

# FreeStyle

## Precision Pro



North Florida South  
Georgia  
Veterans Health System

Point-of-Care Testing  
(POCT)

# Glucometer Initial Training

Ancillary  
Testing  
Coordinators  
North Florida  
South  
Georgia  
Veterans  
Health  
System

- Sandra Pascual
- Dolly A. Gonzalez

**Contact information located in the glucometer box**

# Limitations of the glucometer

The system is not to be used for the diagnosis or screening of diabetes mellitus

Only for the monitoring of the treatment of diabetes mellitus

**\*\*\*Very Important\*\*\***

**This meter is not FDA  
approved to**

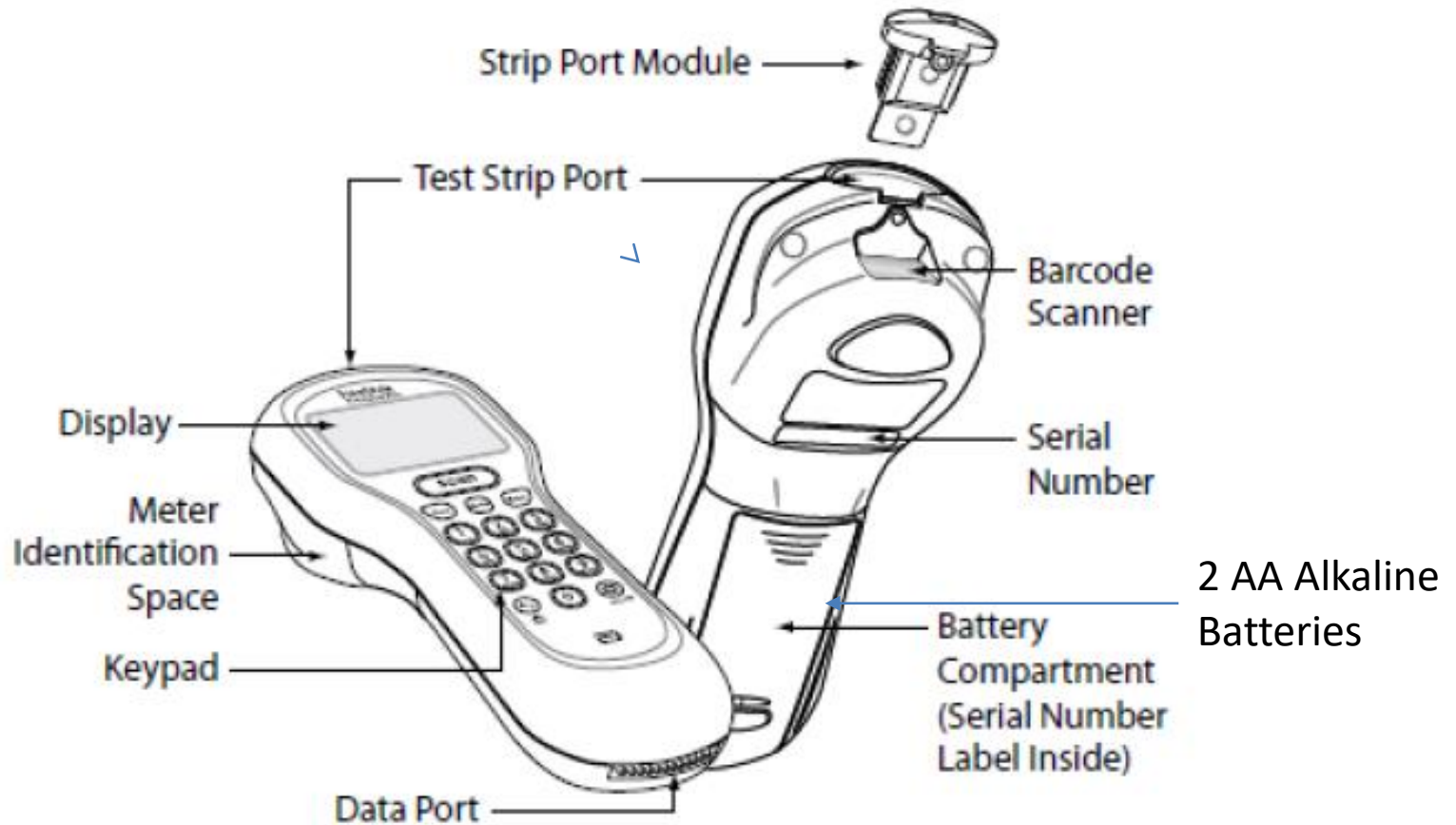
**be used on**

**Critically Ill patients.**

# Critically ill Patients

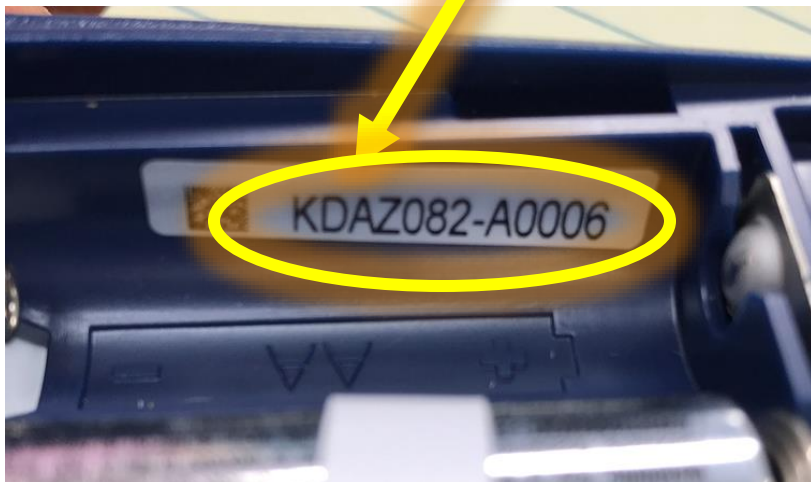
- Patient on mechanical ventilation and requiring an FiO<sub>2</sub> of >60% or CPAP of >8
- Hypotension requiring vasopressor support to maintain mean arterial pressure (MAP) >60 mmHg
- Hematocrit <15% or >65%.
- Requiring intravenous insulin infusion to maintain glucose control
- A diagnosis of any of the following: Shock, severe Hypotension, decompensated heart failure, diabetic ketoacidosis, metabolic acidosis with pH<7.2 and or lactic acidosis
- Status epilepticus
- Patient on a balloon pump or other circulatory assist device
- Patients receiving massive transfusion protocol post cardiac arrest

