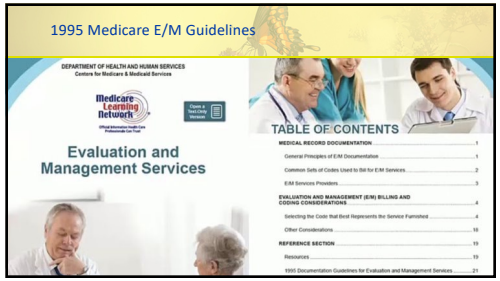
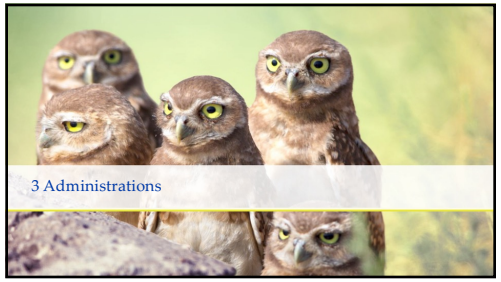

GENERATIONAL CHANGE

1


1995 Medicare E/M Guidelines
DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Medicare & Medicaid Services
Medicare Learning Network
Evaluation and Management Services
TABLE OF CONTENTS
MEDICAL RECORD DOCUMENTATION 1
General Principles of E/M Documentation 1
Common Sets of Codes Used to Bill for E/M Services 2
E/M Services Providers 3
EVALUATION AND MANAGEMENT (E/M) BILLING AND CODING CONSIDERATIONS 4
Selecting the Code that Best Represents the Service Furnished 4
Other Considerations 18
REFERENCE SECTION 19
Resources 19
1995 Documentation Guidelines for Evaluation and Management Services 21

2

3



4

Patients Over Paperwork

FOR IMMEDIATE RELEASE
May 23, 2022

Contact: HHS Press Office
202-690-6343
media@hhs.gov

New Surgeon General Advisory Sounds Alarm on Health Worker Burnout and Resignation

During Mental Health Awareness Month, Surgeon General's Advisory Highlights the Impacts of the COVID-19 Pandemic on Health Workers, Who Already Faced Crisis Levels of Burnout Prior to the Pandemic

There is a Projected Shortage of More than 3 Million Essential Low-Wage Health Workers in the Next Five Years and a Projected Shortage of Nearly 140,000 Physicians by 2033

Today, United States Surgeon General Dr. Vivek Murthy issued a new Surgeon General's Advisory highlighting the urgent need to address the health worker burnout crisis across the country. Health

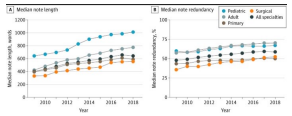
"Partner with health care delivery organizations, professional associations, and other stakeholders to **reduce documentation burden by 75% by 2025**. This includes clarification of regulations and documentation requirements, optimization of the prior authorization process, and review of additional challenges with stakeholders, such as coding validations and electronic health record (EHR) technology."

5

Increasing Note Length and Redundancy

July 19, 2021

Length and Redundancy of Outpatient Progress Notes Across a Decade at an Academic Medical Center



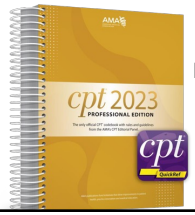
JAMA Netw Open. 2021;4(7):e2115334. doi:10.1001/jamanetworkopen.2021.15334

6

Large US Health System – Characters Per ED Note

7

New Documentation Guidelines



Released July 1, 2022
Effective January 1, 2023

AMA

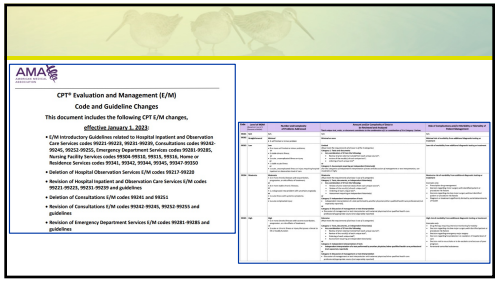
8

A Clinical Approach to the 2023 Documentation Guidelines

Jason Adler, MD, FACEP, FAAEM

VP, Acute Care Solutions, LogixHealth
Director of Compliance and Reimbursement
University of Maryland, Department of EM

9



10

Objectives

Describe major changes in the history and exam section

Outline a **clinical** approach to the medical decision-making section

Demonstrate the value of shared decision making and social determinants of health

11

Why Are The New Documentation Guidelines Important

- 83% of typical ED doc's RVUs from 99281-99285
- 8% from critical care
- 9% from procedures

12

13

History and Exam

"The nature and extent of the history and/or physical examination is determined by the treating physician reporting the service"

"The extent of history and physical examination is NOT an element in selection of codes"

"The main purpose of documentation is to support care of the patient by current and future health care team(s)"

2023 CPT E/M Descriptors and Guidelines

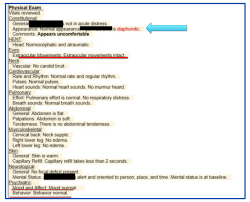
14

Clinically Relevant History

- CC: Syncope
- 22 yo male presents after a syncopal event this morning. He recently began exercising, today's episode occurred while running on the treadmill. No preceding symptoms. Woke up on the floor, has mild headache no neck pain. States his father died suddenly at the age of 42.

15

Focused Exam Can Reduce Note Bloat



16

17

Key Documentation Elements

- Differential diagnosis demonstrate complexity of care
- Pertinent comorbidities that may affect care
- Management information from a non-patient source
  - History obtained from a source other than the patient (family/EMS)
  - Review of external records (outpatient notes, inpatient notes, old studies)
  - Discussions of management with other physician, QHP, or Appropriate Source (hospitalist, consultants)
- Independent interpretations of studies
- Diagnostic tests considered but not performed
- Prescription medications considered but not prescribed
- Consideration of admission/de-escalation of care
- Social determinants of health

18

Differential Diagnosis

CC / HPI
Triage note: "MVC", c/o neck pain and wrist pain"

[redacted] is a 41 y.o. male who presents after a MVC. Restrained driver, driving approximately 10 MPH, hit a parked car at a red light. No airbag deployment. Reports neck pain, no weakness or numbness in either arm. No headache. Also notes R wrist pain - no elbow or shoulder pain on the right side.

- A targeted differential diagnosis based on your workup will demonstrate risk and complexity of care.
  - "...head CT to evaluate for ICH" vs "CT negative"
  - ALTERED MENTAL STATUS??

ED Course

More

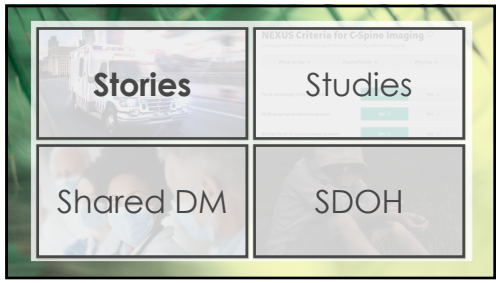
Concern for potential C-spine injury and wrist fx. Xray's ordered. Pt medicated with tylenol

19

Comorbidities Demonstrate Complexity

- Cellulitis
  - +/- fever
  - +/- diabetes
  - +/- PVD

20



21

Management Information From a Non-Patient Source

Prior to Arrival EMS/Police Referring Clinician Urgent Care	**Family Members** *Parents* *Caregivers*
Review of External Records *Inpatient & Office Visit Notes* *Old Studies & Procedures*	**Management Discussions with Physicians, QHP, or Appropriate Source** Consultants Social work, case management, pharmacy, SBIRT

22

Stories –Independent Historian and External Record Review

History of Present Illness
Triage note:
"Intoxication per EMS"

30 year old presents via EMS for evaluation of altered mental status. History is limited due to the acuity of condition.

