Clinical Effectiveness South East London

Our Healthier South East London Integrated Care System

NHS

Prescribing alert: NICE guidance update (to be ratified by SEL IMOC)

Type 2 diabetes in adults: management (NG28) was updated on 15/2/2022. This includes changes to prescribing guidance. The SEL Integrated Medicines Optimisation Committee (SEL IMOC) will update their T2DM guidance for SEL for the summer of 2022. HbA1c management section of the CESEL T2DM guidance (page 6) will be updated to align with SEL IMOC guidance as soon as it is available.

Type 2 Diabetes Mellitus in Adults

A guide for Lambeth General Practice

Key messages

1. Life-style changes can prevent/reduce need for medication
2. Offering education to patients at any stage is key to improving management
3. Optimise BP management adjusted for age and co-morbidities
4. Check for complications and do a QRISK
5. Optimise HbA1c adjusted for hypoglycaemic risk and frailty

Always work within your knowledge and competency

February 2022 (review June 2022, or earlier if indicated)

Why focus on Type 2 Diabetes (T2DM) in Lambeth?

Primary Care can contribute to substantially reducing diabetes complications, major vascular events and improving survival[1].

- **Covid-19:** T2DM is a risk factor for mortality with Covid-19[2]
- **Preventable:** Management of non-diabetic hyperglycaemia and risk factors can reduce the risk of developing T2DM[3]
- **Prevalent:** Diabetes is common. There are almost 19000 adults living with T2DM in Lambeth[4]
- **Under-diagnosed:** According to prevalence data, there are around 4500 adults living with undiagnosed diabetes in Lambeth (prevalence 5.6% vs 7.11% England average)[4]
- **Under-treated:** Only 34% of people with diabetes achieved the triple target* in Lambeth in 2020-21[4]

*HbA1c, BP and Cholesterol within target

Due to health inequalities, Lambeth residents are more at risk of diabetes:

Deprivation

The poorest people in the UK are **2.5 times** more likely to develop diabetes at any age[3].

In Lambeth, around 30% of residents are in the lowest quintile for deprivation, and more than 70% are in the lowest 2 quintiles[5].

Ethnicity

T2DM is up to **6 times** more common in people of South Asian descent and up to **3 times** more common among people of African-Caribbean or Black African descent[3].

In Lambeth, 29.1% of residents are from ethnic minority groups[5].

(England average 13.2%)

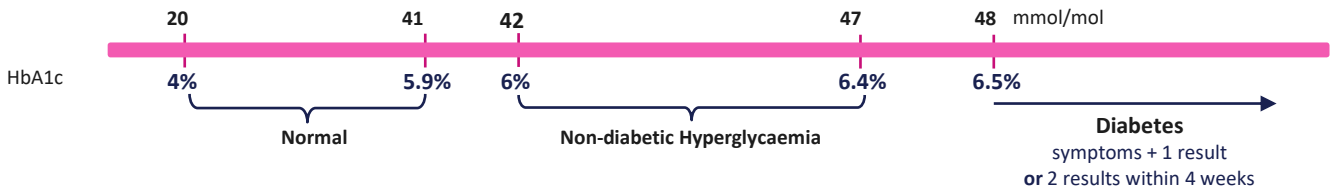
Risk Factors and Diagnosis

Risk factors for T2DM[3,6]

- Age > 25 and Black African-Caribbean or Asian
- Age > 40 and Caucasian / White European
- Family history
- High blood pressure
- BMI > 25 (>23 in South Asians)
- Waist circumference:
  - > 80cm for all women
  - > 94cm for most men
  - > 90cm for South Asian men
- History of coronary heart disease or stroke
- Serious mental illness
- Polycystic ovarian syndrome and gestational diabetes
- COVID-19 infection may precipitate a diabetes diagnosis

Calculate T2DM risk using a QDiabetes calculator

Diagnosis using HbA1c[7]



Diagnosing diabetes using HbA1c	If initial result is within withing diagnostic range for diabetes, follow the above guidance.
Cautions regarding HbA1c:	Patients with abnormal red blood cell turnover/abnormal haemoglobin type (including haemoglobinopathy, severe anaemia, altered red cell life-span e.g. post-splenectomy, recent blood transfusion). Liaise with local lab regarding an appropriate test
Do NOT use HbA1c to diagnose in:	Type 1 diabetes, T2DM in <30 years, rapid onset of diabetes symptoms, pregnancy, up to 2 months post-partum, end-stage renal disease, acute pancreatic damage, HIV infection or if taking medication linked with hyperglycaemia, e.g. long-term corticosteroids

