



Blood Sciences

Section : Point of Care

Title: DCA Vantage User Guide

Site/Area of application	Point of Care - Produced specifically for Ward Users
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Superseded documents	BSF2POC142 Version 1.1
Implementation date of this version	10/09/19
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Reason for change Created to supply ward users with a user guide for the DCA Vantage.	
Impact on training needs and requirements for competency assessment	
This is a new procedure Acknowledgment of notification is taken to be your confirmation that you will ensure you are familiar with and implement the processes described. A process of training and assessment of competency is required.	
Keywords for search Point of Care, DCA, HbA1c	
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Introduction	<p><u>How to contact POCT</u></p> <p>Call: 0113 39 22338 Email: leedsth-tr.pointofcare@nhs.net</p>
Training	<p>It is important to not share passwords and always use the correct patient ID</p> <ul style="list-style-type: none"> • It is a legal requirement and trust policy for individual access not to be shared. • Creates an Information Governance audit trail • Enables test results to be recalled for specific users and patients • Protects staff and patients from device misuse <p>Training updates are required every TWO years and untrained staff must NOT use the analyser.</p> <p>Each location should have a Key Trainer with access to set up passwords for all newly trained staff. Key trainers must receive a training update from POCT every 2 years.</p> <p>All training can only be performed by either a member of the POCT Team or a designated Key Trainer. The training paperwork can be found in the Key Trainer Handbook [BSFOPOC113]</p>
Analyser overview (Hardware)	<div style="display: flex; justify-content: space-around;"> <div data-bbox="432 947 938 1350">  <p>1 Power plug 2 Power switch (off) 3 Power switch (on)</p> </div> <div data-bbox="970 947 1449 1395">  <p>1 Printer 2 Display/touch screen 3 Reagent cartridge compartment 4 Onboard barcode reader</p> </div> </div> <p>HbA1c Cartridge Cassettes – Box of 10 - expire after 3 months in ambient conditions (date of opening and should be noted on the side of box) or until expiry date if stored in the fridge (2-8°C)</p> <p>Each cartridge box contains a calibration card unique to that lot number and a capillary pipette for testing.</p> <p>If Cartridges are left ambient, please note date opened. Box has temperature monitor on outside of box. If indicator turns red DO NOT USE.</p> <p>Cartridges can be ordered by sending the order form by email to POCT.</p> <p>QC – 3 months expiry from reconstituting (should be noted on the side of bottles). QC must be stored in the fridge (2-8°C)</p> <p>Cartridges can be ordered from LTHT POCT Department using the DCA Supplies Order Form [BSFOPOC036]</p>

Analyser overview (Screen)	<ul style="list-style-type: none"> The analyser Events Box will be highlighted to prompt a course of action to be taken Results are presented on screen as well as printed out automatically.
Calibration	<p>Calibration should be performed for each new lot of DCA cartridges (HbA_{1c} reagent) Each Box has its own calibration card unique to that lot number</p> <ul style="list-style-type: none"> Before using the new box of cartridges, scan calibration card for each new lot number to save in the analyser There is no need to scan the calibration card more than once if you have the same lot number on 2 or more boxes of cartridges Two levels of QC will need to be analysed after calibration
Quality Control (QC)	<p><u>IQC (Internal Quality Control)</u></p> <ul style="list-style-type: none"> The IQC consists of 2 levels of aqueous material – Normal and Abnormal levels. The analyser will lockout weekly and both levels of QC must be run to resume patient testing. <p>To Reconstitute:</p> <ul style="list-style-type: none"> Remove from Fridge Remove bottles from package Tap bottle gently on surface to enable powder to fall to the bottom Open reconstitution fluid Discarding the first drop, add 6 drops into powder bottle. Close lids, gently swirl to enable mixing Leave to sit for 15 minutes before use <p>To Run:</p> <ul style="list-style-type: none"> If QC already reconstituted, remove from fridge and allow QC to warm up for 10 minutes Remove Cartridge from fridge and allow to warm for 10 minutes Scan the QC card -one side is Normal (GREEN), the other is Abnormal (BLUE) Scan the cartridge to be used Place a single drop of QC onto a clean glove or cartridge foil Using the capillary pipette, collect sample Wipe sides of the capillary on a tissue to remove excess sample Place the pipette into its place in the cartridge Slot the cartridge into the analyser, label facing right. Pull the foil tab on the cartridge off completely Shut the cartridge compartment door Repeat for the next QC ensuring to scan the correct side of the card for QC <p>Should a QC test fail:</p> <ul style="list-style-type: none"> Repeat the QC (only the failed level) Check the Cassettes and QC have not expired If it is persistent, Contact POCT <p><u>EQA (External Quality Control)</u></p> <p>EQA is organised by an external organiser but the aim is to compare your Surgery's performance with your peers nationally</p> <p>Run the EQA sample in the same way you would run a patient sample. Use the DIST number as the ID number.</p> <p>EQA results MUST BE returned by the stated deadline date on the request form. If you have a login, enter your results directly to the WEQAS website. If not, email the results to POCT and request login details to be sent.</p>

