Delivering Diabetes Care during the COVID-19 Pandemic – the ‘new normal’

Guidance for General Practice

22nd June 2020 (version 2)

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Summary of key points

This summary covers the key points within the guidance and includes a flowchart of the suggested review process. Each point is explored in greater detail with supporting advice, information and rationale in the main document.

- The COVID-19 pandemic has required healthcare services to adapt their approaches to care delivery, with remote consultations becoming the default where applicable. It has brought a number of challenges regarding clinical capacity and the management of ongoing care needs alongside the risks associated with face-to-face contact.

- Reviews should follow a two-stage process; the first part is focused on any necessary elements requiring face-to-face contact (such as venous blood testing and complete foot checks) and may be omitted on a case-by-case basis after discussion of risks and benefits; the second part is essential for all reviews and is a consultation, performed remotely unless face-to-face contact is specifically required, covering information gathering, issues, concerns, results, actions and next steps. Aim to optimally match workforce skill mix to the identified clinical needs and complexity of reviews.

- People with evidence of hypoglycaemia or extreme hyperglycaemia, active foot disease, new pregnancy or new insulin initiation have urgent clinical needs and should be reviewed without delay.

- Prioritisation for routine reviews may be necessary with various possible approaches. For any approach, consideration should be given to feasibility, complexity, utility, effect on inequalities, possible unintended consequences and any groups needing additional consideration.

- The example approach to risk stratification and prioritisation in this document takes into account significant comorbidities and complications of diabetes, missed reviews and last recorded HbA1c, blood pressure and lipid management status. It is intended as a guide only and practices should consider approaches and thresholds based on local needs, data and context:

<table>
<thead>
<tr>
<th>HbA1c (mmol/mol)</th>
<th>BP (mmHg)</th>
<th>Lipid management status</th>
</tr>
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<tbody>
<tr>
<td>RED</td>
<td>&gt; 86 mmol/mol*</td>
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<tr>
<td>AMBER</td>
<td>59 – 86 mmol/mol</td>
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</tr>
<tr>
<td>GREEN</td>
<td>≤ 58 mmol/mol</td>
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If last results fall into GREEN category but are > 24 months old, person should be stratified as AMBER.

People with last results in GREEN category with significant co-morbidities (including CKD stage 3-5, CHD, CBVD, heart failure) or known significant complications of diabetes should be stratified as AMBER.

- National Diabetes Audit data show that over 80% of people achieving glycaemic and blood pressure treatment targets in the previous year are likely to achieve these again in the following year.

- A personalised approach to reviews should be taken; in people with moderate or severe frailty, avoid over-intensive glycaemic control with agents prone to causing hypoglycaemia and over-intensive control of blood pressure and lipids. For people at end of life, focus care on symptom management.
• The need for face-to-face contact for venous blood testing and foot checks should ideally be assessed on a case-by-case basis. This is particularly important for people who are shielding.

• Although likely to be needed by most people, venous blood tests may not be necessary for all. The key question to consider is whether venous blood tests will affect clinical management (a detailed set of principles of consider is included in the main document). If required, phlebotomy should occur at COVID-minimal sites.

• Blood pressure readings should be obtained remotely. If this is not possible, face-to-face measurement may be performed if seen for other reasons (such as venous blood testing) or if there are specific concerns. People should be encouraged to purchase a monitor for home use although it is recognised that this may not be feasible for all.

• Urinary albumin creatinine ratio may be tested without any face-to-face contact with healthcare professionals.

• People should be encouraged and supported to check their own feet daily. Any symptoms suggesting diabetic foot disease should be acted on promptly and referred to specialist care within 24 hours.

• Elements of foot checks may be performed remotely by video call although there may be challenges with video quality and positioning. If a venous blood test is arranged and an in-person foot check is indicated, this should be performed at the same visit, by the same person if possible.

• Retinal screening providers are also using risk stratification; people who attended their last invited screen and were assessed as being at low risk of sight loss or retinopathy (RO MO) may have the time between screenings extended to up to 24 months. All recall is managed by the provider.

• Self-reported weight measurements are acceptable. People with obesity should be supported to lose weight although care should be taken in older people and those with frailty due to the risk of sarcopenia.

• Digital self-management tools have recently launched nationally; ensure people are aware of this free-of-charge support and how it may be accessed:
  o Digibete is for children and young adults and is accessed via specialist teams.
  o MyType1Diabetes is for adults and can be accessed directly at www.myType1diabetes.nhs.uk.
  o Healthy Living for Type 2 Diabetes is due to be released shortly with a direct to consumer route enabled.