Principles of care

	Non-diabetic Hyperglycaemia (NDH)	New diagnosis of Diabetes
Support patient understanding	Support patients/carers to reach an understanding of the diagnosis and implications and what they can do to care for themselves Use Diabetes UK Information Prescriptions to support personal care (can be downloaded into EMIS)	
Code correctly	Use Ardens pre-diabetes clinical template	Use Ardens diabetes clinical template
Structured education	Emphasise to patients and carers that structured education is integral to their care.	
	Refer to Healthier You NHS Diabetes Prevention Programme (DXS) if criteria met	Refer / encourage self refer to Diabetes Book and Learn
Follow-up	Offer **annual review** to patients with NDH/or history of gestational diabetes: HbA1c + Vital 5: BP, BMI, smoking status, mental health and alcohol intake	Agree clear date for next review All patients should in addition have **annual review** with NICE eight care processes **(8CPs)** (see page 4) plus **annual retinal screening**

Considering pregnancy[8]

1. Start folic acid 5mg daily, 3 months before conceiving
2. Check medications for contraindications (see page 5,6)
3. Check HbA1C, renal function, TFT
4. Refer Diabetes Pre-conception clinic at KCH or GSTT (via ERS)
5. As soon a pregnancy confirmed inform Diabetes pregnancy clinic kch-trdiabetesnurses@nhs.net or gst-tr.diabetesandendocrine@nhs.net

WORRYING SYMPTOMS

New T2DM, >60 years, weight loss - 2WW referral for suspected cancer of pancreas[9]

HbA1c >85mmol/mol +/- weight loss at diagnosis: consider Type 1, ketosis prone, latent autoimmune diabetes in adults (LADA). Seek specialist advice.

T2DM Eight Care Processes (8CP)[10]

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1 Body Mass Index kg/m[11,12]

Page 5

Overweight: BMI ≥ 25 Caucasian / White European groups, BMI ≥ 23 Black African, African Caribbean and Asian groups

Agree an initial weight loss target of 5–10% of body weight

Undertake all care processes at least annually. Individualise all targets, review dates and monitoring

2 Blood Pressure[11,13]

Page 5

QOF ≤140/80mmHg excludes those with moderate or severe frailty

NICE ≤140/90mmHg if under 80 years; ≤ 150/90mmHg if ≥ 80 years; ≤130/80 mmHg if CKD

3 Cholesterol[14]

Page 6

Primary prevention: Offer statin if QRISK >10% after addressing modifiable risk factors

Secondary prevention (history of CVD): Offer high dose statin aiming for 40% reduction in non-HDL level

QOF target excludes those with moderate or severe frailty

Women of child-bearing age need contraception during statin treatment and for 1 month afterwards. Discontinue statins 3 months before trying to conceive

4 HbA1c[14,15]

Page 6

It takes 3 months from medication dose change to see HbA1c change. Check 3 monthly until target is reached then every 6 months

Target: **≤48mmol/mol** (6.5%) unless taking a drug that could cause adverse low sugars/hypos e.g. gliclazide, insulin

≤53mmol/mol (7%) if on a drug that **could** cause low sugars/hypos

≤75 mmol/mol (9%) if moderate/severe frailty (QOF)

Individualise HbA1c target especially for those with reduced life expectancy, risk of falls and/or significant co-morbidities

5 Smoking

ASK ADVISE ACT Ensure you are trained to deliver Very Brief Advice (VBA) Very Brief Advice Training Module

If ready to quit refer to Lambeth Specialist Stop Smoking service

6 Renal function and albumin creatinine ratio (ACR)[17,18]

Measure serum creatinine **and** urine ACR; consider CKD if low eGFR* (<60ml/min/1.73m²) and/or raised ACR (≥ 3 mg/mmol)

Use the One London Diabetic Kidney Disease Risk Stratification to identify those at high risk of diabetic kidney disease progression for patients with eGFR<45ml/min/ 1.73m²