# Freestyle Precision Pro Glucometer Abbott



# Freestyle Precision Pro Glucometer Serial Number

Serial Number



# Supplies

Testing strips, control vials,  
and AA batteries are  
supplied by

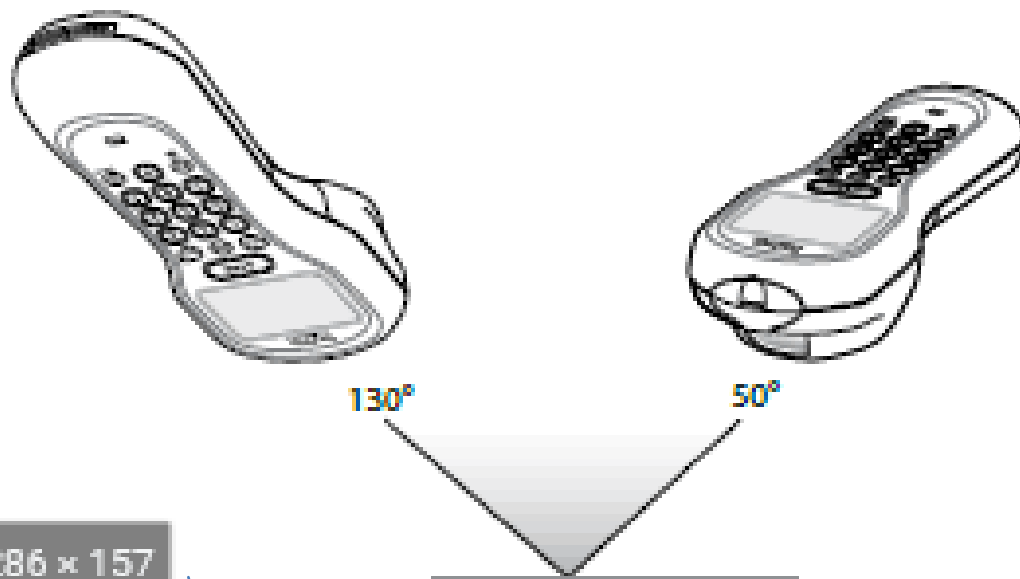
**Supply Chain  
Management.**

These items are usually stock  
right next to the lancets in the  
supply room





286 x 157



# Scanning Freestyle Precision Pro Glucometer Abbott

---





**Scanning  
Freestyle Precision Pro Glucometer Abbott**

# Operator ID?

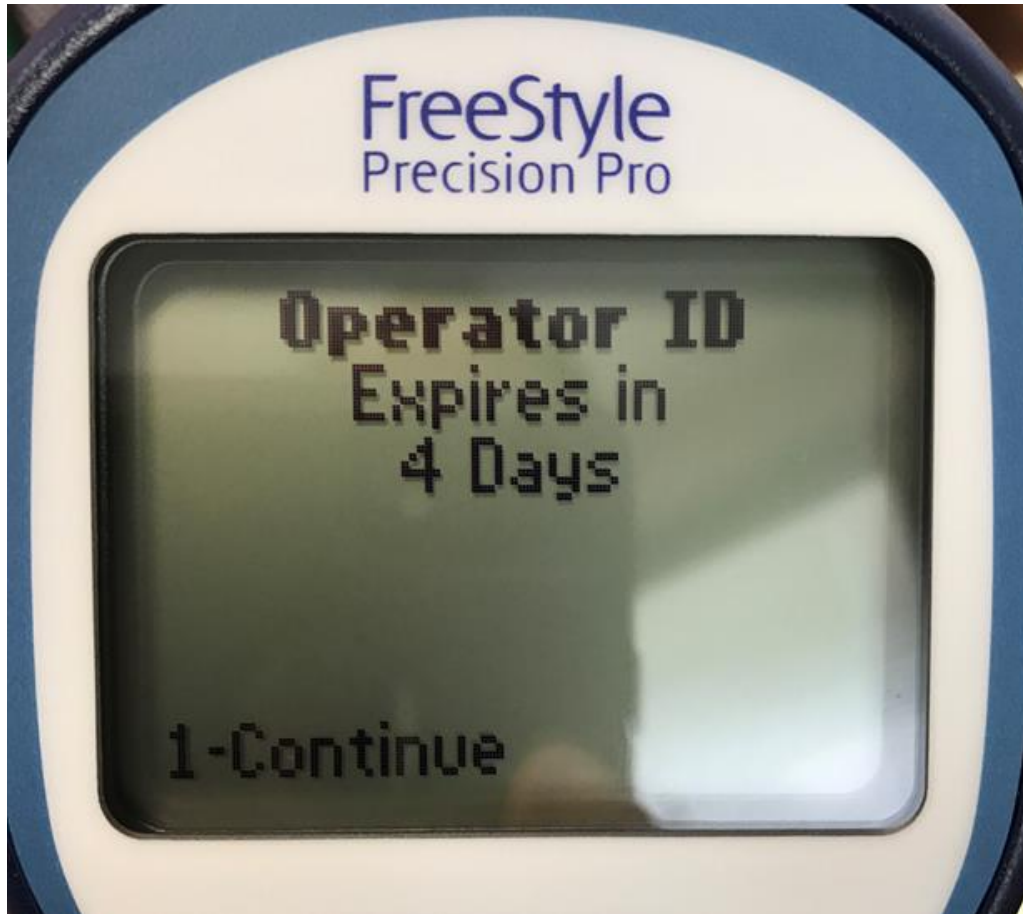
Operator IDs are used to access the glucometer to perform glucose testing.



This Operator ID or DUZ number is unique to each individual.

**NEVER SHARE**  
**OPERATOR NUMBER**  
**WITH ANYONE**

# Operator ID Expiration message



Contact your nurse manager or nurse educator to schedule training

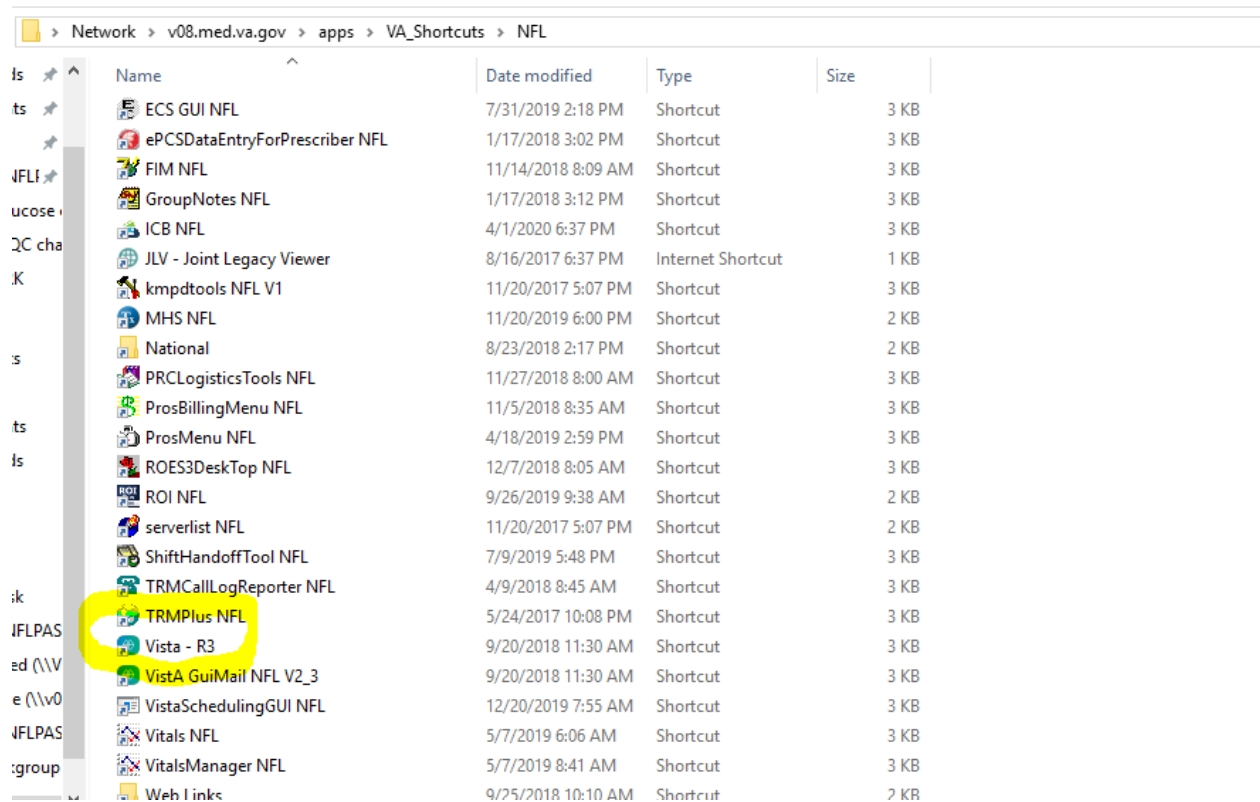
We are also here to assist you

How to find your  
own operator  
code?

**VISTA**

# How to find your own operator code?

## Vista




The screenshot shows a Windows Explorer window with the address bar set to "Network > v08.med.va.gov > apps > VA\_Shortcuts > NFL". The main pane displays a list of files with columns for Name, Date modified, Type, and Size. The file "Vista - R3" is highlighted with a yellow circle.

