

PINELLAS COUNTY EMERGENCY MEDICAL SERVICES
12490 Ulmerton Road, Rooms 130/132
Largo, FL 33774

EMS LEADERSHIP GROUP MEETING MINUTES
February 21, 2023

The Pinellas County EMS Leadership Group (EMS LG) met on this date at this location with the following agencies marked present:

- Airport
- Clearwater
- Dunedin
- East Lake
- EMS & Fire Administration
 - Director
 - Data Systems Coordinator
 - EMS Academy Coordinator
 - Logistics Coordinator
 - Protocol and Equipment Coordinator
 - Quality Assurance Coordinator
- Gulfport
- Largo
- Lealman
- Madeira Beach
- Medical Director
- Oldsmar
- Palm Harbor
- Pinellas Park
- Pinellas Suncoast
- Safety Harbor
- Seminole
- South Pasadena
- St. Pete Beach
- St. Petersburg
- Sunstar
- Tarpon Springs
- Treasure Island

CALL TO ORDER AND ROLL CALL

Chief Tony Tedesco called the meeting to order at 9:00 a.m., noting Chief Terry Tokarz is attending today's Levrum Power Users training class. Roll call was taken.

APPROVAL OF MEETING MINUTES

Upon presentation of the minutes from the January 31, 2023, EMS Leadership Group meeting, held face to face, the minutes were unanimously approved. (Sunstar/Palm Harbor)

SYSTEM UPDATE

Craig Hare presented the following system update on the following topics:

- Budget process is underway, with a long list of enhancements to work through.
- Restarting the EKG monitor replacement process. Have a draft agreement with No. 2 vendor, Physio, noting existing contract with Stryker. Plans for item to be presented to BCC within 60 days, hoping for a summer rollout.

- Master Medical to handle repair of existing devices. Members asked to double-down on cleaning and maintaining stock and refresher on training.
- Final approach on ImageTrend site buildout. Discussion had regarding tentative time frame, needs, transition, training, and implementation.
- Staffing (later in the meeting)
 - Craig Queen has been placed on inactive service, and the Credentials Coordinator position to be posted soon. Ken Grimes to oversee certifications until the position is filled.
 - Zoe Kieta and Taylor Rhoades, two new temporary office staff, are assisting with the cleanup of certification and training records, allowing for a smooth transition to the ImageTrend License module, which has been delivered and in the configuration stage. He thanked everybody for their patience as administrative staff has been short-staffed for a while now, but positions are being placed as quickly as possible.

MEDICAL DIRECTOR UPDATE

Dr. Donna Dooley provided a clinical update on the following topics:

- The LUCAS Device has deployed for use to Madeira Beach and Clearwater. A short awareness In-Service video assignment in Target Solutions will be available soon. Dr. Andrew Smith relayed that connectivity issues are being resolved.
- Encouraged members to subscribe to the website's newsfeed for valuable updates and provide important feedback. Please relay any feedback, questions, or concerns to Dr. Jameson via email.
- *Leave Behind Narcan* program is live, and kit distribution is going well. No issues have been reported. Please relay any feedback, questions, or concerns.
- Shelly Childers, Executive Assistant for the Office of the Medical Director (OMD), handles OMD scheduling and business functions. Shelly's contact information is (727) 582-5699 and schilders@pinellas.gov.
- All certification packets are to be sent to the Certification website at emscertificationrequest@co.pinellas.fl.us. Liz Fogo and John Murphy are handling certs. Please do not send to directly to MDs.

AIR MEDICAL UPDATE

Julie Bacon referred to a document titled *Air Medical – Dispatch – January 2023* and provided statistical information regarding air support requests, pending program information, and LifeLine dispatch.

SUNSTAR UPDATE

Richard Schomp presented an operational update and shared statistical information regarding year-over-year trends, January transports, and improving hospital delays.

MEDICAL EQUIPMENT & SUPPLY/LOGISTICS UPDATES

David Hudak conducted a PowerPoint presentation titled *February 2023 Protocols, Medical Supplies & Equipment, Pharmaceuticals & Logistics*.

Derek Schauer thanked everyone for using the PSTrax alerts and provided an update regarding medical equipment asset tracking via PSTrax.

EMS ACADEMY/EMS TRAINING/CME UPDATE

Mark Eggers expressed thanks to all who assisted over the last 3-4 weeks with the February online content, and work is beginning in April online; whereupon he provided information on the following topics:

- EMS Academy
 - IPD started today. Format to change in the next month. Implementing the use of I-

simulate monitors in scenarios and testing. PowerPoints have been updated, adding a narcotics exchange component with embedded action slides. Plans to return to the Medical Director's Office next month for Week 2 only.

- Starting the Immersive light pre-roll for scenarios next month, a recorded pre-briefing. Plans to do a recording of dispatch and a drive/walk up for clinicians, where a victim will do initial scene stuff. The new process will remove instructors from having to read that part of the scenario component and will give the same view for every single person.
- CME
 - 3 IPDs this week, 1 next week. February CME is out. March IPDs are completed. April is in progress.
 - There are several new instructors in EMS Academy as well as CME. Thanks to all for the great recruitment work.
 - Equipment is ready to be deployed to each site. Please be patient. There are only six sets of equipment.
 - Reports show 17 people who still have not completed the December In-Service, noting some are admin/clinical staff. Discussed concerns whether some of the people remaining on the list are employed or retired and whether certain current staff really need CME, user management in Vector/Target Solutions, and how best to identify clinicians that do not need CME to be taken off the list. Mark noted that Clearwater, St. Petersburg, and Sunstar make up the biggest chunk of the group. Discussion had regarding extenuating circumstances where people remain on the list because they are not officially retired, have time off the books, or are on extended FMLA. Craig and Mark to get together and talk about resolving the issue. Schedule and format for March 2023 CME, June ACLS, CME, July ACLS, CME, August ACLS, CME, and November CME.
 - The Credentials Coordinator position will be posted soon. Ken Grimes will oversee certification records and clean training records in preparation for ImageTrend.
 - Craig thanked Mark for this work with the March CME and IPD. It went well and was well prepared.
 - Chief Mark Zipeto provided updates on EMS Academy as well as other training.
 - In April, there will be five video parts: an introduction video with Dr. Jameson regarding system changes, a roundtable with Dr. Jameson and other physicians to discuss substance use disorders, mental health problems in the field, patient and provider safety, as well as restraints, and chemical sedation.

TECHNOLOGY UPDATE

Steve Fravel provided new and updated information on the following topics:

- Working to get the Surface Gos up to speed.
- Still collecting CF20s for the Grand Prix.
- First Watch was working on the BLS, which was put under Sunstar. Trying to get it broken out by agency.
- Still working with people to clear up ZDMCs. Reminder to check workflows. Chief Zipeto asked if the Physio monitors are uploading to a cloud or right to the monitor. Craig Hare advised the need to go to the monitor because the LifeNet station is separate. They are compatible with Windows tablets. Need to discuss wi-fi versus Bluetooth.

QUALITY ASSURANCE UPDATE

Chris Jordan referred to a document titled *Quality Assurance Update* and provided statistical information pertaining to the following topics:

- Baldrige Patient Satisfaction Surveys for January 2023 and overall Pinellas County EMS engagement results.
- January QARs.

- Case tracking.

COMMITTEE UPDATES

PCEMS Supply and Equipment Committee – Chief Tony Tedesco

- The Equipment and Supplies Subcommittee will be ramping up slowly.

PCEMS Controlled Substances Subcommittee – Chief Tony Tedesco – On hold.

EMS Training Group – Chief Mark Zipeto

- EMS Quality is being chaired by Chris Jordan. Dr. Lozano is adding a research component to it.

EMS Quality Committee – Jeremy Tinter

- Nothing new to report. Continuing to work on the protocol and plan to get the Austere Environment project up and running. Chief Bill Gorham is taking the lead.
- Upcoming meeting scheduled for next week via Zoom.

ePCR Committee Update – On hold.

Complex Case Management – Dr. Angus Jameson

- Complex Case Management was addressed by Craig Hare, who advised we can process the cases but need to determine how and what cases we can refer.

First Pass Group – Chief Bill Gorham

- First Pass has some member changes due to Lt. Johnson's retirement. We talked about strokes so please look at the stroke in the First Pass test queue and advise of any issues. It was noted that ImageTrend character count was changed from 300 to 500. We are considering two First Pass classes, one for the admin side on QA and one for the user side.
- Working with Ryan to make sure the correct items are being uploaded to the MRxes. Caleb Hudak is going to look at our new protocols for this year.
- Next meeting is scheduled for March 7 at 1:00 pm. Capt. Thomas Kras recommended a content review of what is being written to be sure we are capturing the correct information in the refusals. It will be added as a bullet point for the next QA class.

OLD BUSINESS

- Chief Tedesco asked about refusals. Craig Hare added this will be built into forms on ImageTrend.
- HIPAA compliant coordinator and portal was raised. Chief Zipeto advised he doesn't think this needs to be kept it on as old business.

NEW BUSINESS

No new business was discussed.

AROUND THE TABLE: POSITIVES, PROJECTS, AND ACCOMPLISHMENTS

Dunedin: Workfront Baseball is kicking off this week. We have a successful Mari Gras with an estimated 30,000 downtown. The new rescue is being delivered today. Baseball kicks off on

Monday.

East Lake: Special events are certainly in high gear. East Lake is very busy.

Gulfport: Working on some promotional testing. Interviews were conducted last week, noting upcoming retirements. Hoping to hire three personnel.

Lealman: The first annual Honey & Arts Festival, held last Saturday, went off well. Looking to hire 3 new personnel.

Oldsmar: Busy with the BMX racing event.

Palm Harbor: Valspar Golf Tournament is coming up on the week of March 13. Recently hired a couple individuals.

Pinellas Park: Working on getting new hires through the process. The Chili Blaze is coming up in March.

Pinellas Suncoast: Busy with the hiring process.

Safety Harbor: Chief Saavedra is still out on medical leave. The Art and Seafood Festival takes place on Saturday and Sunday, expecting approximately 10,000 attendees.

Seminole: Bringing on 5 personnel and a couple more in the near future, as well as a Fire Chief.

St. Pete Beach: Hiring new personnel. Upcoming events: The Grand Prix, Skyway 10K, and Reggae Rise Up, a 4-day event from March 16 through 19. Rays home opener scheduled for the end of the month.

Tarpon Springs: Hired 2 people and looking to bring on 3 more.

Treasure Island: Ordered a rescue with a letter of intent to lock in today's price. RAB is 28 months out.

Clearwater: Spring break is right around the corner.