7

Ideally early morning urine, if random sample then confirm any ACR between 3-70 mg/mmol with an early morning sample. If ACR ≥70 mg/mmol, repeat not needed

Nephropathy – start an ACEI/ARB even if normotensive

*it is no longer recommended to correct eGFR for ethnicity

8 Foot Check[19]

Medium risk (neuropathy/absent pulse) refer to Community Podiatry Clinic via DXS

High risk – neuropathy/absent pulse + plus deformity or skin changes in previous ulcer - Urgently refer to Community Podiatry Clinic via DXS

Active ulcer / infection / ischaemia Urgent KCH/GSTT foot clinic or A&E out of hours

Resource for clinicians: Annual foot review pathway, Diabetes UK

Resource for patients: Diabetes and Looking After Your Feet

+

Vital 5
Includes mental health + alcohol intake

Retinopathy screening within 3 months of diagnosis and at least annually[14]
Should be called automatically once T2DM coded, check happening at annual review

Vaccination
Flu annually and pneumococcal once[3]

BP and Weight Management

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Identify and address all modifiable risk factors → **Individualise targets and goals, especially for those with moderate or severe frailty** → **Check understanding and adherence and set a review date**

Blood pressure[11,13,15]

Diagnosis

Diagnosis	See CESEL Lambeth Hypertension guide **Confirm diagnosis with ABPM or HBPM**
Measuring BP in T2DM	• Measure sitting & standing BP in T2DM • If postural drop (≥20mmHg SBP) review medications and treat to target on standing BP

Which BP target?

NICE	Age <80 yrs ≤140/90mmHg Age ≥ 80 yrs ≤ 150/90mmHg CKD if ACR ≥ 70 mg/mmol ≤130/80
QOF[15]	≤140/80mmHg (excludes those with moderate or severe frailty)

Step 1* — **ACEI or ARB****
ramipril/lisinopril or losartan

Step 2* — **ACEI or ARB** + CCB or thiazide-like diuretic**
ramipril/lisinopril or losartan | amlodipine or indapamide (IR)

Step 3* — **ACEI or ARB**+ CCB + thiazide-like diuretic**

If uncontrolled on optimal doses regard as **resistant hypertension**
Repeat ABPM/HBPM, assess for postural hypotension, discuss adherence

Step 4* — Consider further diuretic with **low-dose spironolactone** if potassium ≤ 4.5mmol/L and good renal function. If potassium >4.5mmol/L and/or reduced renal function prescribe **alpha-blocker** (doxazosin) or **beta-blocker** (atenolol/bisoprolol) and/or consider seeking specialist advice

*Optimise medication to most effective tolerated dose and check adherence at each step, before stepping up

**For people of Black African or African-Caribbean origin, use ARB instead of ACEI as increased risk of angioedema with ACEI

Drugs to avoid at conception/in pregnancy include:

ACEI/ARB/thiazide or thiazide-like diuretic (increased risk of congenital abnormalities).

NICE guidelines: Stop ACEI/ARB and change medication within 2 working days of notification of pregnancy. Offer alternatives:

Labetalol if no CI (eg asthma), nifedipine or methyldopa.

Can also remain on amlodipine – GSTT Obstetric Medicine advice

Target BP ≤ 135/85 mmHg

Highlight all co-morbidities on antenatal booking form (even if already self – referred) to ensure triage into appropriate clinic and contact diabetes pregnancy team (see p3)

Weight Management[12,15]

Physical Activity

For All	**Increased physical activity, even without weight loss, brings health benefits**
To prevent obesity	40-60 mins moderate intensity exercise / day
With a history of obesity	60-90 mins moderate intensity exercise/day to avoid weight gain

Weight management referral

- General advice on healthy weight and lifestyle to all
- Tailor interventions to patients' circumstances and choices
- Signpost to local and national resources (see page 11)

BMI ≥ 30 with co-morbidity or BMI ≥ 27 for BAME adults	Offer referral: **Tier 2** • Lambeth Early Intervention Prevention Service **LEIPS** • **NHS Digital Weight Management** supports adults living with obesity who also have a diagnosis of diabetes, hypertension or both, to manage their weight via 12 week online programme
BMI ≥ 35	Offer referral: **Tier 3** • SEL Tier 3 Healthy Weight programme • ERS referral using form on DXS • Include BP, BMI, HbA1c, lipid profile and creatinine
BMI ≥ 35 + Would consider bariatric surgery + Tier 3 completed	Offer referral: **Tier 4** • Bariatric Service (KCH or GSTT) via ERS • Include details of Tier 3 programme for eligibility