Name	Date modified	Type	Size
ECS GUI NFL	7/31/2019 2:18 PM	Shortcut	3 KB
ePCSDataEntryForPrescriber NFL	1/17/2018 3:02 PM	Shortcut	3 KB
FIM NFL	11/14/2018 8:09 AM	Shortcut	3 KB
GroupNotes NFL	1/17/2018 3:12 PM	Shortcut	3 KB
ICB NFL	4/1/2020 6:37 PM	Shortcut	3 KB
JLV - Joint Legacy Viewer	8/16/2017 6:37 PM	Internet Shortcut	1 KB
kmpdtools NFL V1	11/20/2017 5:07 PM	Shortcut	3 KB
MHS NFL	11/20/2019 6:00 PM	Shortcut	2 KB
National	8/23/2018 2:17 PM	Shortcut	2 KB
PRCLogisticsTools NFL	11/27/2018 8:00 AM	Shortcut	3 KB
ProsBillingMenu NFL	11/5/2018 8:35 AM	Shortcut	3 KB
ProsMenu NFL	4/18/2019 2:59 PM	Shortcut	3 KB
ROES3DeskTop NFL	12/7/2018 8:05 AM	Shortcut	3 KB
ROI NFL	9/26/2019 9:38 AM	Shortcut	2 KB
serverlist NFL	11/20/2017 5:07 PM	Shortcut	2 KB
ShiftHandoffTool NFL	7/9/2019 5:48 PM	Shortcut	3 KB
TRMCallLogReporter NFL	4/9/2018 8:45 AM	Shortcut	3 KB
<b>Vista - R3</b>	9/20/2018 11:30 AM	Shortcut	3 KB
Vista GuiMail NFL V2_3	9/20/2018 11:30 AM	Shortcut	3 KB
VistaSchedulingGUI NFL	12/20/2019 7:55 AM	Shortcut	3 KB
Vitals NFL	5/7/2019 6:06 AM	Shortcut	3 KB
VitalsManager NFL	5/7/2019 8:41 AM	Shortcut	3 KB
Web Links	9/25/2018 10:10 AM	Shortcut	2 KB

# How to find your own operator code?

Vista

 TRMPlus NFL

 Vista - R3

# How to find your own operator code?

## Vista

Type '^' to stop, or choose a number from 1 to 19 :^ ??

- 1 Phlebotomy menu ...
- 2 Accessioning menu ...
- 3 Process data in lab menu ...
- 4 Quality control menu ...
- 5 Results menu ...
- 6 Information-help menu ...
- 7 Ward lab menu ...
- 10 Microbiology menu ...
- 11 Supervisor menu ...
- LSM Lab Shipping Menu ...

You have PENDING ALERTS

Enter "VA to jump to VIEW ALERTS option

Select Laboratory DHCP Menu Option: ^display user Characteristics



# How to find your own operator code?

Vista

Select Laboratory **Enter** Menu Option: ^display user Characteristics

Employee Name

DUZ#

DEVICE: LINUX SSH (\$I: /dev/pts/87)JOB:

ENVIRONMENT

ATTRIBUTES

Site ..... GAINESVILLE VAMC,FL

UCI .....

Signed on ...

Terminal type C-VT100

Type-ahead .....

Time-out .....

Fileman code(s) ..

Person Class:

KEYS HELD

**Operator Code becomes inactive if you don't sign in into VISTA or CPRS within 90 days**

- If you barely use CPRS or VISTA... sign-in once a month to keep it active.**

# Procedures are located at the PLMS SharePoint

The screenshot shows the VA Intranet website for the North Florida/South Georgia Veterans Health System. The left navigation menu is highlighted, with the 'SharePoint' link selected. The main content area features a 'COVID-19' section with a blue arrow pointing to the 'SharePoint' link in the menu. The 'SharePoint' link is located under the 'Reference' category in the left sidebar.

North Florida/South Georgia Veterans Health System Home

Administrative  
Clinical  
DataMart  
Education  
Employees  
Facilities  
News  
Policies  
Reference  
Services  
SharePoint  
Site Search

COVID-19

For preparedness information, helpful links, and other resources, visit our local [COVID-19 page](#) (available from the top of the [Emergency Preparedness SharePoint](#) site or from the [Clinical](#) page in the Information Control box). Our local COVID-19 page also includes a link to more information about [NF/SGVHS COVID-19 Vaccinations](#).

**High Reliability Organization (HRO) Trainings: Blitz Week!**

A blitz week of HRO virtual trainings for supervisors and frontline staff is taking place July 12-16 with multiple offerings each day. The supervisor training is 2 hours and the frontline training is 1.5 hours. Trainings are interactive so the time passes quickly, and the information gained will empower ALL employees to help us continually improve. Visit the [Patient Safety SharePoint](#) and click the [VHA's Journey to High Reliability logo](#) to be taken to the offerings page and select your date/time - it's that easy! The goal is 90% of staff trained by the end of this year. Together, we can continue our journey to HRO at NF/SGVHS to keep our Veterans as safe as possible - YOU can make a difference!

**Hurricane Season (June 1 - Nov. 30) Are You Ready?**

Be prepared! Visit the [NF/SGVHS Emergency Preparedness](#) page or check out [VISN 8's Hurricane Tips for Veterans and Families page](#).

Search | Site Map | Links | [SharePoint](#)

Quick Links

- [Access Management](#)
- [Call Schedules](#)
- [Compliance](#)
- [Contingency](#)
- [JPSR Incident Reporting](#)
- [Information System Security](#)
- [Insurances Captured \\$](#)
- [High Reliability Organization \(HRO\)](#)
- [MyHealthVet](#)
- [Patient Safety](#)
- [Planning](#)
- [Performance](#)
- [Privacy](#)
- [Returning Service Members](#)
- [Safety Data Sheets \(SDS\)](#)
- [Service Request Center](#)
- [SharePoint Calendars](#)
- [Systems Redesign](#)
- [TMS \(Talent Mgmt. System\)](#)
- [Terminal Servers \(TS Web\)](#)
- [Web, SharePoint & OIT Support](#)

Public Site Links

- [NF/SGVHS Internet](#)
- [VISN 8 Internet](#)
- [VA Internet](#)
- [VHA Internet](#)
- [VA Public Directory](#)



## NORTH FLORIDA/SOUTH GEORGIA VETERANS HEALTH SYSTEM

### Pathology & Lab. Service (113)

Pathology and Laboratory Medicine Service serves both male and female inpatients and outpatients with age ranges including young adults (18-39), adults (40-64), and older adults (over 65). Acuity levels extend from ambulatory outpatients (primary care, community based outpatient clinics, home based health care) to hospital based patients (emergency room, nursing home, intensive care, intermediate medicine, same day surgery). The system has expanded ability to absorb Champus, Tri-Care, DOD, reference laboratory testing, or other authorized patient workload sources.

The system provides a wide range of diagnostic and therapeutic tests and services in both anatomic and clinical pathology. Departments include: Hematology, Chemistry, Toxicology, Urinalysis, Ancillary Testing, Microbiology, Transfusion Medicine, Immunology, Electron Microscopy, Autopsy, Histology, Cytopathology, and Surgical Pathology. Hours of operation at all system divisions are 8 a.m. to 4.30 p.m. Monday through Friday. At both medical center divisions, during non-administrative hours, holidays and weekends, a narrow range of emergency services (STAT tests) is also provided with a Pathology Resident and Staff Pathologist on call 24/7.

**Service Chief:** [Robert W. Allan, MD](#)  
Service Phone: (352) 548-6057

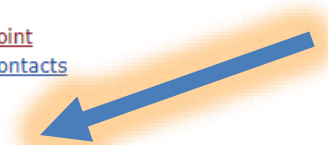
**Questions or comments about this page/site?**  
Send e-mail to: [Elena Melendez](#)

#### Service Pages

- [Service Home](#)
- [Service SharePoint](#)
- [Service Staff/Contacts](#)
- [Lab Manual](#)
- [Lab News](#)
- [Ancillary Testing](#)
- [Referral Testing](#)

#### Related Links

- [VHA Patient Care Services](#)





# Pathology and Lab. Medicine Service

Search


+ New Upload Edit in grid view Sync Add shortcut to OneDrive Export to Excel Power Apps Automate ...