Independent Historian: Independent Historian
EMS: arrived at the scene of a young male laying on the sidewalk. Collar placed. Glucose en route 160. Responds to painful stimulus and makes incomprehensible sounds/speech.

Progress Notes, Medical Decision Making and Critical Care *procdoc edmdoc*

75 year old presented with altered mental status, fever, and tachycardia. Sepsis order set was initiated, concern for UTI or pneumonia.

ED Course as of 02/16/23 1625
Thu Feb 16, 2023
1600 External records reviewed: pt admitted here, 2/2022 for ACS workup. Echo at that time showed an EF of 55%. Will order a 30 ml/kg bolus. [ET]
1617 CBC noted, 22K, and lactate 2.4. Pt reassessed, BP 105 systolic, HR 110. [ET]

External record review

23

Stories – Discussions with Physician or Appropriate Source

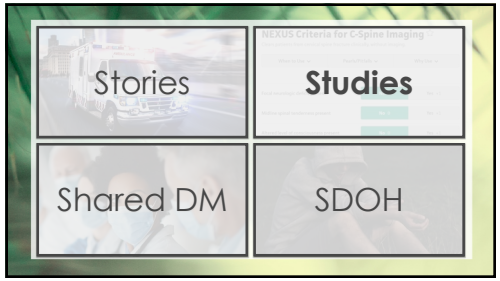
Received call from radiologist, Dr. Darkroom, saddle PE at the bifurcation of the pulmonary artery. JA 1422 3/5/2023

24

Stories – Discussions with QHP or Appropriate Source

- Mental health liaison
- Pharmacy
- Case management
- Social work

25



26

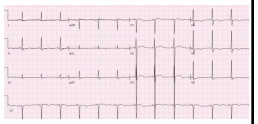
Studies – Independent Interpretations

- Heightened emphasis of independent interpretations of separately billable procedures (EKG, X-ray, CT, U/S)
- "Per my interpretation" or "my interpretation is"
- Not held to the standard of a billable interpretation to be included in the MDM

27

Studies – Independent Interpretations

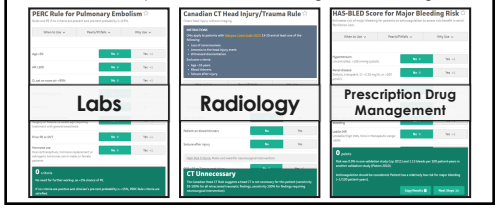
EKG interpreted by me:
Normal sinus rhythm, T wave inversion consistent with inferolateral ischemia.



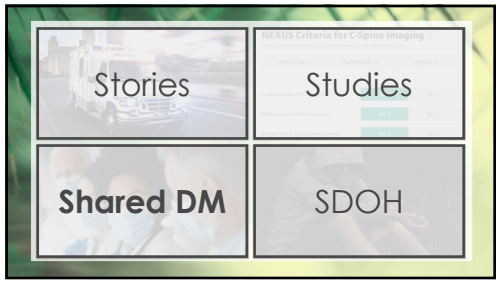
28

Studies – Cognitive Work is Valued

Document your rationale for ordering, or *not ordering*:



29



30

Document the Talk

"Ordering a test may include those ***considered, but not selected after shared decision making****. A patient may request diagnostic imaging that is* ***not necessary for their condition****. Discussion of the lack of benefit may be required."*

"This includes the possible management options selected and those considered but not selected after shared decision making with the patient and/or family. For example, a decision ***about hospitalization*** *includes consideration of* ***alternative levels of care.****"*

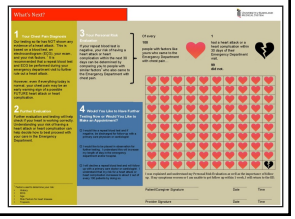
2023 CPT E/M Descriptors and Guidelines

31

Document the Talk

"Shared decision making involves eliciting patient and/or family preferences, patient and/or family education, and explaining risks and benefits of management options"

2023 CPT E/M Descriptors and Guidelines



32

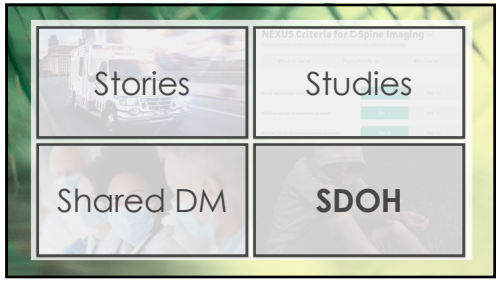
De-escalation of Care

ED Course [redacted]

0830 76 yo F, hx afib on AC, found in bed this morning by husband after not waking up. Was immediately intubated to protect airway, GCS 3T, CT with large ICH, 12 mm shift, uncal herniation. Neurosurgery reviewed CT, described no intervention available and overall poor prognosis. ICU also involved. Both neurosurgery, ICU, and myself met with pts husband, who decided to de-escalate care to palliative measures and not pursue transfer to tertiary medical center. Plan to admit to floor here. [ET]

ED Course User Index

33


Stories
Studies
Shared DM
SDOH

34


Social Determinants of Health

35


Social Determinants of Health
Problems related to:
Homelessness
Insufficient social insurance
Housing instability and economic circumstance
Low income or unemployment
Insufficient social insurance
Lack of primary support group
Living in a residential institution
Lack of transportation

36

Take-Home Points

- The history and exam will no longer be used to score the chart
- Medical decision making will now drive code selection
- Heightened emphasis on shared decision making and social determinants of health
- Document discussions with patients, considerations of testing, treating, or escalation of care

37

Questions & Contact

Jason Adler, MD, FACEP, FAAEM

jadler@logixhealth.com

202.438.6983
www.logixhealth.com

38

39

WHEN ORTHOPEDICS ISN'T THERE TO GIVE YOU A HAND

BILLY CAPUTO, MD RDMS FACEP
RESIDENCY DIRECTOR, ASSOCIATE CHAIR
STATEN ISLAND UNIVERSITY HOSPITAL

Lecturer Contact: wcaputo@northwell.edu
Please reach out to me with any questions or comments

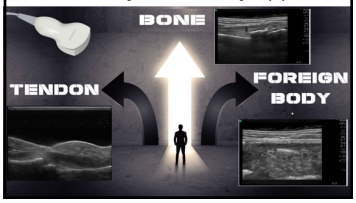
QR code to lecture Ultrasound images and videos used in the lecture. PDF to Advanced upper extremity, trunk, and neck regional nerve blocks

1

Caputo's 5 tips and tricks for hand injuries

1 USE HAND ULTRASOUND

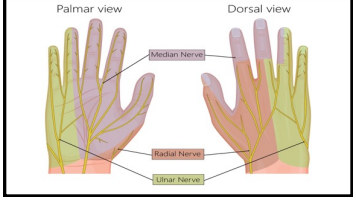
Ultrasound is superior to x-rays for hand injuries in many cases. You can diagnose fractures, tendon function, and foreign bodies that can be missed on x-rays. A waterbath can be used and you can get high definition images without even touching an injury.



