

DCA Vantage HbA1C: Patient Test Procedure

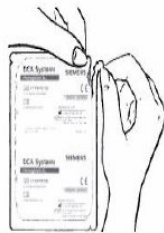

Purpose:

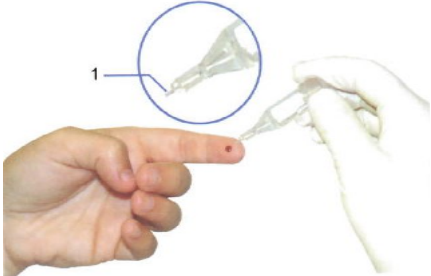
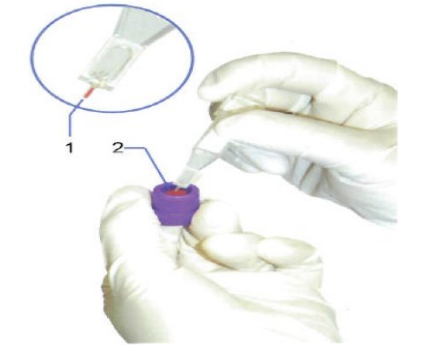
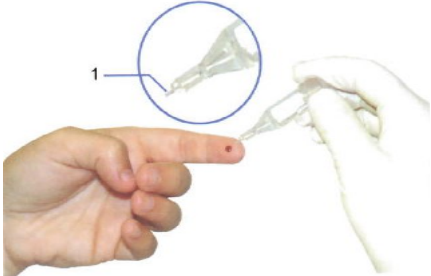
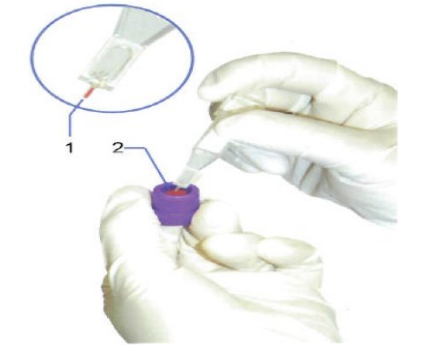
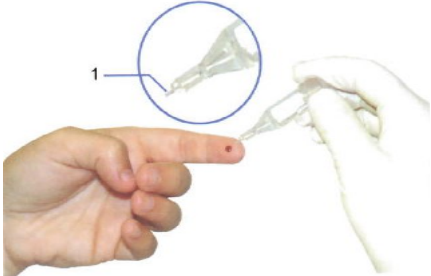
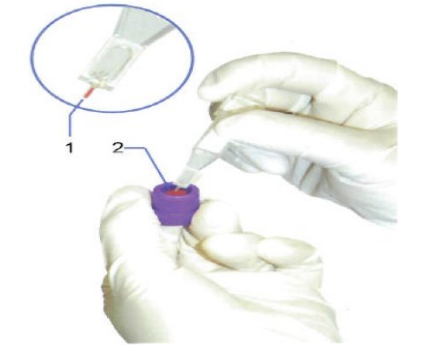
This procedure provides instruction for HbA1C patient testing with the DCA Vantage.

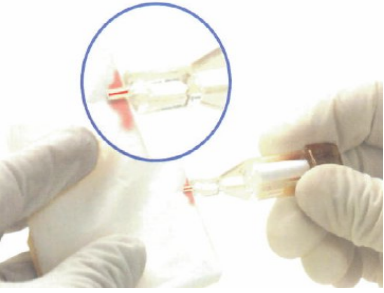

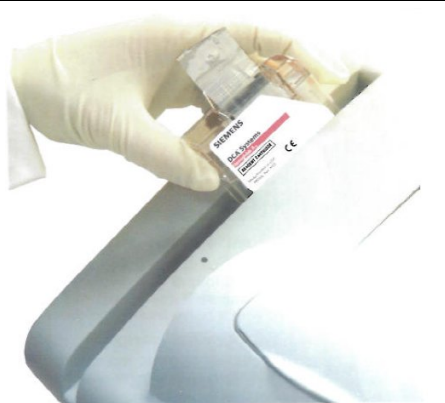
Required materials:


