maternity Centre	Whittington Hospital	Islington N19	020 7272 3070
NORTH WEST LONDON			
Maternal Medicine Centres	Queen Charlotte's & Chelsea	Hammersmith W12	020 7272 3070
	Chelsea & Westminster	Chelsea SW10	020 3315 8000
Local Maternity Centre	Hillingdon Hospital	Hillingdon UB8	01895 238282
Local Maternity Centre	Northwick Park	Brent HA1	020 8864 3232
Local Maternity Centre	St. Mary's Hospital	Westminster W2	020 3312 6666
Local Maternity Centre	West Middlesex	Hounslow TW7	020 8560 2121
SOUTH EAST LONDON			
Maternal Medicine Centre	St Thomas' Hospital	Southwark SE1	020 7188 7188
Local Maternity Centre	King's College London	Lambeth SE5	020 3299 9000
Local Maternity Centre	Lewisham University Hospital	Lewisham SE13	020 8333 3000
Local Maternity Centre	Princess Royal University Hospital	Bromley BR6	01689 863000
Local Maternity Centre	Queen Elizabeth Hospital	Greenwich SE18	020 8836 6000
SOUTH WEST LONDON			
Maternal Medicine Centres	St George's University Hospital	Wandsworth SW17	020 8672 1255
	St. Helier Hospital	Sutton SM5	020 8296 2000
Local Maternity Centre	Croydon University Hospital	Croydon CR7	020 8401 3000
Local Maternity Centre	Epsom Hospital	Epsom KT18	01372 735735
Local Maternity Centre	Kingston Hospital	Kingston KT2	020 8546 7711

London Maternal Medicine Networks Contacts

NORTH EAST LONDON		
Lead Physician	Kate Wiles	kate.wiles@nhs.net
Lead Obstetrician	Rehan Khan	rehan.khan1@nhs.net
Lead Midwife	Nafiza Anwar Hayley Martin	nafiza.anwar@nhs.net hayley.martin2@nhs.net
Lead Anaesthetist	Parvesh Verma	parvesh.verma3@nhs.net
NORTH CENTRAL LONDON		
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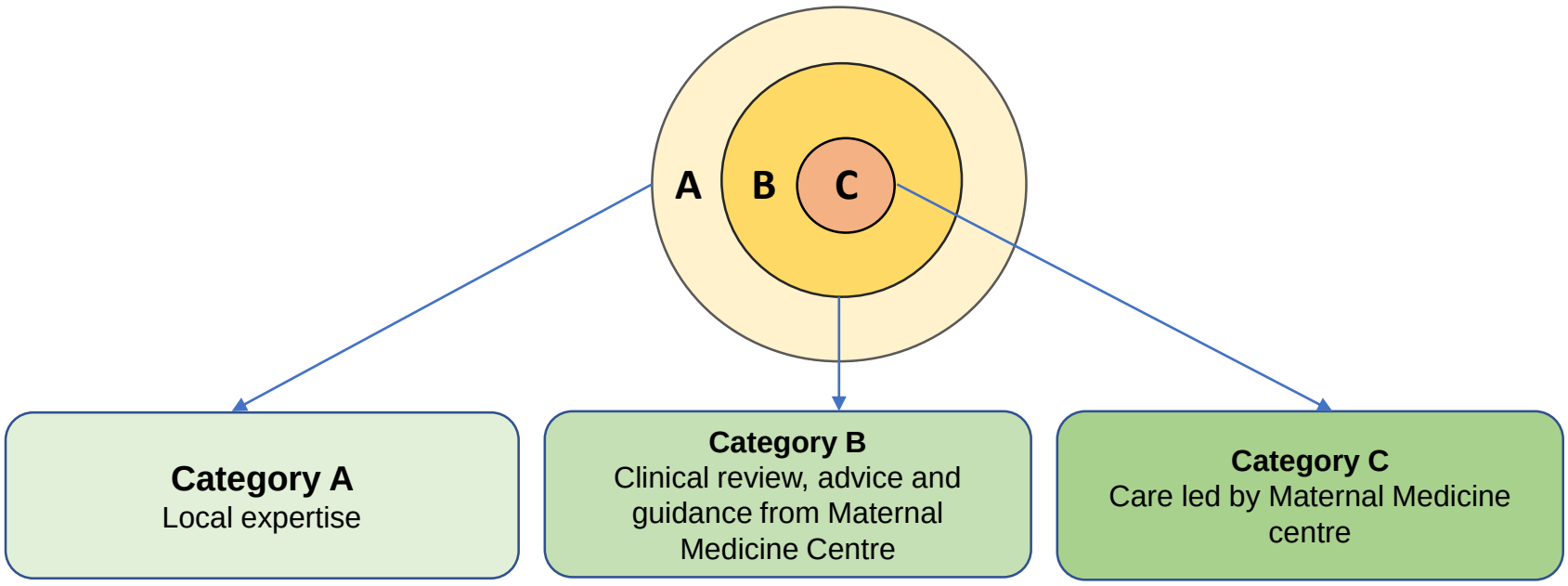
Lead Midwife	Luci Buxton	lucinda.buxton@nhs.net
Lead Anaesthetist	Rory Bell	rory.bell@nhs.net
NORTH WEST LONDON		
Lead Physician	Charlotte Frise	charlotte.frise@nhs.net
Lead Obstetrician	Mandish Dhanjal	mandish.dhanjal@nhs.net
Lead Midwife	Nora Farrelly	norafarrelly@nhs.net
Lead Anaesthetist	Vinnie Sodhi	vinnie.sodhi@nhs.net
Clinical Director	Joanna Girling	joanna.girling@nhs.net
SOUTH EAST LONDON		
Lead Physician	Catherine Nelson-Piercy	catherine.nelson-piercy@gstt.nhs.uk
Lead Obstetrician	Sonji Clarke	sonji.clarke@gstt.nhs.uk
Lead Midwife	Sharon Elder	sharon.elder@gstt.nhs.uk
Lead Anaesthetist	Lindsay Arrandale	Lindsay.arrandale@gstt.nhs.uk
SOUTH WEST LONDON		
Lead Physician	Lila Mayahi	lila.mayahi@nhs.net
Lead Obstetrician	Hassan Shehata	hassan.shehata@nhs.net
Lead Midwife	Carolyn Romer	carolyn.romer1@nhs.net
Lead Anaesthetist	Renate Wendler	renate.wendler@nhs.net

Heart Disease



Mild pulmonary stenosis	Mild reduced left ventricular ejection fraction (>45%)	Pulmonary hypertension*
Small/repaired patent ductus arteriosus	Hypertrophic cardiomyopathy with no high-risk features	Left ventricular ejection fraction <45%
Mitral valve prolapse	Repaired aortic coarctation	Severe aortic stenosis
Repaired atrial septal defect	Mild mitral stenosis	Systemic right ventricle
Repaired ventricular septal defect	Mild-moderate aortic stenosis	Fontan
Isolated atrial or ventricular ectopic beats	Other valve lesions not listed in A or C	Previous peripartum cardiomyopathy
Postural tachycardia syndrome (PoTS)	Atrioventricular septal defect	Ventricular arrhythmia
	Repaired tetralogy of Fallot	Mechanical valve
	Supraventricular arrhythmias	Moderate-severe mitral stenosis
	Turner syndrome without aortic dilatation	Aortic dilatation
	Treated ischaemic heart disease	Heart transplant
	Myocarditis	New ischaemic heart disease*