- Path & Lab Home
- Contingency
- Admins
- Path & Lab Documents
- Issue tracker
- Site Contents

## Path & Lab Documents

Name	Modified	Category	+ Add column
Activated Clotting Time-Kaolin-ACT i-STAT ...	October 29, 2020	Ancillary Testing	
Alere hCG Combo Cassette Urine Pregnanc...	October 29, 2020	Ancillary Testing	
Ancillary Testing Criteria and Protocol SOP ...	April 21	Ancillary Testing	
Ancillary Tests Currently Approved (Memor...	April 21	Ancillary Testing	
BinaxNOW COVID-19 Ag Card Testing Proc...	January 6	Ancillary Testing	
Blood Gases ABL 90 Testing Procedure.aspx	April 21	Ancillary Testing	
Blood Gases ABL90 Maintenance Procedure...	April 21	Ancillary Testing	
Blood Gases Radiometer Maintenance Proc...	October 29, 2020	Ancillary Testing	
Blood Gases Testing Using the Radiometer ...	October 29, 2020	Ancillary Testing	
Finding DUZ numbers and printing barcode...	April 21, 2019	Ancillary Testing	
Finger Puncture for Bedside Glucose Monit...	October 29, 2020	Ancillary Testing	
Glucometer Whole Blood Glucose Testing u...	April 21	Ancillary Testing	
KOH with DMSO Procedure.aspx	October 29, 2020	Ancillary Testing	
Provider Performed Microscopy SOP 113-1....	April 21	Ancillary Testing	

# Pathology & Lab Medicine SharePoint SOP or Procedure Manuals

	Finding DUZ numbers and printing barcode...	April 3, 2019	Ancillary Testing
	Finger Puncture for Bedside Glucose Monit...	October 29, 2020	Ancillary Testing
	Glucometer Whole Blood Glucose Testing u...	April 21	Ancillary Testing

# QUALITY CONTROL

Is how you verify that your glucometer is working correctly and provide you with accurate results



# QUALITY CONTROL

Controls are good for

**Ninety (90) Days**

from when they are opened  
and need to be dated  
with both  
**Opened and Expiration  
date.**





# QUALITY CONTROL

Always!!!!

Write on the vial

**Open and Expiration**  
dates.

**It's a**

**Joint Commission**  
**Requirement**



# QUALITY CONTROL

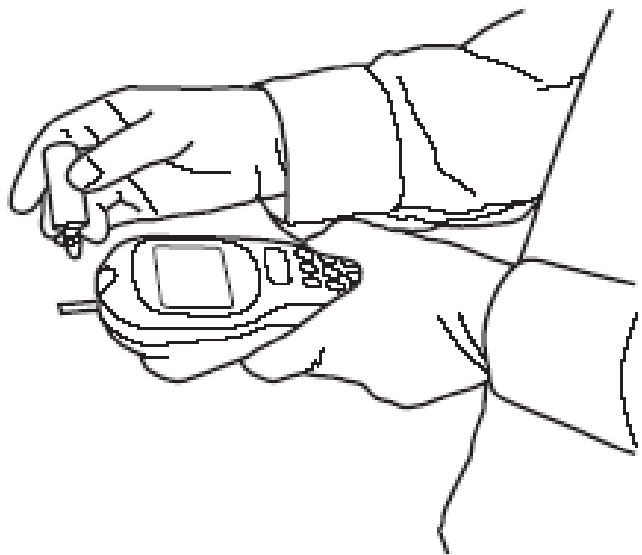
Control testing should be performed in the following circumstances:

- Required once every 24 hours QC needs to **PASS**
- If a patient test has been repeated and the blood glucose results are still lower or higher than expected.
- When troubleshooting the glucometer
- Whenever the glucometer has been dropped.



# Running QC

---





# If QC Fails...

---

- Repeat control level
- If it Fails...
- Open a new set of controls
- If it still fails...
- Glucometer might have issues.
- Contact us immediately



# Glucose Patient Testing

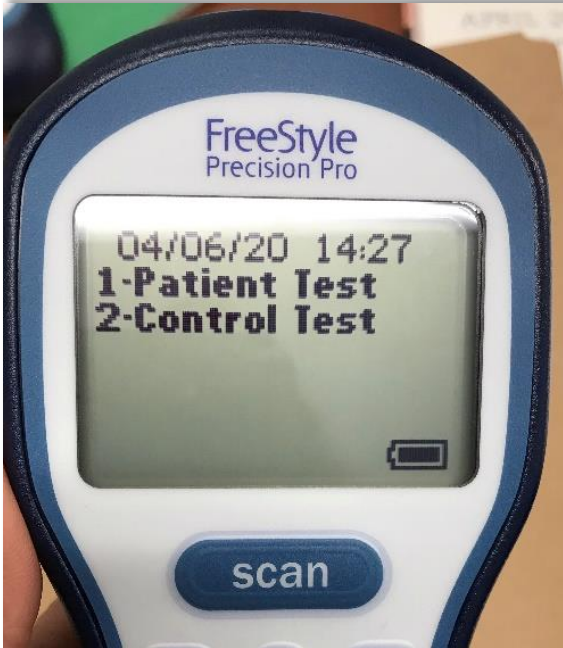
## Patient Identification

Always!!!!

Use 2 identifiers:

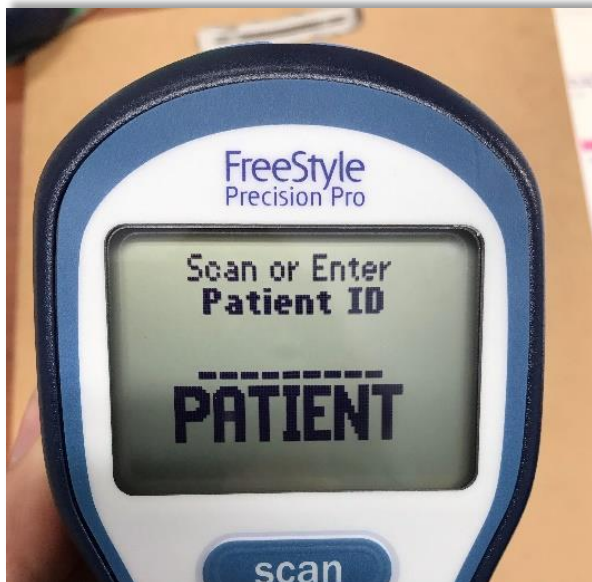
Full Name

Full Social Security  
Number (SSN)



# Patient Testing

- Select “Patient Test”



- Scan patient wristband.
- Scanning is highly recommended!!!

