Blood Glucose Meters and Test Strips

Implementation plan

September 2014
Implementation of approved Self Monitoring of Blood Glucose (SMBG) equipment

In July 2014 Cumbria Diabetes reviewed blood glucose testing meters, strips, diabetic pen needles and lancets and recommended a limited range to Cumbria Area Prescribing Committee (APC). This recommendation was accepted by Cumbria APC in August 2014. The review team included patient user group representatives, Cumbria Diabetes clinicians (consultant and Diabetes Specialist Nurses), Medicines Optimisation Pharmacist, GP and practice nurses. The approved list contains meters which will be suitable for the majority of patients. However there are some patients groups (Type 1 diabetics, children, during pregnancy and pre-conception, patients who use an insulin pump and during transition) who need specialist equipment and should not have their meter changed.

The APC also approved Guidelines on Self Monitoring of Blood Glucose (SMBG), which specify who should use SMBG and the appropriate frequency of testing for patients, depending on their condition and treatment.

Implementation of the approved list will save a significant amount of money, but there are also benefits by reducing the numbers of different meters in circulation, as healthcare professionals become more familiar in their use.

Implementation of the approved SMBG equipment and guidelines should be seen by clinicians as an opportunity to review patients SMBG in line with NICE guidance. A switch carried out without face to face contact with patients is a missed opportunity to identify poor SMBG practice, explore patient’s beliefs and motivation for using SMBG and allow patients to set goals in line with the principles of care planning. This is in line with the Calls to Action in the Diabetes UK publication “Access to Test Strips”.

This implementation pack provides practices with the materials necessary to implement the change to the approved products.

The approved devices are:

- **Element test strips** - Element meter (Neon Diagnostics)
- **Glucolab test strips** - Glucolab meter (Neon Diagnostics)
- **GlucoRx Nexus Test strips** - Nexus, Nexus Mini, Nexus Voice meters— (GlucoRx)
- **Greenlan lancets**
- **GlucoRx lancets**
- **GlucoRx fine point needles**
- **BBraun Omnican fine needles**

This pack consists of:
- Timescale for implementation
- NHS Cumbria CCG recommended Blood Glucose Meters Guide
- Excluded patients
- Selection of suitable patients
- Suggested switching options
- Top Tips for practices
- Practice checklist for implementation
- Sample letters for practices
- Sample data collection form
Implementation Plan Timescale

**ACTION**

- LPC inform community pharmacists of approved equipment
- SMBG guidance and Implementation pack distributed to practices
- Companies send an initial allocation of 5 meters to all practices and 20 meters to Secondary Care Clinics
- Companies to provide training for primary and secondary care healthcare professionals on request.
- Practices & Secondary Care Diabetes Clinics supply APC approved meters to all new patients
- Neon Diagnostics and GlucoRx offer training to patients to use the new meters and support practices to change patients to approved equipment on request. Patients reviewed and changed.
- Practices order additional meters via telephone, fax or e-mail (details on page 4)

**TIME SCALE**

- WC 22nd September 2014
- WC 22nd September 2014
- On request by practices
- From September 2014
- On receipt of approved meters
- October 2014 onwards
- As necessary
- March 2015
Cumbria CCG Recommended Blood Glucose Meters, Test Strips and Needles/Lancets (for general use *)

* These meters and strips should be suitable for the majority (80%) of patients. There still remains the need for “specialist” meters and strips that offer the facility for Carb counting and blood ketone testing for Type 1 diabetics, Pregnancy/Preconception, Pump and transition.