ACTION ITEMS

- Reminder of the First Pass meeting on March 7 at 1:00 pm to review the stroke data, give feedback, and an upcoming QA class. Send an email for input.
- Chief Mark Zipeto requested that the HIPAA Complaint/Coordinator Portal Discussion be removed from Old Business. Steve Fravel to get with Mark to figure out a HIPAA coordinator portal.

NEXT MEETING

The next Leadership Group meeting is scheduled for Tuesday, March 21, 2023, at 9:00 a.m., to be held via Zoom.

ADJOURNMENT

The meeting was adjourned at 10:25 a.m.

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CALL TO ORDER AND ROLL CALL

Chief Terry Tokarz called the meeting to order at 9:03 a.m. Roll call was taken.

APPROVAL OF MEETING MINUTES

Upon presentation of the minutes from the December 20, 2022 EMS Leadership Group meeting, the minutes were unanimously approved. (Palm Harbor/Dunedin)

Chief Tokarz related that, deviating from the agenda, the Medical Director Update will be the next item discussed.

MEDICAL DIRECTOR UPDATE

Dr. Angus Jameson provided a clinical update on the following topics:

- Dr. Jameson's medical license is available for agency documentation. A survey will be attached with the agency recertification packet.

- Protocols have been live for a couple of weeks. Please relay any feedback, questions, or concerns.
- The LUCAS Device is an automated CPR device that basically clamps on and performs compressions. Demonstrations will start at Station 46 and in Madeira Beach. The project is scheduled to go live in the near future. Expect a short awareness In-Service video assignment in Target Solutions.
- PCEMSOMD website is going well and is being optimized on a daily basis. Check out the new pages supporting EMS Academy at www.pcemsomd.com. MOMs Volume 2 will be corrected with the new version of the Rules and Regs. Encouraged members to subscribe to the website's newsfeed for valuable updates and to provide important feedback.
- *Leave Behind Narcan* program is live and has placed people into treatment. Please continue to capture signatures for *Leave Behind Narcan* and COSSAP. Thanked everyone for their help making the program a success. Please relay any feedback, questions, or concerns.
- Congratulated the multiple EMS and Fire teams that competed in Fire-Rescue EAST (FRE) competition.
- Expressed thanks to members that attended the state constituency meetings. Discussed various significant meeting topics, including workforce and education pipelines and certified staff retention issues.
- Discussion had between Fire Chiefs Association, educators, and medical directors regarding pass rates, time frame to successfully get through school, and improving staff engagement.
- Shared that Tampa Bay was well represented and showed well to EMS Leadership around the country at last week's NAEMSP Conference in Tampa. Expressed thanks to Capt. Thomas Kras, Sunstar, and both of their teams for the High-Quality Pit Crew-based CPR demonstrations and the Resuscitation Academy presentation. Working to set up a debrief session in the next week or so. Discussed membership to the NAEMSP and benefits to joining the professional association.
- Welcomed Shelly Childers, the Executive Assistant for the Office of the Medical Director. Shelly can be contacted at schilders@pinellas.gov.

SYSTEM UPDATE

Craig Hare presented the following system update on the following topics:

- Staffing
 - Welcomed Ken Grimes, the new EMS & Fire Administration Department Administrative Manager, and provided background information and a brief employment history.
 - Introduced Zoe Kieta and Taylor Rhoades, the new temporary employees that are assisting with updating certification and training records for forward progress with ImageTrend implementation by summertime.
 - Announced that Craig Queen, Certification Coordinator, will likely retire soon.
 - Congratulated Brenda Dixon, Administrative Assistant, on her upcoming retirement on March 3 after 31 dedicated years with Pinellas County.
 - Reported that Matt Caravona, former Training Coordinator, has transitioned to Sunstar.
 - All positions to be posted soon.
- Budget process is starting now. Working on a budget decision package, looking at hiring a lead instructor and curriculum developer to offset overtime costs, both areas discussed with the Training Group.
- Discussed the ImageTrend site buildout progress. Getting ready to conduct power user training for system configuration. Will set a date for an ePCR retreat once system configuration is completed.

- Continued struggles with Philips EKG monitor replacement, noting problems with the Pro and LS boxes and FDA hold. Plans to restock the 50 Philips monitors for credit. Will start due diligence on another vendor. Discussed ensued regarding possible alternatives and potential time frame for restarting the RFP process.
- Master Medical will repair existing monitors throughout the next year.

AIR MEDICAL UPDATE

Julie Bacon referred to a document titled *2022 December Pinellas Data* and provided statistical information regarding Pinellas County air requests, flight time, and average dispatch time.

SUNSTAR UPDATE

Richard Schomp praised Jazmin Soloman's work Capt. Kras with the Resuscitation Academy presentation at the NAEMSP Conference. Mr. Schomp presented an operational update and shared statistical information regarding ambulance transports and year-over-year trends.

MEDICAL EQUIPMENT & SUPPLY/LOGISTICS UPDATES

David Hudak referred to a PowerPoint titled *January 2023 Protocols, Medical Supplies & Equipment, Pharmaceuticals & Logistics*, and provided new and updated information on the following topics:

- Price increases on medical supplies and pharmaceuticals.
- Pharmaceutical shortages.
- Philips MRx operations check.
- Equipment damage/proper use/maintenance/storage and handling.
- Philips MRx battery calibration.
- Inventory expiration.
- PSTRax reports.
- Equipment reminders.

Derek Schauer provided an overview of the PSTRax equipment servicing and asset issuance/tracking processes.

EMS ACADEMY/EMS TRAINING/CME UPDATE

Mark Eggers provided information on the following topics:

- CME
 - Thanked everyone for their assistance with providing feedback for CME edits/corrections and assisting with video work.
 - February CME is complete and will go out later today. March CME is done.
 - Schedule and format for March 2023 CME; June ACLS, CME; July ACLS, CME; August ACLS, CME; and November CME.
- EMS Academy
 - Added Surface Gos for all students, changing to a paperless format. Hard copy workbooks are still in use.
 - IPD to start February 28. Rolling out the I-simulates and updated PowerPoints with refreshed content.
 - The move of the Immersion environment to CPM is working out well.
 - Capstone written pass/fail rates and improved written test. Working with Jazmin Soloman on building a Capstone pretest.

TECHNOLOGY UPDATE

Steve Fravel provided new and updated information on the following topics:

- 75 of the Go 3 tablets have been deployed to North County and CME. Discussion had regarding monitor communication, keyboard functionality, and pairing issues.
- Contact Steve if anyone experiences error messages with daily reports.
- Reminder to complete and save to archive ePCRs that remain in the ZDMCs during the switch from Zoll to ImageTrend. Discussed the process for clearing out ZDMCs. Working to fix 2022 and prior reports within 30 days. Steve to resend.

QUALITY ASSURANCE UPDATE

Chris Jordan referred to a document titled *Quality Assurance Update* and provided statistical information pertaining to the following topics:

- Baldrige Patient Satisfaction Surveys for December 2022 and overall Pinellas County EMS engagement results for 2022.
- December QARs.
- Case tracking.

OLD BUSINESS

No old business was discussed.

NEW BUSINESS

- Chief Mark Zipeto commented on (1) operational challenges with staffing special rescues and (2) saving valuable time by sending personnel to fire school full-time rather than paramedic school to get medics certified in a more timely fashion, and discussion ensued regarding staffing SRs with certified EMTs/provisional medics and minimum County standards for staffing an SR crew, and speaking with the Fire Chiefs to see if they would be open to sending 12 students to fire school full-time. Craig Hare indicated that he would research the Rules and Regulations and First Responders Agreement, and Dr. Jameson to review academic pathways to see if any changes could be made to improve current requirements.
- John Murphy indicated that members can contact him for any issues with running credential reports in Target Solutions.
- Chief Andrew Hughes related that (1) Liz Lavelle from Bayfront has asked if the EMS Chiefs will stop in every so often to give a hospital update, and (2) announced that there will be a Hexagon demo on February 10. Information to be forwarded to the EMS Chiefs.
- Jeremy Tinter provided commentary regarding awareness pertaining to the recent events that transpired in Memphis, Tennessee, and collaborating with police departments about leadership best practices. Dr. Jameson discussed presenting a roundtable or livestream to discuss nationwide case reviews and how to spread awareness about impactful situations, will send out an email to gauge interest to collaborate. Discussion ensued.
- Richard Schomp noted that Sunstar is reminding clinicians to conduct a cursory check of patients for weapons to ensure safety. Also, children are not allowed to ride in with parents to the Emergency Department unless they are a patient.

AROUND THE TABLE: POSITIVES, PROJECTS, AND ACCOMPLISHMENTS

Dunedin: Will be picking up a new rescue.

Largo: Shared statistical information regarding Medic 41 UHU.

Dr. Jameson: Complex Case Management Committee meets on Friday. Please forward any cases for review to Chris Jordan with as much information as possible.

ACTION ITEMS

- Members are asked to subscribe to the Medical Director's website, www.PCEMSOMD.com.
- Address problems with asset returns with David Hudak and Derek Schauer.
- Please review the CME calendar to ensure agency participation.
- Reminder to clear out ePCRs in ZDMC. Contact Steve Fravel with any questions.
- Group to conduct research on the EMT/paramedic certification rules and regulations.
- Dr. Jameson to send out an email to collaborate in a roundtable or livestream to discuss case reviews around the county and improve relations.

NEXT MEETING

The next Leadership Group meeting is scheduled for Tuesday, February 21, 2023, at 9:00 a.m., to be held via Zoom.