HbA1c and Lipid Management

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Identify and address all modifiable risk factors → **Individualise targets and goals, especially for those with moderate or severe frailty** → **Check understanding and adherence and set a review date**

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HbA1c Management[11,14,15]

Step 1 3 months

Person-centred lifestyle advice

If HbA1c ≥ 48mmol/mol (6.5%)* go to Step 2

***Individualise targets and goals**
For patients with moderate or severe frailty the QOF target is ≤75 mmol/mol (9%)

Step 2 3 m from dose change

Metformin standard release

- Start 500mg daily with/after food and increase by 500mg every 2 weeks until on 1g twice a day (MR if GI side effects)
- Aim for HbA1c of ≤ 48mmol/mol (6.5%)*
- If HbA1c ≥ 58mmol/mol (7.5%)* go to step 3

Step 3 3 m from dose change

Gliclazide preferred 2nd line for most patients[16] (guidance under review)

- Consider alternative to gliclazide (Gliptins, SGLT-2 and Pioglitazone) especially if BMI≥35, frail elderly or concern regarding hypoglycaemia e.g. Group 2 driver
- Gliclazide dose 40mg-80mg once to twice daily with meals
- Titrate on pre-meal blood glucose target 4-6mmol/mol, individualised BM target or HbA1c
- If HbA1c ≥ 58mmol/mol (7.5%)* go to step 4

Step 4 3 m from dose change

Third agent needed, or considering insulin, or contra-indication to metformin/gliclazide?

Refer to South East London Blood Glucose Control Management Pathway for Adults with Type 2 Diabetes Mellitus

Guidance aligns with SEL IMOC Blood Glucose Control Management Pathway for Adults with Type 2 Diabetes

Need more help?

Refer to Lambeth Diabetes Intermediate Care team via ERS, using form on DXS or email lamccg.diabetes@nhs.net or Advice and Guidance (ERS)	Community Hypertension and Lipid Clinic: DXS referral or advice See SEL Lipid Management 2021 for criteria

Lipid Management[10,14]

Cardiovascular risk

Management of cardiovascular risk factors is essential to prevent and reduce macrovascular complications of diabetes

- Perform baseline bloods (non-fasting lipid profile, LFT, TFT, HbA1c, renal profile)
- Record weight, smoking status, BP
- Calculate QRISK except in CKD/albuminuria or familial hypercholesterolaemia
- Offer education and lifestyle interventions to modify CVD risk
- Use shared decision-making to consider risk vs benefit of drug therapy

Primary Prevention

If QRISK ≥ 10% start **Atorvastatin 20mg OD** (or Rosuvastatin 10mg OD) after addressing modifiable risk factors*

- Calculate baseline non-HDL level (total cholesterol minus HDL cholesterol)
- Repeat lipids after 3 months **aiming for 40% reduction in non-HDL level**

≥ 40% reduction	Review annually	
< 40% reduction	1. Consider up-titration of statin to max dose **Atorvastatin 80mg** (or Rosuvastatin 20mg) 2. If intolerant to higher dose consider adding ezetimibe 10mg daily. If intolerant to statins start ezetimbe and refer to lipid clinic.	If still not achieving target after further 3 months refer to lipid clinic *caution in pregnancy

Secondary Prevention

History of CVD (MI, angina, stroke/TIA, peripheral vascular disease, abdominal aortic aneurysm)

Offer high dose, high intensity statin: **Atorvastatin 40-80mg OD or max tolerated dose** (or Rosuvastatin 20mg OD)

- Calculate baseline non-HDL level (total cholesterol minus HDL cholesterol)
- Repeat lipids after 3 months **aiming for 40% reduction in non-HDL level**

≥ 40% reduction	Review annually	
< 40% reduction	Ensure on max tolerated dose of statin and consider adding **Ezetimibe 10mg**	If still not achieving target after further 3 months refer to lipid clinic