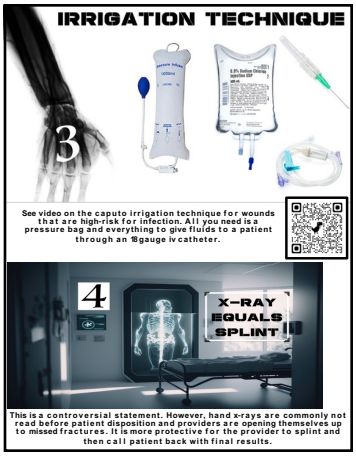
2

2 USE THE BEST ANALGESIA

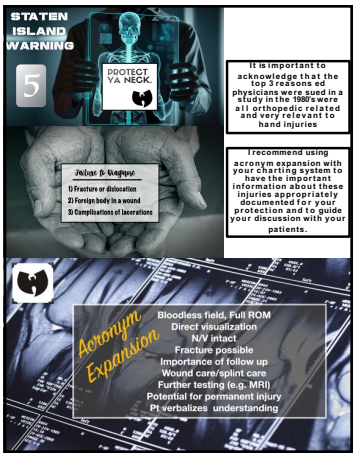
Almost always, the best analgesia for hand injuries involves local anesthetics. This can be done with a regional nerve block, hematoma block, or digital block depending on the injury. It's important to know the distribution of the median, radial, and ulnar nerves



3


IRRIGATION TECHNIQUE
3
See video on the caputo irrigation technique for wounds that are high-risk for infection. All you need is a pressure bag and everything to give fluids to a patient through an 18gauge iv catheter.
4
X-RAY EQUALS SPLINT
This is a controversial statement. However, hand x-rays are commonly not read before patient disposition and providers are opening themselves up to missed fractures. It is more protective for the provider to splint and then call patient back with final results.

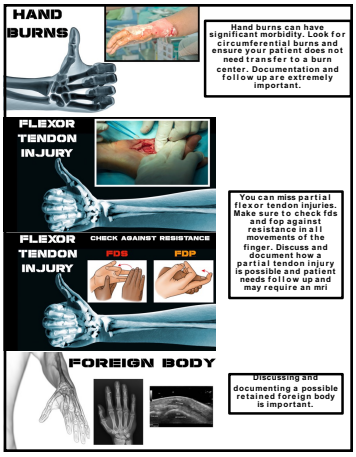
4


STATEN ISLAND WARNING
5
PROTECT YA NECK
It is important to acknowledge that the top 3 reasons ed physicians were sued in a study in the 1980's were all orthopedic related and very relevant to hand injuries
Failure to Diagnose
1) Fracture or dislocation
2) Foreign body in a wound
3) Complications of lacerations
I recommend using acronym expansion with your charting system to have the important information about these injuries appropriately documented for your protection and to guide your discussion with your patients.
Acronym Expansion
Bloodless field, Full ROM
Direct visualization
N/V intact
Fracture possible
Importance of follow up
Wound care/splint care
Further testing (e.g. MRI)
Potential for permanent injury
Pt verbalizes understanding

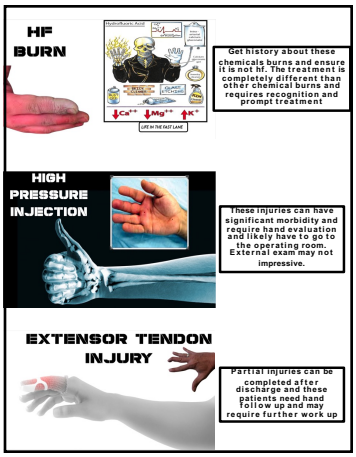
5


10
CAN'T MISS HAND INJURIES
FIGHT BITE
Patients may not always be honest with their story. Cuts over knuckles of dominant hand are suspicious. If you suspect this, please irrigate and start on antibiotics
FLEXOR TENOSYNOVITIS
TENDERNESS TO FLEXOR TENDON SYNOVIAL SWELLING PAIN WITH PASSIVE ROM FLEXED POSTURE
Ultrasound can also help with this diagnosis as you can see inflammation around the flexor tendon. Consult hand surgery
OPEN FRACTURE
Starting antibiotics in the right time frame is important for quality measures and not all open fractures are obvious. Inspect all wounds for injuries.

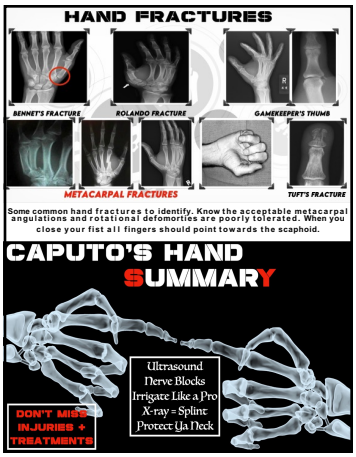
6


HAND BURNS
Hand burns can have significant morbidity. Look for circumferential burns and ensure your patient does not need transfer to a burn center. Documentation and follow up are extremely important.
FLEXOR TENDON INJURY
You can miss partial flexor tendon injuries. Make sure to check fds and fop against resistance in all movements of the finger. Discuss and document how a partial tendon injury is possible and patient needs follow up and may require an mri
FLEXOR TENDON INJURY
CHECK AGAINST RESISTANCE
FDS
FDP
FOREIGN BODY
Discussing and documenting a possible retained foreign body is important.

7


HF BURN
Get history about these chemicals burns and ensure it is not hf. The treatment is completely different than other chemical burns and requires recognition and prompt treatment
HIGH PRESSURE INJECTION
These injuries can have significant morbidity and require hand evaluation and likely have to go to the operating room. External exam may not impressive.
EXTENSOR TENDON INJURY
Partial injuries can be completed after discharge and these patients need hand follow up and may require further work up

8


HAND FRACTURES
BENNET'S FRACTURE
ROLANDO FRACTURE
GAMEKEEPER'S THUMB
METACARPAL FRACTURES
TUFT'S FRACTURE
Some common hand fractures to identify. Know the acceptable metacarpal angulations and rotational deformities are poorly tolerated. When you close your fist all fingers should point towards the scaphoid.
CAPUTO'S HAND SUMMARY
Ultrasound Nerve Blocks Irrigate Like a Pro X-ray = Splint Protect Ya Neck
DON'T MISS INJURIES + TREATMENTS

9

Rhabdomyolysis Updates

Peter Alamia, DO
ACOEP Spring Seminar 2023

1

Introduction:

Characterized by destruction of skeletal muscle

Release of intracellular contents into the bloodstream

Leads to muscle necrosis

Clinical impact ranges from asymptomatic elevation of muscle enzymes to acute kidney injury and electrolyte abnormalities

2

Introduction:

- Results in cell death and release of potentially toxic substances into the bloodstream
- Management often is directed in preventing the primary complication from rhabdomyolysis: Acute kidney injury

3

Patient population that rhabdomyolysis occurs?

Traumatic causes are a common mechanism (20%)

- Multisystem trauma
- Crush injuries
- Compartment syndrome - leads to muscle ischemia
- Vascular injuries
- Falls with prolonged immobilization

Approximately 8.5% of critically injured patients in TICU

- 10% develop renal failure
- 5% require RRT

4

Patient population that rhabdomyolysis occurs?

Metabolic & Medical causes are more common (80%)

- Suspect in patient with increased metabolic demands on myocytes in excess of available supply of ATP
- Prolonged exercise
- Status epilepticus
- Exogenous agents (Alcohol, drugs, or toxins)
- Lipid lowering agents (Statins)
- Genetic defects
- Myopathies
- Infection
- Malignant hyperthermia
- Neuroleptic malignant syndrome
- Heat stroke

5

What clinical findings are expected with rhabdomyolysis?