# Freestyle Precision Pro Glucometer Abbott

Glucometer Strip

## FreeStyle Precision Pro Blood Glucose Test Strip



↙



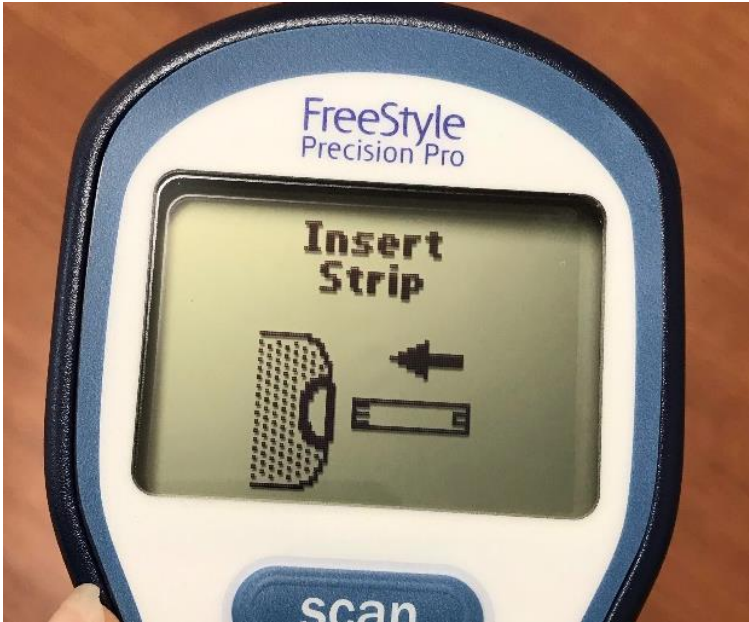


# Scan strip

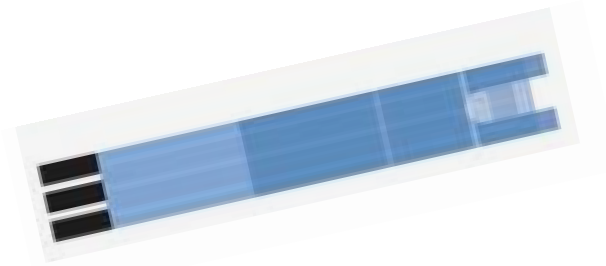


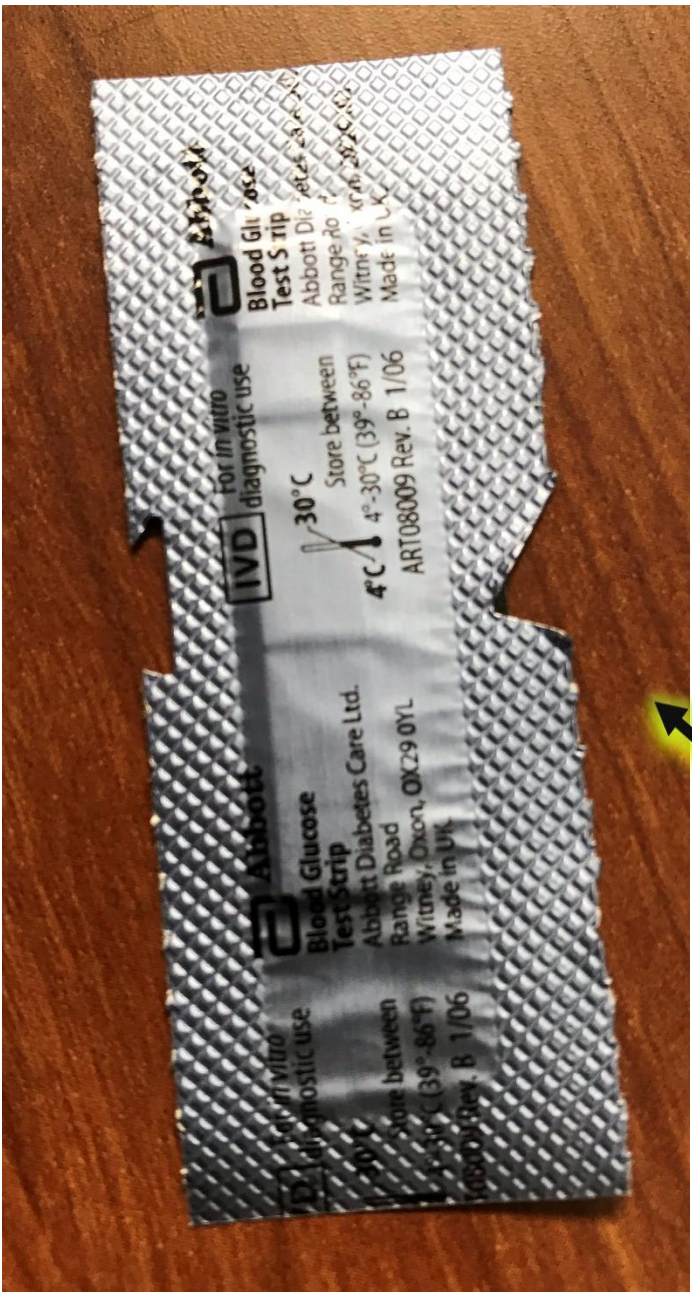
- Do not use test strips after expiration date.
- Do not use test strips that are damaged in any way.
- Do not use the test strip if the foil packet has a puncture or tear in it.
- Use the same scanned strip for testing





- To open strips hold with left hand with barcode facing away from you.
- Grab the lower tip of the notch (see arrow) and tear left and down.
- You should see a print resembling piano keys.
- Handle the strip by the middle, **do not touch the testing area and connectors**





Abbott



Blood Glucose  
Test Strip

Abbott Diabetes Care Ltd.  
Range Road  
Witney, Oxon, OX29 0YL  
Made in UK

IVD For in vitro  
diagnostic use

30°C



4°C Store between  
4°C - 30°C (39° - 86°F)

ART08009 Rev. B 1/06

Abbott



Blood Glucose  
Test Strip

Abbott Diabetes Care Ltd.  
Range Road  
Witney, Oxon, OX29 0YL  
Made in UK

For in vitro  
diagnostic use

30°C

Store between  
4°C - 30°C (39° - 86°F)

ART08009 Rev. B 1/06

# Testing Strip



Testing area.  
Do not touch!!!

Contact Bars  
“piano Keys”  
Goes inside glucometer

# Specimen Collection and Handling

- Capillary blood from a finger is the specimen of choice
- Venous and arterial whole blood with **lithium heparin**, **sodium heparin** and **EDTA** are acceptable.



# Specimen Collection and Handling

- **Capillary blood from a finger is the specimen of choice**
- Venous and arterial whole blood with **lithium heparin**, **sodium heparin** and **EDTA** are acceptable.
- Clear arterial lines before blood is drawn and dosed on the strip. Avoid air bubbles. Mix thoroughly and perform within 30 min.
- Venous and capillary blood may differ in glucose concentration by as much as 20%, depending on the time of blood collection after food intake.

# Specimen Collection and Handling

- Perform hand hygiene and put on disposable gloves
- Hold patient's arm downward to allow blood to flow to fingertip, choose site, usually side of the fingertip is less painful
- Clean site with alcohol or soapy water, allow to dry, use single use lancet to puncture side of finger.
- Gently squeeze finger to get large hanging drop of blood

# Specimen Collection and Handling



The most important part  
of fingerstick technique

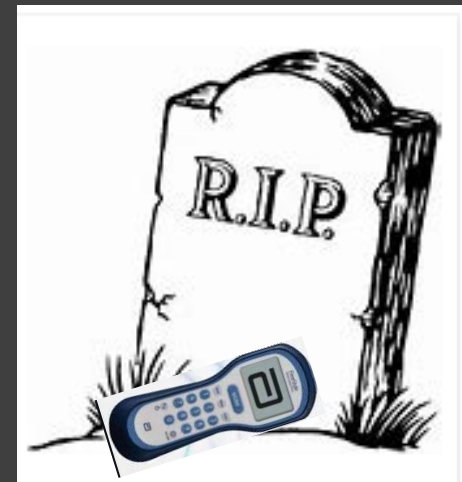
Wipe off the  
first drop of  
blood!!!!!!



# Specimen Collection and Handling

Never scoop the  
blood!!!

Blood will get inside strip  
port and damage the  
glucometer



# When to apply the sample?



Do not apply  
blood to the strip  
until the screen  
says:  
**Apply sample**

- Always keep the meter horizontal during testing
- Finger stick samples must be tested immediately

## Specimen Collection and Handling (Cont'd)

Once the test has been completed, the result will be displayed on the screen

- Expected/Reference Range: 65-99 mg/dL
- Reportable Range: 20 – 500 mg/dL
- If result is outside of Reportable Range, it will be displayed as <20 or >500

# Critical Results NF/SG

## <50 or >500 mg/dL

- Resolve discrepancies with laboratory glucose testing.
- **Document in Critical Value Template.**

**This is mandatory!!!!**

**Policy: 113-4 Point of care Glucose Critical Value follow up**

# Critical Value Documentation

- It is mandatory to document glucose result, notification of the result and action taken (treatment) using the Critical Value Template

Reminder Dialog Template: CRITICAL VALUE (T)

Lab Value

Name of Critical Lab(s) \*

Glucometer Glucose Value

Time unit notified of results \*

Critical Lab Result(s) \*

Time physician notified of critical result(24 hr clock)

Time physician notified \*

Name of Physician Notified \*

Provider Read Back: \*  Yes  No

Patient Treated/Action Taken: \*  Yes  No

Check here if author is different than staff notified of critical result.

Imaging result

Critical Lab Result(s)  
Name of Critical Lab(s) Glucometer Glucose Value

Health Factors: CRITICAL LAB NOTIFY STAFF, CRITICAL LAB PERSONNEL, CRITICAL LAB TEST, CRITICAL LAB TIME NOTIFIED, CRITICAL LAB VALUE

\* Indicates a Required Field

# Critical Value Documentation

Fill out the  
template with all  
the required  
information

Lab Value

Name of Critical Lab(s) \*

Glucometer Glucose Value

Time unit notified of results \*

Critical Lab Result(s) \*

Time physician notified of critical result (24 hr clock)