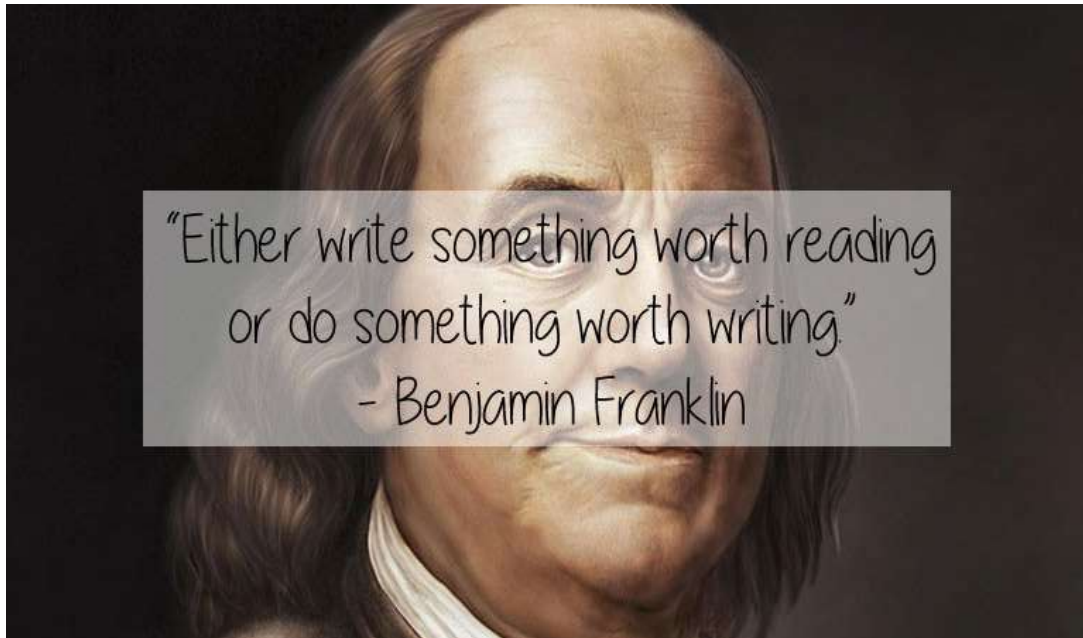
ADJOURNMENT

The meeting was adjourned at 11:58 a.m.

*Audio and documentation received for this meeting is on file at the
Pinellas County EMS & Fire Administration.*

Air Medical - Dispatch – January 2023

- **25 requests for air support**
 - 1 weather decline
 - 5 completed by Bayflite
 - 1 completed by Aeromed
- **Pending information from programs**
 - Times, patient destination
- **LifeLine Dispatch**
 - Flight request to program offering average <60 seconds
> (90 second metric – 100%)



"Either write something worth reading
or do something worth writing."
- Benjamin Franklin

February 2023



**PROTOCOLS, MEDICAL SUPPLIES &
EQUIPMENT, PHARMACEUTICALS &
LOGISTICS**

EMS Central Supply



Warehouse



Scheduled

On
Demand





Scheduled



**Orders submitted
no later than
FRIDAY**

**Delivered the
following Tuesday**

SOUTH COUNTY FD

GULFPORT

ST PETE BEACH

MAD BEACH

ST PETERSBURG

PINELLAS PARK

LEALMAN

SEMINOLE

PASADENA

ST PETE WAREHOUSE

TREASURE ISLAND



**Orders submitted
no later than
TUESDAY**

**Delivered on
Thursday**

NORTH COUNTY FD

EAST LAKE

TARPON SPRINGS

PALM HARBOR

SAFETY HARBOR

DUNEDIN

CLEARWATER

LARGO


OLDSMAR

PINELLAS SUNCOAST

ARFF

Order Follow-Up

We are working on improving the level of communication about the status of orders submitted – additional information will be forthcoming



Pharmaceutical Shortages - UPDATE

Gvoke Kit™ (glucagon injection)

NDC 72065-140-11 \mathcal{R} Only

1 mg per 0.2 mL

Single-Dose Vial and Syringe – Discard Unused Portion

FOR LOW BLOOD SUGAR EMERGENCY

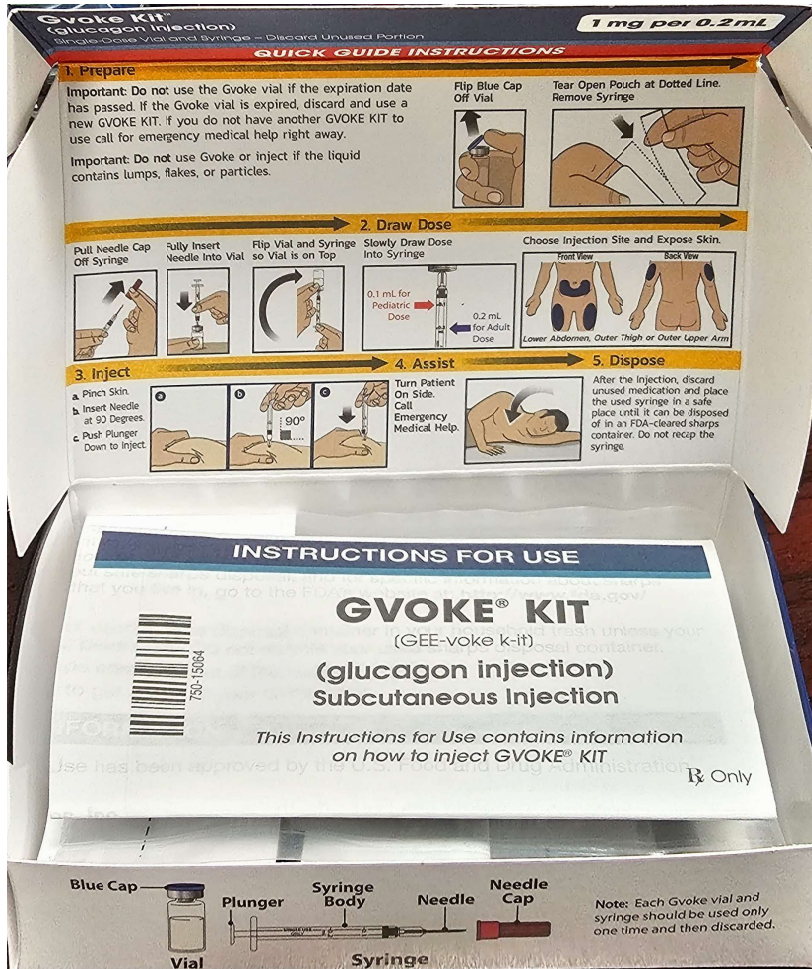
Contains one single-dose sterile syringe (29 G x 1/2" Needle) and one single-dose vial containing 0.2 mL of solution.

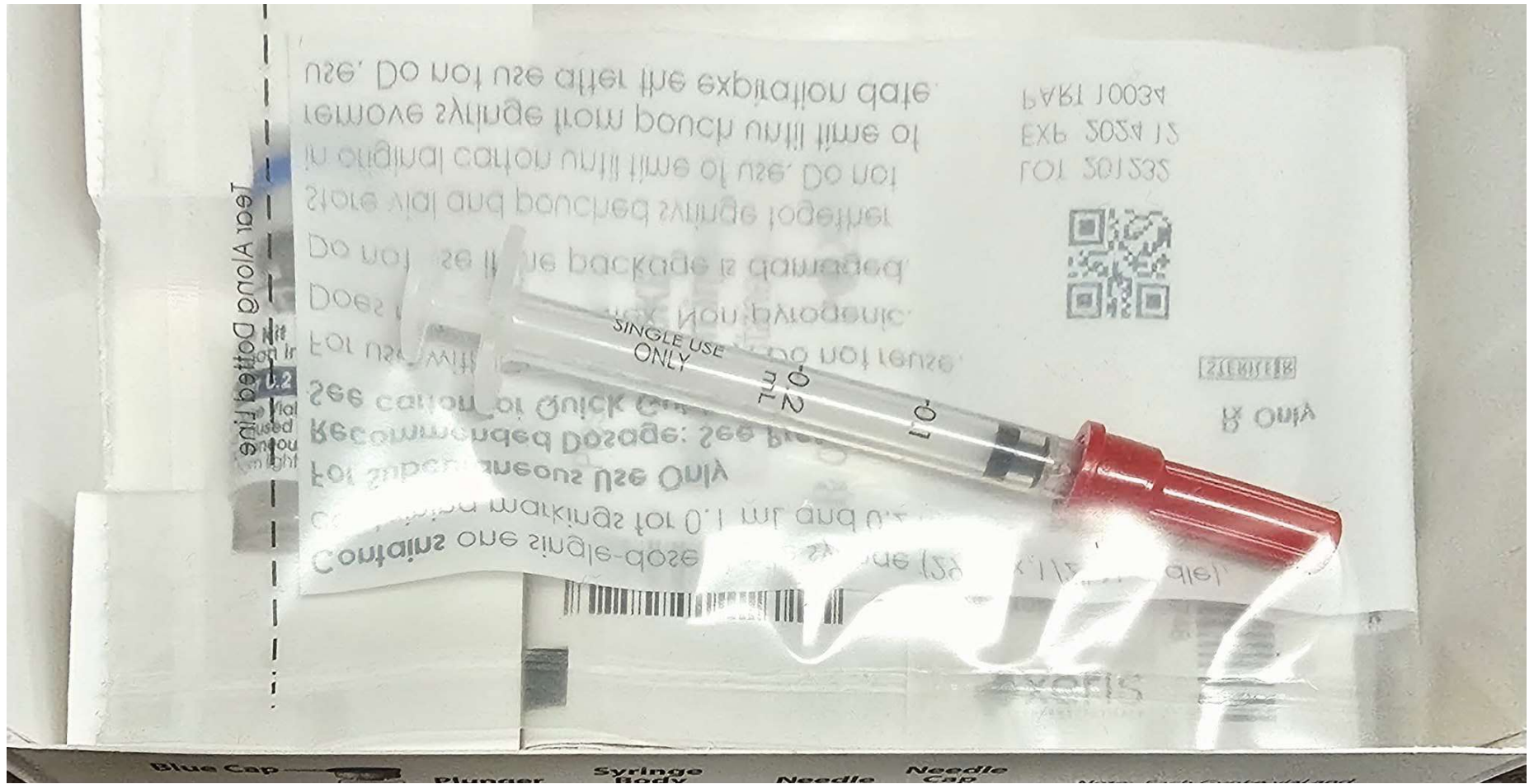
For Subcutaneous Use Only
Discard Unused Portion

Recommended Dosage:
See Prescribing Information

See inside for Quick Guide Instructions







Teal/Violet Dotted Line

Do not use after the expiration date
remove syringe from pouch until time of
in original carton until time of use. Do not
store vial and bunched syringe together
Do not use if the backside is damaged
Does not contain any preservatives
For use with the following products:
See carton of Quick Start
Recommended dosage: see package
For subcutaneous use only
See package markings for 0.1 mL and 0.2 mL
Contains one single-dose syringe