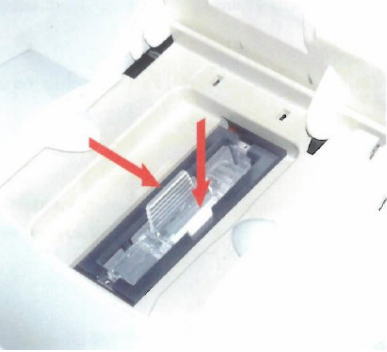
- 1) DCA Vantage® Analyzer
- 2) DCA HA1c Reagent Cartridges
- 3) Capillary Holders
- 4) Lint-free tissue (not provided)
- 5) Sample collection supplies as per institutional guidelines for a capillary or venous collection.

Procedure:

	Action	Related Documents Title Number
1.	Instrument is ready for patient testing.	DCA Vantage HbA1C: Daily Instrument Set Up Flowchart
2.	Prepare Patient specimen worksheet.	
	Clinic	Daily worksheet.
	Laboratory	Call worksheet from Sunquest. Function: WO Worksheet: CA1POC,DCA1 Printer: 8049
3.	Remove HA1c Cartridge from 2-8°C storage. Note: <ul style="list-style-type: none"> • Cartridge is at room temperature for a minimum of 10 minutes before use. • Room Temperature expiry is (3) months. • Use within (1) hour after opening the foil pouch. <p>Caution: Do not touch the optical window of the cartridge.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	
4.	Wear gloves.	

	Action	Related Documents Title Number						
5.	<p>Remove capillary holder from blister package just prior to use. Note: Capillary holders can be used with any lot of reagent cartridges.</p> <p>Caution: Discard capillary holder if a part is missing</p> <ul style="list-style-type: none"> a) Capillary glass b) absorbent pad c) latching mechanism 							
6.	<p>Collect or prepare whole blood sample for testing. Capillary vial holds 1uL. Note: @ PHS preferred anticoagulant is EDTA. Acceptable anticoagulants are EDTA, heparin, fluoride/oxalate, and citrate. Whole blood may be stored frozen up to (-70°C), refrigerated (2-5°C) for two weeks; at room temperature (25°C) for one week.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="240 810 691 846" style="width: 50%;">If sample is</th> <th data-bbox="691 810 1276 846">Then</th> </tr> </thead> <tbody> <tr> <td data-bbox="240 846 691 1157"> Clinic capillary collection  </td> <td data-bbox="691 846 1276 1157"> <ul style="list-style-type: none"> • Perform skin puncture with appropriate device. • Wipe first drop of blood from finger. • Hold capillary holder at an angle. • Touch ONLY the tip of the glass capillary to the drop on the finger. </td> </tr> <tr> <td data-bbox="240 1157 691 1541"> Venous or capillary collection.  </td> <td data-bbox="691 1157 1276 1541"> <ul style="list-style-type: none"> • Bring samples to room temperature. • Mix sample thoroughly on mixer. • Touch ONLY the tip of the glass capillary to the blood on the stopper or in the tube. </td> </tr> </tbody> </table>	If sample is	Then	Clinic capillary collection 	<ul style="list-style-type: none"> • Perform skin puncture with appropriate device. • Wipe first drop of blood from finger. • Hold capillary holder at an angle. • Touch ONLY the tip of the glass capillary to the drop on the finger. 	Venous or capillary collection. 	<ul style="list-style-type: none"> • Bring samples to room temperature. • Mix sample thoroughly on mixer. • Touch ONLY the tip of the glass capillary to the blood on the stopper or in the tube. 	
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7.	<p>Use lint free tissue and carefully wipe the outside of the glass capillary without allowing the tissue to touch the open end. Inspect the glass capillary for bubbles or blood on the capillary holder.</p>							

