Emergency Department Update

Friday, June 9, 2023
Issue # 145

GENERAL

STUDENT NURSE OBSERVATIONS

The Mahoney REIGN Student Nurse Externship Program at Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) provides students from underrepresented races and ethnicities in the profession of nursing. This year there is a group of 10 externs and they are very excited to shadow for a couple of shifts in the ED.

Please note this externship is not associated with any academic or work programs, the externs are limited to observation only and may not actively engage in patient care or nursing services

TRIAGE PDSA

You may have noticed a pink "value stream map" on the huddle board. We have a great team and guidance from the KPO and support of hospital leadership to help gather improvement ideas from triage. While there are many constraints the team has identified, we are excited by the opportunities!

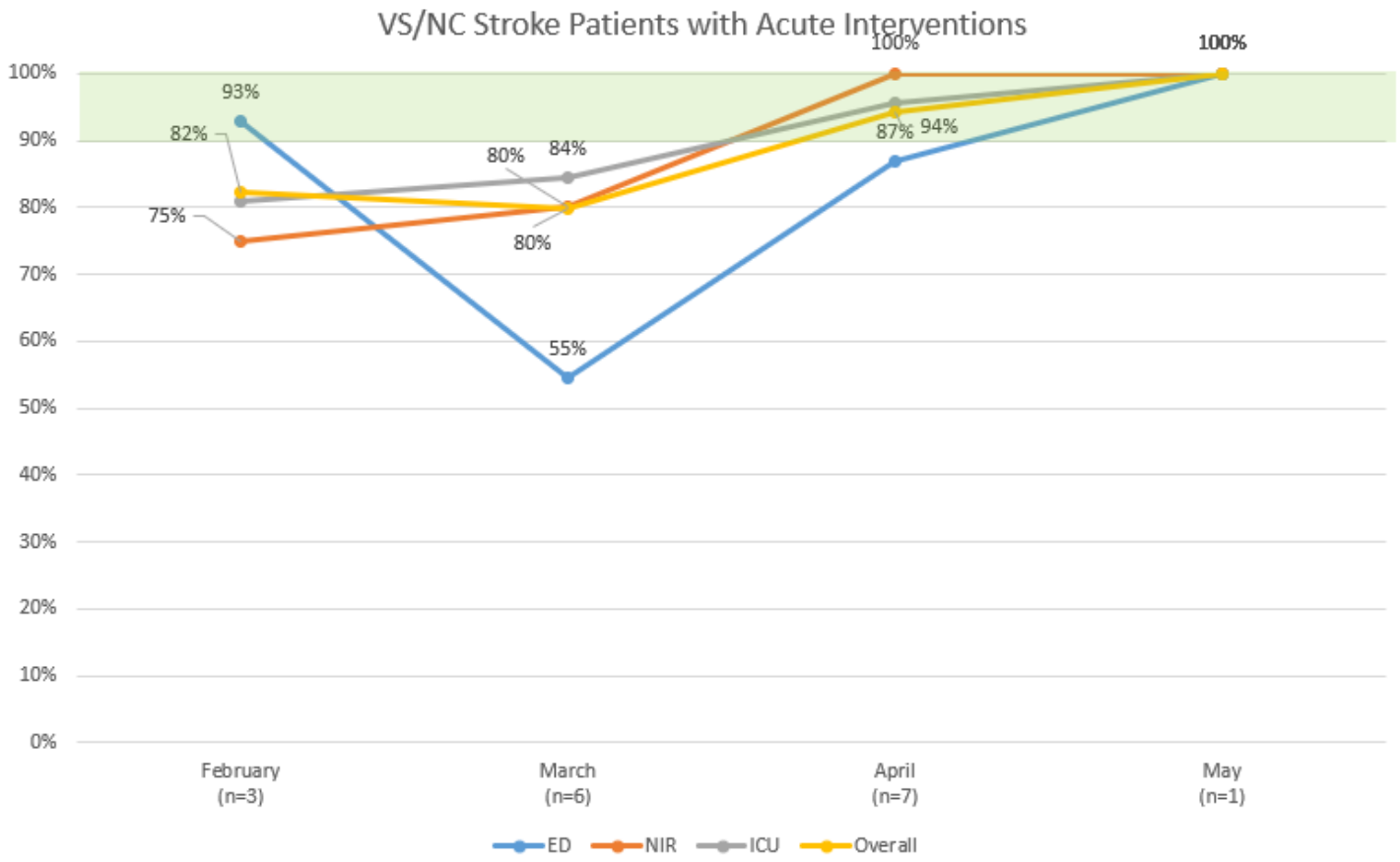
We would love your ideas and input in this improvement process. Over the next three weeks, staff will have the opportunity to provide their input on sticky notes at the huddle board, or in this digital survey.