- Asymptomatic to critically ill
- Clinical presentation can vary greatly

Resultant organ injury may include:

- Renal (AKI)
- Cardiac (Arrhythmia)
- Coagulopathy
- Dark tea colored urine is a common finding

6

What laboratory findings aid in the diagnosis of rhabdomyolysis?

- Elevated serum CK concentration
- CK >5 times upper limit of normal or
- CK >1,000 IU/L

Elevated myoglobulin

Elevated LDH

Elevated potassium

Elevated Creatinine

Injury to skeletal muscle cellular membrane leads to influx of calcium

- Disruption of cellular homeostasis occurs
- Leads to cell death
- Resulting in accumulation of CK, myoglobulin, LDH, and potassium in the bloodstream

7

Creatinine Kinase

- Usually elevated by 12 hours of injury
- Peak at 24 to 72 hours after injury
- Returns to normal in approximately 5 days

8

What is the optimal crystalloid type, rate of administration, and urine output goals to prevent AKI in rhabdomyolysis?

Fluid of choice:

- No clear recommendation
- No randomized controlled trials
- Lactated ringers
- Saline (0.9% or 0.45%)
- Saline is promoted due to its lack of potassium
- Crush injuries = Hyperkalemia
- Recommendation is 200 mL/hour to 1,000 mL/hour
- 400 mL/hour can be initiated
- Goal directed therapy of urine output of 1 mL/kg/hour to 3 mL/kg/hour and up to 300 mL/kg/hour
- If the patient remains anuric, then RRT may be necessary

9

Are diuretics and/or bicarbonate administration beneficial?

Exact mechanism of AKI is controversial

- Two factors in development of myoglobin induced renal toxicity are:
  - Hypovolemia
  - Acuduria

Ultimately, AKI results from:

- Vasoconstriction
- Oxidant injury (Ferrihemate - breakdown product of myoglobin, in the presence of low pH can generate free radicals, which lead to direct renal cell injury)
- Tubular obstruction (Pigmented casts - result of an interaction between Tamm-Horsfall protein and myoglobin)
- Decreased tubular filtration

10

Can alkalization of urine may prevent AKI?

- Sodium bicarbonate
- Mannitol - an osmotic diuretic, may lead to renal vasodilation
- No strong clinical evidence to support on the use of either

11

Are diuretics useful?

Loop diuretics: clinical evidence is sparse. Mostly only case reports. Loop diuretics:

- Have shown to reduce metabolic demand and oxygen consumption by proximal tubular cells
- But, also shown to worsen renal afferent arteriole vasoconstriction, acidify urine, and promote aggregation of Tamm-Horsfall protein within the tubular lumen

12

What electrolyte abnormalities should be expected and what are the optimal methods for management?

Hyperkalemia:

- Often associated with high potassium levels
- Correlates with the volume of muscle breakdown
- When it occurs with rhabdomyolysis-induced AKI, it occurs early in the course of the disease
- Hypocalcemia aggravates electrical effects of hyperkalemia: Should be aggressively treated with calcium chloride or calcium gluconate
- Treat hyperkalemia with Insulin, glucose, B-2 agonist, potassium removal cations, and RRT as a last resort

13

Hyperphosphatemia:

- Occurs as a result of phosphate release from damaged cells
- High phosphate levels are problematic: binds to calcium and these complexes deposit in soft tissues
- Treat with caution. Require a calcium chelator, which can increase precipitation of calcium phosphate in injured muscles
- Early hyperphosphatemia typically decreases as phosphate is excreted in urine

14

Hypocalcemia:

- Occurs early in rhabdomyolysis due to calcium entry into damaged cells and calcium phosphate deposition in necrotic muscle
- Early treatment should be avoided unless patient is symptomatic or severe hyperkalemia is present
- Avoid correction with calcium chloride or calcium gluconate - calcium deposition can occur in injured muscle

15

Hypermagnesemia:

- May occur, but id infrequent
- Typically occurs in association with AKI
- Should be treated with RRT

16

What is the role of RRT in rhabdomyolysis:

- No role in dialysis or CRRT in preventing AKI
- Also, there is no significant evidence to determine that CRRT has any benefit over conventional RRT in preventing AKI in rhabdomyolysis
- In patients who either develop AKI, and need dialysis: Either CRRT or intermittent RRT can be considered
- AKI is associated with myoglobulinemia, thus extracorporeal removal is an effective strategy
- Plasmapheresis does NOT have an effect on myoglobin clearance
- CRRT and conventional RRT have been shown to be equally effective

17

What is the role of RRT in Rhabdomyolysis?

- Since myoglobin has a molecular weight of 17 KDa, it is poorly cleared by diffusion (dialysis). Studies have been performed to evaluate benefits of:
  - Continued RRT
  - Intermittent RRT
  - Hemodiafiltration
  - Hemofiltration
  - Special high cut off membrane filters (Enhance clearance of large molecules)
    - Overall studies are small and lack sufficient evidence to make recommendations

18

What complications should be suspected?

- Hyperkalemia: most significant electrolyte abnormality
- Hepatic dysfunction may occur in 25% of patients
- Dysrhythmia or cardia arrest: Most likely secondary to hyperkalemia
- Mortality in patients with CK >5,000 IU/L is approximately 14%
- AKI develops in approximately 15% of patients
- Among patients requiring RRT, mortality is as high as 59%
- DIC may occur, due to release of intracellular products that may activate the clotting cascade

19

What complications should be suspected?

- Compartment syndrome: May be an early or late complication
  - Results from direct muscle injury
  - Vigorous muscle activity
  - Occurs primarily due to limited muscle expansion from enveloping tight fascia
  - Delay of more than 6 hours may lead to irreversible muscle damage or death

20

Papers of the year 2023

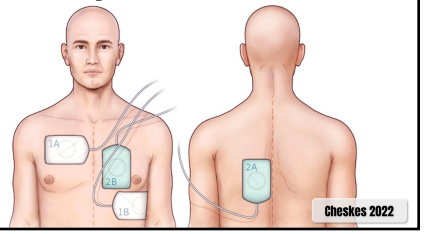
Justin Morgenstern

1

NO COI

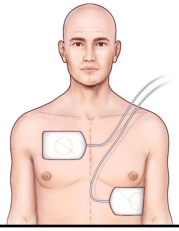
2

Dual sequential defibrillation



3

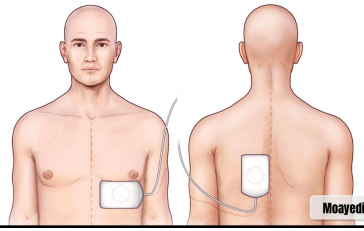
Anterior lateral for cardioversion



Schmidt 2021

4

AP for pacing?