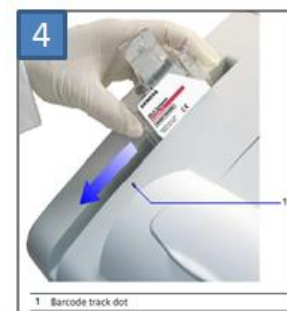
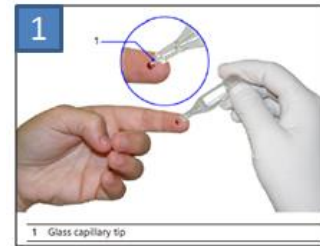
Pre-Analytical	<p>Contraindications:</p> <ul style="list-style-type: none"> • Take care when using alcohol wipes to clean site of lancet puncture as alcohol can lyse blood cells and can cause micro capillaries in the blood to close. • Measurement of HbA1c can give misleading results in the following conditions: Iron deficiency anaemia, chronic kidney disease, chronic liver disease, any conditions giving increase red cell turnover e.g. haemoglobinopathies, recent history of blood donation and various others (please check if uncertain). <p>Sample collection:</p> <ul style="list-style-type: none"> • Wash test site in warm water and ensure site is dry prior to finger prick. Alternatively wipe clear with damp cotton wool. • Testing site should be the middle/side of the finger pad avoiding use of the thumb and index finger to maintain patient independence and prevent dulling of the patients nerves (e.g. reading brail in diabetic retinopathy) • Lance the patient's finger using a lancing device • Finger can be milked prior to finger prick, but not afterwards • Wipe away the first drop
Health and Safety	<ul style="list-style-type: none"> • PPE (Gloves) must be worn when handling /testing the patient sample. • Discard used lancet in sharps bin. • Discard the used cartridge in a clinical waste bag.
Maintenance	<ul style="list-style-type: none"> • Clean barcode window using damp tissue or damp swab (weekly) • Clean analyser surface using alcohol wipes (As required) • Replace Air Filter - done by POCT (every three months) • Optical ID Test - done by POCT (every three months) <p>Quarterly maintenance is performed by the POCT department who will be in contact to arrange a maintenance session. For the ensured quality of your device it is vital that you make every effort to attend or facilitate these sessions.</p> <p>Completed maintenance will be recorded in the Surgery Handbook [BSFOPOC114] and audited in the event of a result query.</p>

Sample Analysis

Three forms of ID should be used each time a patient is run. Acceptable forms of ID are:

- **NHS Number** - **Patient Fore/Surname** - **Date of Birth**

- [1] Collect blood sample for testing using the capillary pipette provided in box avoiding any air bubbles. Vol (1ul)
- [2] Wipe sides of capillary with a tissue to clean any excess blood (avoid touching the end of capillary as all contained blood will be drawn out by capillary action).
- [3] Insert the capillary pipette into the cartridge.
- Holding the cartridge down, slowly and firmly pull on the flexible tab to remove it.
- [4] Insert the reagent cartridge into the barcode track above the black dot. Quickly and smoothly, slide the reagent cartridge down. A beep sounds to signal a successful scan.
- [5] Insert the reagent cartridge into the cartridge compartment until a gentle click is heard or felt.
- Close the cartridge compartment door to start test.
- The test lasts **6 minutes**
- Log into analyser using your operator id/password
- Enter patient ID (see above for acceptable ID).
- Remove the cartridge by pushing and holding down the button on the right hand side and pull.
- The machine will show the results when analysed on the screen and print a copy if print facilities are in use.



Results	<p>Record the results on the screen or printout if available.</p> <ul style="list-style-type: none"> • Results will print automatically and appear on screen • Results should be documented according to the Surgery's procedures (patient's note or on computer) ensuring correct patient identification. • Result should be clearly marked as from 'POCT DCA'
Recall results	<ul style="list-style-type: none"> • In order to recall the results, there is a button on the main touch screen where the last 200 patient and QC results can be recalled.
Error messages / troubleshooting	<ul style="list-style-type: none"> • Repeat QC • Ensure the correct level of QC which has been scanned in has been run • Contact the POCT Team on 0113 39 22338 for any further support required if unable to resolve error.