• People with diabetes should be made aware of sick day rules and what to do if unwell.

• Explore psychological and emotional wellbeing and offer support as applicable.

• For people at high risk of Type 2 Diabetes (but not previously diagnosed with diabetes), the NHS Diabetes Prevention Programme is still accepting referrals and is operating fully remotely.
Flowchart of the two-stage review process

Urgent clinical need highlighted
(hypoglycaemia, extreme hyperglycaemia, active foot disease, new pregnancy or new insulin initiation)
or
Individual prioritised for routine review by risk stratification

Example approach to risk stratification and prioritisation for routine reviews:

<table>
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If last results fall into GREEN category but are > 24 months old, person should be stratified as AMBER.

People with last results in GREEN category with significant co-morbidities (including CKD stage 3-5, CHD, CBVD, heart failure) or known significant complications of diabetes should be stratified as AMBER.

Is a face-to-face foot check due and clinically indicated?
(Is it likely that a remote foot check would not be appropriate or sufficient?)

1st stage of review requires face-to-face care
Arrange for any clinically indicated blood tests.

Plan for foot check to be completed at same visit, if due and clinically indicated

Check BP and weight at same visit only if self-reported readings cannot be obtained

Can the individual provide self-reported blood pressure and weight readings?
(consider if a BP monitor could be obtained / provided)

Is face-to-face contact for obtaining BP / weight clinically indicated?
Consider if there are any:
• concerns about BP or weight
• high/low previous BP readings
• symptoms suggestive of high/low BP
• intervening changes to management
• reported changes in habitus

2nd stage of review should be performed remotely
(face-to-face review may sometimes be necessary)

Plan remote consultation for information gathering and discussing issues, concerns, results, actions and next steps. Aim to optimally match workforce skill mix to identified clinical needs and complexity of reviews

Is venous blood testing required?
Consider if testing will affect management
Take into account:
• Time since last test
• Values and trends of previous readings
• Any intervening acute events / symptoms
• Intervening changes to management
• Known comorbidities / complications
• Evidence suggesting hypo / hyperglycaemia
• Data from CBGs (if available)

Is a face-to-face foot check due and clinically indicated?
(Is it likely that a remote foot check would not be appropriate or sufficient?)

1st stage of review may be performed remotely
Obtain self-reported BP and weight if possible
Arrange remote foot check if foot check due (if cannot be performed satisfactorily remotely, consider arranging face-to-face foot check)

2nd stage of review should be performed remotely
(face-to-face review may sometimes be necessary)

Plan remote consultation for information gathering and discussing issues, concerns, results, actions and next steps. Aim to optimally match workforce skill mix to identified clinical needs and complexity of reviews
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Purpose of this guidance

This document is intended to guide and support General Practices with the delivery of diabetes care during the COVID-19 pandemic. Recognising the challenges faced relating to workforce and capacity, and considering the management of ongoing care needs alongside the risks posed by face-to-face contact during the pandemic, this document aims to give practical, pragmatic advice, with supporting examples, regarding approaches to the delivery of diabetes care in the ‘new normal’.

Introduction

During the COVID-19 pandemic, primary, community and secondary care services have made major changes to the ways in which they deliver care. Remote consultations are used across care settings and we have adapted our processes in response to the potential risks posed by face to face contact. At the same time, we face additional challenges regarding clinical capacity and unmet need which have arisen during the pandemic.

In General Practice, ‘routine annual reviews’ for people with diabetes have largely been suspended. This has been driven by a number of factors in the context of increased workforce pressures: the need to prioritise clinical capacity to deal with urgent clinical needs, the need to protect people with diabetes from potential harm related to face-to-face contact (required for venous blood testing and complete foot checks), and the need to reduce non-urgent demand on pathology testing services.

Prior to the COVID-19 pandemic, clinical reviews for people with diabetes generally occur in response to an identified acute clinical need or as a ‘routine review’ or follow-up. The former aims particularly to reduce risks of imminent harm and may relate to hypoglycaemia, extreme hyperglycaemia, or active foot disease – situations which may result in admission to hospital if urgent action is not taken – while the latter tends to be more scheduled with the purpose of optimising glycaemia, blood pressure and lipids to reduce the risk of the complications of diabetes and performing pro-active monitoring to identify these at an early stage.