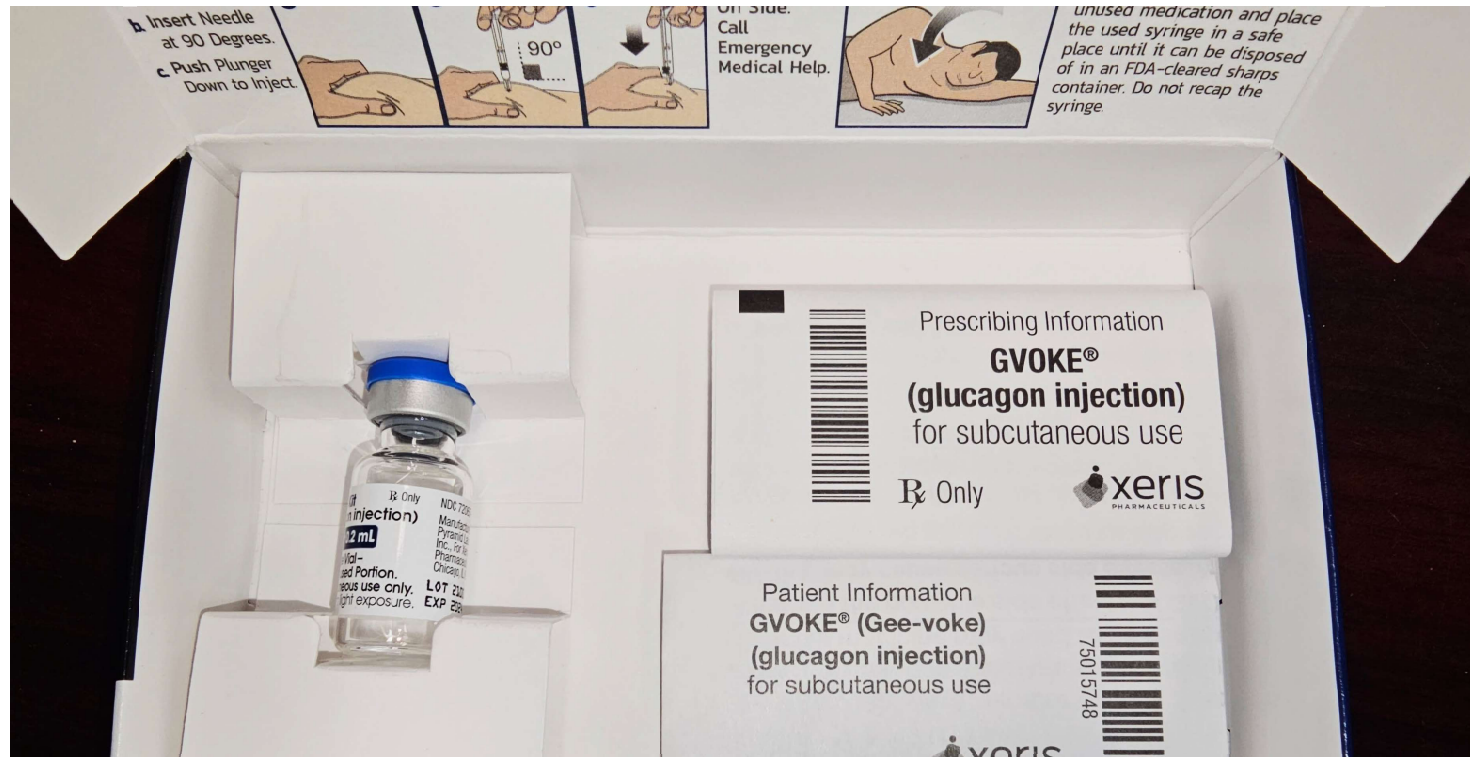
PART 10034
EXP 3034 15
LOT 301535



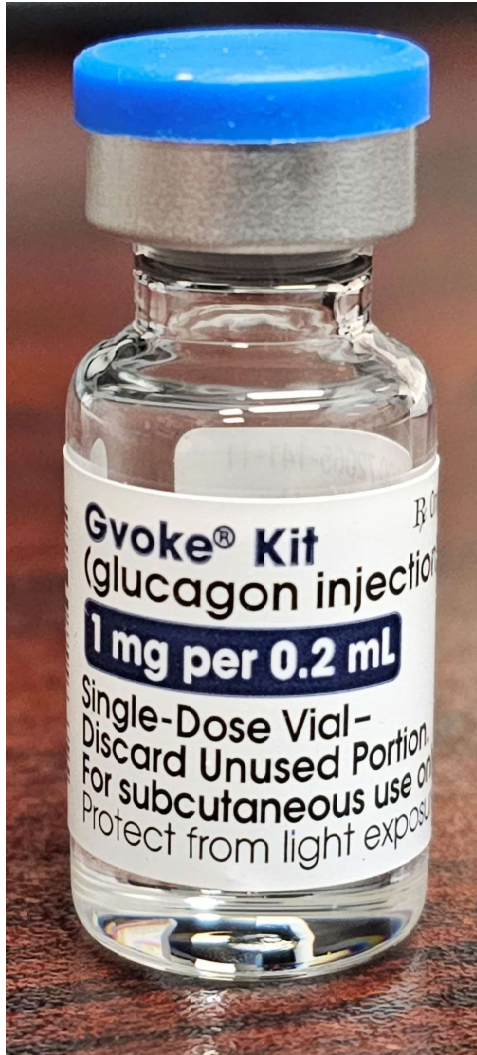
LOT 301535
BY ONLY



Blue Cap Plunger Syringe body Needle Needle Cap



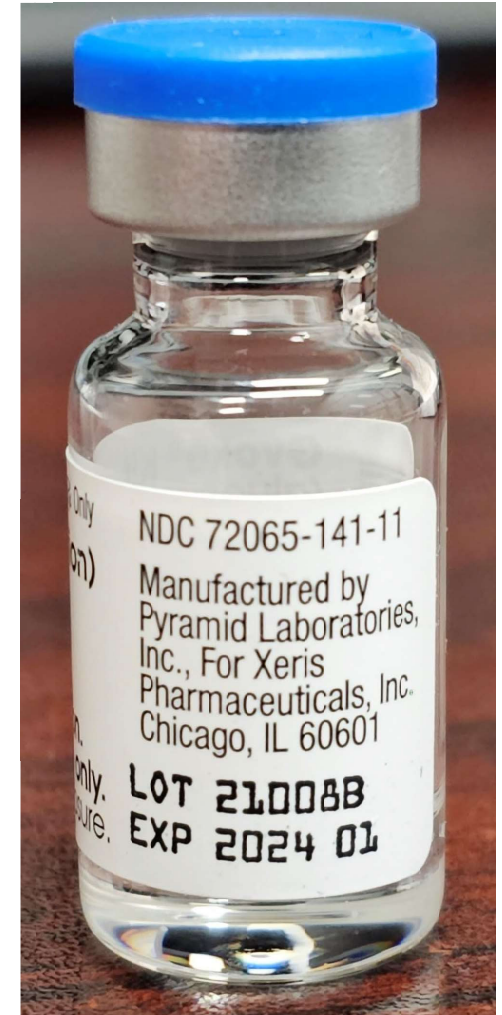
**DRUG IS LIGHT SENSITIVE –
DO NOT REMOVE FROM ORIGINAL PACKAGING**

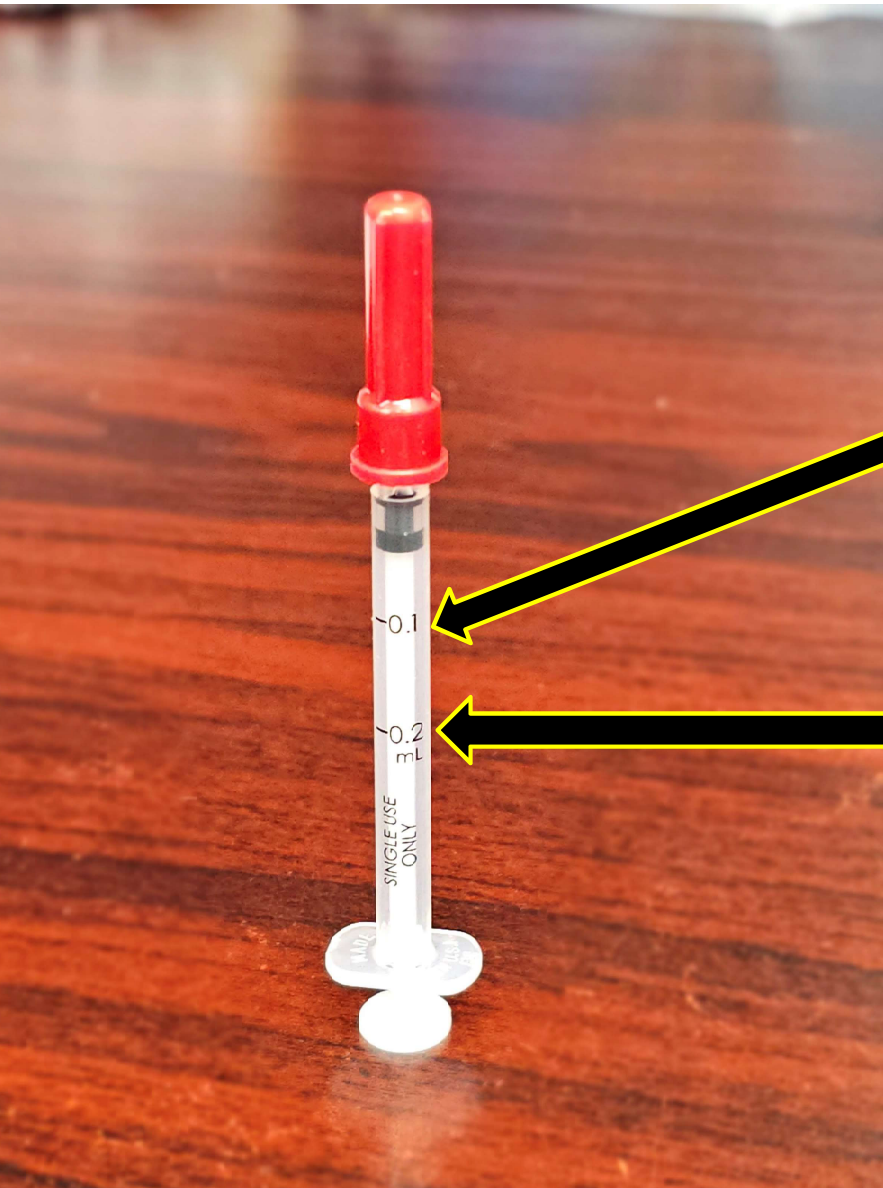


**SHELF
STABLE
LIQUID**

NO MIXING!!!

1 mg/0.2 mL





0.1 mL (0.5 mg)
PEDIATRIC DOSE –

Age 2 to UNDER 12
weighing less than 45 kg
(100 lbs.)