	Action	Related Documents Title Number
	 <p data-bbox="704 325 1258 388">Discard the capillary holder and repeat the sample application procedure if</p> <ul data-bbox="753 394 1206 562" style="list-style-type: none"> • there are obvious bubbles or inadequate sample in the glass capillary. • there is residual blood on the outside of the capillary holder. <p data-bbox="704 562 1177 630">Caution: Once capillary is filled with sample, analyse within 5 minutes.</p>	
8.	<p data-bbox="248 655 1263 693">Insert capillary holder into the HA1c cartridge until the holder snaps into place.</p>  <p data-bbox="704 903 1209 1039">Caution: Do not touch the optical window of the cartridge. Wipe any smudges or fingerprints</p>	
9.	<p data-bbox="248 1083 776 1121">Scan HA1c cartridge on DCA instrument</p>  <ul data-bbox="753 1134 1250 1480" style="list-style-type: none"> • Hold the reagent cartridge so that the barcode faces to the right. • Insert the reagent cartridge (above dot) into the barcode track and quickly slide the cartridge down past the dot. • Beep sounds with a successful scan. • View screen for display prompt to proceed with loading the cartridge. 	

	Action	Related Documents Title Number																		
10.	<p>Insert the HA1c cartridge into the DCA for testing.</p>  <ul style="list-style-type: none"> • Open the compartment door. • Hold the reagent cartridge so that the barcode faces to the right. • Insert the reagent cartridge until a gentle snap is heard or felt. • Hold cartridge with left hand. • With right hand, pull the flexible plastic pull-tab completely out of the reagent cartridge. Use a smooth, continuous motion. Dispose the pull-tab. • Close compartment door. <p style="color: blue;">Note: if the compartment door is accidentally closed before the pull-tab is removed you have up to 5 seconds to re-open the door and pull the tab.</p>																			
11.	<p>Enter sample demographic information using the touch screen during the test cycle. The test cycle is 6 minutes.</p> <p style="color: blue;">Note: The sample data menu screen will display when the system detects the compartment door is closed after the 5-second delay.</p> <table border="1" data-bbox="250 1157 1276 1367"> <thead> <tr> <th style="text-align: left;">Information Entry</th> <th style="text-align: left;">clinic</th> <th style="text-align: left;">lab</th> </tr> </thead> <tbody> <tr> <td>Sample ID</td> <td></td> <td>Sunquest #</td> </tr> <tr> <td>Patient ID</td> <td>MRN #</td> <td></td> </tr> <tr> <td>Last Name</td> <td>Last name</td> <td>Last name</td> </tr> <tr> <td>First Name</td> <td>First name</td> <td>First name</td> </tr> <tr> <td>User ID</td> <td>Operator ID [XXXX]</td> <td></td> </tr> </tbody> </table>	Information Entry	clinic	lab	Sample ID		Sunquest #	Patient ID	MRN #		Last Name	Last name	Last name	First Name	First name	First name	User ID	Operator ID [XXXX]		
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12.	A beep sounds at the end of the test cycle.																			
13.	<p>Remove the test cartridge.</p>  <ul style="list-style-type: none"> • Open the compartment door. • Locate the button on the right side of the cartridge compartment. • Push button down and hold with right hand. • With left hand, gently push the tab on the cartridge to the right of the cartridge compartment. This unlocks the cartridge. • Pull the cartridge up to remove. • Close the compartment door. 																			