The vast majority of diabetes reviews in General Practice take place for people with Type 2 diabetes; however, some also take place for people with Type 1 diabetes or with other forms of diabetes, particularly if not under specialist care. This document does not differentiate between types of diabetes since it is mainly focused on the practical aspects of reviews in the context of the COVID-19 pandemic; however, given the difference in aetiology and pathophysiology, clinical management is likely to differ. Up to 25% of people with Type 1 diabetes will be solely under the care of their General Practice team.

Specialist diabetes services are continuing to operate and, like General Practice, are reviewing people remotely where possible and appropriate. If any review, urgent or routine, highlights a need for specialist diabetes care, referral to such teams should proceed without delay (or should trigger communication with the specialist team if the person with diabetes is already under their care). Particularly for people with Type 1 diabetes, specialist diabetes teams may have access to resources such as structured education tools, specialist psychological support and technology (such as flash glucose monitoring, continuous glucose monitoring, insulin pumps) which are not all available directly to General Practice.
The two-stage review process

Wherever possible and clinically appropriate, consultations should be conducted remotely - online, by telephone, or video call - to minimise avoidable face-to-face contact in the COVID-19 pandemic and protect people with diabetes and our workforce. Face-to-face, in-person contact should be the exception, for specific circumstances, rather than the default. Careful thought must be given to consultation type if injectable treatment is considered; for insulin, it is essential that the individual is given sufficient support, instruction and demonstration regarding safe use and injection technique. If GLP-1 analogue therapy is considered, links to online videos demonstrating injection technique may be helpful. Aim to optimally match workforce skill mix to identified clinical needs and complexity of reviews.

Amongst the elements of care which cannot be delivered fully remotely are venous blood testing, retinal screening and complete foot checks. Though these may have been deferred in the last few months, it is becoming increasingly clear that we are likely to continue operating in the context of COVID-19 for some time. For the majority of people, it will be appropriate to offer venous blood tests and foot checks as part of their review with appropriate infection control precautions (such as using COVID-minimal sites, suitable personal protective equipment and consideration of scheduling to avoid busy waiting areas). Everyone invited to attend a face-to-face appointment should be informed that they must cancel such appointments if they develop any symptoms suggestive of COVID-19 at any time in the prior two weeks.

A diabetes review is therefore likely to occur in two stages:

1. The first stage is face-to-face and focused on any required elements which cannot be performed remotely (such as venous blood tests or a complete foot check, if these are indicated). On a case-by-case basis, this stage may be omitted if not completely necessary or may be declined following discussion of the risks and benefits of face-to-face contact; if so, consider whether alternative approaches may be viable (such as remotely assessing the feet rather than a complete in-person foot check).

2. The second stage is a consultation covering information gathering, issues, concerns, results, actions and next steps. The second stage is required for all reviews and should be performed remotely unless specific circumstances necessitate face-to-face contact.

Where face-to-face contact is recommended, ensure that people are aware of the precautions and infection control measures in place. Consideration should also be given to combining a visit for face-to-face elements of diabetes care with fulfilling other care needs requiring face-to-face contact, such as dressings or those relating to other conditions.

Urgent clinical needs

Despite the pressures and challenges associated with the COVID-19 pandemic, it is essential that urgent clinical needs, both physical and psychological, continue to be managed. Hypoglycaemia, extreme hyperglycaemia and active foot disease pose risk of major harm in the short-term and require urgent attention. These may be highlighted through different mechanisms including direct reporting by the individual (or their carers) of capillary blood glucose (CBG) readings or symptoms (such as those suggestive of diabetic ketoacidosis (DKA) or hyperosmolar hyperglycaemic state (HHS), osmotic symptoms of
diabetes, or those suggestive of hypoglycaemia), or reports from urgent care services, hospital emergency departments or ambulance services. Any such reports require urgent assessment and should be acted upon promptly, constituting an urgent clinical need rather than a routine review. If insulin has been newly started in response to hyperglycaemia during a hospital admission, it is important that they are assessed promptly following discharge to ascertain safety. Women with diabetes reporting pregnancy need urgent review and referral.

A clinical picture suggestive of DKA or HHS requires an emergency admission to hospital. For symptomatic hyperglycaemia not requiring admission, if venous blood testing is likely to affect management, the benefits of such testing are likely to outweigh the risks; using CBG data (if available and sufficiently detailed) may also be considered. People treated with insulin or insulin secretagogues, and therefore at risk of hypoglycaemia, should have access to equipment for self-monitoring of blood glucose in line with NICE guidance. People should also be encouraged and supported to highlight any issues or concerns relating to their diabetes and their physical and psychological wellbeing.