*see Pan-London Pathway

HEART DISEASE CONTACTS IN LONDON		
North East London	Kate von Klemperer	katherine.vonklemperer@nhs.net
North Central London	Fiona Walker	fiona.walker16@nhs.net
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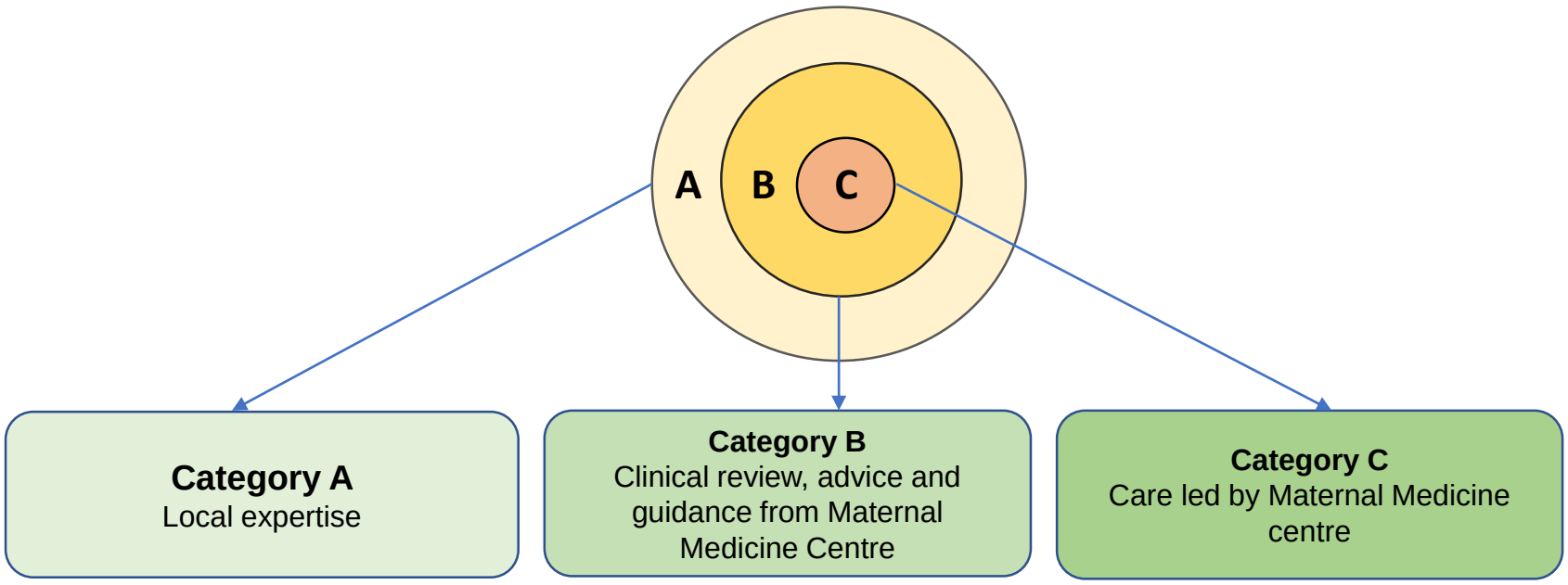
South East London	Hannah Douglas	hannah.douglas@gstt.nhs.uk
South West London	Rajan Sharma	Rajan.sharma@stgeorges.nhs.uk

AVAILABLE CLINICAL GUIDANCE:

2018 ESC Guidelines for the management of cardiovascular diseases during pregnancy: The Task Force for the Management of Cardiovascular Diseases during Pregnancy of the European Society of Cardiology (ESC). European Heart Journal 2018; 39 (34):3165–3241.

Lung Disease



Uncomplicated Asthma	Complicated asthma: • Repeated presentations of asthma (≥3) in pregnancy • Asthma receiving biologics • Long-term corticosteroids	Sickle chest crisis (see Haematology pathway)
Pneumonia	Restrictive lung disease (e.g., ILD, kyphoscoliosis) with FVC >50%	Restrictive lung disease (e.g., ILD, kyphoscoliosis) with FVC <50%
TB	Any respiratory condition receiving immunotherapy / biologics	Neuromuscular disorders with respiratory muscle involvement e.g. myasthenia gravis, Guillain-Barré syndrome
Chronic Obstructive Airways Disease	Bronchiectasis	Cystic fibrosis
Pneumothorax	New diagnosis of obstructive sleep apnoea/obesity hypoventilation in pregnancy	Lung transplant
Sarcoidosis without restrictive lung disease, no renal involvement	COVID pneumonitis	Pulmonary vasculitis
Managed obstructive sleep apnoea/obesity hypoventilation	Lung cancer	
Pulmonary embolus without haemodynamic compromise	Pulmonary embolus with haemodynamic compromise	

LUNG DISEASE CONTACTS IN LONDON		
North East London	Gavin Thomas (ILD) Paul Pfeffer (Asthma)	gavin.thomas5@nhs.net paul.pfeffer1@nhs.net
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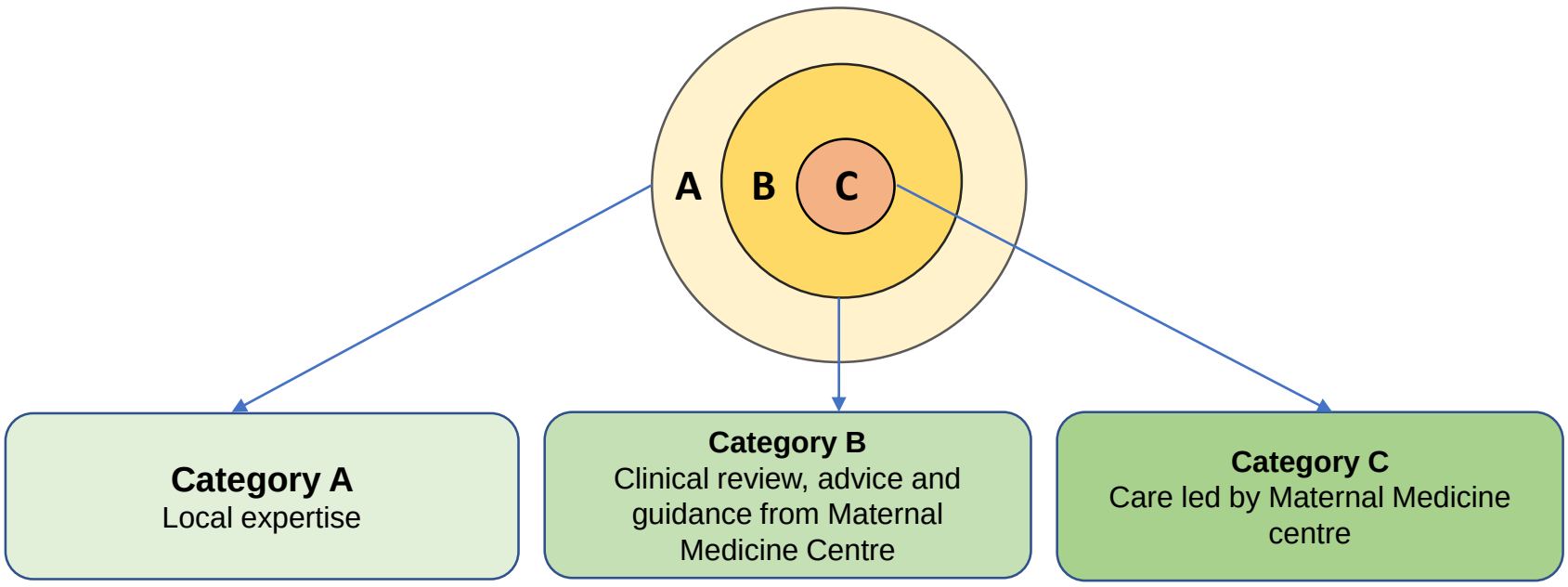
North West London	via Charlotte Frise	charlotte.frise@nhs.net
South East London	Boris Lams	boris.lams@gstt.nhs.uk
South West London	Nicola Walters	nicola.walters@nhs.net