Time physician notified \*

Name of Physician Notified \*

Provider Read Back: \*  Yes  No

Patient Treated/Action Taken: \*  Yes  No

Check here if author is different than staff notified of

# Critical Value Documentation

- Be accurate with the value
- Do not use brand names like Accucheck, etc

# Comment Codes

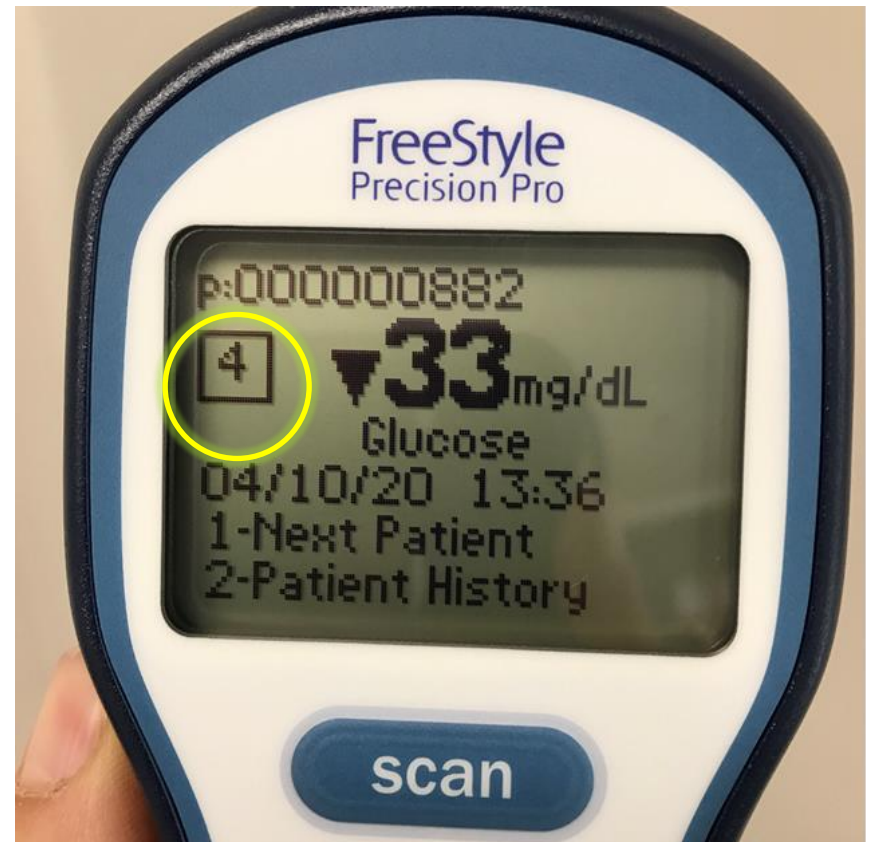
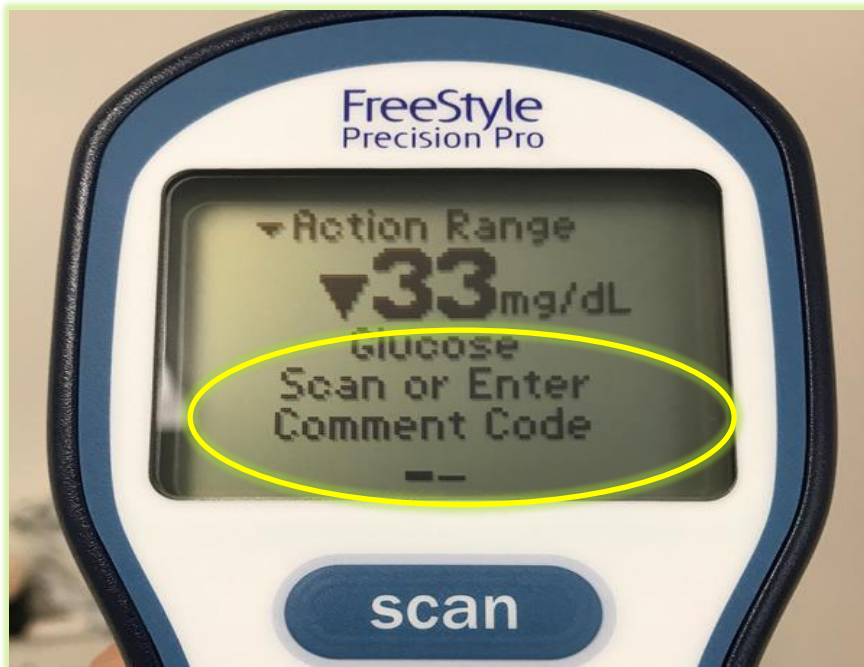
- **Required when obtaining a critical value**

## Comment Code Reference Guide

<u>Code</u>	<u>Description</u>
1	Repeat test
2	Procedure error
3	Treated patient
4	Notified RN/MD



# Comment Codes



# What to do during an emergency

- To be used when no patient ID is readily available

**Use all Zeros or all 9's**

**000-00-0000**

**999-99-9999**

- **Never use consecutive numbers!!!!**
- After the emergency it is required to send an encrypted email with the full name and full social of the patient to the Ancillary Testing Coordinators

# Dock glucometers!!



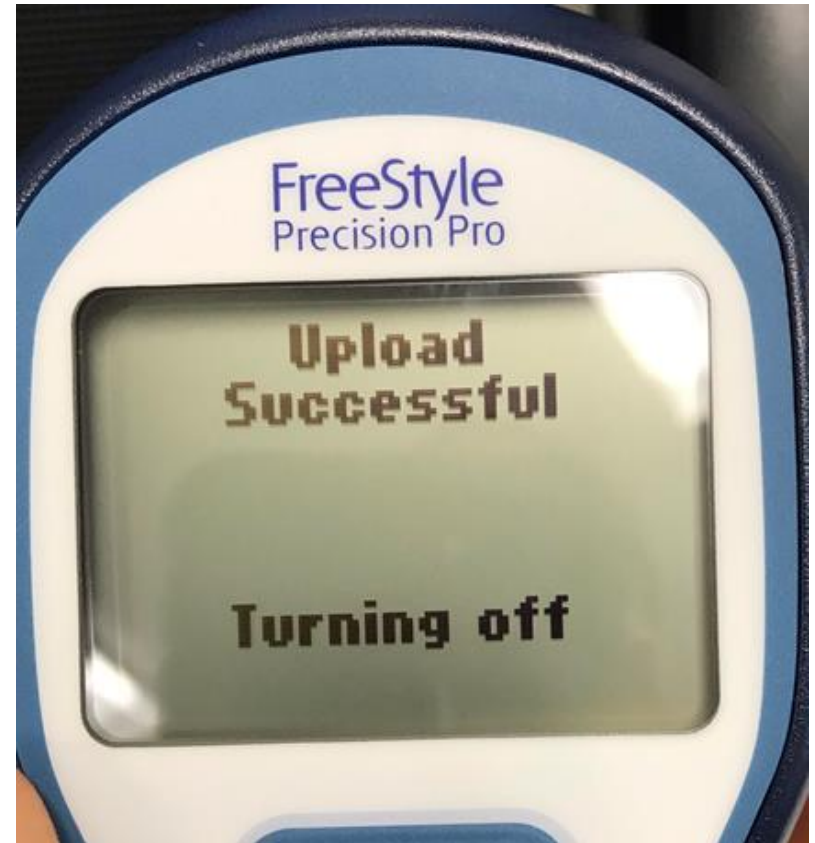
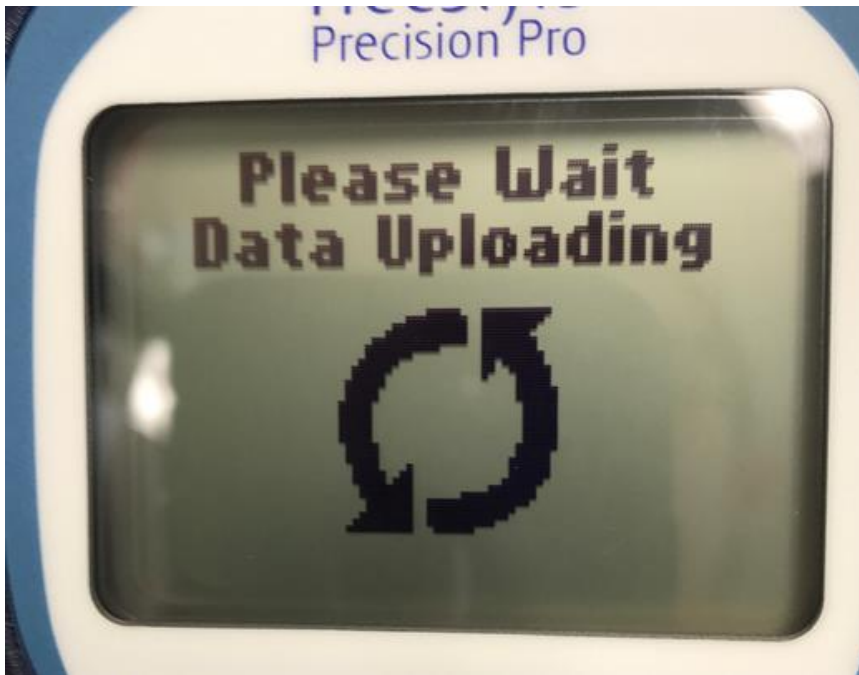
## Docking Glucometer:

- Provides a route for transferring data or configurations
- Upload patient's results to the chart
- Provides accountability of all glucometers

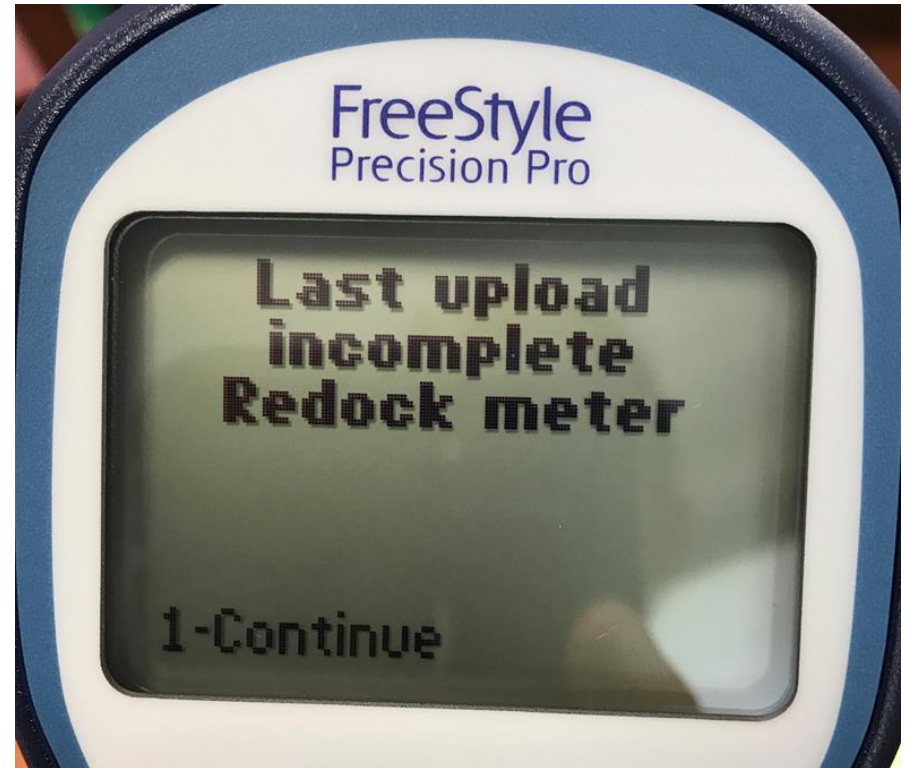
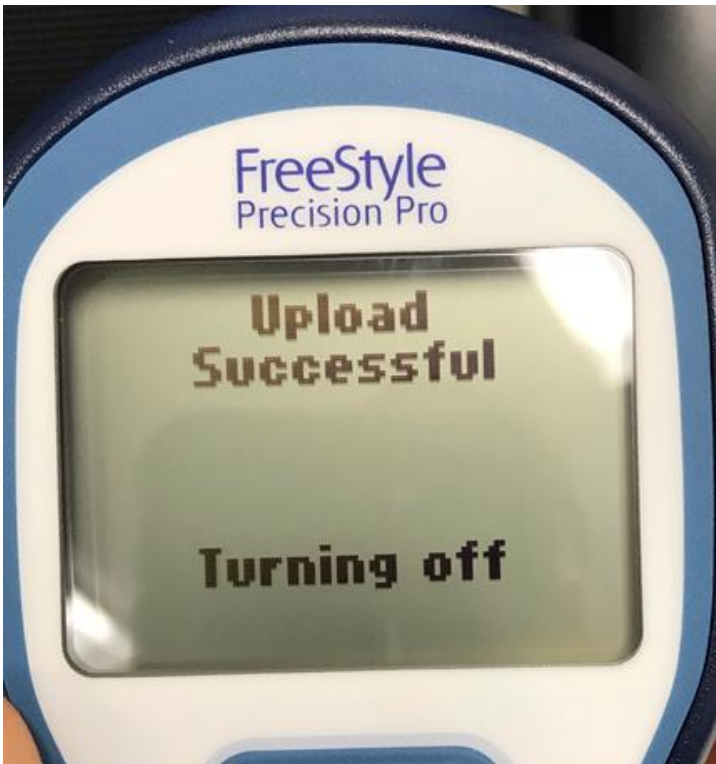
**Glucometers are required to be docked as often as possible after patient testing or once every 24 hours**

# Docking glucometer

---



# Docking issues



# Missing Glucometer



Glucometer can save up to 2,500 social security numbers with results



Notify the nurse manager immediately



Look everywhere



Notify VA police, and Information Security Officer (ISO)



Notify the Ancillary Testing Coordinators

# Flagged Results

**The following results will not cross to the patient's chart immediately**

- Critical values
- Patient ID errors
- Results ran within 15 minutes of each other
- Patient's without appointments
- Tests ran by operators with invalid operator code

# Glucometer Maintenance



# Maintenance

Reusable medical equipment.

Cleaning and disinfecting the exterior surface of the meter is

required  
after each  
patient  
use.



# Cleaning the glucometer



**IMPORTANT:** *If a pre-packaged wipe is used for cleaning, excess fluid should be squeezed out to keep liquid from entering the monitor. Permanent damage could occur.*



## **Glucometer CAP Surveys**

We are a Joint Commission (JC)  
accredited facility

## **Proficiency Testing**

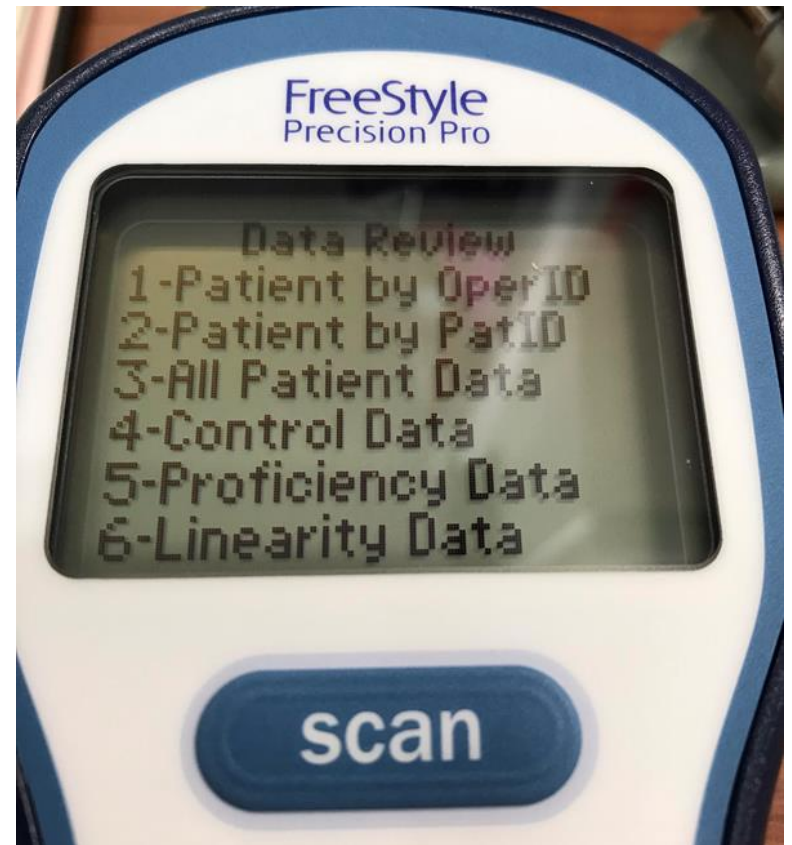
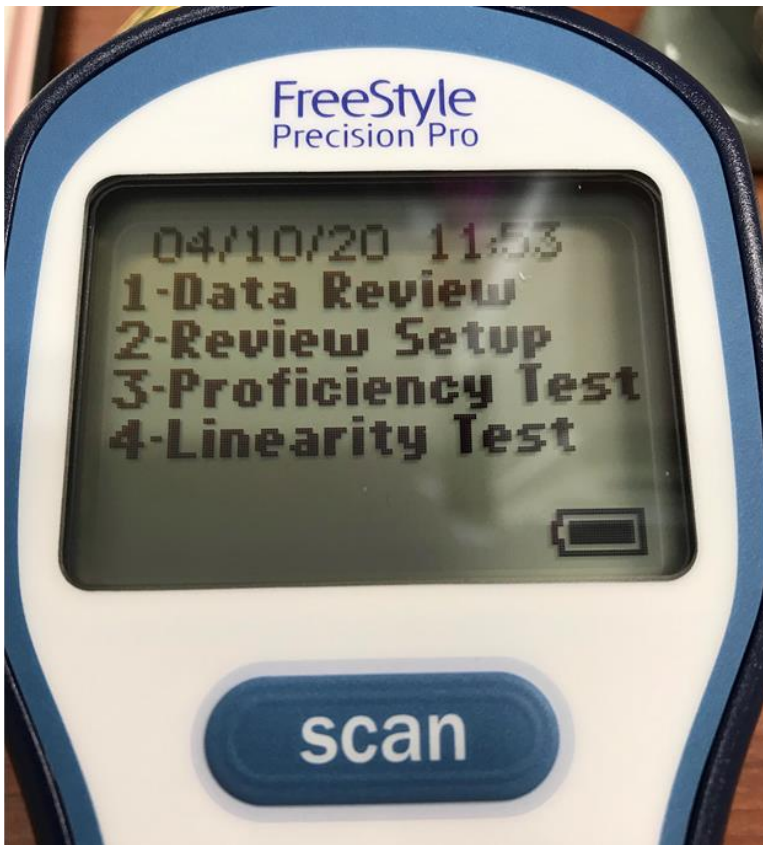
Testing of PT samples must be  
performed by personnel who perform  
patient testing.