Routine reviews, risk stratification and prioritisation

In addition to identifying and addressing otherwise undetected acute clinical needs, and specific issues and concerns of the person with diabetes, routine reviews are aimed at identifying and addressing risk factors for complications of diabetes. This involves optimising glycaemia, blood pressure and lipids, and proactively searching for early signs of complications including nephropathy, neuropathy and peripheral vascular disease.

During the first phases of the outbreak, people who had not reported urgent clinical needs may have had their routine review appointments cancelled or deferred. Moving into the next phases of the outbreak, there is a need to consider the approach for restarting routine diabetes care. Where capacity is limited, it is sensible for such reviews to be prioritised on the basis of modifiable risk, while considering other key factors such as comorbidities and time since last review.

In addition to the risk of complications, the coronavirus pandemic has brought additional risks to consider; namely that of mortality with COVID-19. Multivariable analysis of mortality data from England, linked to the National Diabetes Audit (NDA), has revealed significant associations in people with diabetes between mortality with COVID-19 and age, sex, deprivation, ethnicity, comorbidities (kidney disease, heart failure, previous stroke), BMI and HbA1c (Holman et al, 2020; see https://www.england.nhs.uk/wp-content/uploads/2020/05/Valabhji-COVID-19-and-Diabetes-Paper-2-Full-Manuscript.pdf).

HbA1c is the most readily modifiable of these risk factors; the risk of mortality with COVID-19 increases as HbA1c increases within the diabetes range (in Type 1 diabetes, this trend only achieved significance for HbA1c > 86 mmol/mol, likely due to smaller numbers and reduced statistical power). Though an association with hypertension has been described in some systematic reviews, this was not found to be significant in this multivariable analysis. HbA1c is therefore a common modifiable risk factor for both the complications of diabetes and for COVID-19 related mortality, while blood pressure and dyslipidaemia are important modifiable risk factors for the complications of diabetes (blood pressure is a risk factor for both the microvascular and cardiovascular complications of diabetes while dyslipidaemia increases the risk of cardiovascular complications).
If capacity for routine reviews is limited and prioritisation is necessary, there are a number of possible risk stratification approaches. These may take into account both risk of mortality with COVID-19 and the risks of diabetes-related complications. There is no single ‘correct approach’ for risk stratification and prioritisation, however consideration should be given to the following:

1. Feasibility (ease of searching clinical systems vs individually assessing records)
2. Complexity (the variety of factors to consider in stratification)
3. Utility (strata should be appropriately sized to be practically useful)
4. Effect on inequalities and possible mitigations
5. Possible unintended consequences and any groups needing additional consideration

One approach would be to stratify into RED, AMBER and GREEN on the basis of last recorded HbA1c, blood pressure and lipid management status, while taking into account significant co-morbidities (such as CKD and CVD) or significant complications of diabetes as well as missed reviews. In the following example, the thresholds between GREEN and AMBER reflect the treatment targets for diabetes, as used by the NDA and the Quality Outcomes Framework (QOF). Statin use is binary while HbA1c and blood pressure are continuous variables; the threshold between AMBER and RED for blood pressure in the example is informed by the NICE definition of stage 2 hypertension (160/100 – 180/120 mmHg), however no such stages are defined for HbA1c.

Above the threshold for diabetes, as HbA1c increases, both the risk of mortality with COVID-19 and the risk of microvascular complications increase fairly linearly. Although the following example uses 86 mmol/mol as the HbA1c threshold between RED and AMBER, it is proposed that practices select a suitable HbA1c threshold themselves, based on local context and taking into account clinical needs and capacity). This should ideally be informed by searches at practice-level, however the following data from the NDA shows the proportions of people with Type 1 diabetes or Type 2 diabetes in England with HbA1c above different thresholds in 2018/19:

<table>
<thead>
<tr>
<th>HbA1c threshold</th>
<th>% with Type 1 Diabetes above threshold</th>
<th>% with Type 2 Diabetes above threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>97 mmol/mol</td>
<td>7.9</td>
<td>3.4</td>
</tr>
<tr>
<td>86 mmol/mol</td>
<td>15.5</td>
<td>6.6</td>
</tr>
<tr>
<td>75 mmol/mol</td>
<td>29.5</td>
<td>12.3</td>
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**Example of an approach to risk stratification and prioritisation**