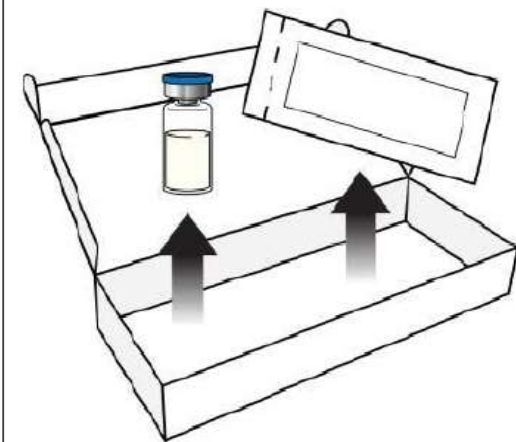
0.2 mL (1 mg)
ADULT DOSE –

Aged 12 years and older or
pediatric patients weighing
45 kg (100 lbs) or greater

Remove GVOKE Vial and Syringe from Carton

Open carton and carefully remove GVOKE vial and syringe (see Figure A)

Figure A



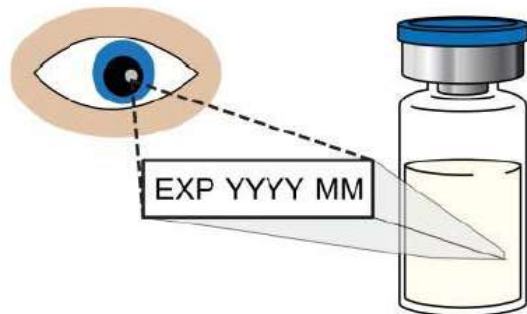
Check the Expiration Date on GVOKE Vial

Check the expiration date printed on the label of the GVOKE vial (see Figure B).

Important:

Do not use the Gvoke vial if the expiration date has passed. If the GVOKE vial is expired, discard and use a new GVOKE KIT. If you do not have another GVOKE KIT to use call for emergency medical help right away

Figure B



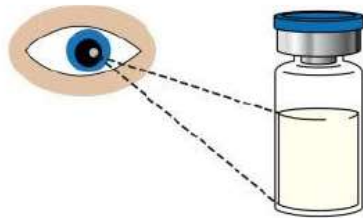
Inspect the Solution in Gvoke® Vial

Look at the liquid medicine in the vial. It must be clear and colorless, or a pale yellow (see Figure C).

Important:

Do not use GVOKE or inject if the liquid contains lumps, flakes, or particles

Figure C



Prepare

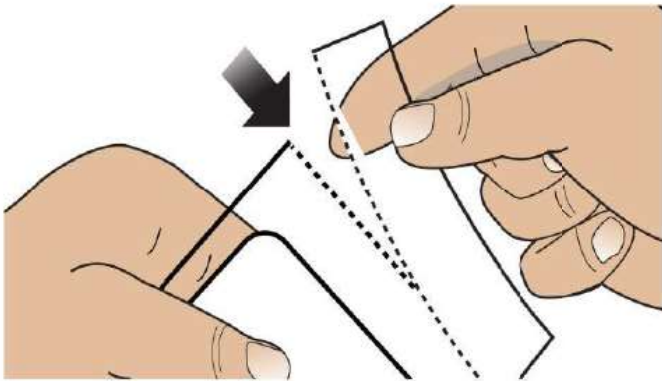
- Remove the blue cap from the vial to expose the rubber stopper (see Figure D).
- **Important: Do not** put your thumb, fingers, or hand on or near the needle guard or needle opening to help prevent accidental needle sticks.

Figure D



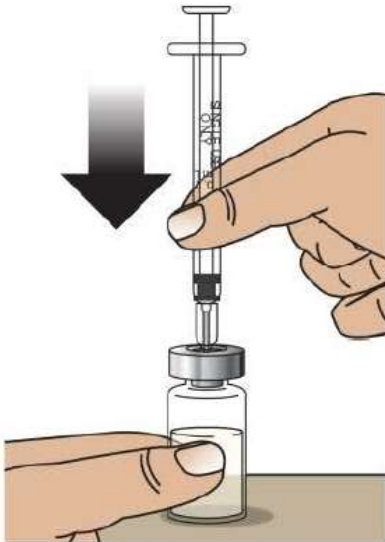
- Tear Open Pouch at Dotted Line (see Figure E). Remove syringe.

Figure E



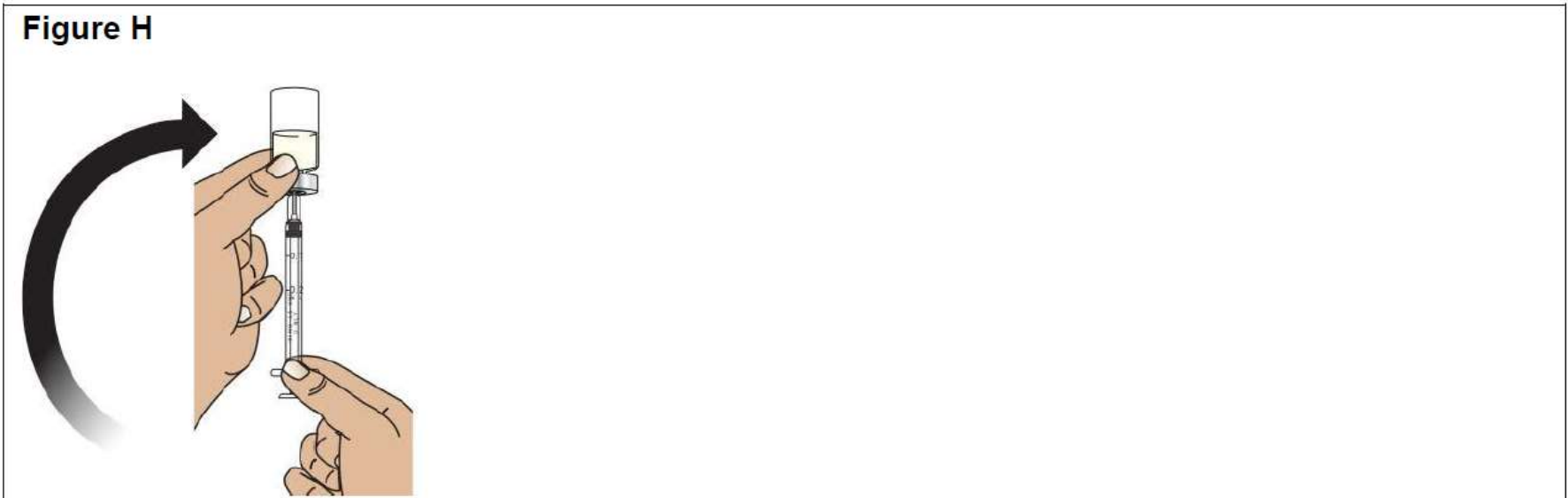
- Push the needle fully into the center of the rubber stopper (see Figure G). It is important to make sure the needle punctures within the raised circle of the stopper

Figure G



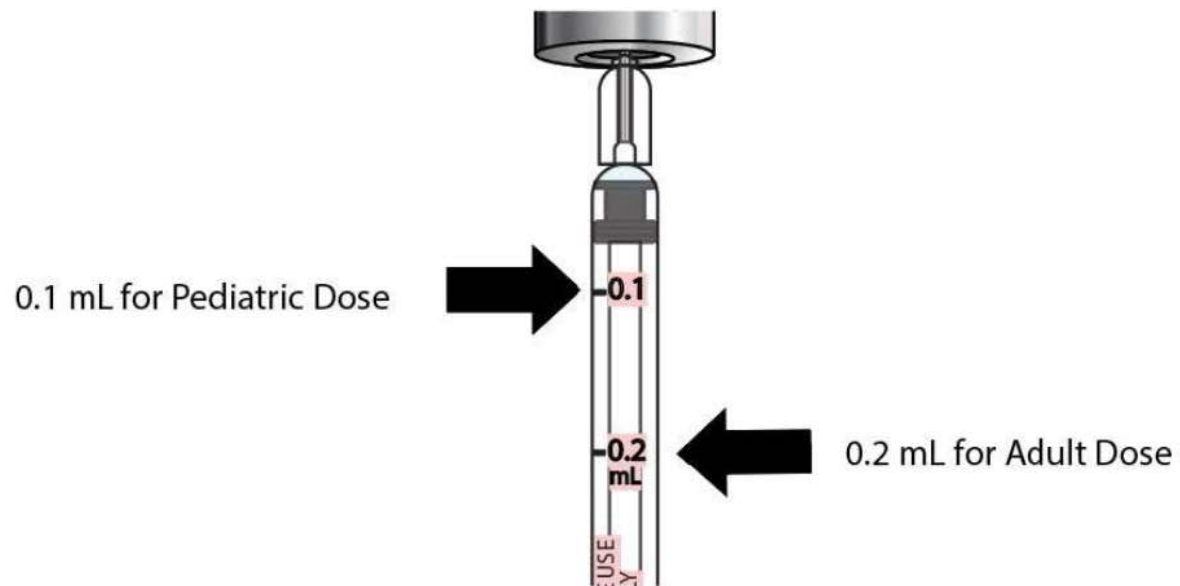
- Flip vial and syringe so vial is on top (see Figure H)

Figure H



- Hold the vial upside down and pull the plunger out until the mark for 0.1 mL (0.5 mg pediatric dose) or 0.2 mL (1 mg adult dose) is lined up with the plunger and remove the syringe from the vial stopper (Figure I).

Figure I

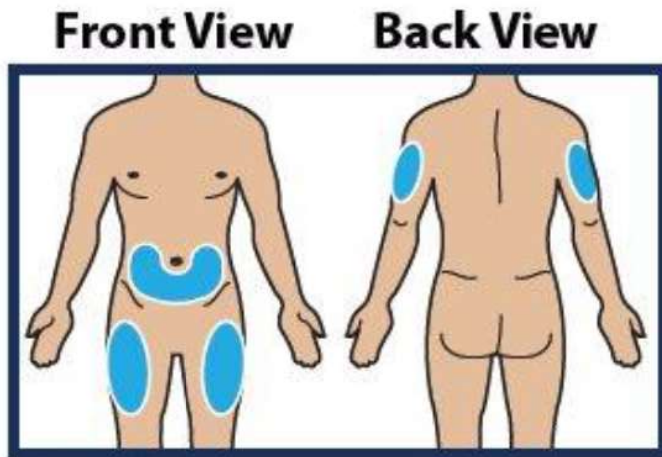


- There will be unused medicine in the vial after use.

Choose Injection Site and Expose Bare Skin

- Choose the lower abdomen, outer thigh, or outer upper arm for your injection site (see Figure J).