# Self Testing is not allowed!!!

- It is against the VA Rules of Behavior and Occupational Health Service Policy to self test or test a co-worker
- Employee needs to visit Employee Health or the Emergency Department

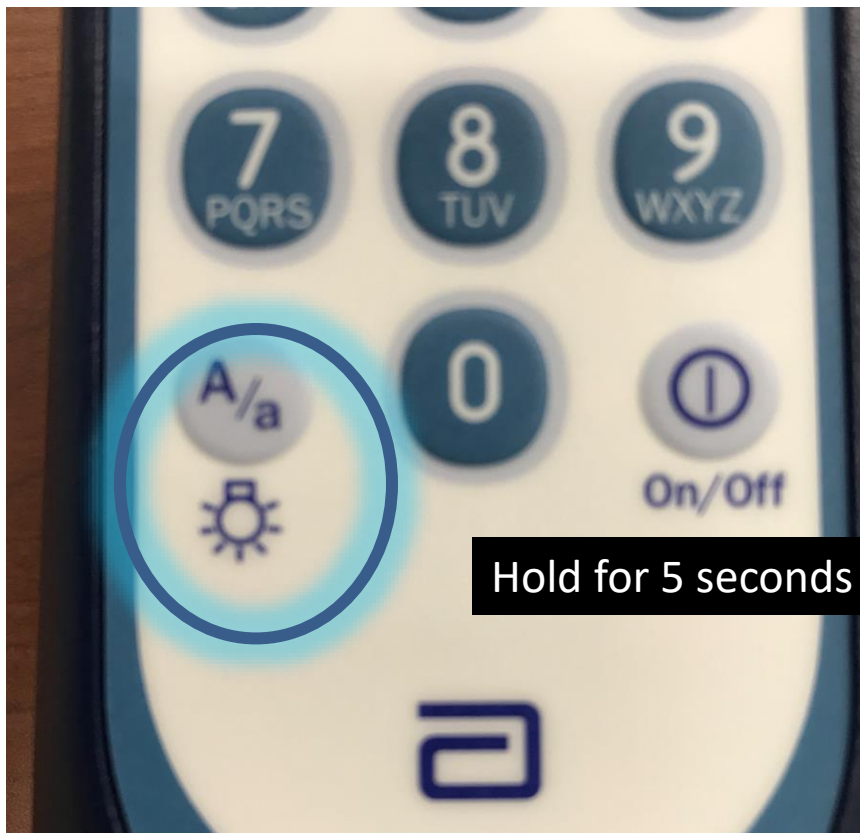
# Downtime procedure

---

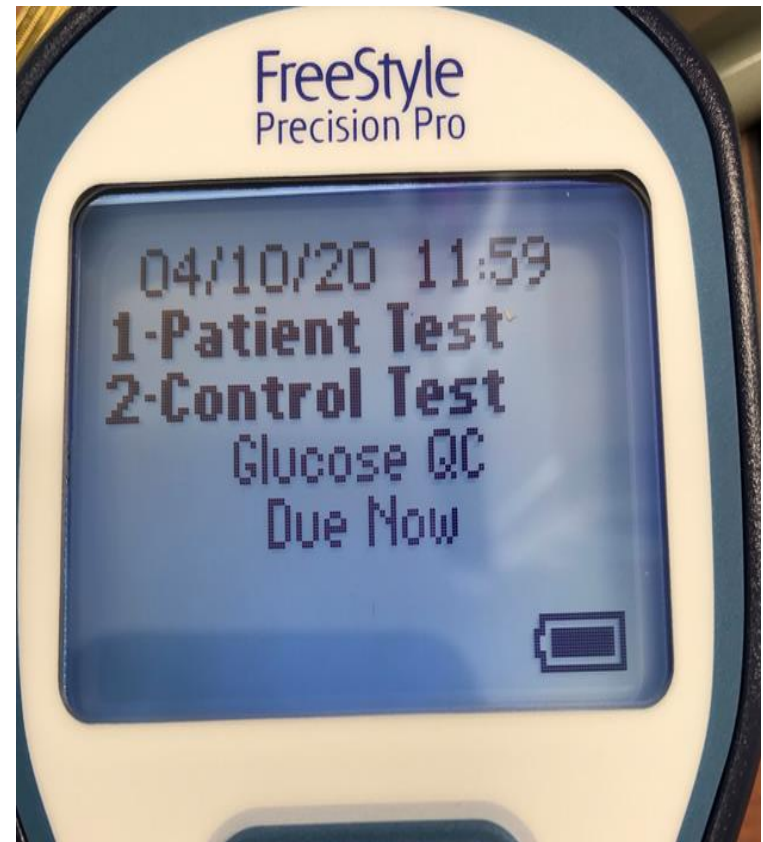


# How to backlight the screen

---



Hold for 5 seconds





Let's do some testing!

# If you need assistance raise your hand

- Today your Operator Code and the patient ID will be the card with the barcode
- Run QC
  - Level Low
  - Level High
- Patient Testing







1. How often should you perform maintenance (cleaning)?

**After each patient**

2. How long is the quality control solution good for after opening?

**90 days**

2... What information is documented on the vials?

**Open & Expiration  
dates**

3. What are the critical values for the glucometer for NF/SG Veterans Health System?

**<50**

**>500**

3...Where is it mandatory  
to document all critical  
glucose glucometer  
results?

**Critical Value  
Template**

4. What is the most important part of fingerstick testing?

**Wipe off the first drop of blood**

5. How often should you download/dock your meter

**As often as possible, After each patient testing**



6. When should you apply the blood to the strip?



**When it tells  
you to apply  
the sample**

7. When is it mandatory to enter a comment code after testing a patient?

**When the result is  
a Critical Value**

8. During a computer downtime situation, the glucose results will not be transmitted to the patient's electronic records. How can you retrieve the patient's results from the glucometer device?

How do you document the results during the downtime situation?

**Menu**

**Data Review**

**Follow your ward/clinic protocol contingency plan during computer downtime**

9. Where can you find your operator ID or DUZ number?

**VISTA**

**^Display user characteristics**

10. If you experience any problems with the glucometer or docking station, who do you notify?

Where can you find their numbers?

**ATCs**

**Ancillary Testing Coordinators**

**Sandra and Dolly**

**On the Glucometer box**

11. There are limitations to the procedure and the use of the glucometer. What patients is the glucometer not intended to be used to perform glucose testing?

**Critically ill Patients**

Any  
Questions?

Sandra Pascual  
Dolly A. Gonzalez

**VHANFLATC@va.gov**

**Contact information located in the glucometer box**