<table>
<thead>
<tr>
<th>Meter Name</th>
<th>Element</th>
<th>Glucolab</th>
<th>GlucoRx Nexus (Model TD-4277)</th>
<th>GlucoRx Nexus Mini (Model TD-4287)</th>
<th>GlucoRx Nexus Voice (Talking) (Model TD-4280)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download Feature</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Measurement Time</td>
<td>3 seconds</td>
<td>5 seconds</td>
<td>5 seconds</td>
<td>5 seconds</td>
<td>5 seconds</td>
</tr>
<tr>
<td>Patient Type</td>
<td>Any (except visually impaired)</td>
<td>Any (except visually impaired)</td>
<td>Any (except visually impaired)</td>
<td>Any (except visually impaired)</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>Suitable test strips</td>
<td>Element test strips</td>
<td>Glucolab test strips</td>
<td>GlucoRx Nexus Test Strips</td>
<td>GlucoRx Nexus Test Strips</td>
<td>GlucoRx Nexus Test Strips</td>
</tr>
<tr>
<td>Associated Testing Strips</td>
<td>Element test strips</td>
<td>Glucolab test strips</td>
<td>GlucoRx Nexus Test Strips</td>
<td>GlucoRx Nexus Test Strips</td>
<td>GlucoRx Nexus Test Strips</td>
</tr>
<tr>
<td>Price per 50 Strips - Drug Tariff (Aug 2014)</td>
<td>£9.89</td>
<td>£9.89</td>
<td>£9.95</td>
<td>£9.95</td>
<td>£9.95</td>
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<tr>
<td>Pip Code</td>
<td>367-5394</td>
<td>367-5410</td>
<td>355-2726</td>
<td>355-2726</td>
<td>355-2726</td>
</tr>
<tr>
<td>Range</td>
<td>0.55 - 33.3 mmol/L</td>
<td>0.55 - 33.3 mmol/L</td>
<td>1.1 - 33.3 mmol/L</td>
<td>1.1 - 33.3 mmol/L</td>
<td>1.1 - 33.3 mmol/L</td>
</tr>
<tr>
<td>Test Strip shelf life</td>
<td>2 vials x 25 strips Each pot has 3 month expiry</td>
<td>2 vials x 25 strips Each pot has 3 month expiry</td>
<td>6 Months once opened (or until date on pack)</td>
<td>6 Months once opened (or until date on pack)</td>
<td>6 Months once opened (or until date on pack)</td>
</tr>
<tr>
<td>UK Distributor</td>
<td>Neon Diagnostics</td>
<td>Neon Diagnostics</td>
<td>GlucoRx Ltd</td>
<td>GlucoRx Ltd</td>
<td>GlucoRx Ltd</td>
</tr>
<tr>
<td>Helpline Number</td>
<td>0800 009 3378</td>
<td>0800 009 3378</td>
<td>01483 755133</td>
<td>01483 755133</td>
<td>01483 755133</td>
</tr>
</tbody>
</table>

The following **needles** both cost £5.95 for 100 and are the needles of choice in Cumbria CCG: **GlucoRx fine point needles**, **B Braun Omnican fine needles**.

The following **lancets** are the lancets of choice in Cumbria CCG: **Greenlan Lancets** (£3.00 pack 100, £6.00 pack of 200), **GlucoRx Lancets** (£6.00 pack 200)
**Excluded patients**

The following patients should not be included in this change.

**Type 1 Diabetes (No Restriction for BGTS)**

There should be no restriction on testing strips in Type 1 diabetes. Concerns about over usage should be referred to Cumbria Diabetes.

- Type 1 diabetics unless changed by Cumbria Diabetes.
- Children – these patients will have meters supplied by paediatric specialists and should not be changed.
- Newly diagnosed patients with (or suspected to have) Type 1 diabetes who need to test for both ketones and glucose. They may prefer to use a single meter for regular testing if they are at risk of diabetic ketoacidosis or have a past history of erratic control.
- Patients who use an insulin pump.
- Patients who are pregnant or pre-conception.
- Patients supplied with a non-formulary meter by Cumbria Diabetes when the practice have been notified that a specific meter is required.