Figure J

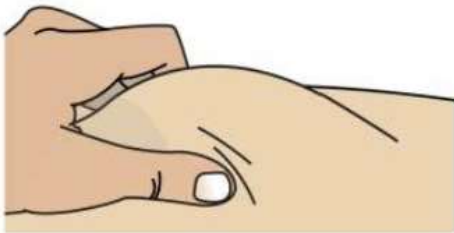


- Remove any clothing covering the injection site (see Figure K). The injection must be performed straight into the skin.
- **Important: Do not** inject through clothing.

Pinch, Insert, and Push to Start Injection

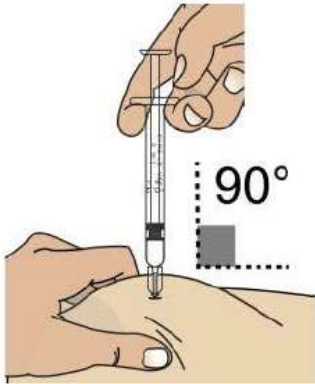
- **Pinch** the skin directly around the chosen injection site and keep pinching for the entire injection (see Figure L). This is recommended to make sure a subcutaneous (under the skin) injection is given and to prevent injection into the muscle

Figure L



- **Without touching the plunger, insert** the needle into the skin at the injection site at a 90-degree angle (see Figure M).

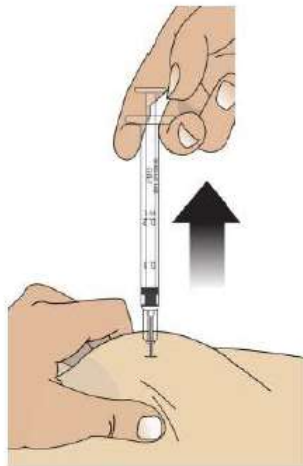
Figure M



Lift away from Skin

- Lift the syringe straight up from the injection site (Figure O).
- **Important: Do not** re-cap the syringe.

Figure O





ECG Electrode Trial



Electrode Type

Wet Gel Electrode:

The gelled electrolyte provides a conductive medium between the skin and electrode allowing the current to pass from the skin to electrode easier

The major portion of electrolytes present in tissue fluids and sweat are sodium, potassium, and chloride

The electrolytes most commonly used in electrode gels are sodium chloride and potassium chloride

These not only ensure good electrical conductivity of the gel, but also increase the conductivity of the skin as the electrolytes diffuse into it due to the existing concentration gradient

Wet Gel Electrode (cont.):

Consists of a gel impregnated sponge, with adhesive around the outside to ensure hold

Wet gels have a very high water concentration, actively hydrating the skin and reducing the resistivity in the outer layers

Have a higher concentration of electrolytes which produces a much lower impedance

The main drawback of the wet gel is the inability to be repositioned; the wet consistency of the gel means we leave a deposit of gel on the skin when moved

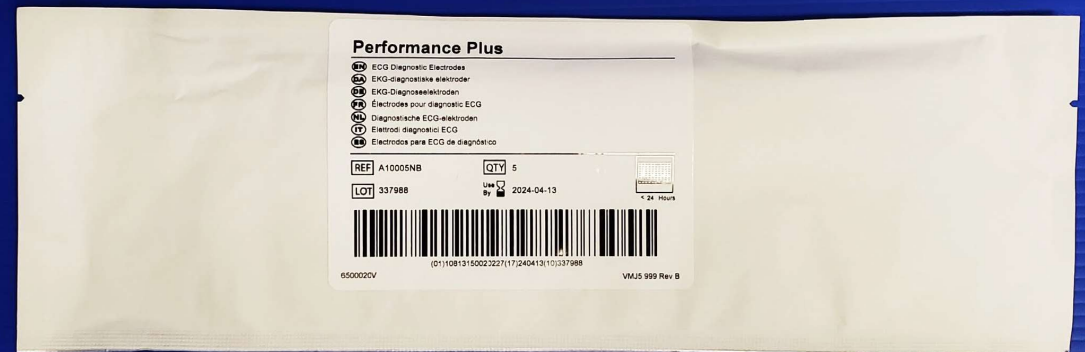
New

Packaging

Case = 120
loosely
packed
pouches of 5
electrodes
each –
It is **VERY**
IMPORTANT
T they stay
this way

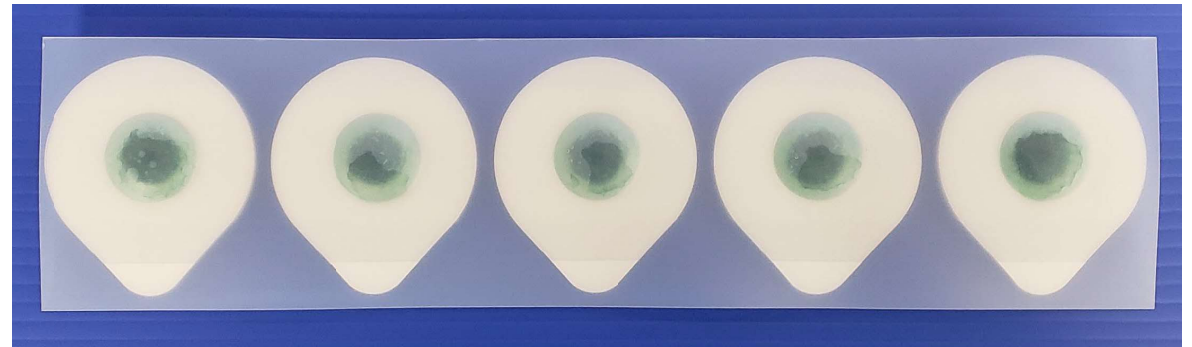


**Individual
Pouch –
Foil lined
containing 5
individual
electrodes
mounted on a
rigid piece of
plastic**

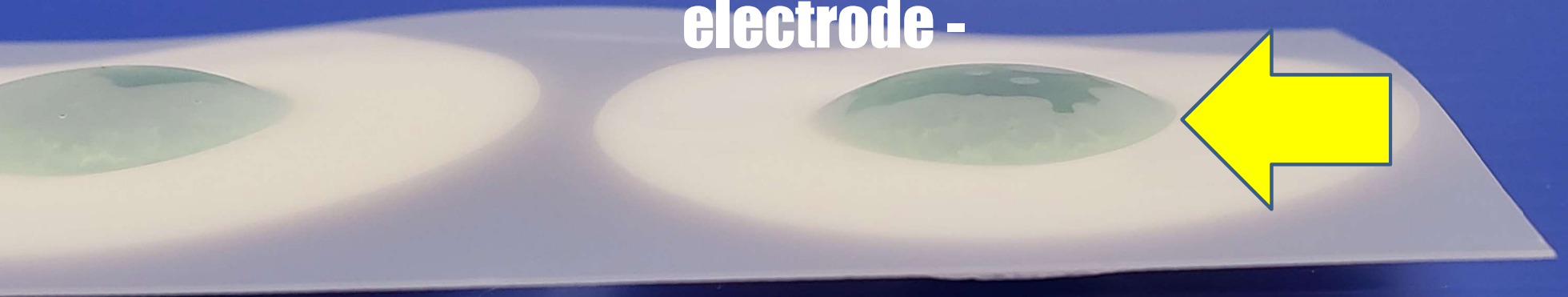




Each plastic strip contains 5 individual electrodes

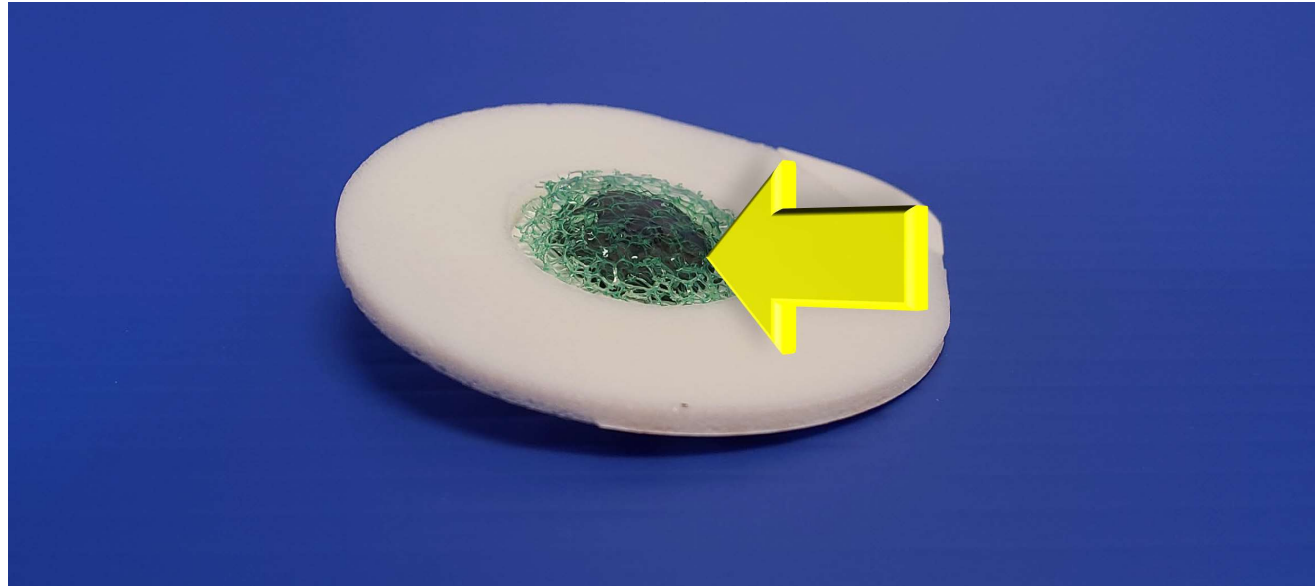


The plastic backing that holds the electrodes has a recessed area which holds the wet gel sponge of each electrode -