(If no baseline value: consider a target non-HDL cholesterol < 2.5mmol/L or LDL cholesterol <2mmol/L)

Guidance aligns with SEL IMOC Lipid Management: Medicines Optimisation Pathways

Type 2 Diabetes review (at least annual)

Principles of remote monitoring: LTC during COVID-19 guide (page 4)

	Tasks/Activity	Who?	Where?	Tools/Support
Review planning at practice level	**Call/recall planning**: Use searches to help determine who to invite for review first, focusing on the triple target and the 8CP	Admin colleague with clinician support (pharmacist/nurse/ GP)	In practice or remotely via EMIS	EMIS searches e.g. EZ Analytics and Ardens searches
Pre-patient review	**Contact patient to:** 1. **Arrange bloods (renal function, FBC, lipids, HbA1c) & urine ACR** 2. **Arrange BP measurement** (in practice/machine at home), at least annually 3. **Height and weight:** home measurements for remote reviews	HCA/ Nurse	In practice/at home/ at pharmacy	Use E-consult "diabetes review" or AccuRx for pre-review information-gathering. Text/ contact patient to encourage to complete ahead of review BP@Home if available
Patient review	1. **Review patient concerns** 2. **Review BMI, BP trend and Pulse check** 3. **Review investigations**: HbA1c, Cholesterol, renal function, urine ACR 4. **Re-calculate QRISK** (if appropriate) 5. **Discuss risk-reduction + life-style**: in context of QRISK, Vital 5 (BMI, smoking, alcohol, diet, activity) & COVID 6. **Medication review**: any concerns with a focus on side-effects and adherence. Signpost to community pharmacy for New Medicines Service. Ensure renal function, HbA1c, cholesterol and BP satisfactory and titrate or initiate medications if needed. 7. **Mind + Body**: consider screening for mental health conditions 8. **Foot check examination and advice on foot care** - share link via Accurx Diabetes UK advice on Footcare 9. **Eye check:** Check patient is receiving annual eye check ups 10. **Driving:** Use Driver and Vehicle Licensing Agency (DVLA)'s Assessing fitness to drive: a guide for medical professionals to guide into account self-monitoring of blood glucose levels for adults with type 2 diabetes.	Pharmacist/ Nurse/ GP	Remote or F2F	EMIS templates e.g. Ardens Diabetes template (for correct coding, annual review, medication review & Vital 5 recording) Diabetes Book and Learn for structured education Brief-interventions around lifestyle
	11. **Goal setting/Self-management/Shared decision-making**	Pharmacist/ Nurse/ GP or Social prescriber, Care Navigator & Patient		Self-management resources, see page 11- send links via AccuRx. Diabetes UK Information Prescriptions to support personal care
Follow-up	Review as agreed, e.g. monthly until BP at target, 3 monthly until HbA1C at target	GP/ Pharmacist/ Nurse/HCA		

QRISK

QRISK3 is preferred as QRISK2 can underestimate cardiovascular risk. Currently there is a link to QRISK3 in the Ardens templates. If this is unavailable use QRISK2 calculator in EMIS

QRISK is not applicable in people considered at high risk of CVD (Type 1 DM, CKD3-5), existing CVD, stroke/ TIA, as they should already be on lipid modification. It is also not applicable in people >85years