Moayedi 2022

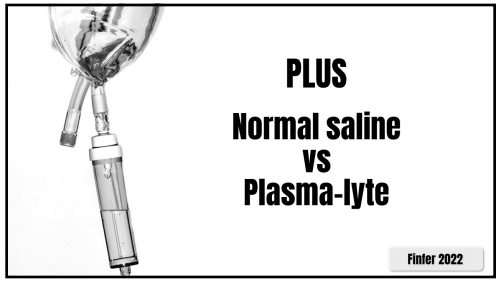
5

REPHILL

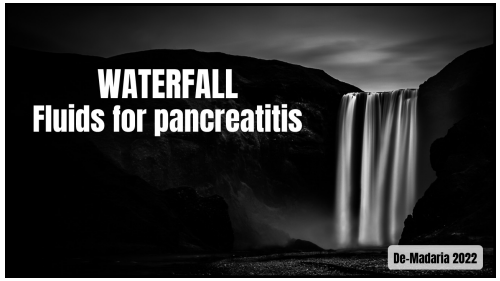
Prehospital fluids in trauma

Crombie 2022

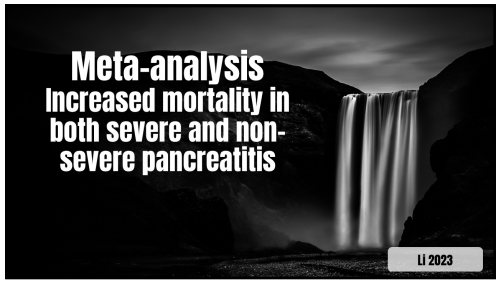
6


PLUS
Normal saline
vs
Plasma-lyte
Finter 2022

7


WATERFALL
Fluids for pancreatitis
De-Madaria 2022

8


Meta-analysis
Increased mortality in both severe and non-severe pancreatitis
Li 2023

9


CLOVERS
Fluids for sepsis
Shapiro 2023

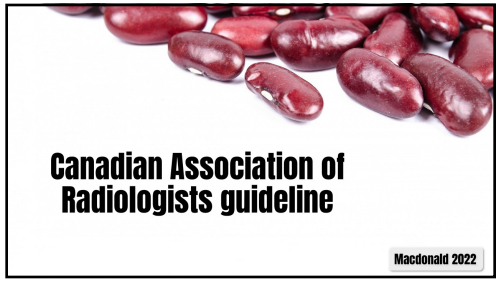
10


LOVIT
Vitamin C for sepsis
Lamontagne 2022

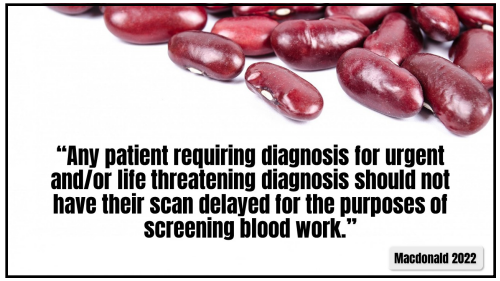
11


CT contrast in AKI
Ehmann 2023

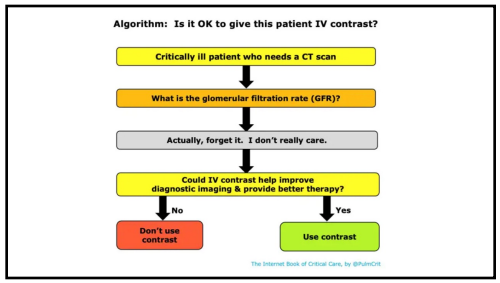
12


Canadian Association of Radiologists guideline
Macdonald 2022

13


"Any patient requiring diagnosis for urgent and/or life threatening diagnosis should not have their scan delayed for the purposes of screening blood work."
Macdonald 2022

14


Algorithm: Is it OK to give this patient IV contrast?
Critically ill patient who needs a CT scan
What is the glomerular filtration rate (GFR)?
Actually, forget it. I don't really care.
Could IV contrast help improve diagnostic imaging & provide better therapy?
No
Yes
Don't use contrast
Use contrast
The Internet Book of Critical Care, by @PulmCrit

15


FORCE Trial
Management of
buckle fractures
Perry 2022

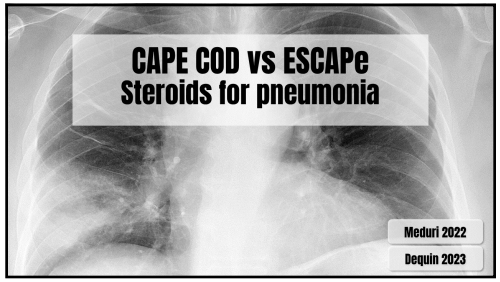
16


Pediatric pneumonia
Williams 2022

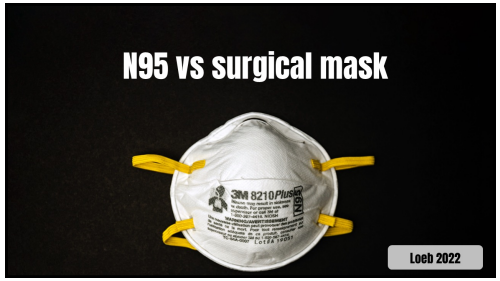
17


The PARIS 2 trial
High Flow Humidified
Nasal Oxygen
Franklin 2023

18


CAPE COD vs ESCAPe
Steroids for pneumonia
Meduri 2022
Dequin 2023

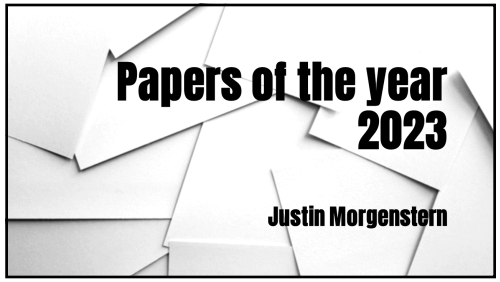
19


N95 vs surgical mask
3M 8210Plus
N95
Loeb 2022

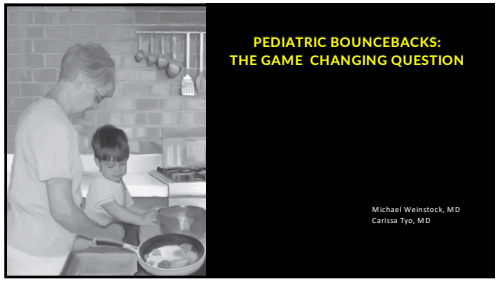
20


Awareness after paralysis
Propofol
Fuller 2022
Driver 2022

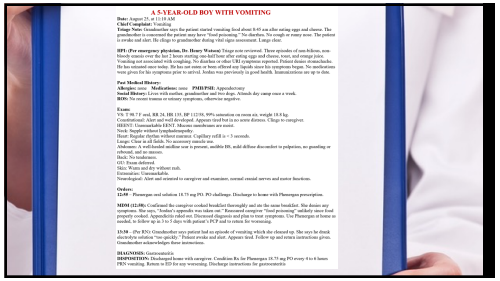
21



22

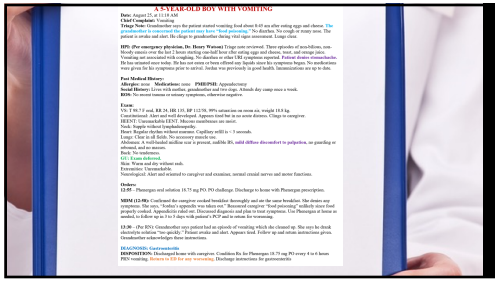

PEDIATRIC BOUNCEBACKS:
THE GAME CHANGING QUESTION
Michael Weinstock, MD
Carissa Tyo, MD

1


A 5-YEAR-OLD BOY WITH VOMITING

2

3


A 5-YEAR-OLD BOY WITH VOMITING

4


What was the game changing question?