(This list is not exhaustive and each patient should have their suitability assessed on an individual basis)
Selection of suitable patients

GROUP A  * Initial Focus Group*
People with type 2 diabetes with good control do not need to use routine SMBG if they are managed with

- diet and physical activity alone
- metformin, glitazones, gliptins or GLP-1 analogues (once stabilised) or any combination of these treatments, *without* a sulfonylurea or rapid acting insulin secretagogue (glinide)

Action
- remove testing strips from repeats
- send patient letter advising that repeat prescriptions for testing strips will not be issued

GROUP B  * Change over to new meters *
SMBG should be available to people with Type 2 diabetes for routine testing

- On insulin
- On a sulfonylurea or rapid acting insulin secretagogue (glinide) *and* in whom any one of the following circumstances apply:
  - Suspected hypoglycaemia
  - Hypoglycaemia unawareness
  - Greater risk of hypoglycaemia (pregnancy, underlying renal impairment, alcohol abuse, physical activity)
  - Where hypoglycaemia has particular safety concerns (e.g. HGV, PCV license holders –see DVLA guidance,)

If none of the above circumstances apply, routine testing may not be required.

See Guidelines for recommended testing frequency in this group

GROUP C  * Newly diagnosed Type 2 - SMBG for initial information on the disease *
SMBG may be used initially to give patients newly diagnosed with Type 2 diabetes a better understanding of the disease and the effect of food, drink and lifestyle on blood glucose levels.

SMBG should not be used routinely but can be used at times agreed in the patient’s self management plan.

- By patients on oral glucose-lowering medications to provide information on hypoglycaemia
- To assess changes in glucose control resulting from medications and lifestyle changes
- To monitor changes during intercurrent illness

Action
- remove testing strips from repeat, issue as acute if appropriate
- offer new meter only if ongoing testing is recommended as part of annual care plan.
Suggested Implementation Options for Practices

**OPTION 1:**

Switch all suitable patients to the practice’s preferred meter / strip in one go.  
(NB use old strips up first to minimise waste)

*Advantages:*

The switch can be done very quickly, maximising the savings.

*Disadvantages:*

Patient preference is not taken into account.

**OPTION 2:**

Switch patients at planned reviews. (NB use old strips up first to minimise waste)

*Advantages:*

Patients are involved in the decision making process and therefore more likely continue using their new meter.

*Disadvantages:*

This process could take up to 12 months, delaying potential savings.

**OPTION 3:**

All suitable patients are switched in one go. Satisfaction is evaluated at next routine review and alternative approved meter provided if necessary. (NB use old strips up first to minimise waste)

*Advantages:*

This allows a rapid initial switch, maximising savings. It also allows for patient choice at the review if necessary

*Disadvantages:*

This could lead to some patients getting two meters in a short space of time (though meters are supplied free of charge)
Potential wastage of strips with meter change

Practices should consider which of the options would work best for both the practice and their patients and the support available to implement this change.
Top Tips for Practices

1. **Promote the benefits of the change to patients.** The approved products have been chosen by a panel of diabetic specialist clinicians and patients. They were selected based on quality and cost effectiveness. This will save a significant amount of money but there will also be benefits because healthcare professionals will become more familiar with a restricted range of meters.

2. **Notify your local community pharmacists in advance to allow them to run down their stocks of previously prescribed products and order the new products.**

3. **Obtain sufficient quantities of meters in advance of clinics or patient training sessions.**

4. **All clinicians should familiarise themselves with the new meters.** The meter companies will provide training sessions for practice staff if required.

5. Choose the implementation option which suits your practice and your patients.

6. **Dispose of all remaining non-formulary meters (advice to follow).** If you wish to retain a few, ensure they are stored safely where they will not be supplied inadvertently to patients.

7. **Do not accept supplies of non-formulary meters from other companies unless you have specifically requested them to meet patient need.** Cancel any standing orders you have with other companies.

8. **Ensure ALL staff (including reception and administration) are aware of this change as they may be the first point of contact for patients with queries.**

9. **Use patient review to ensure that all patients on insulin have an insulin passport.**
Practice Checklist for Implementation of SMBG guidelines

- A copy of the new SMBG guidance has been made available to all clinicians.

- All staff involved in counselling patients on the switch have received training on the new meters and test strips.

- Sufficient meters have been received.

- The companies have been contacted if required and the support they are offering has been agreed and organised.

- The annual review template has been amended to include change of meter.

- Agreement on communicating the change to patients has been made.

- Local community pharmacies have been informed in advance.

- Switch option agreed.