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	Further considerations:	
Dietary advice Diabetes UK	•Eat plenty of vegetables •Have sufficient fibre in your diet •Eat fish, especially oily fish (mackerel, salmon, sardines) regularly •Cut down on: •sugary food and drinks •energy dense foods such as crisps, cakes, biscuits and pastries •alcohol •salty, processed foods	Consider doing the CDEP Nutrition learning module to increase your knowledge of diet and T2DM
Goal setting	Support your patients to make SMART goals e.g. **Specific: '**I want to lose weight' **Measurable: '**I'll aim to lose 2kg' **Achievable: '**I attend a Book and Learn course to help me' **Realistic: '**I'll ask my family to help too' **Timed: '**I will do this over the next 6 months'	Watch this short patient video on achieving goals Involve Health and Wellbeing Coach
Personalised care	'A one-size-fits-all health and care system simply cannot meet the increasing complexity of people's needs and expectations. Personalised care is based on 'what matters' to people and their individual strengths and needs.' NHS England	Consider learning through the Personalised Care Institute, or encouraging patients to work with a Social Prescribing Link Worker (SPLW) to help take control
Sick day rules[20]	• If available increase glucose monitoring to at least 4 times a day when unwell • Maintain fluid and carbohydrate intake. Sugary fluids if glucose low and sugar-free fluids if glucose high • NEVER stop insulin: change dose of insulin and gliclazide according to glucose readings Patients should seek medical advice if they: • have no access to glucose monitoring and experience symptoms of high glucose – e.g. thirst, polyuria, fatigue • are unable to maintain hydration or take carbohydrates due to vomiting • have persistently high or low glucose despite altering medication doses • other concerns If changing medication doses remember to change them back when better i.e. eating and drinking normally for 2 days	**SADMANS rules** Consider stopping these classes of drugs temporarily during dehydrating illness **S** SGLT-2 inhibitors **A** ACE inhibitors **D** Diuretics **M** Metformin **A** ARBs **N** NSAIDs **S** Sulfonylureas **Links to send via accuRx:** 1. What to do when you are ill 2. Sick day rules 3. NHS Video library guide to using glucometer

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	Drug	Starting dose	Daily Range	**Notes** (these are not extensive, please refer to the latest BNF for further information especially titration increments/cautions/contra-indications)
Biguanide	Metformin	500mg OD	Metformin standard release Start 500mg daily with/after food and increase by 500mg every 2 weeks until on 1g BD or maximum tolerated dose	• Ensure eGFR >45ml/min, or review dose. Contraindicated if eGFR <30ml/min*. Routine renal function at least annually, 6 monthly for those at risk of renal impairment. • Consider slow-release preparation if standard preparation causes gastrointestinal side effects. • Take with meals to reduce gastrointestinal side effects • Remember sick day rules ☛ p.8 • Manufacturer advises patients and carers should be informed to seek urgent medical advice if symptoms of lactic acidosis e.g. dyspnoea, cramps, abdominal pain
Sulfonylureas	Gliclazide	40mg – 80mg daily	160mg-320 mg daily, doses over 160mg divided. Titrate every 2 weeks according to pre-meal blood glucose – 4-6mmol/L or individualised target or against 3 monthly HbA1c.	• Inform patients of risk of adverse events/hypoglycaemia, particularly if renal impairment • Advise patients on how to manage hypoglycaemia • Use with care in those with mild to moderate renal impairment (eGFR 30-60ml/min), only prescribe under specialist advice in severe impairment (eGFR <30ml/min) • Self monitor according to DVLA guidance and consider alternative if Group 2 driver (large lorries and buses) • Consider alternative if BMI >35 • Care with frail elderly, housebound and certain occupations e.g., working heavy machinery
ACEI	1st line Ramipril	2.5mg OD (1.25mg OD in frail/elderly patients)	2.5mg-10mg OD	• For people of Black African or African-Caribbean family origin, use ARB instead of ACEI (as increased risk of angioedema with ACEI) • Check base line U&Es and renal profile (Na/K/Cr/eGFR). Hyperkalaemia may occur, therefore close monitoring of serum potassium is required • Re-check renal profile within 2 weeks of initiation or dose increase and then at least annually. • **Titrate ACEI/ARB up at 2-4 weekly intervals to achieve optimal BP control** • Initiation/dose titration: if Cr increases by >20% (or eGFR falls by >15%) stop ACEI and seek specialist advice. ACEI dose should only be increased if serum creatinine increases by <20% (or eGFR falls by <15%) after each dose titration and potassium <5.5mmol • **ACEI/ARB dose should be optimised before the addition of a second agent** • Side effects: symptomatic hypotension can occur on first dosing – suggest take at night. Dry cough with ACEI, consider switch to ARB • **Caution:** Do not combine ACEI and ARB to treat hypertension • For diabetic nephropathy ARB of choice: losartan and irbesartan
	2nd line Lisinopril	10mg OD	10-80mg OD (maintenance dose 20mg for hypertension)	
ARBs	Losartan	50mg OD (25mg OD if >75yrs old)	50-100mg OD	
	Candesartan	8mg OD	8mg-32mg OD	