5

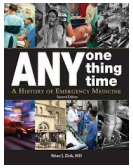

The bounceback

6


PEARLS
• Check old records
• Use all resources available (call mom)
• Do a GU exam
• Use caution with sedating anti-emetics
• Ensure caregiver understands the 'question' their presentation has asked

7

We Are…



1

Experts of Acute Unscheduled Care

Resuscitation

High acuity presentations

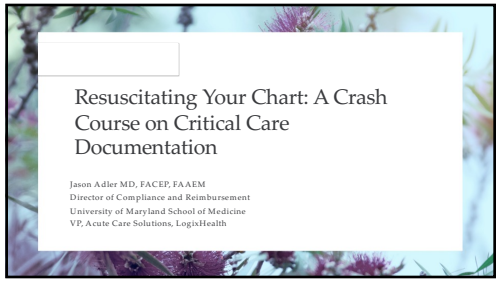
Consideration of most dangerous diagnoses

2

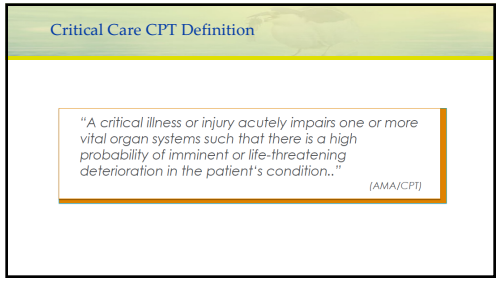
HALO Events and Procedures

- Aortic dissection
- Acute Coronary Syndrome
- Severe electrolyte derangements
- Pulmonary embolism
- Angioedema
- Diabetic ketoacidosis

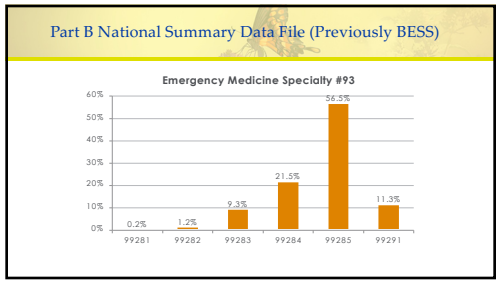
3


Resuscitating Your Chart: A Crash Course on Critical Care Documentation
Jason Adler MD, FACEP, FAAEM
Director of Compliance and Reimbursement
University of Maryland School of Medicine
VP, Acute Care Solutions, LogixHealth

4


Critical Care CPT Definition
"A critical illness or injury acutely impairs one or more vital organ systems such that there is a high probability of imminent or life-threatening deterioration in the patient's condition.."
(AMA/CPT)

5


Part B National Summary Data File (Previously BESS)
Emergency Medicine Specialty #93
60%
50%
40%
30%
20%
10%
0%
0.2%
1.2%
9.3%
21.5%
56.5%
11.3%
99281
99282
99283
99284
99285
99291

6

Critical Care: The Math

CPT Code	RVUs	Approx. Payment
99283	2.13	$85
99284	3.58	$140
99285	5.21	$205
99291 (critical care)	6.31	$255

7

8

Critical Care: Supporting Criteria

- **Potential** for life threatening deterioration
- **Hard finding**: diagnostic or exam
- **Intervention** to prevent deterioration
- 30 minutes of physician care outside of separately billable procedures

9

Critical Care: A Clinical Approach

10

"On My Way"

11

Hard Findings – Vital Signs

- Hypotension/hypertension
- Hypoxia
- Tachycardia
- Tachypnea
- Fever

12

Interventions – Medications and Procedures

Medications

- Anticoagulation: lovenox, heparin, integrilin
- Allergy/asthma: epi, magnesium
- Antiarrhythmic: adenosine, diltiazem, amiodarone
- Antidotes: naloxone, IV dextrose, bicarb, charcoal
- Blood products: pRBC, platelets, Kcentra
- Pressors: epi, norepi, dopa

Procedures

- BIPAP/CPAP/HFNC
- Intubation
- Bag valve mask
- Central line
- Cardioversion
- Chest tube
- CPR*

13

Potential Critical Care Diagnoses

- Severe sepsis/septic shock
- Acute coronary syndromes
- Atrial fibrillation with RVR and arrythmia
- COPD/asthma exacerbation
- Acute pulmonary edema
- Hyperkalemia with EKG changes
- DKA
- Intracranial hemorrhage
- GI bleeding
- Pulmonary embolism
- Substance withdrawal

14

Critical Care- Disposition

- Transfer to a higher level of care
- ICU
- Telemetry
- Discharge after significant improvement

15

16

Inclusion: Time Spent

- At the bedside
- Full attention to the patient
- Ordering/reviewing diagnostic tests
- Treatment discussions with family and EMS after patient arrival
- Treatment discussions with consultants or appropriate source
- At least 30 minutes

- **Cumulative, not consecutive**

17

Time Not Counted: Separately Reportable Procedures

- Central line
- Laceration repair
- Thoracostomy
- Intubation
- CPR
- Time after patient expires

18

Time Considerations: Take Home Point

- Total minutes, not ranges
- Critical care requires 30 minutes or more
- *"I provided XX minutes of critical care time exclusive of procedures"*

19

20

Hyperkalemia

Progress Notes, Medical Decision Making and Critical Care *procdoc*

38 year old male, known ESRD on (M/W/F), coming in today after missing his last dialysis session. +mild SOB. VS 190/80, 90, 12, 95% on RA. +crackles b/l lung bases. Cxr interpreted by me, mild edema no infiltrate. EKG interpreted by me, peaked Twaves in the precordial leads, which is new when compared to previous EKG on 10/24/2022. Labs - K is 7.9, nl bicarb.

Spoke with Dr. Kidney, nephrology, who will help facilitate dialysis in the AM. Will keep in hospital. For the acute on chronic hyperK with EKG changes, patient was given insulin/glu, albuterol, and calcium. Discussed with admitting team.

21

Atrial Fibrillation With RVR

Progress Notes, Medical Decision Making and Critical Care *procdoc*

55 yo F, history of atrial fibrillation on AC, hypertension, hyperlipidemia, presents to the ED with 4 hours of palpitations. No associated SOB or chest pain. Onset was sudden, non-exertional, not associated with diaphoresis. Upon arrival, initial heart was 140 with a systolic BP around 120. Electrolytes were reviewed, no significant abnormalities, a CTA was performed to evaluate for pulmonary embolism and read as negative by radiology.

EKG is consistent with atrial fibrillation with RVR. A diltiazem bolus and infusion has been ordered. Most recent heart rate is 120. Discussed with hospitalist who will continue treatment plan during hospitalization.

22

Allergy/Anaphylaxis

Progress Notes, Medical Decision Making and Critical Care *procdoc*

Patient arrived with an acute allergic reaction - diffuse urticaria, expiratory wheeze, and initial blood pressure 100/60. Was brought back to a treatment room, given fluids, benadryl, steroids, and nebs, and epinephrine.

Reassessment at 1330: lungs still with expiratory wheeze, no retractions. Urticaria appears less pronounced. BP 110/85

Reassessment at 1400: mild scattered wheeze. Second liter running. Urticaria resolved.

Reassessment at 1445: Pt reports feeling better. Clear lungs.

1530: Blood pressure has consistently been >130 systolic. Plan to monitor for 2 more hours, if no rebound, will dc.

23

Acute Psychosis

ED Course as of [redacted]

0944	Pt with persistent agitation. HR 145. Verbal de-escalation attempted. Tangential, non-linear thought process. Worsening acute psychosis and a potential danger to himself and others. Concern about metabolic derangements possible acidosis. Ordering haldol, benadryl, and ativan. [ET]
0948	Pt more calm, resting in bed. HR has improved to 110. Will continue to reasess. [ET]

24

Pulmonary Edema

Progress Notes, Medical Decision Making and Critical Care *procdoc*

Eval most consistent with acute cardiogenic pulmonary edema. Initially RR 32, labored breathing, course BS. BP significantly elevated 220/130, Sa02 90% on 15L NRB.

Was started on BIPAP , high dose NTG gtt, and furosemide.