AVAILABLE CLINICAL GUIDANCE:

- British guideline on the management of asthma. British Thoracic Society/Scottish Intercollegiate Guidelines Network (SIGN158), 2019.
- Thromboembolic Disease in Pregnancy and the Puerperium: Acute Management. RCOG Green Top Guideline 37b, April 2015

Gastrointestinal and Liver Disease



Uncomplicated inflammatory bowel disease in remission or inflammatory bowel disease managed in a specialist IBD-obstetric service at a local centre	Complex inflammatory bowel disease without access to specialist IBD-obstetric service at a local centre: • Active disease despite treatment • Biologics • Corticosteroids • Peri-anal disease • Pouch/stoma	Complex pancreatitis • Not responding to treatment • Recurrent disease • Hypertriglyceridaemia • IR/surgical intervention
Hyperemesis gravidarum	Acute and chronic pancreatitis	Portal hypertension
Constipation	Treated GI malignancy	Active malignancy
Gallstones	Unexplained jaundice	Decompensated liver disease/liver failure/cirrhosis*
Gastro-oesophageal reflux disease	Acute fatty liver of pregnancy	Liver transplant
Coeliac disease	Achalasia	
Viral hepatitis	Liver infarction/haematoma	
Intrahepatic cholestasis (bile acids <100)	Intrahepatic cholestasis (bile acids ≥100)	
Cholecystitis	Autoimmune hepatitis	
Viral hepatitis**	Wilson's disease	
HELLP	Crigler Najjar syndrome	
Non-alcoholic fatty liver disease with normal fibroscan and no metabolic complications	Non-alcoholic fatty liver disease with abnormal fibroscan or metabolic complications	
	Primary sclerosing cholangitis	
	Primary biliary cirrhosis	
	Haemochromatosis	

*see Pan-London Pathway

** New diagnoses of Hepatitis B should be referred directly to local hepatology services

GASTROENTEROLOGY AND LIVER DISEASE CONTACTS IN LONDON		
North East London	Bel Kok (GI) Janet Dearden (Liver)	klaartje.kok1@nhs.net janet.dearden@nhs.net
North Central London	Sara MacCartney	sara.mccartney@nhs.net
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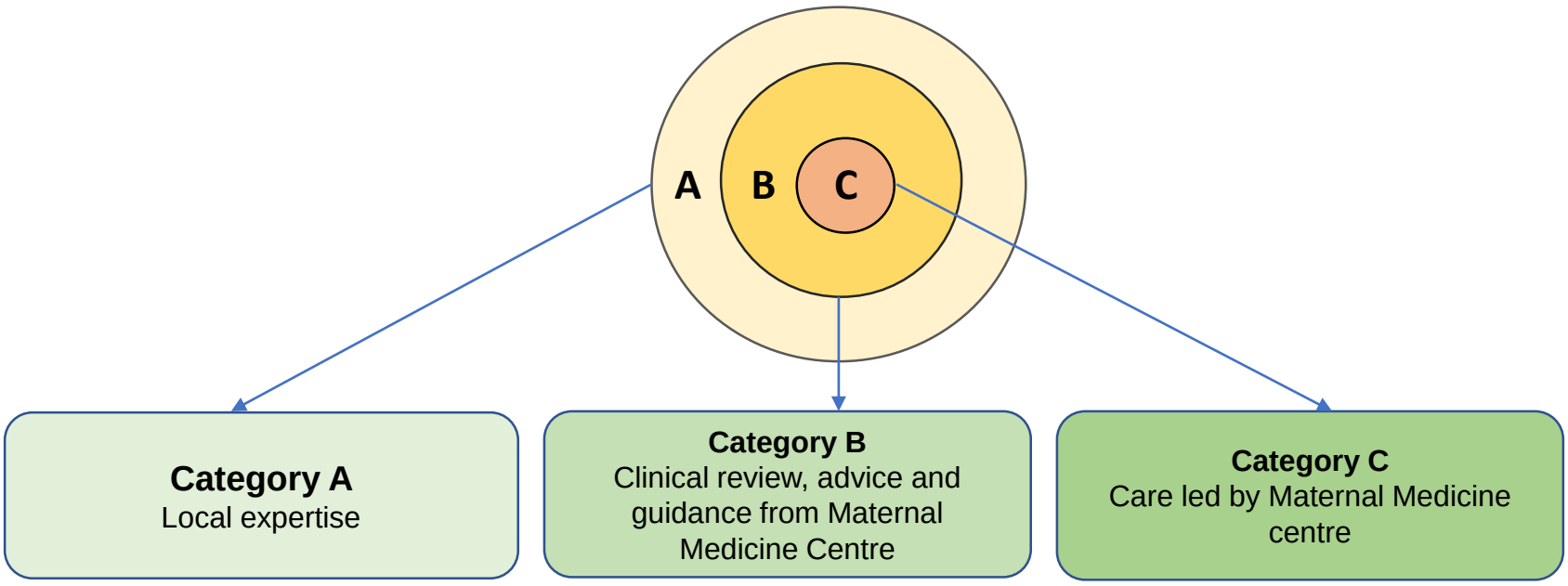
South East London	Joel Mawdsely	joel.mawdsley@gstt.nhs.uk
South West London	Kamal Patel	kamal.patel@stgeorges.nhs.uk

AVAILABLE CLINICAL GUIDANCE:

- British Society of Gastroenterology consensus guidelines on the management of inflammatory bowel disease in adults. Gut 2019; 68:s1-s106. http://dx.doi.org/10.1136/gutjnl-2019-318484
- Standards for the provision of antenatal care for patients with inflammatory bowel disease. British Society of Gastroenterology 2020. doi:10.1136/flgastro-2020-101459.
- The Second European Evidenced-Based Consensus on Reproduction and Pregnancy in Inflammatory Bowel Disease. Journal of Crohn's and Colitis 2015; 9(2): 107–124.
- Intrahepatic cholestasis. RCOG Green Top Guideline, due 2022. .