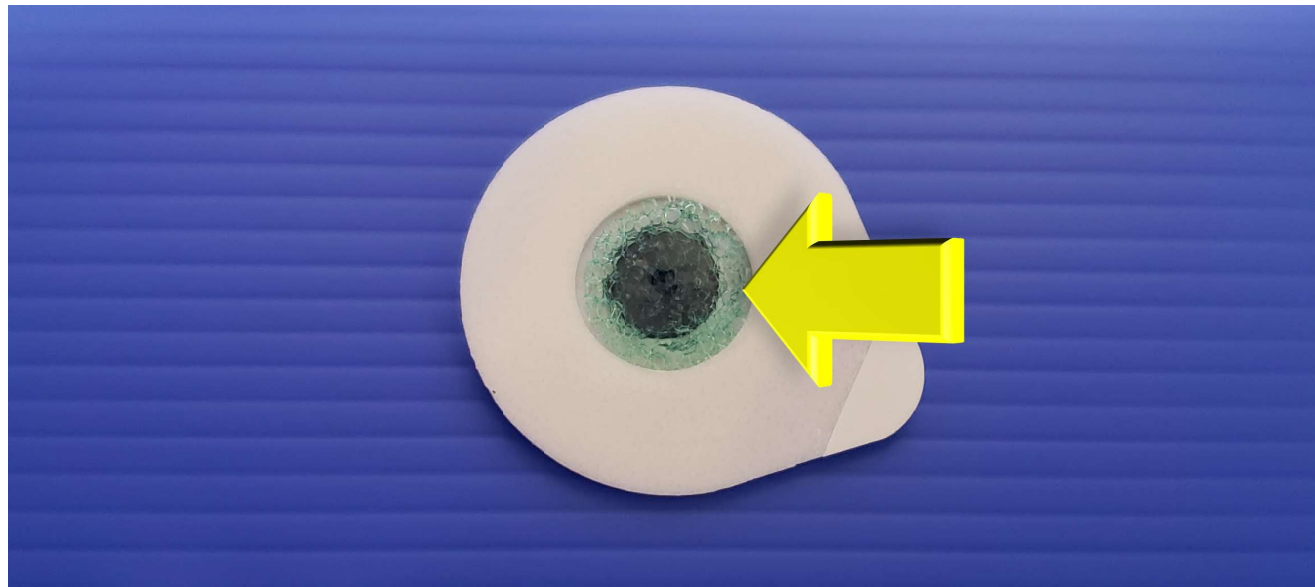


IT IS EXTREMELY IMPORTANT THAT THIS AREA DOES NOT GET DEPRESSED

**Critical Point of
Contact Between
the Patient and
the Cardiac
Monitor**



**AVOID TOUCHING
IT OR DISTURBING
THE GEL
CONTAINED
WITHIN IT**



Stocking



**NEVER EVER FOLD THE
PACKAGING SUCH THAT THE
ELECTRODES OR THE PLASTIC
BACKING IS INVOLVED**



**DO NOT OVERPACK/STUFF THE
MONITOR WITH PACKAGES OF
ELECTRODES**



Instructions For Use

- **Don't "preload" the electrodes! Opening the foil pouch containing the electrodes or attaching them to the cables without immediately using them on a patient will cause the electrodes to dry out prematurely. While the gel surface may feel "wet", it is not reliable.**
- For diaphoresis, use clean gauze or a towel to wipe away the perspiration. Using gauze has the added benefit of slightly "roughing" the skin's surface that improves adhesion.
- Skin oil can be removed with an alcohol pad. Scrub the surface with moderate pressure to remove the oil and disrupt the uppermost layer of the epidermis. Use multiple alcohol pads, as they dry quickly.
- If there is obvious hair on the chest, use a razor to remove it before applying the electrodes.
- **Connect the monitoring cables to the electrodes first while the electrode is still attached to the plastic backing.** Then, when you apply the electrode to the skin, press down firmly on the foam around the center of the electrode.

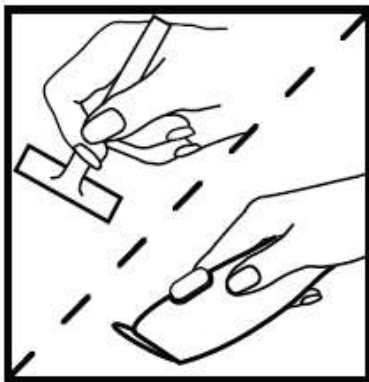


- Electrodes are to remain in the sealed original pouch until time of use.
- Cardiac monitor cables are **NEVER** to be preloaded with ECG electrodes waiting for the next call

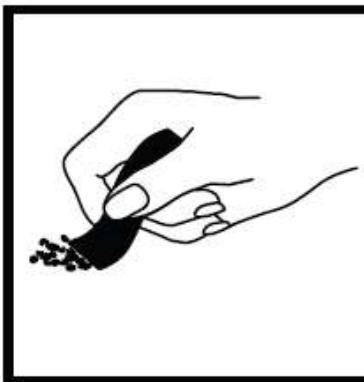


Manufacturer Instructions for Use

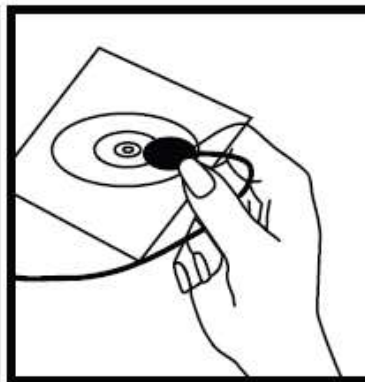
INSTRUCTIONS FOR USE



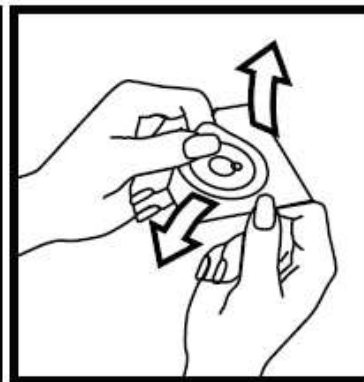
• Shave/Clip



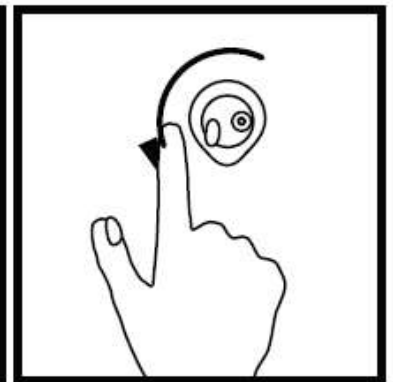
• Prep



• Connect



• Peel



• Apply

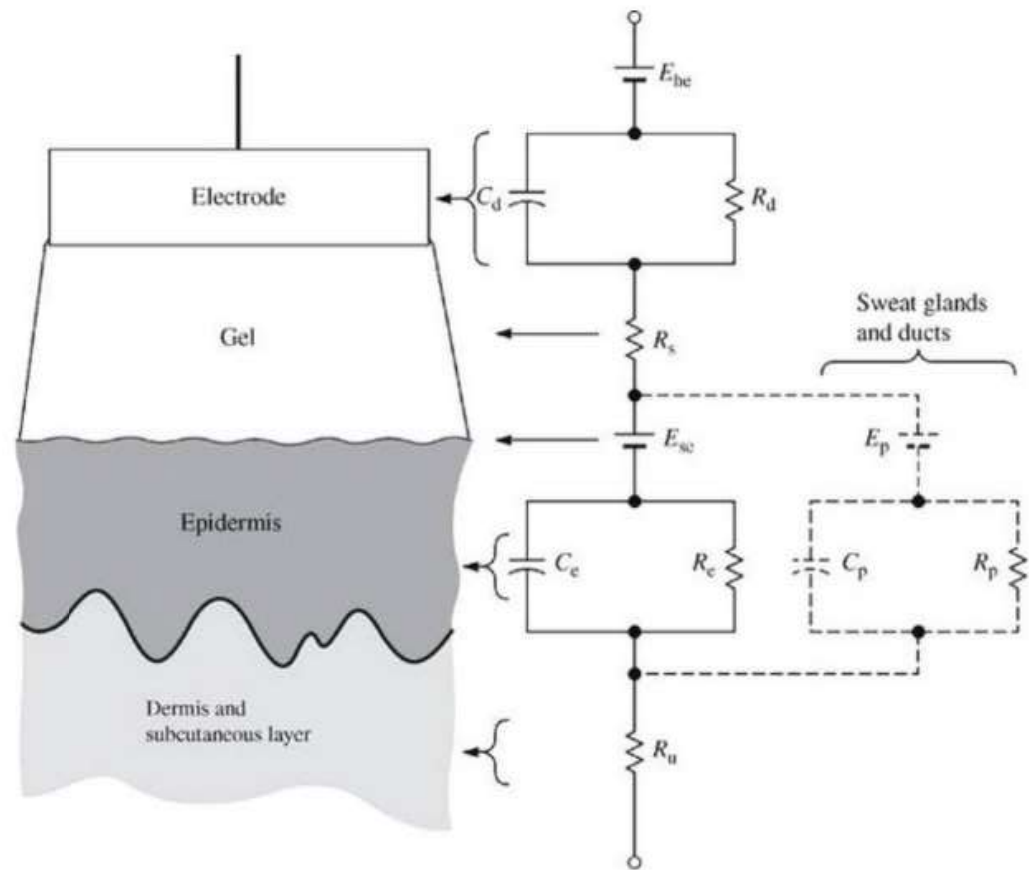
The Back Story – Clinical

The largest source of artifact in the ECG signal is ***the skin***

Due to its sizeable impedance and unstable potential, it can create many problems when recording an ECG

The electrode–electrolyte interface impedance is minimal in comparison with the large impedance of the skin

The skin is a multi-layered organ that covers and protects the body. It is made up of three principal layers; the epidermis, dermis and subcutaneous layer



Cells within the inner most layers are constantly multiplying, pushing the older skin cells up towards the skins surface

As these are pushed up, they undergo changes

As the cells are pushed outwards, the cell layers become flattened, compacted and dehydrated

These cells form the outermost layer, the stratum corneum

This layer is relatively non-conductive compared to the inner layers of the skin

Skin Preparation

The different types of skin preparation techniques commonly used are:

- Abrasion
- Alcohol wipes

Abrasion removes some of the non-conductive top layers of skin.

By reducing the width of the dielectric (Stratum corneum) we increase the capacitance while also revealing a less resistive and more conductive top layer.

Using these techniques, we see a very quick drop in impedance.

Alcohol wipes are also used to remove the loose outermost cells of the skin, and the non-conductive lipids present on the skin

The alcohol content however does cause the skin to dry out once used, creating an initial increase of impedance

As the skin rehydrates itself the impedance then reduces below its original value

This is suited especially for wet electrodes due to their hydrating properties, enabling a faster rehydration process

References

- <https://www.pulseai.io/blog/why-electrodes-matter-skin-electrolyte-interface>
- https://www.medline.com/media/catalog/Docs/MKT/LITe21485_SSH_Electrodes_Troubleshoot.pdf
- <https://www.boundtree.com/university/cardiac-care/12-lead-ecg-tips-for-special-situations>
- <https://hs.nisshamedical.com/>





Crumpton is the current provider of service

Deliveries require a signature acknowledging the delivery – They will no longer be providing a physical receipt to the individual delivery sites.