*Latest NICE CKD guidance (August 2021) does **not** recommend adjusting the estimation of glomerular filtration rate (GFR) in people of African-Caribbean or African family background

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	Drug	Starting dose	Daily Range	**Notes** (these are not extensive, please refer to the latest BNF for further information especially titration increments/cautions/contra-indications)
CCBs	Amlodipine	5mg OD	5-10mg OD	• Increase after 2-4 weeks to maximum dose of 10mg OD. • Caution: Interacts with simvastatin – consider switching to atorvastatin. • If amlodipine causes ankle oedema consider using a thiazide-like diuretic instead • CI: unstable angina, aortic stenosis, severe hypotension • Side effects include flushing and headaches at initiation; swollen ankles especially at higher doses
Thiazide-like diuretics	Indapamide (IR)	2.5mg OD	2.5mg OD	• Check baseline renal profile, then after 2 weeks, then at least annually. If K < 3.5mmol/L or eGFR <25ml/min, stop indapamide and seek specialist advice.
Aldosterone receptor antagonist (K+ sparing diuretic)	Spironolactone	25mg OD	25mg OD	• Step 4: Spironolactone is the preferred diuretic at step 4 (NICE), but is an unlicensed indication in resistant hypertension (BNF) • Consider only if potassium ≤4.5mmol/L (caution in reduced eGFR <30ml/min, as increased risk of hyperkalaemia). Monitor Na/K/renal function within 1 month and repeat 6 monthly thereafter • If K>4.5mmol/L should be stopped.
α-B	Doxazosin (IR)	1mg OD	2-16mg OD (or BD dosing when >8mg/day)	• Consider at Step 4 if potassium ≥ 4.5mmol/L. Initial dose of 1mg usually increased after 1-2 weeks to 2mg OD • At doses above 8mg/day, consider split dosing from OD to BD to reduce BP variation • **Caution:** Initial dose as may cause postural hypotension, avoid in elderly as orthostatic hypotension risk
β-B	Atenolol	25mg OD	25-50mg OD	• Consider at Step 4 if potassium ≥ 4.5mmol/L. • **Particular caution in T2DM – symptoms of hypoglycaemia may be masked.** • Beta blockers may be considered in younger people and in those with an intolerance/CI to ACEI/ARBs, women of childbearing potential, co-existent anxiety/tachycardia/heart failure. • **CI:** asthma, 2nd/3rd degree AV block, severe PAD • **Caution:** beta blockers can cause bradycardia if combined with certain CCBs e.g. Verapamil/Diltiazem
	Bisoprolol	5-10mg OD	5-20mg OD	
Statin **(See page 6)**	Atorvastatin (alternative is rosuvastatin)	20mg OD	20-80mg OD	• Seek specialist advice if eGFR <30ml/min, liver disease, untreated hypothyroidism, heavy drinker • **CI** in pregnancy, breast feeding, avoid or address contraceptive needs women of childbearing age. Advise to stop 3 months before conception. • Multiple drug interactions, check BNF for advice, avoid grapefruit juice • Advise patient to visit GP if they experience unexplained muscle pains • Refer to SEL IMOC Guidelines on Lipid Management

Resources:

Patient resources

- Patients with pre-diabetes can **self-register** with the NHS Diabetes Prevention Programme
- **NHS Digital Weight Management Programme** a 12 week online behavioural and lifestyle programme
- **Lambeth GP Food Co-op** build food growing gardens in NHS surgeries & patients participate in food growing groups
- **Diabetes Book and Learn:** NHS south London Diabetes Education Booking Service.
- **The Diabetes UK Lambeth and Southwark Group:** support and information for everyone with diabetes and their carers.
- Diabetes UK: **Patient information leaflets in different languages**
- Lambeth health and wellbeing **information and support** (smoking, healthy eating and physical activity)
- NHS Better Health **free tools and support** to kickstart your health (weight, smoking, activity, alcohol)
- Physical activity for older people with **Silverfit**
- Local activity finders**: getactive** and **gomammoth**
- Walking for health: **Lambeth Community Health Walking Scheme**
- Lowering your blood pressure with **DASH diet**
- Diabetes UK **Diabetes and looking after your feet**
- Discounted prices at Lambeth Leisure Centres **REAL Plus Leisure Card**