Diabetes and Endocrine Disease



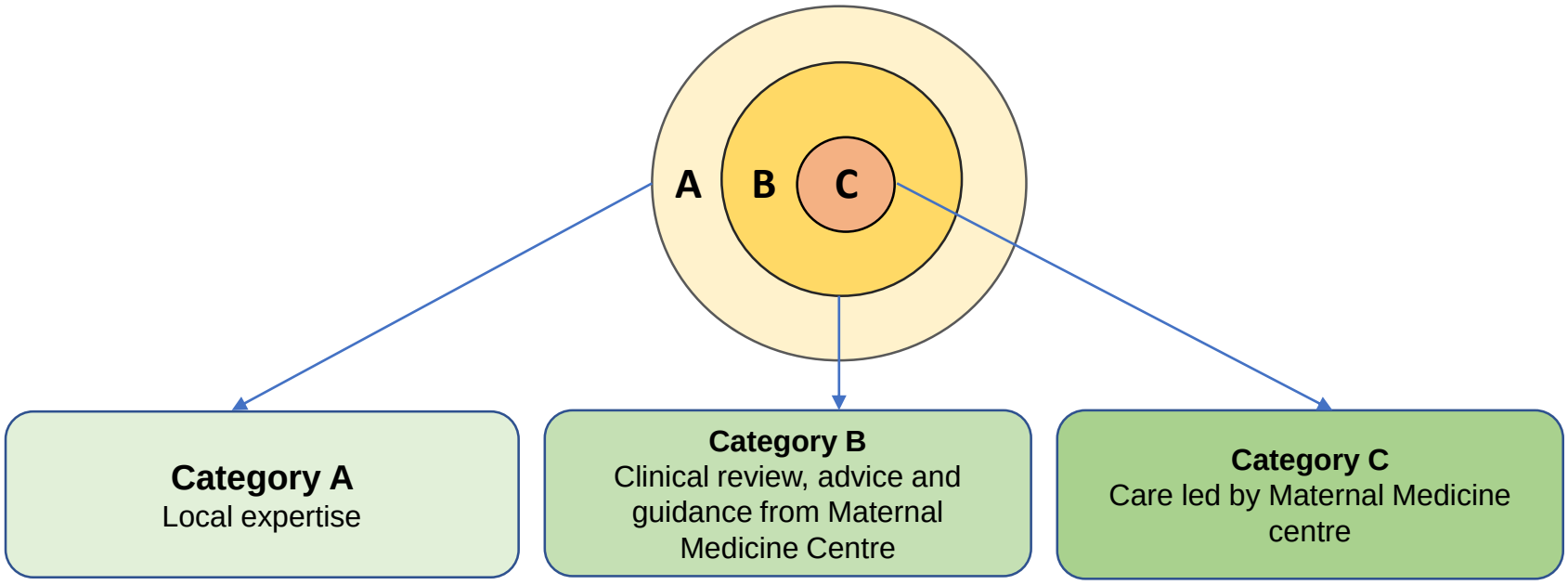
Gestational diabetes mellitus	Diabetes mellitus with: • Nephropathy (see Kidney Pathway) • Cardiovascular disease (see Heart Pathway) • CGM/CSII/Closed loop if support not available at local centre	Primary and secondary hyperaldosteronism
Type I and II diabetes mellitus including diabetic retinopathy	Monogenic diabetes	Phaeochromocytoma or paraganglioma
Hypothyroidism	Thyroid hormone resistance	Cushing's syndrome
Hyperthyroidism and gestational hyperthyroidism	Thyroid cancer	Acromegaly
Thyroid nodules	Pituitary disease on hormone replacement therapy	Pituitary apoplexy
Microprolactinoma	Macroprolactinoma	Hyperparathyroidsm
PCOS	Congenital adrenal hyperplasia	Hypoparathyroidism
Vitamin D deficiency	Dumping syndrome post bariatric surgery	Metabolic disorders such as glycogen storage disorder
	Addison's disease	

DIABETES AND ENDOCRINE DISEASE CONTACTS IN LONDON		
North East London	Kirun Gunganah	kirun.gunganah@nhs.net
North Central London	Sarita Naik	sarita.naik@nhs.net
North West London	Anne Dornhurst	ann.dornhurst@nhs.net
South East London	Anita Banerjee	anita.banerjee@gstt,nhs.uk
South West London	Arshia Panahloo	Arshia.panahloo@nhs.net

AVAILABLE CLINICAL GUIDANCE:

- Diabetes in pregnancy: management from preconception to the postnatal period. National Institute for Health and Care Excellence, updated 2020.
- Guidelines of the American Thyroid Association for the Diagnosis and Management of Thyroid Disease During Pregnancy and the Postpartum. Alexander et al. Thyroid 27(3): 315-389, 2017.

Kidney Disease



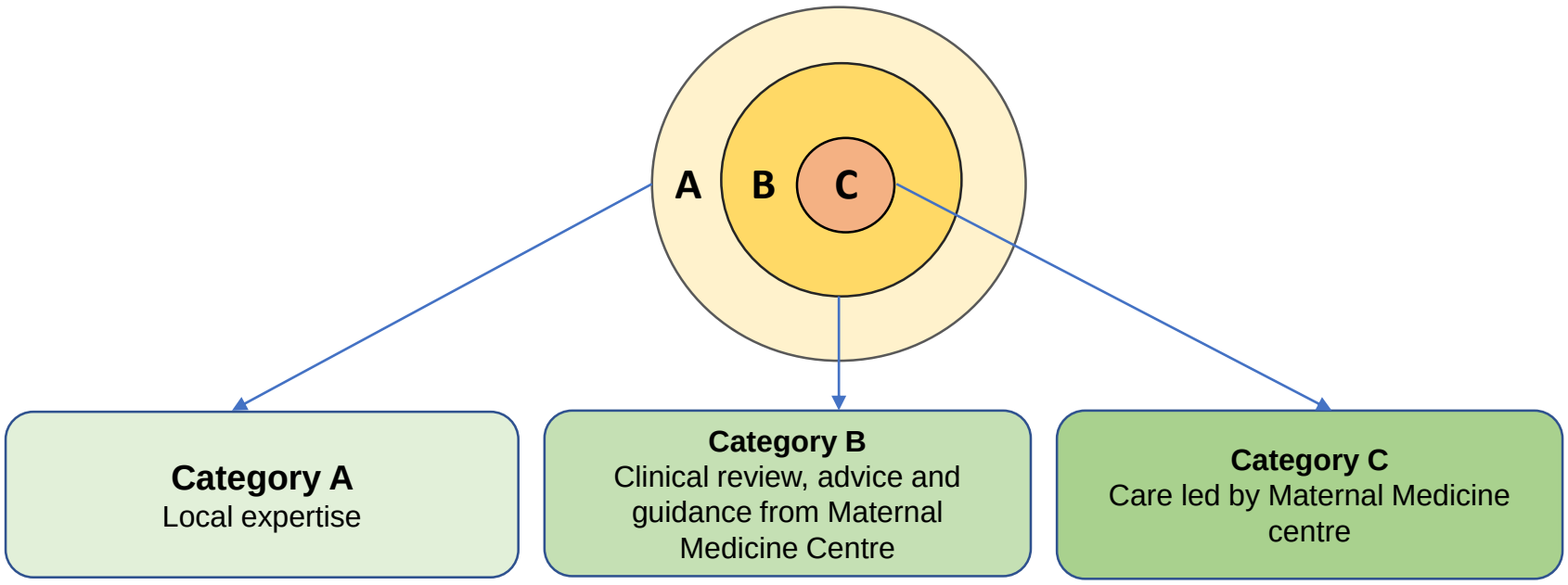
Single kidney	Lupus nephritis in remission or on treatment	Active lupus nephritis
Non-lupus glomerulonephritis/ tubulointerstitial nephritis: • No immunosuppression AND • Stable pre-pregnancy CKD stage 1-2 AND • uPCR <100 or uACR <30 AND • BP <140/90	Non-lupus glomerulonephritis/ tubulointerstitial nephritis: • On immunosuppression OR • Pre-pregnancy CKD stage 3 OR • uPCR ≥100 or uACR ≥ 30 OR • BP >140/90	Pre-pregnancy CKD stages 4 and 5
Kidney stones	Kidney transplant	Combined kidney-pancreas transplant
Recurrent UTI (no immunosuppression)	Recurrent UTI on immunosuppression	Dialysis
Reflux nephropathy with normal kidney function	Reflux nephropathy with abnormal kidney function	New renal vasculitis in pregnancy and vasculitis on immunosuppression
Autosomal dominant polycystic kidney disease with normal kidney function.	Autosomal dominant polycystic kidney disease with abnormal kidney function	Scleroderma renal crisis
AKI responding to treatment	AKI not responding to treatment or not resolving post-partum	
AKI due to pre-eclampsia resolved post-partum	Previous renal vasculitis in remission, no longer on treatment	
	Previous urinary tract reconstructive surgery	
	Kidney disease requiring biologic treatment	
	Progressive kidney disease in pregnancy	
	Kidney disease on biologic treatment	