IMPROVE TRIAGE SURVEY!

https://forms.office.com/g/VTQSqcnL9X

STROKE DOCUMENTATION

We recently had a successful stroke center recertification survey and have been monitoring vital sign and neuro check documentation closely, as usual. And good news documentation was at 100% across all areas of care for the month of May 2023. Great job everyone!



EQUIPMENT, SUPPLIES, PRODUCTS

IV TUBING

- There are some supply/stocking issues with the new Duo-Vent IV tubing that is being stocked in the Pods
- To get us through the weekend there may be some of the older “Anesthesia” IV tubing used to stock up the Pods

OUT OF STOCK

- Vial-mate adapter: NO ETA
- Atomizer: NO ETA
- Ankle Brace: NO ETA
- Spit mask: Have been order with no ETA at this time.

MEDICATION SUPPLY ISSUES (Limited or out of stock)

- Ipratropium nebs
- DuoNebs
- Hydrocortisone IV
- Methylprednisolone IV
- Oxycodone 5 mg tabs
- Viscous Lido

EDUCATIONAL OPPORTUNITIES

PEM PEARL

Dina Wallin, MD, FACEP, FAAP

I've seen a number of kids over the past several weeks with **prolonged fever (≥ 5 consecutive days)**. While the vast majority of these kids are fine, likely suffering from a prolonged viral illness, we *do* typically start to perform more of a workup once that threshold of 5 days has been crossed. A study published last month explores potential cues to serious illness in these kids. Some interesting findings:

- Kids with fever ≥ 5 days had **higher rates of serious bacterial infection** (SBI) than kids with fever < 5 days: 8.4% vs 5.7%.
    - *This definition of SBI was broader than one we usually use-- it included definite or probable bacterial infection of the GI tract, lower respiratory tract, urinary tract, bone/joints, CNS, or sepsis*
- Rates of **invasive bacterial infections** were low and similar in both groups
- **"Warning signs"** (prolonged cap refill, increased work of breathing, seizures and other neurological signs, nonblanching rash) had ***great* specificity for SBI**, but very low occurrence and, thus, poor sensitivity.
- **CRP < 20 mg/L** had a negative LR of **0.16** for SBI-- that is, if CRP is < 20, it's pretty unlikely that the kid actually has an SBI.
- **1.7%** of kids had **confirmed alternate diagnoses**-- 32% of *those* had **Kawasaki disease (KD)**, 42% had **inflammatory conditions**, and 6% had **malignancies**. Kids with KD were more likely to be ill-appearing.

So, putting this all together, what do *I* do when I have a kid presenting with ≥ 5 consecutive days of fever?

- **Thorough H&P**
    - I cannot emphasize this enough. Ask all of the questions, including a detailed ROS and exposure history. Look at all the skin and scalp, in ears/eyes/mouth, and watch the child walk (if they walk).
    - When a child looks very well and has no concerning features on H&P, I often do VERY little by way of workup and instead make sure the kid has access to supportive care and close follow-up.
- Consider **testing for occult infection**, especially in preverbal or nonverbal kids:
    - UA/UCx
    - Chest X-ray
    - Blood culture
        - Occult bacteremia is now rare enough that we're often more likely to get a false positive from a contaminant than a true pathogen. Consider BCx wisely.
    - Viral testing-- Covid, influenza in correct season, RVP*
        - As we've learned throughout the pandemic, a positive viral PCR test does NOT exclude SBI or other sinister causes of fever, though it does decrease the probability of those alternate diagnoses.
    - Strep testing
        - Not all kids with Strep will note a sore throat. Consider in kids with belly pain, palatal petechiae, significant lymphadenopathy, and, obvi, history of exposure.
- Consider **testing for KD, inflammatory conditions, and/or malignancy** (and consider using a pathway to drive your evaluation)**:**
    - CBC with diff
    - CMP
    - ESR, CRP
    - **Non-catheterized** UA (looking for evidence of urethritis)

If this workup comes up negative, you're not incorrect to admit the kid for observation if you're worried they may not have access to close follow-up; discharge of the well-appearing child is also very appropriate.

ENPC COURSES 2023

- September 14-15 To register go to https://Sept2023ENPC.eventbrite.com
- November 2-3 To register go to https://Nov2023ENPC.eventbrite.com

CELEBRATIONS/ANNOUNCEMENTS

CELEBRATIONS

Send me your celebrations (david.staconis@sfdph.org) that you would like included in the ED Updates and I will share them here.

I want to recognize the team that has been up in Triage this week. So, if you have been assigned to Triage this past week, I celebrate you! There have been quite a few discharges each day which is great to see. **~Matthew Talmadge, ED Nurse Manager**