CXR, interpreted by me, with diffuse pulmonary edema and cephalization. External record review - admitted with similar presentation to this hospital 6/15/2022, inpatient notes show BNP range 1500-2000.

Reassessed at 1230, RR is much improved, breathing is less labored, no longer diaphoretic. Will continue with BIPAP and continuous monitoring. Repeat BP 200/100. Anticipate admission to IMC/ICU.

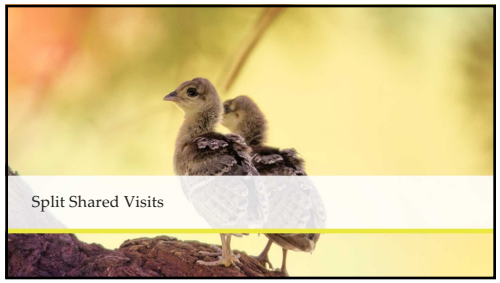
25

CPR

99285 plus CPR yields a total of 10+ RVUS

- **AMA Policy Statement**
  - *"The physician may report 92950 whether actually performing compressions or directing these activities"*
  - Documentation: Write a brief oversight note
  - Typically, also report a high-level E/M service

26



27

Split Shared Visit for 2022 and 2023

- Cumulative time may be reported
- Clinician with more than half (substantive time) will get the credit

Critical Care Shared Visit Physician Attestation Example:
"I personally saw the patient. PA Green and I provided critical care for a total of 40 minutes. I provided a substantive portion of the care and the majority of the critical care time."

28

29

Key Take Home Points

- Critical care is often under reported
- Consider the potential for deterioration, hard findings, and interventions
- Time
- No major changes in split shared visits

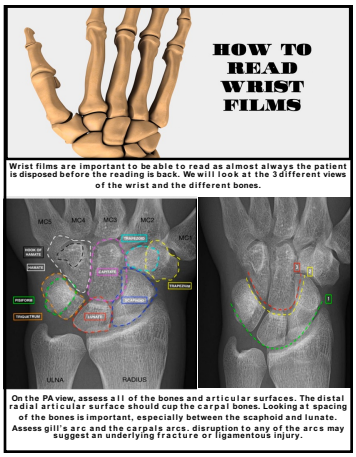
30


Contact Information
Jason Adler, MD, FACEP, FAAEM
jadler@logixhealth.com
www.logixhealth.com

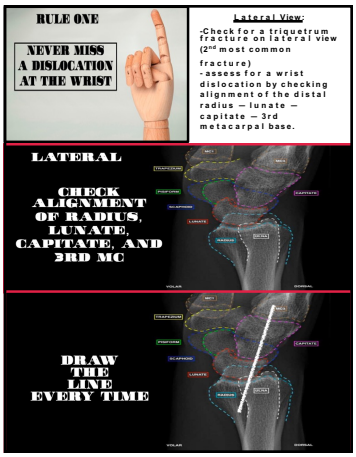
31


LECTURE INSPIRED BY
BIGGIE
I GOT A STORY TO TELL
ACOEP
BILLY CAPUTO, MD RDMS FACEP
RESIDENCY DIRECTOR, ASSOCIATE CHAIR
STATEN ISLAND UNIVERSITY HOSPITAL
Caputo's Wrist and Forearm Injuries
Lecturer Contact: wcaputo@northwell.edu
Please reach out to me with any questions or comments
QR code to lecture Ultrasound images and videos used in the lecture. PDF to Advanced upper extremity, trunk, and neck regional nerve blocks

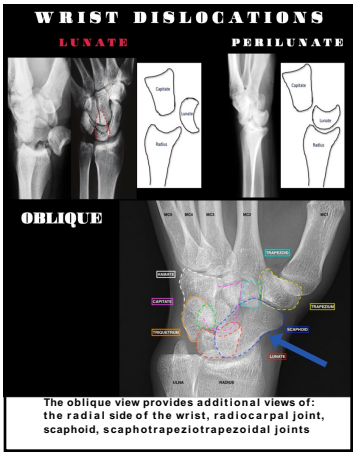
1


HOW TO READ WRIST FILMS
Wrist films are important to be able to read as almost always the patient is disposed before the reading is back. We will look at the 3 different views of the wrist and the different bones.
MC5
MC4
MC3
MC2
MC1
ULNA
RADIUS
On the PA view, assess all of the bones and articular surfaces. The distal radial articular surface should cup the carpal bones. Looking at spacing of the bones is important, especially between the scaphoid and lunate.
Assess gill's arc and the carpals arcs. disruption to any of the arcs may suggest an underlying fracture or ligamentous injury.

2


RULE ONE
NEVER MISS A DISLOCATION AT THE WRIST
Lateral View:
-Check for a triquetrum fracture on lateral view (2nd most common fracture)
- assess for a wrist dislocation by checking alignment of the distal radius — lunate — capitate — 3rd metacarpal base.
LATERAL
CHECK ALIGNMENT OF RADIUS, LUNATE, CAPITATE, AND 3RD MC
DRAW THE LINE EVERY TIME

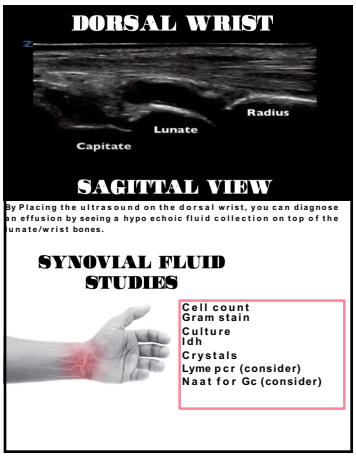
3


WRIST DISLOCATIONS
LUNATE
PERILUNATE
Capitate
Lunate
Radius
OBLIQUE
MC1
MC2
MC3
MC4
MC5
TRAPEZIOID
SCAPHOID
CAPITATE
TRAPEZIUM
TRIQUETRUM
LUNATE
ULNA
RADIUS
The oblique view provides additional views of:
the radial side of the wrist, radiocarpal joint,
scaphoid, scaphotrapeziotrapezoidal joints

4


ATTENTION
TO THE SCAPHOID
DISPLACED = ORIF
The scaphoid is the most common wrist bone fracture. It requires special attention as it is at high risk for non-union and avascular necrosis. Displaced scaphoid fractures usually require orif.
RULE THREE
LOW THRESHOLD
FOR TAPPING
AN EFFUSION
Unless there is a contraindication, tapping a wrist effusion is the best test to determine whether an effusion is infectious or inflammatory in nature. It can look for less common infections and crystals to diagnose gout or pseudogout.