KIDNEY DISEASE CONTACTS IN LONDON		
North East London	Kate Wiles	kate.wiles@nhs.net
North Central London	Chris Laing David Williams	chris.laing@nhs.net david.williams7@nhs.net
North West London	Liz Lightstone Phil Webster	l.lightstone@imperial.ac.uk philip.webster1@nhs.net
South East London	Taryn Pile	taryn.pile@gstt.nhs.uk
South West London	Dr David Makanjoula Joyce Popoola	David.Makanjoula@nhs.net joyce.popoola@stgeorges.nhs.uk

AVAILABLE CLINICAL GUIDANCE:

- Clinical practice guideline on pregnancy and renal disease. Wiles et al. BMC Nephrology 20, 401, 2019.

Rheumatological Disease



Uncomplicated* rheumatoid arthritis	Rheumatological disease requiring biologic therapy	Active lupus nephritis (see Kidney Pathway)
Uncomplicated* seronegative arthritis: • Ankylosing spondylitis • Psoriatic arthritis • Reactive arthritis • IBD related arthritis	Rheumatological not controlled on current treatment	Large and medium vessel vasculitis
Uncomplicated* connective tissue disease: • Lupus • Scleroderma (restricted disease) • Sjogren's	Rheumatological disease with restrictive lung disease and FVC >50% (see	Rheumatological disease with restrictive lung disease and FVC ≤50%
Osteoarthritis	Rheumatological disease with kidney involvement (see Kidney Pathway)	New small vessel vasculitis or small vessel vasculitis on immunosuppression
Obstetric antiphospholipid syndrome (see Haematology Pathway)	Thrombotic antiphospholipid syndrome (see Haematology Pathway)	Vascular Ehlers Danlos
Hypermobile Ehlers Danlos (type III)	Other Ehlers Danlos syndromes**	Scleroderma renal crisis
	Diffuse scleroderma	Antisynthetase syndrome
	Small vessel vasculitis in remission, no longer on treatment	
	Polymyositis-dermatomyositis	
	Behcet's syndrome***	

*Uncomplicated disease requires all of:

1. no lung/kidney/heart/CNS/thrombotic/muscle involvement
2. controlled on current treatment
3. no current biological treatments

** The Ehlers-Danlos Syndrome National Diagnostic Service for suspected/complex Ehlers-Danlos syndrome is at Northwick Park Hospital

*** The regional centre for Behcets syndrome for London is at Royal London Hospital

RHEUMATOLOGY DISEASE CONTACTS IN LONDON		
North East London	Maria Bickerstaff	maria.bickerstaff@nhs.net
North Central London	Ian Giles	ian.giles@nhs.net
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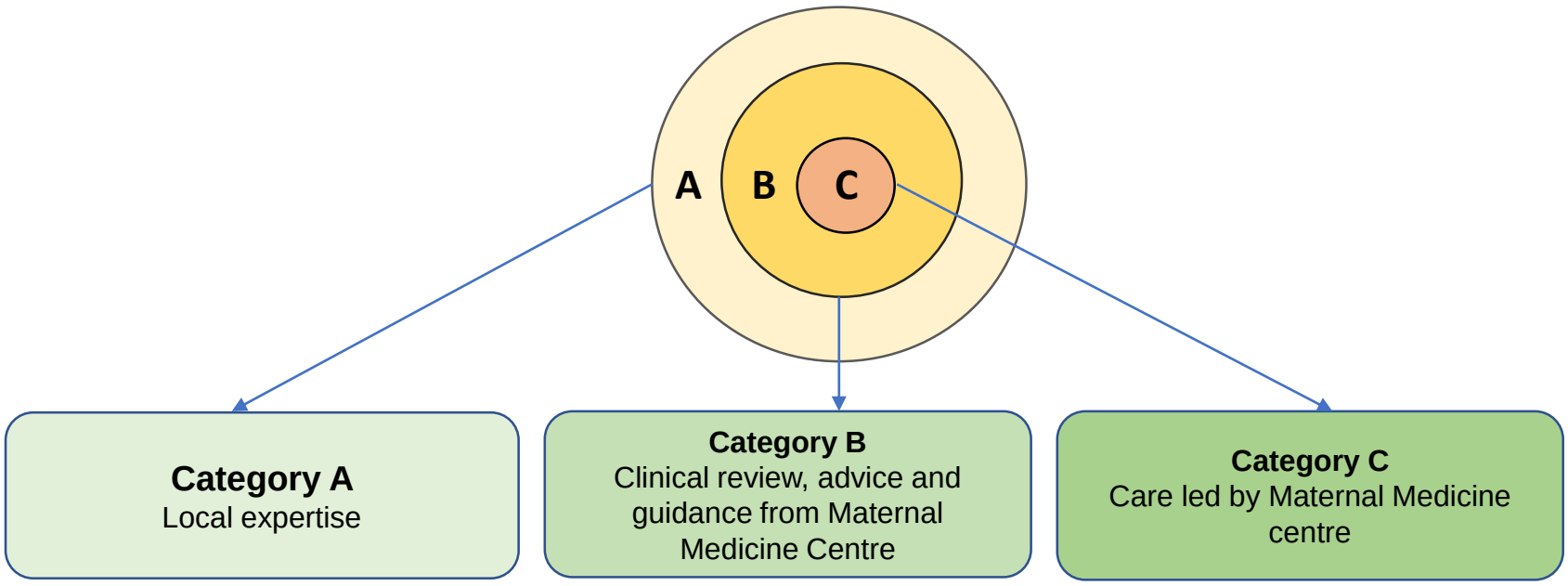
South East London	Oseme Etomi	Oseme.etomi@gstt.nhs.uk
South West London	Arvind Kaul	arvind.kaul@nhs.net

AVAILABLE CLINICAL GUIDANCE:

- BSR and BHPR guideline on prescribing drugs in pregnancy and breastfeeding. Flint et al. Rheumatology 55: 1693-1702, 2016.
- The EULAR points to consider for use of antirheumatic drugs before pregnancy, and during pregnancy and lactation. Skorpen et al. Annals of Rheumatic Diseases 75(5): 795-810, 2016
- EULAR recommendations for women's health and the management of family planning, assisted reproduction, pregnancy and menopause in patients with systemic lupus erythematosus and/or antiphospholipid syndrome. Andreoli et al. Annals of Rheumatic Diseases 76: 476-485, 2017.