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<tr>
<td>RED</td>
<td>&gt; 86 mmol/mol*</td>
<td>≥ 160/100</td>
<td>Not on statin despite hx of CVD (excl. haem stroke)</td>
</tr>
<tr>
<td>AMBER</td>
<td>59 – 86 mmol/mol</td>
<td>141/81 – 159/99**</td>
<td>Not on statin despite age ≥ 40 yrs and QRISK ≥ 10%</td>
</tr>
<tr>
<td>GREEN</td>
<td>≤ 58 mmol/mol</td>
<td>≤ 140/80**</td>
<td>On statin (or statin not indicated / declined)</td>
</tr>
</tbody>
</table>

If last results fall into GREEN category but are > 24 months old, person should be stratified as AMBER

People with last results in GREEN category with significant co-morbidities (including CKD stage 3-5, CHD, CBVD, heart failure) or known significant complications of diabetes should be stratified as AMBER

*If risk stratifying and prioritising based on this approach, practices are advised to select a suitable threshold for HbA1c based on local needs, data and context
**Note that the threshold between GREEN and AMBER for blood pressure aligns with the treatment target for diabetes used by the NDA and QOF. An alternative approach would be to adopt the blood pressure target level recommended in NICE NG136 of 140/90 mmHg (for people aged under 80 years).

The above approach relies on searches on General Practice Clinical Systems to determine categorisation. This is intended as a guide only and does not replace clinical judgement. People with characteristics in the RED category would be prioritised for review, followed by AMBER and then GREEN. If an individual’s glycaemic, hypertensive and lipid status fall into different categories, then the highest priority of those categories would take precedence, i.e. someone with HbA1c 87 mmol/mol (RED), blood pressure 142/85 mmHg (AMBER) and on statin treatment (GREEN) would be in the RED category overall. Consideration may also be given to additional adjustments or factors for inclusion, e.g. it would be reasonable to categorise anyone diagnosed with diabetes in the previous 12 months with higher priority than suggested by their HbA1c, blood pressure or lipid status.

It is advised that a personalised approach to care be taken; for people with moderate or severe frailty, there is generally likely to be benefit overall from intensifying treatment if parameters are in the RED category, while the balance of risks and benefits may be more complex for intensifying treatment if parameters are in the AMBER category (particularly when closer to GREEN). Insulin and insulin secretagogues confer a risk of hypoglycaemia and overly intensive glycaemic control with these agents should be avoided in people with frailty (Strain et al, 2018; see https://onlinelibrary.wiley.com/doi/full/10.1111/dme.13644). Similarly, over intensive blood pressure control and lipid management in this group may lead to more harm than benefit.

Reassuringly, analyses of the NDA indicate that over 85% of people who achieved HbA1c ≤ 58 mmol/mol in 2017/18 also achieved this in 2018/19; in other words, most people with GREEN categorisation are likely to still have HbA1c ≤ 58mmol/mol. However, if someone with last HbA1c ≤ 58 mmol/mol is considered to have had a deterioration in glycaemia since this was last checked (e.g. due to high CBG readings, new symptoms, cessation of treatment), they should be re-categorised to a higher risk group for review.

Likewise, over 80% of people with blood pressure less than 140/80 mmHg in 2017/18 had blood pressure consistently recorded as less than 140/80 mmHg in 2018/19 – it is therefore reasonable to consider that people with acceptable blood pressure in the previous year are likely to still have acceptable blood pressure now, in the absence of other changes such as de-intensification of anti-hypertensives or reduced compliance.

**Venous blood testing**

Prior to the COVID-19 outbreak, practices would usually arrange venous blood tests prior to all routine diabetes reviews. While the majority of reviews are likely to require blood testing, it is suggested that practices should consider the need for venous blood testing on a case-by-case basis, given the risk posed by face-to-face contact during the pandemic. Though this should ideally be followed for all, it is particularly important that this is followed for people who are shielding. The key question to consider is whether the blood tests will affect management – i.e. blood tests should be fulfilling a defined clinical need, rather than ‘tick-boxes’ or QOF. Some general principles:
1. Venous blood tests should take place at COVID-minimal sites, avoiding acute hospital sites. If possible, all required face-to-face checks should be performed at the same visit.