PHSA Laboratories CW Site - Point of Care
Title: CWPC_HbA1C_0130 DCA Vantage HbA1C Patient Test Procedure

	Action	Related Documents Title Number														
	<p>Note: To cancel a test at any time during the testing process press [ESCAPE]. At the display prompt [CANCEL TEST?], press [ENTER] within 15 seconds. Discard the cancelled test.</p>															
14.	<p>Result screen displays when the system finishes analyzing the sample.</p> <ul style="list-style-type: none"> The screen displays result values and demographics for each test. At this time you can edit the sample demographics and comments at the Sample Data screen. 															
15.	<p>Print the result. For each HA1c patient result the following is displayed.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 5px;"> <pre> DCA Vantage HbA1c Patient Test Print Date 06.04.2010 14:19 Serial No. 5015762 Test Date 06.04.2010 14:12 Sequence No. 006 Cartridge Lot 0811 HbA1c Primary NGSP Primary HbA1c = 5.4 % Sample ID T12319 Patient ID 9862718192 Last Name ADIRIM </pre> </td> <td style="width: 60%; padding: 5px;"> <ul style="list-style-type: none"> Test name Print date DCA Vantage Serial number Test date Sample Sequence number Cartridge Lot # HA1c % Patient Result Sample ID Patient ID Patient last name Patient first name. User ID </td> </tr> </table>	<pre> DCA Vantage HbA1c Patient Test Print Date 06.04.2010 14:19 Serial No. 5015762 Test Date 06.04.2010 14:12 Sequence No. 006 Cartridge Lot 0811 HbA1c Primary NGSP Primary HbA1c = 5.4 % Sample ID T12319 Patient ID 9862718192 Last Name ADIRIM </pre>	<ul style="list-style-type: none"> Test name Print date DCA Vantage Serial number Test date Sample Sequence number Cartridge Lot # HA1c % Patient Result Sample ID Patient ID Patient last name Patient first name. User ID 													
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16.	<p>Record displayed test result on the Clinic or Lab Record Sheet.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Reporting Range</td> <td>2.5 – 14.0 HA1c %</td> </tr> <tr> <td>< sign displayed</td> <td>< 2.5 % HA1c</td> </tr> <tr> <td>> sign displayed</td> <td>> 14.0 % HA1c</td> </tr> <tr> <td>Reference Range</td> <td></td> </tr> <tr> <td>≤ 5 years</td> <td>< 9 % HA1c</td> </tr> <tr> <td>5-12 years</td> <td>< 8 % HA1c</td> </tr> <tr> <td>13 - adult</td> <td>< 7 % HA1c</td> </tr> </table> <p>Notes:</p> <ul style="list-style-type: none"> If result is unexpected, then repeat the analysis procedure. Contact POCTLab@cw.bc.ca local 7521 for help with troubleshooting. If result is greater than reportable range notify physician. Measurement of Uncertainty for HbA1C test is available upon request <p>Limitations: Samples with high amounts of HbF (>10%) may yield lower than expected HA1c. Do not use highly lipemic samples or refrozen samples.</p>	Reporting Range	2.5 – 14.0 HA1c %	< sign displayed	< 2.5 % HA1c	> sign displayed	> 14.0 % HA1c	Reference Range		≤ 5 years	< 9 % HA1c	5-12 years	< 8 % HA1c	13 - adult	< 7 % HA1c	
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17.	<p>Follow instructions on the display screen to return to Home Page for testing.</p>															

References:

DCA Vantage Analyzer Operator’s Guide REF 06489264 Rev. B,2008-06

Medical Approval: Dr Benjamin Jung

Medical Approval Date: 28 Dec 2016

Version: 1.2

Implementation Date: 7/1/2019 7:58:49 PM

Folder Name: CW\Point of Care\Hemoglobin A1C

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REVISION & APPROVAL LOG

Version	Revision Type	Description of Change	Revision Date	Technical Approval	Medical Approval
1.0		New document	31 Dec 2013	Elvira Kozak	Dr. Cathy Halstead
1.1	Minor	Document title and number change. Upload to QMS document control	28 Dec 2016		Dr. Benjamin Jung
1.2	Minor	Correct POCT Contact, Added reference to MU.	July 1, 2019	Calvin Lee	

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