Neurological Disease



Epilepsy managed in a combined clinic including specialist neurology and obstetrics	Cluster headache	All epilepsy without local access to a combined clinic including specialist neurology and obstetrics.
Migraine	Idiopathic intracranial hypertension	Symptomatic raised intracranial pressure
Stable, small cerebrovascular malformation, reviewed within 2 years of conception, plan for mode of delivery	CVM, not reviewed within 2 years of conception	Unstable CVM/AVM/cavernoma Intracerebral bleed within 2 years
Previous brain tumour	Current brain tumour	Progressive brain tumour
Previous cerebral vein thrombosis (CVT)	New cerebral vein thrombosis (CVT)	Acute stroke*
Meningitis	Previous Guillain Barre Syndrome	New-onset Guillain-Barre syndrome
Previous encephalitis	Treated, stable myasthenia gravis	New diagnosis or flare of myasthenia gravis
Stable multiple sclerosis managed without disease modifying drugs	Unstable multiple sclerosis or disease modifying drugs	Myotonic dystrophy
Mononeuropathy eg: Bell's palsy carpal tunnel, peroneal nerve compression	Progressive or persistent mononeuropathy	
Post-dural puncture headache	New encephalitis	
	Reversible Cerebral Vasoconstriction Syndrome (RCVS)	
	Posterior Reversible Encephalopathy Syndrome (PRES)	
	Spinal cord injury	
	Neurofibromatosis	
	Neuromuscular dystrophy	
	Spinal muscular atrophy	
	Motor neurone disease	

*see Pan-London Pathway

NEUROLOGICAL DISEASE CONTACTS IN LONDON		
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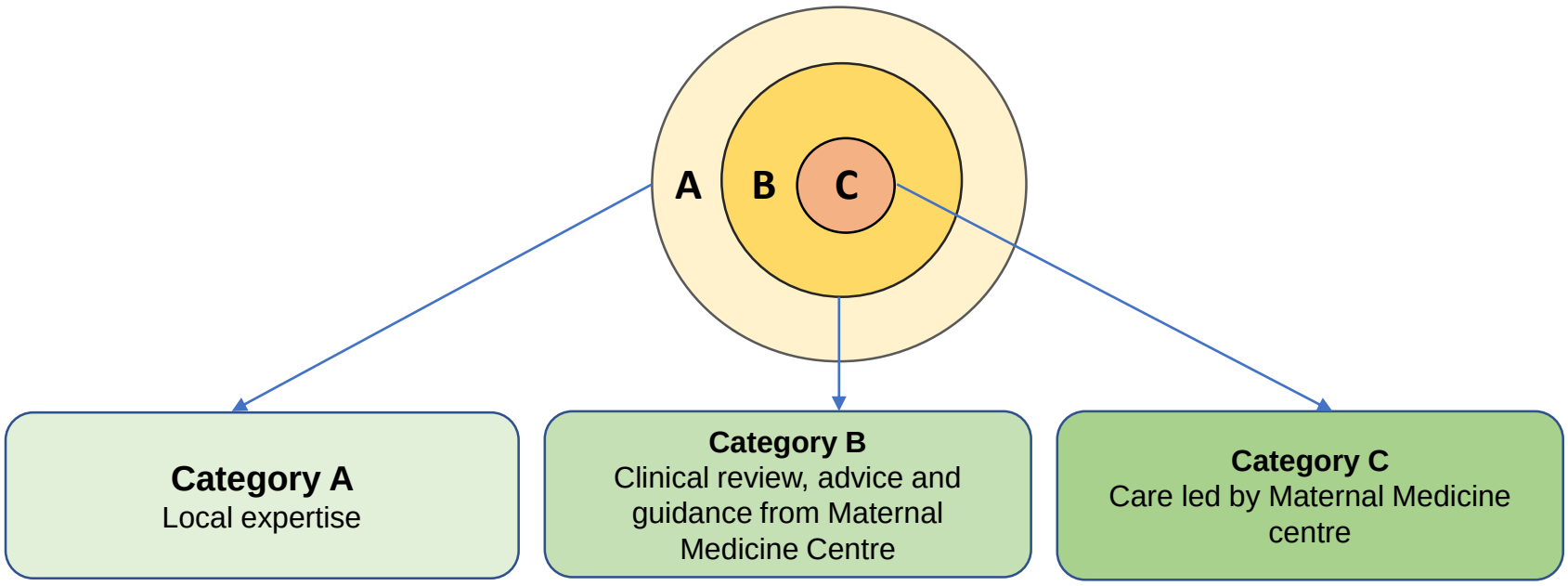
North West London	Pooja Dassan	pooja.dassan@nhs.net
South East London	William Stern	william.stern@gstt.nhs.uk
South West London	Dominic Paviour	dominic.paviour@stgeorges.nhs.uk

AVAILABLE CLINICAL GUIDANCE:

- Epilepsy in Pregnancy. RCOG Green Top Guideline 68, June 2016.
- UK consensus on pregnancy in multiple sclerosis: Association of British Neurologists' guidelines. Dobson et al. Practical Neurology 19(2): 106-114, 2019.

Haematological Disease



Sickle cell trait	Current immune thrombocytopenia and platelet count ≤75	Sickle cell disease
Historical immune thrombocytopenia and platelet count >75	Thrombocytosis	Beta thalassaemia major
Gestational thrombocytopenia	White cell disorders	Other complex thalassaemia: - iron overload - Endocrine disease - Pulmonary hypertension*
Current VTE or previous single VTE	Recurrent VTE	Current extensive VTE without other access to Factor Xa monitoring
Obstetric antiphospholipid syndrome	Thrombotic antiphospholipid syndrome	Antiphospholipid syndrome with extensive arterial events
Inherited thrombophilia (no VTE, not antithrombin deficiency)	Inherited thrombophilia with previous VTE	Antithrombin deficiency
History of treated haematological malignancy	Stable myeloproliferative/myelodysplastic disease	Active haematological malignancy
Alpha/beta thalassaemia trait	Mild, isolated clotting factor deficiency • Factor II, V, XI or XIII > 0.2iu/ml • Factor X > 0.3iu/ml	Clotting factor deficiency: • Factor II, V, XI or XIII ≤ 0.2iu/ml • Factor X ≤ 0.3iu/ml • Combined deficiencies
B12/folate deficiency	Mild platelet function disorder with platelet count >100	Moderate/severe platelet function disorder or platelet disorder with platelet count <100
	Carriers of haemophilia with known female fetus and normal factor VIII/IX	Carriers of haemophilia with male or unknown gender of fetus
	Type I Von-Willebrand disease, VWF activity normalised in pregnancy	Von-Willebrand disease: Type 1 if VWF not normalised, Type II and Type III
		Transfusion dependent disease