2. If one blood test is required, such as renal function, then it is sensible to also request all other clinically-indicated blood tests at the same time (such as HbA1c and lipids).

3. When evaluating the need for renal function testing, consider:
   a. time since last test
   b. values and trend of previous readings
   c. any intervening acute events (such as hospital admissions)
   d. any intervening new medications (such as diuretics)
   e. overall risk of complications (i.e. long duration of suboptimal glycaemic control)
   f. presence of known diabetes complications (if so, then high risk of nephropathy)

4. When evaluating the need for HbA1c testing, consider:
   a. time since last test
   b. values and trend of previous readings
   c. changes in treatment since last measurement
   d. any evidence suggesting hyperglycaemia or hypoglycaemia (such as symptoms noted in the clinical record, OOH / A&E attendances, ambulance service reports)
   e. data from capillary blood glucose testing (if applicable)

5. If only HbA1c may be needed, consider whether the patient already checks CBG readings and if these could provide enough information to guide treatment (if available and sufficiently detailed).

6. There is generally little value in arranging a blood test solely to check lipids – use the last recorded values if assessing QRISK.

7. If it is deemed that a review could reasonably take place without venous blood tests, but the person with diabetes requests that blood tests are arranged, these should not be denied as long as such tests would have been conducted under ordinary circumstances and the additional risks and measures applicable during the COVID-19 pandemic are explained.

8. It is also reasonable for someone to decline blood tests due to concerns about face to face contact. This is their decision and should be respected, though it is important to explain the rationale for recommending blood testing, the risks posed by contact, and relevant infection control precautions.

9. If indicated, arrange for the person with diabetes to bring an early morning urine sample to their blood test appointment and for this to be sent for ACR testing by the health professional taking blood.

Example 1: John was diagnosed with Type 2 diabetes around 2 years ago. His renal function was last checked a year ago and reported eGFR > 60 ml/min/1.73m², all previous renal function results have been in the normal range, he has no known nephropathy and no known complications of diabetes. He has previously attended annual reviews and retinal screening. He takes metformin 1g bd and gliclazide 40mg bd. He has testing strips prescribed and regularly checks CBG readings. His last HbA1c was a year ago and was 54 mmol/mol – there have been no changes to his medications since that time.
In this example, arranging renal function testing may not be necessary, unless there is a specific concern that it may have deteriorated. His last HbA1c showed adequate blood glucose control and there have been no changes to treatment since then. He confirms that he is also able to provide CBG readings, taken at different times over a few days, giving an indication of blood glucose levels. It is therefore decided not to arrange venous blood tests for John at this time and to proceed to reviewing him remotely.

Example 2: Sultana was diagnosed with Type 2 diabetes around 8 years ago. Her routine review in March was cancelled. Her renal function was last checked 15 months ago and reported eGFR of 49 ml/min/1.73m². There has been a steady decline in renal function over the last few years. She has background retinopathy. She has previously attended reviews and retinal screening. She takes metformin 1g bd and linagliptin 5mg od. Her HbA1c 15 months ago was 52 mmol/mol – there were no medication changes at that time.

In this example, there is likely to be overall benefit with arranging testing of renal function. It is important to check current renal function as there has been a downward trend over time and the metformin dose will need modification if eGFR is < 45 ml/min/1.73m². Her glycaemic control is likely to be similar to when last checked, unless there have been significant changes to her lifestyle, and though it may not warrant testing at this time on its own, it is reasonable to check HbA1c (along with all other clinically-indicated bloods) since blood testing will occur for renal function anyway.

Blood pressure

Management of blood pressure is a key aspect of diabetes care and has major influence on the development of the complications of diabetes. It is expected that anyone with a most recent blood pressure greater than 180/120 mmHg should already have had appropriate management initiated and follow-up arranged, in line with NICE guidance. As a precaution, it is suggested that all practices run a search of any people (not limited to those with diabetes) with last blood pressure reading greater than 180/120 mmHg to ensure that such action has been taken and follow-up is in place; if there is any doubt then urgent review should be arranged.

For the majority of people with diabetes, monitoring of blood pressure should not necessitate a visit to the practice. Blood pressure monitors are available relatively inexpensively (under £20) and are easy to use; people should be encouraged to purchase a monitor for home use if at all possible, with explanation of the benefits for monitoring (an average of home BP readings is generally much more useful than one-off clinic readings) and for limiting avoidable contact which may place the individual and staff at risk.