- List of potential patients reviewed by GP/practice nurse before starting, to exclude patients for whom the change is not appropriate.
Appendix 1

Sample letters

Letter A - Prescription review, review clinic appointment

Patient Name
House number and street name
Town
Postcode

NHS Number: Patient Number:
DOB:

Dear <patient name>

Review of Blood Glucose Meters

As a practice we think it is important that our patients receive the best possible care and that we support the NHS by prescribing cost-effective treatments.

We are reviewing all patients who monitor their blood glucose (sugar) levels, using a blood glucose meter and test strips as part of their diabetes management.

You are currently prescribed xxxxx TEST STRIPS and xxxxx Lancets

Most of the test strips used by our patients cost around £15 per pack – which is more than many diabetes medicines cost per month. Across the whole of England this adds up to around £160 million each year.

There are now blood glucose meters available that use test strips costing less than £10 per pack – this is much better value for the NHS.

Local diabetes specialists have assessed the meters and recommend that one of the following meters and test strips are suitable for the majority of people who need to test their blood glucose.

- **Element Meter** using **Element Blood Glucose Test Strips**
- **Glucolab Meter** using **Glucolab test strips**
- **GlucoRx Nexus using GlucoRx Nexus Blood Glucose Test Strips**
- **GlucoRx Nexus mini using GlucoRx Nexus Blood Glucose Test Strips**
- **GlucoRx Nexus voice using GlucoRx Nexus Blood Glucose Test Strips**

We would like you to try using one of these new meters and invite you to attend an appointment to find out more about them and see which might be suitable for you. The meter is pre-set and ready for immediate testing. It is accurate and convenient to use and comes with an easy to follow operation manual. As you already use a meter you may be able to start using the meter by yourself, however, we will provide training on its use to make sure there are no problems and will also change your prescriptions to the correct lancet and testing strips.

The review clinic will be held on ______________ between __________and__________.

Please contact the surgery to make an appointment.

Thank you for your continued support.

Yours sincerely
(Insert GP’s name)
Letter B – No clinic

Patient Name
House number and street name
Town
Postcode

NHS Number: Patient Number:
DOB:

Dear <patient name>

Review of Blood Glucose Meters

I am writing to inform you that as part of the NHS process to improve and review the use of blood glucose meters, the decision has been made to recommend the use of one of the following meters for new and existing diabetes patients:

- **Element Meter using Element Blood Glucose Test Strips**
- **Glucolab Meter using Glucolab test strips**
- **GlucoRx Nexus using GlucoRx Nexus Blood Glucose Test Strips**
- **GlucoRx Nexus mini using GlucoRx Nexus Blood Glucose Test Strips**
- **GlucoRx Nexus voice using GlucoRx Nexus Blood Glucose Test Strips**

In line with this recommendation we are changing your current meter and test strips to (insert meter name)

We have reserved a (insert meter name) meter starting kit for you which you can collect directly from the surgery. The meter is pre-set and ready for immediate testing. It is accurate and convenient to use and comes with an easy to follow operation manual. As you already use a meter we are confident you will be able to start using the meter by yourself, however, if you require my assistance please make an appointment to see me at the surgery and I will show you how to use the machine.

And/or

Alternatively we will be running drop in clinics at the surgery on (insert number) afternoons next week, (Specify Days) between (Specify Time) where you can collect your new meter and prescription and receive training on how to use the meter if so required.

If you have any questions please do not hesitate to contact the surgery.

Thank you for your continued support.

Yours sincerely

(Insert GP’s name)
## Appendix 2  
### Data collection form

<table>
<thead>
<tr>
<th>Patient Identifier</th>
<th>Type of Diabetes</th>
<th>Diabetes Medicines</th>
<th>Current Test Strips</th>
<th>Current Lancets</th>
<th>Any Special Requirements for meter e.g. talking meter</th>
<th>Is the patient suitable for switch?</th>
<th>Suggested meter</th>
<th>Date of Diabetes Review</th>
<th>Other Notes</th>
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</tbody>
</table>
For further information contact:
Paul Elwood
Paul.elwood@cumbria.NECSU.nhs.uk