HAEMATOLOGICAL DISEASE CONTACTS IN LONDON		
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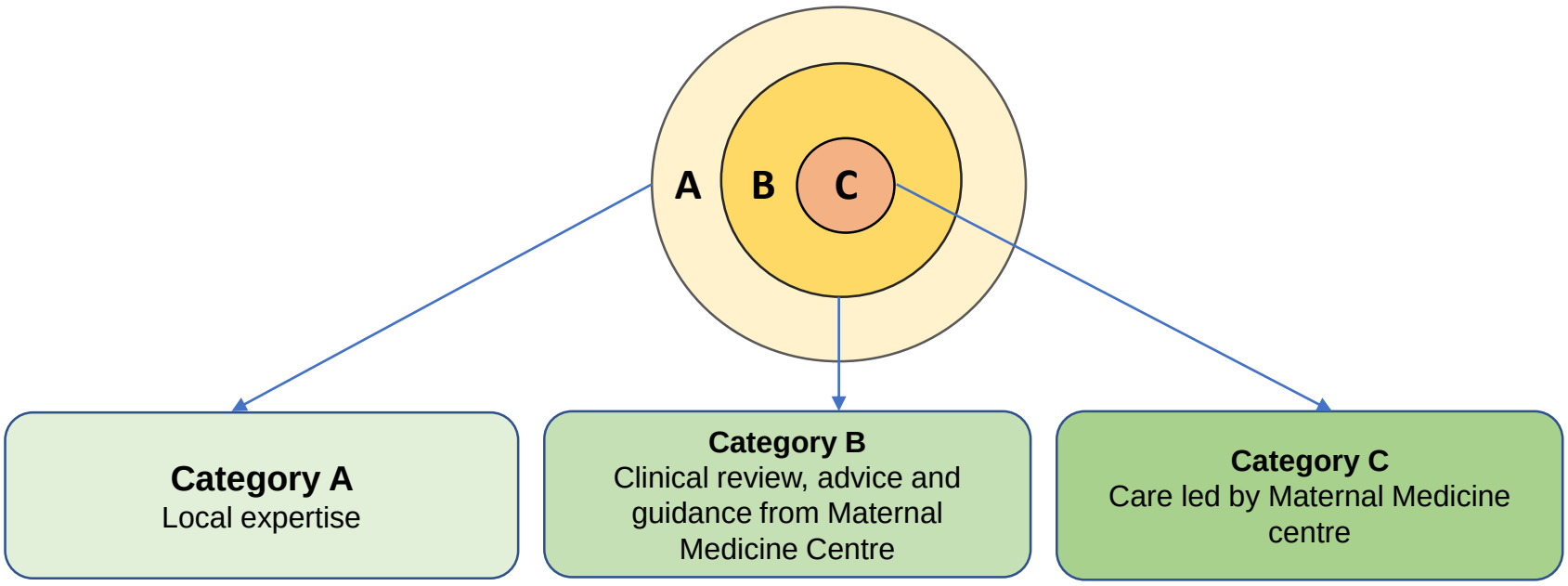
North Central London	Marie Scully	m.scully@nhs.net
North West London	Carolyn Millar	carolynmillar@nhs.net
South East London	Beverley Hunt	beverley.hunt@gstt.nhs.uk
South West London	Pamela Kanagasabapathy	pamela.kanagasabapathy@stgeorges.nhs.uk

AVAILABLE CLINICAL GUIDANCE:

- Thromboembolic Disease in Pregnancy and the Puerperium: Acute Management. RCOG Green Top Guideline 37b, April 2015.
- Reducing the Risk of Venous Thromboembolism during Pregnancy and the Puerperium. RCOG Green Top Guideline 37a, April 2015.

Skin Disease



Uncomplicated eczema	Complex eczema/psoriasis: • Biologic therapy • Systemic immunosuppression	Stevens-Johnson syndrome/toxic epidermal necrolysis
Uncomplicated psoriasis*	Impetigo herpetiformis	
Atopic eruption of pregnancy	Pemphigoid	
Polymorphic eruption of pregnancy	Pemphigus	
Prurigo of pregnancy	Vasculitic rash**	
Treated skin cancer	Active skin cancer	
Pruritic folliculitis		
Acne		
Pityriasis rosacea		
Urticaria		
Herpes simplex		
Varicella Zoster		
Cellulitis		
Scabies		

*****see Rheumatology Pathway for psoriatic arthritis
** see Kidney Disease Pathway for vasculitis/lupus

SKIN DISEASE CONTACTS IN LONDON		
North East London	Malvina Krupiczojc	m.krupiczojc@nhs.net
North Central London	via David Williams	david.williams7@nhs.net
North West London	via Charlotte Frise	charlotte.frise@nhs.net
South East London	via Cathy Nelson-Piercy via Anita Banerjee	catherine.nelson-piercy@gstt.nhs.uk anita.banerjee@gstt.nhs.uk
South West London	Leila Ferguson	Leila.Ferguson@stgeorges.nhs.uk

AVAILABLE CLINICAL GUIDANCE:

- British Association of Dermatologists. Polymorphic eruption of pregnancy. Available at: https://www.bad.org.uk/ResourceListing.aspx?sitesectionid=159&itemid=352
- Vaughan-Jones et al. Skin disease in pregnancy. BMJ 2014; 348: g3489.

Appendices

1. Management of the third stage of labour for women with category C heart disease.

Adapted from Intrapartum care for women with existing medical conditions or obstetric complications and their babies (NG121). https://www.nice.org.uk/guidance/ng121

Condition	First-line uterotonic	Second-line uterotonics	Drugs to avoid because of potential harm
• Significant aortopathy • Marfan syndrome and Loeys–Dietz with aortic dilatation >40 mm. • Bicuspid aortopathy and aortic dilatation >45 mm. • Previous aortic dissection. • Turner syndrome and • Aortic size index >25 cm/ 2 m	Oxytocin	Misoprostol Carboprost	Ergometrine: risk of hypertension-induced aortic dissection or rupture
• Limited or fixed low cardiac output, or preload- dependent circulation • Severe systemic ventricular dysfunction (ejection fraction <30%). • Severe valvular stenosis. • HCM with diastolic dysfunction or significant outflow tract obstruction. • Fontan circulation. Cyanotic heart disease	Slow infusion of oxytocin to avoid sudden haemodynamic change	Misoprostol Carboprost	Long-acting oxytocin analogues and ergometrine: risk of hypertension-induced heart failure
• Pulmonary arterial hypertension.	Oxytocin	Misoprostol	Ergometrine, carboprost and long-acting oxytocin analogues: risk of worsening pulmonary hypertension