Direct all requests to Derek/David –

DO NOT CONTACT CRUMPTONS DIRECTLY OR DISCUSS NEEDS/GAPS/ETC. WITH THE DELIVERY REPRESENTATIVE



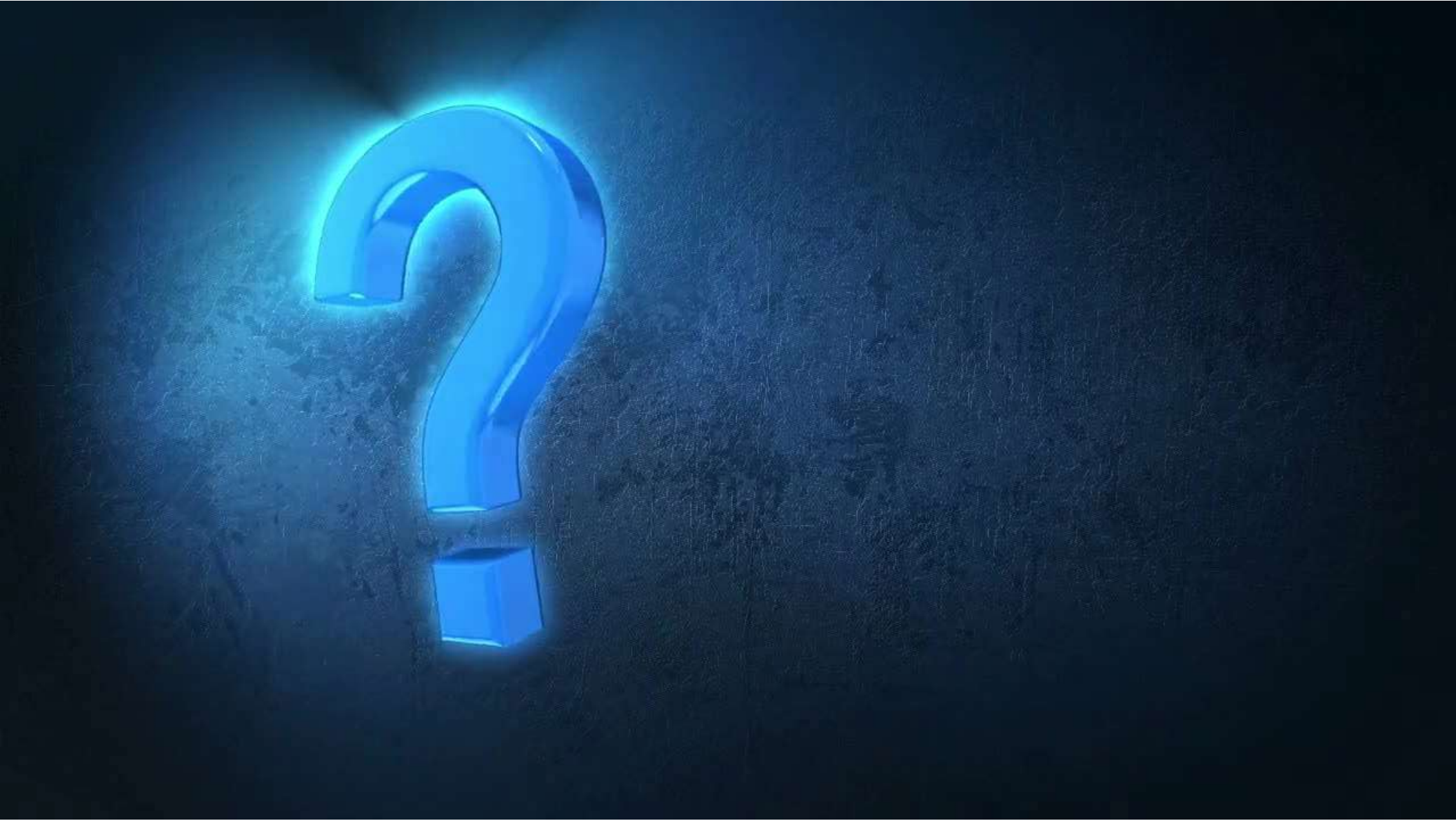


Ensure all bottle inventory is being rotated

Ensure empty bottles are making it to the designated exchange site for Crumpton's

If your agency has excess bottles from COVID that you do not routinely use, they can be returned to the EMS Central Supply Warehouse

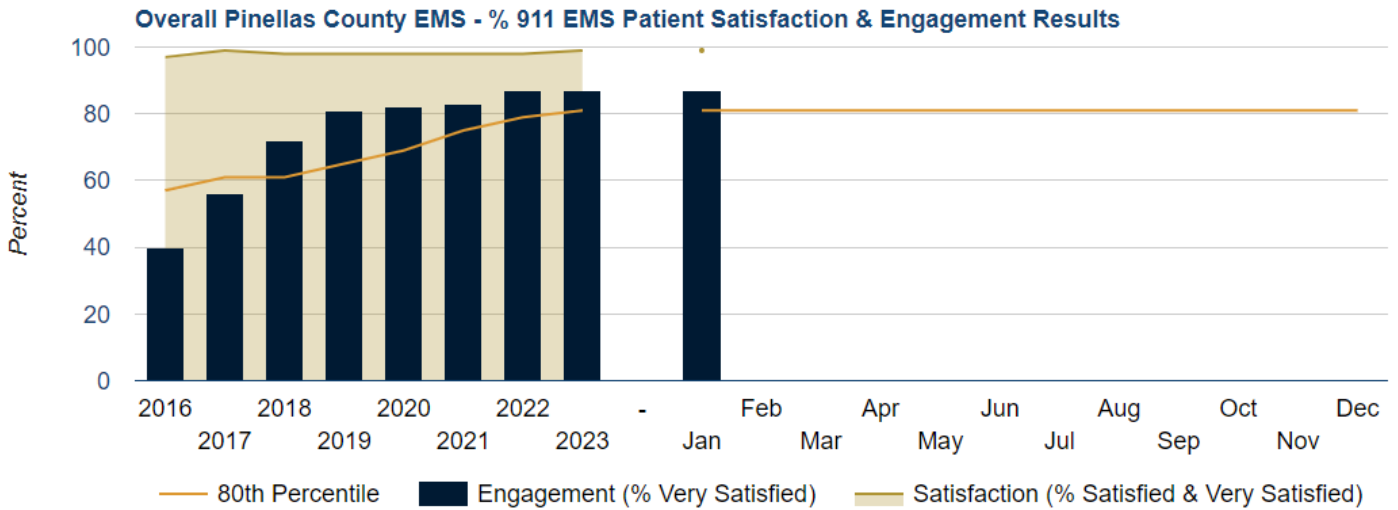




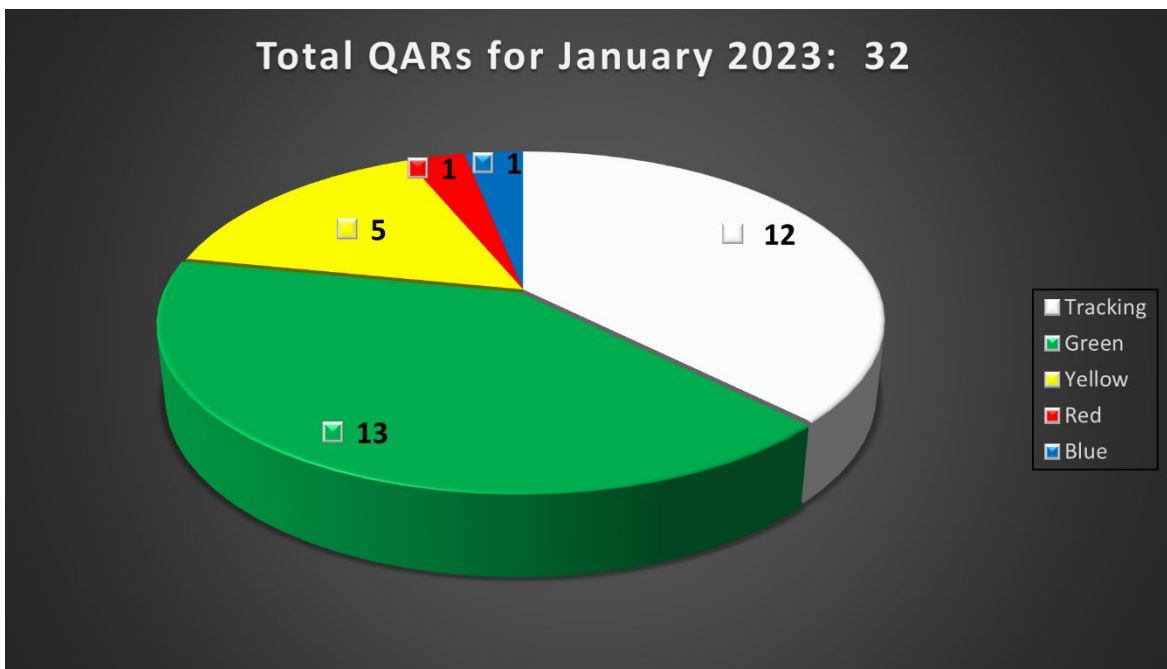
QUALITY ASSURANCE UPDATE

Baldrige – Patient Satisfaction Surveys:

- ❖ 2023 YTD: There have been 253 Customer Satisfaction Surveys completed.
- ❖ Overall YTD Engagement/Top Box – % represents customers who selected “Very Satisfied” = **87.10**
- ❖ Overall YTD Satisfaction – % represents customers who selected “Very Satisfied” or “Satisfied” = **99.68**
 - January 2023 – “Very Satisfied” Score was **87** and a “Very Satisfied” or “Satisfied” Score of **99**.
 - Gold bar = **80th Percentile** is needed to meet/exceed the gold bar.



January 2023 QARs:



Green 13

- (1) Incomplete Narc Transfers in PSTrax- Trending downwards from previous months 4.
- (3) Loss of control-Blue bag left in BLS unit (seeing this type of issue more Frequently)
- (1) Procedure and (1) Med error

Yellow: 5

- clinicians who did not complete December in-service, 3 agencies

Red: 1

- Clinician Arrest

Blue: 1

- Commendation on Cardiac Arrest call

Tracking: 12

- Equipment Failure/ Issues – emphasis on proper cleaning/ equipment maintenance: please follow established procedures
- (3) Interagency conflicts
- (5) Pt disputing invoice

☑ The current QAR count is 60 QARs generated so far this year; the office has been busy...