However, it should be recognised that this may not be feasible for all and that many people have been adversely affected financially by the COVID-19 pandemic; practices may consider lending out BP monitors in such situations, with relevant infection control measures taken. A list of blood pressure monitors validated for home use is available from the British and Irish Hypertension Society at [https://bihsoc.org/bp-monitors/for-home-use/](https://bihsoc.org/bp-monitors/for-home-use/)

If someone is unable or unwilling to purchase a blood pressure monitor, carefully consider the risks and benefits of measuring blood pressure in the practice. If needing blood tests or a foot check, it would be reasonable to check blood pressure at the same time. If there is no other reason to attend the practice in person, only arrange a visit for BP testing if the
benefits of obtaining a clinic blood pressure reading outweigh the risks (such as if the last recorded BP was very high). For infection control, disposable blood pressure cuffs are available or cling film may be wrapped around the cuff site to prevent direct skin contact.

**Urinary albumin creatinine ratio testing**

Of the care processes for diabetes, analysis of urinary albumin creatinine ratio (ACR) has the lowest completion rate according to the NDA. Even if venous blood tests and an in-person foot check are not taking place, make sure that consideration is given to urinary ACR testing. This does not necessitate face-to-face contact with healthcare professionals; the sample pot, instructions and pathology form may be provided to the person with diabetes (through post if necessary), with instructions to arrange for dropping off of the sample at the practice when ready (as appropriate). If attending the practice face-to-face for venous blood tests or a foot check, the sample may be provided at the same time.

**Foot checks**

Diabetic foot problems should be referred to a specialist team within 24 hours, if not requiring immediate acute referral. Delayed referral to a multi-disciplinary footcare team is associated with poorer rates of ulcer healing (National Diabetes Foot Audit). It is recommended that everyone with diabetes should be supported to check their feet daily (see [https://www.diabetes.org.uk/guide-to-diabetes/complications/feet/taking-care-of-your-feet](https://www.diabetes.org.uk/guide-to-diabetes/complications/feet/taking-care-of-your-feet)), in addition to having a scheduled yearly foot check.

If someone is attending the practice for a venous blood test, and a foot check is also indicated, arrange for this to be done at the same visit, ideally by the same person if possible. If blood tests are not considered absolutely necessary, but a foot check is indicated, discuss the risks and benefits of attending in-person for a foot check. If the person with diabetes decides to proceed with a foot check, it would be sensible to conduct any clinically-indicated blood tests at the same visit (even if the review could feasibly proceed without them).

If a foot check in-person is not absolutely necessary or is declined, consider attempting a foot check remotely. Some elements of a foot check may be performed satisfactorily by video call, such as inspection of the skin and nails and checking of capillary refill time, while other elements, such as checking pulses and assessment of protective sensation, are clearly less amenable to remote consultation (although there are tests for sensitivity which can be performed at home with a carer, see [https://www.diabetes.org.uk/guide-to-diabetes/complications/feet/touch-the-toes](https://www.diabetes.org.uk/guide-to-diabetes/complications/feet/touch-the-toes)). Furthermore, it can be challenging to visualise intended areas with sufficient clarity for an adequate inspection, particularly if the individual does not have someone with them to manoeuvre the smartphone/webcam.

Foot checks are particularly important for people at high risk of foot disease. Those likely to be at highest risk are people with previous diabetic foot disease as well as those with foot deformities, neuropathy or known peripheral vascular disease. Other risk factors include longer duration of diabetes, poor glycaemic control, male sex, smoking, hypertension and the presence of other complications of diabetes.
Whether accepting or declining an in-person foot check, consider signposting the person with diabetes and their carers to online videos showing them how to thoroughly check their feet. Emphasise the importance of urgently reporting any cuts, blisters, wounds, signs of infection or other concerning features to the practice.

Retinal screening

Although General Practice is not directly involved in the scheduling or recall for retinal screening, questions and concerns regarding screening may arise during reviews. As part of the restoration of diabetic eye screening, a risk stratification approach to invitations for screening has been agreed nationally. People with diabetes most at risk of sight loss and progression of retinopathy will continue to be invited for screening as usual, while people who attended their last invited screen and were assessed as being at low risk of sight loss or retinopathy (R0M0) may have the time between screening extended to up to 24 months.

Eye screening cannot be delivered remotely. If locations other than the GP practice for the face-to-face elements of diabetes care are required, consider engaging with eye screening providers to identify venues where these services could be co-located, facilitating provision of a ‘one-stop-shop’ approach.