2. Recommendations for obstetric anaesthesia and monitoring in cardiac disease in pregnancy.

Adapted from: ESC Guidelines for the management of cardiovascular diseases during pregnancy. European Heart Journal 2018; 39 (34):3165–3241. https://doi.org/10.1093/eurheartj/ehy340

	mWHO I	mWHO II	mWHO II-III	mWHO III	mWHO IV
Uterotonics					
Oxytocin	Y	Y	Low dose	Low dose	Low dose
Carbetocin	Y	Y	N	N	N
Misoprostol 400-600mcg	Y	Y	Y	Y	Y
Injectable Prostaglandin Carboprost	Y	Y	N	N	N
Ergometrine	Y	N	N	N	N
Oxytocin with Ergometrine	Y	N	N	N	N
Monitoring in labour and delivery					
Heart rate	Y	Y	Y	Y	Y
Non-invasive blood pressure	Y	Y	Y	Y	Y
Pulse oximetry	Y	Y	Y	Y	Y
ECG continuous	N	N	Y	Y	Y
Arterial blood pressure continuous	N	N	N	Y	Y
Central venous pressure continuous	N	N	N	N	Y
Analgesia and Anaesthesia					
Nitrous oxide inhaled	Y	Y	Y	Y	Y
Morphine/ Fentanyl/ Opioid parenteral	Y	Y	Y	Y	Y
Epidural for labour	Y	Y	Y	Y*	Y*
Spinal anaesthesia standard	Y	N	N	N	N
CSE standard	Y	N	N	N	N
CSE low dose spinal, incremental top-up	Y	Y	Y	Y*	Y*
General anaesthesia	Y	Y	Y#	Y#	Y#
Intravenous fluid boluses	Normal	Normal	Cautious	Carefully titrated*	Carefully titrated*
Key					
Y denotes Yes can be given or Yes should be used					
N denotes Not to be used or Not required					
** denotes with invasive monitoring as above*					
# denotes avoid unless other techniques contra-indicated					

3. Immunosuppressant use in pregnancy and lactation

Drug[A]	Pre-conception	During pregnancy	Breastfeeding
Corticosteroids			
Prednisolone (oral)	Yes	Yes	Yes
IV methylprednisolone	Reserve for flares	Reserve for flares	Reserve for flares
Antimalarials			
Hydroxychloroquine	Yes	Yes	Yes
Mepacrine[N]	No	No	No
DMARDs			
Azathioprine	Yes	Yes	Yes
Ciclosporin	Yes	Yes[C]	Yes[D]
Cyclophosphamide	No	No	No
Intravenous immunoglobulins	Yes	Yes	Yes
Leflunomide	No; cholestyramine washout	No	No
Methotrexate	Stop 3 months in advance	No	No
Mycophenolate mofetil	Stop 6 weeks in advance	No	No
Sulfasalazine (with 5 mg folic acid)	Yes	Yes	Yes
Tacrolimus	Yes	Yes[C]	Yes[D]
TNFi biologics			
Adalimumab	Yes	Maintain pregnancy dosing until third trimester and resume post-partum	Caution[D]
Certolizumab	Yes	Yes	Yes
Etanercept	Yes	Maintain pregnancy dosing until third trimester and resume post-partum	Caution[D]
Golimumab	Yes	Maintain pregnancy dosing until third trimester and resume post-partum	Caution[D]
Infliximab	Yes	Maintain pregnancy dosing, stop in second trimester and resume post-partum	Caution[D]
Non-TNFi biologics			
Anakinra	Yes	Limited but reassuring data on use in systemic autoinflammatory diseases in pregnancy[23]	Caution[D]
Rituximab	Stop 6 months pre-conception. Due to limited documentation on use in pregnancy only consider using after specialist advice if no other pregnancy compatible drug available.		Caution[D]
Abatacept Belimumab Secukinumab Tocilizumab Ustekinumab	Discontinue in first trimester, due to limited documentation on use in pregnancy only consider use later in pregnancy after consultation with specialist advice if no other pregnancy compatible drug is available.		Caution[D]
Small molecules			
Apremilast Baricitinib Tofacitinib	Stop 1 month before conception[I]	Not recommended due to lack of data; potential ability of small molecules to cross the placenta and into breast milk	

4. Networked Maternal Medicine Services in London: Contraception

1. **Information for healthcare professionals:** Guidance on Contraception choices for women with medical disorders

    a. The UK Medical Eligibility Criteria for contraceptive use (2016, amended 2019) https://www.fsrh.org/standards-and-guidance/documents/ukmec-2016/

    b. FSRH CEU Guidance: Drug Interactions with Hormonal Contraception (2017, reviewed 2019) https://www.fsrh.org/documents/ceu-clinical-guidance-drug-interactions-with-hormonal/

2. **Information for women/ service users:** Guidance on Contraception choices

    a. Pictorial representation of effectiveness Effectiveness of Family Planning Methods. (cdc.gov)

    b. Family Planning Association guide including 'which choice is best for me', 'emergency contraception', 'contraception after having a baby' and a postcode finder for local services https://www.sexwise.org.uk/contraception

    c. Contraception choices 'What's right for me?' https://www.contraceptionchoices.org/whats-right-for-me

3. **Access to Contraception services**: Websites for users; table for services by London Borough

    - GPs, some pharmacies, NHS 111 can provide contraceptive advice and services
    - Sexual Health London www.shl.uk/clinics - across most of London, access to contraception information, appointments and home delivery in some boroughs /some forms of contraception
    - NW London: https://www.nwlondonsexualhealth.nhs.uk/index.php
    - SW London: https://shswl.nhs.uk/
    - East London: https://www.alleast.nhs.uk/contraception or 020 7377 7307
    - Central and Northwest London: contraception services for much of London and Surrey, with online and telephone options https://www.sexualhealth.cnwl.nhs.uk/

Where does the patient live		How to self-refer	
NWL	Brent	020 8453 2221	lnwh-tr.PCCGENERAL@nhs.net.
NWL	Ealing	020 3255 0084	LNWH-tr.familyplanning@nhs.net
NWL	Harrow	020 3893 8575	LNWH-tr.HarrowISRH@nhs.net
NWL	Hillingdon	020 8453 2751	lnwh-tr.hillingdonisrh@nhs.net
NWL	Hounslow	020 8321 5718	www.shl.uk/clinic/sexual-health-hounslow
NWL	Kensington & Chelsea Westminster Hammersmith & Fulham	020 3315 1010 option 1	https://www.chelwest.nhs.uk/services/hiv-sexual-health/clinics/john-hunter-clinic-for-sexual-health
NCL	Camden Barnet Islington	0203 317 5252	www.sexualhealth.cnwl.nhs.uk
NCL	Enfield	0208 887 4510	https://www.echoclinics.nhs.uk/
NCL	Haringey		https://www.haringey.gov.uk/social-care-an health/health/public-health/sexual-health/contraception/contraception
NEL	Barking & Dagenham Havering Redbridge	020 8970 5724	https://www.bhrhospitals.nhs.uk/sexual-hea
NEL	Tower Hamlets Waltham Forest Newham	020 7377 7307	https://www.alleast.nhs.uk/
SEL	Bexley	020 8301 8920	www.bexleysexualhealth.org/
SEL	Bromley	0300 330 5777	bromh.askfp@nhs.net
SEL	Greenwich	**0800 470 4831**	www.greenwichsexualhealth.org/
SEL	Lambeth	**020 7188 6666**	Online sexual health services | Lambeth Cc
SEL	Lewisham	020 3049 3500	www.lewishamandgreenwich.nhs.uk/contra on
SEL	Southwark	020 7188 7707; 0345 300 2350	www.zesty.co.uk/practices/kch-virtual-contraception-consultation
SWL	Croydon	0208 401 3766 t	https://www.croydonsexualhealth.nhs.uk/cc eption/
SWL	Kingston	**020 8974 9331**	https://www.sexualhealthkingston.co.uk/ khn-tr.wolvertoncentre@nhs.net
SWL	Merton, Richmond, Wandsworth	033 3300 2100	https://shswl.nhs.uk/

SWL	Sutton	020 8296 3910	https://www.suttonhealthandcare.nhs.uk/aception-service