Professional resources

Healthier You NHS Diabetes Prevention, see referral pathway via DXS

- **Cambridge Diabetes Education Programme,** comprehensive, competence based learning. Free for all Lambeth clinicians REGISTRATION KEY CODE: **DIABETESLAMBETH**
- **Diabetes in Healthcare** Diabetes UK free on line learning for health professionals
- **RCGP Diabetes Hub**
- **Personalised Care Institute**
- **Primary Care Diabetes Society**
- **RCGP Quality Improvement Toolkit for Diabetes Care**
- Annual **foot review** Diabetes UK

Lambeth Clinical Support

Urgent telephone advice- Consultant connect: Diabetes at GSTT/KCH by telephone or via App
Virtual diabetes clinics- These are available for practices via Lambeth DICT (see below)
Lambeth Diabetes Intermediate Care team (DICT)
Referral criteria on form (see DXS). Can also contact via email: lamccg.diabetes@nhs.net

Specialist clinics- Request **advice and guidance** or referral to specialist clinics via eRS to: Diabetes medicine (GSTT/KCH), Pre-conception counselling clinic (GSTT/KCH), Diabetes Pregnancy clinic (GSTT /KCH), CKD clinic (GSTT/KCH)]

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Abbreviations:

2WW – Two week wait referral
α-B – Alpha blocker
A&E – Accident and Emergency
ABPM – Ambulatory blood pressure monitoring
ACEI– Angiotensin converting enzyme inhibitor
ACR – Albumin-creatinine ratio
ALT – Alanine aminotransferase
APL – Active Patient Link tools
ARB – Angiotensin receptor blocker
AST – Aspartate aminotransferase
BAME – Black, Asian and Minority Ethnic
β-B – Beta blocker
BD – Twice daily (dosing)
BM- Blood monitoring
BMI – Body mass index
BNF - British National Formulary
BP – Blood Pressure
CDEP – Cambridge diabetes Education Programme
CES – Clinical Effectiveness Southwark
CCB – Calcium channel blocker
CI – contra-indication
CK – Creatinine Kinase
CKD – Chronic Kidney Disease
Cr – Creatinine
CVD – Cardiovascular disease
DASH – Dietary approaches to stop hypertension
DESMOND – Diabetes Education and Self-Management for Ongoing and Diagnosed
DPP – Diabetes Prevention Programme
DVLA – Driver and Vehicle Licensing Agency
DXS – Point-of-care tool for EMIS Web
ECG – Electrocardiogram
eGFR – Estimated glomerular filtration rate
ERS – Electronic Referral System
F2F – Face to face
FBC – Full blood count
GSTT – Guy's and St. Thomas' Hospital
GI – Gastro-intestinal
IGR – Impaired Glucose Regulation
IR – Immediate release
K – Potassium
KCH – King's College Hospital
HbA1c – Haemoglobin A1c %
HBPM– Home blood pressure monitoring
HDL – High-density lipoprotein
IGR – Impaired glucose regulation
IHD – Ischaemic Heart Disease
IR – Immediate release
LFT – Liver function tests
LADA – Latent autoimmune diabetes in adults
LDL – Low-density lipoprotein
MI – Myocardial infarction
NDA – National Diabetes Audit
NICE – The National Institute for Health and Care Excellence
NSAID – Non steroidal anti-inflammatory
OD – Once daily (dosing)
PAD – Peripheral Arterial Disease
PCOS – Polycystic Ovarian Syndrome
PHM – Population health management (contract)
PLT – Protected Learning Time
PMS – Primary medical services (contract)
QOF – Quality and outcomes framework (contract)
QRISK2 – a prediction algorithm for CVD. EMIS currently using QRISK2 (although QRISK3 released in 2017)
RCGP – Royal College of General Practitioners
Renal profile – this includes serum sodium/potassium/creatinine/eGFR
SELAPC – South East London Area Prescribing Committee
SEL – South East London
SBP – Systolic blood pressure
SGLT-2 inhibitor – Sodium-glucose Cotransporter-2 inhibitor
SPC – Summary of product characteristics
SPLW – Social Prescribing Link Worker
T2DM – Type 2 Diabetes Mellitus
TIA – Transient ischaemic attack
TFT – Thyroid function blood tests

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February 2022 (to be reviewed June 2022)