Weight checks and lifestyle support

Weight may be measured at the same time as attendance for blood tests or foot checks. If not having other procedures or checks in-person, it is reasonable to accept self-reported weight. In most cases, if there is no other reason for face-to-face contact, the need for an updated weight measurement is unlikely to justify a face-to-face attendance unless there is a specific concern.

Analyses of COVID-19 related mortality in people with diabetes have suggested that risk of a poor outcome increases as BMI increases above 30 kg/m² (Holman et al, 2020; see https://www.england.nhs.uk/wp-content/uploads/2020/05/Valabhji-COVID-19-and-Diabetes-Paper-2-Full-Manuscript.pdf). Most people with obesity and diabetes (whether Type 1 diabetes or Type 2 diabetes) are likely to benefit overall from weight loss and should be supported to manage their weight (however, care should be taken in older people and those with frailty as, even if obese, the benefits of weight loss may be less clear and losing weight may exacerbate sarcopenia).

Many locally-commissioned, weight management services are operating remotely and there are a number of resources available online to support increasing physical activity, improving diet and achieving weight loss (such as the NHS Fitness Studio, see https://www.nhs.uk/conditions/nhs-fitness-studio or Diabetes UK 7-day meal plans, see https://www.diabetes.org.uk/guide-to-diabetes/enjoy-food/eating-with-diabetes/meal-plans)
Support for self-management

It is essential to encourage and empower self-management. Historically, diabetes structured education has usually been provided in group, face-to-face settings; this mode of delivery ceased during the COVID-19 pandemic. Digital diabetes structured education tools have been commissioned nationally; once available, ensure that people with diabetes are aware of such support and how this may be accessed. The tools for Type 1 diabetes have already launched and the tool for Type 2 diabetes is due to launch shortly.

- Digibete – this is available for children and young people with Type 1 diabetes and is accessed through specialist care teams
- MyType1Diabetes – this is available for adults with Type 1 diabetes and can be accessed directly at http://www.myType1diabetes.nhs.uk
- Healthy Living for Type 2 Diabetes – this is due to launch shortly and will have a ‘direct to consumer’ route enabled

Particularly in the context of the COVID-19 pandemic, everyone with diabetes should be made aware of sick day rules and what to do if unwell. Examples can be found at https://www.england.nhs.uk/london/london-clinical-networks/our-networks/diabetes/diabetes-covid-19-key-information/

Psychological wellbeing

The links between diabetes and psychological ill health are well established. In many people, the COVID-19 pandemic and resultant lockdown have resulted in social isolation and additional anxiety. The diabetes review should not solely focus on blood glucose control, blood pressure and lipids; it is important to enquire about psychological and emotional wellbeing and holistically support the person with diabetes. If indicated, discuss treatment options as appropriate and offer referral to local psychological therapy services (most, if not all, are offering remote services during the pandemic) and signpost to online resources; these include advice from Diabetes UK about diabetes and emotional health (see https://www.diabetes.org.uk/guide-to-diabetes/emotions) and tips from MIND about managing psychological wellbeing during the pandemic (https://www.mind.org.uk/information-support/coronavirus/).

People who are shielding

Although diabetes itself is not included in the list of conditions which necessitate shielding, some people with diabetes will have applicable co-morbidities or other indications for shielding (see the section on shielding on the Diabetes UK coronavirus webpage at https://www.diabetes.org.uk/about_us/news/coronavirus). It is important that the risks and benefits of face-to-face contact are carefully considered in this group. If blood tests or an in-person foot check are recommended (and accepted) following an individual assessment of the clinical context, these should be performed with all practical and appropriate steps taken to reduce risk.
People at high risk of Type 2 diabetes

Though outside the scope of this document for more detailed discussion, the NHS Diabetes Prevention Programme (DPP) continues to operate during the COVID-19 pandemic and provides fully remote support for people at high risk of Type 2 diabetes to make lasting lifestyle changes and avoid the development of Type 2 diabetes. If appropriate, offer referral to the NHS DPP to adults with no previous diagnosis of diabetes who are found to have non-diabetic hyperglycaemia (NDH; HbA1c 42 - 47 mmol/mol or fasting plasma glucose 5.5 - 6.9 mmol/l) and are not currently pregnant. Eligibility criteria have been relaxed until April 2021 such that providers will accept referrals with NDH-range blood results within the previous 24 months (previously, results needed to be within the previous 12 months).