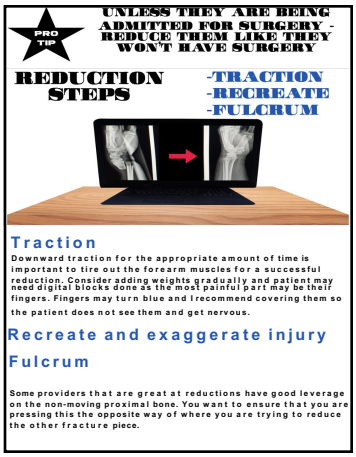
5


DORSAL WRIST
Radius
Lunate
Capitate
SAGITTAL VIEW
By Placing the ultrasound on the dorsal wrist, you can diagnose an effusion by seeing a hypo echoic fluid collection on top of the lunate/wrist bones.
SYNOVIAL FLUID
STUDIES
Cell count
Gram stain
Culture
Idh
Crystals
Lyme pcr (consider)
Naat for Gc (consider)

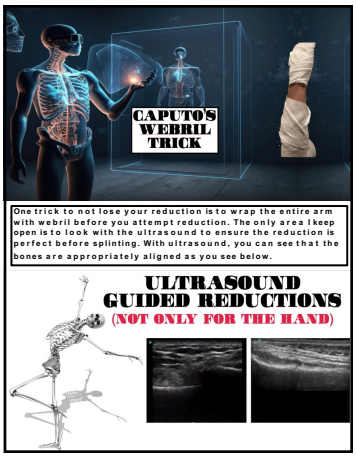
6


SUPRACLAVICULAR BRACHIAL PLEXUS BLOCK USES
The supraclavicular brachial plexus block is an ultrasound guided block that gives complete analgesia to the arm. It is in the wheelhouse of emergency medicine physicians. Please refer to the recent article in ACEP NOW regarding this procedure.
April
2023
SOUND ADVICE
Targeted Analgesia for Upper Extremity Injuries

7


PRO TIP
UNLESS THEY ARE BEING ADMITTED FOR SURGERY - REDUCE THEM LIKE THEY WON'T HAVE SURGERY
REDUCTION STEPS
-TRACTION
-RECREATE
-FULCRUM
Traction
Downward traction for the appropriate amount of time is important to tire out the forearm muscles for a successful reduction. Consider adding weights gradually and patient may need digital blocks done as the most painful part may be their fingers. Fingers may turn blue and I recommend covering them so the patient does not see them and get nervous.
Recreate and exaggerate injury
Fulcrum
Some providers that are great at reductions have good leverage on the non-moving proximal bone. You want to ensure that you are pressing this the opposite way of where you are trying to reduce the other fracture piece.

8


CAPUTO'S WEBRIL TRICK
One trick to not lose your reduction is to wrap the entire arm with webril before you attempt reduction. The only area I keep open is to look with the ultrasound to ensure the reduction is perfect before splinting. With ultrasound, you can see that the bones are appropriately aligned as you see below.
ULTRASOUND GUIDED REDUCTIONS
(NOT ONLY FOR THE HAND)

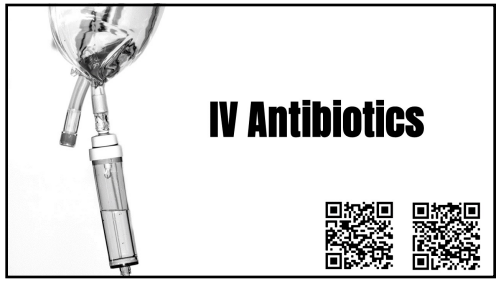
9


PATIENT INFORMATION
PROGNOSIS
RICE THERAPY
SPLINT CARE
MEDICATIONS
FOLLOW UP
LIMITATIONS OF ED WORK UP
POSSIBLE MRI
POSSIBLE SURGERY
HEALING TIMELINE
RETURN PRECAUTIONS
COMPARTMENT SYNDROME
SUMMARY
DORSAL WRIST
SAGITTAL VIEW
-TRACTION
-RECREATE
-FULCRUM

10

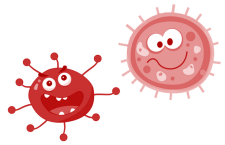
1

2



3

"Don't worry.
That antibiotic is from
the stomach!"



4

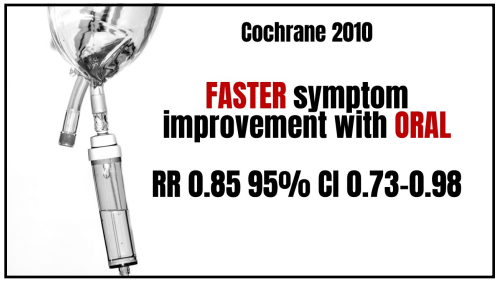
BIOAVAILABILITY

Cephalexin	90-100%
Doxycycline	>90%
Clindamycin	90%
Septra	80-90%
Metronidazole	80%
Cipro	70-80%

5

Cellulitis
4 RCTS
PO better?

6

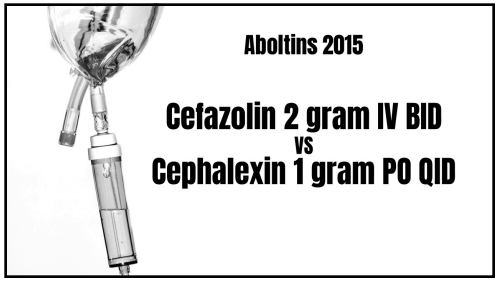


Cochrane 2010

FASTER symptom improvement with **ORAL**

RR 0.85 95% CI 0.73-0.98

7



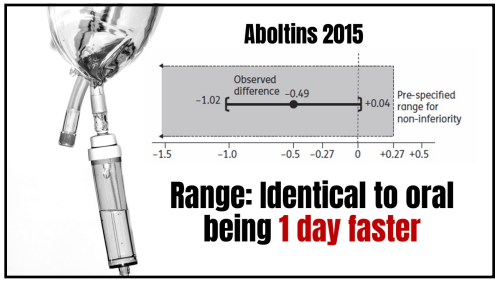
Aboltins 2015

Cefazolin 2 gram IV BID

vs

Cephalexin 1 gram PO QID

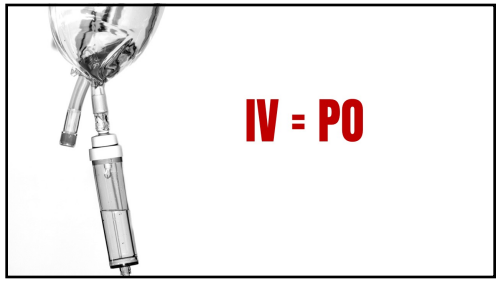
8



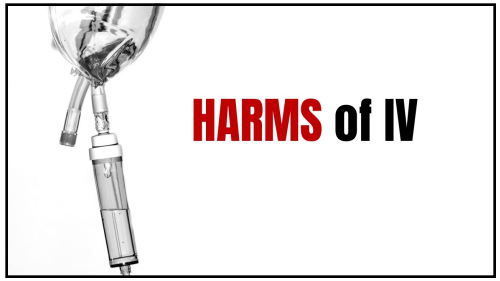
Aboltins 2015

Range: Identical to oral being **1 day faster**

9



10

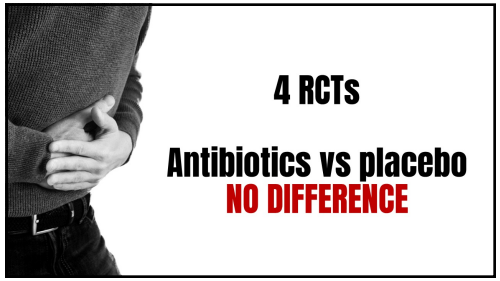


11

12


Diverticulitis

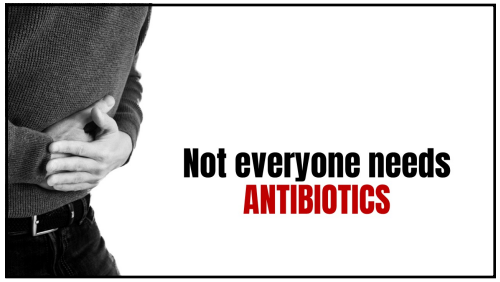
13


4 RCTs
Antibiotics vs placebo
NO DIFFERENCE

14


No antibiotics
98% cure

15



Not everyone needs
ANTIBIOTICS

16

Pneumothorax

17

Brown 2020

BIG pneumothorax
Chest tube vs Nothing

18

Brown 2020

Not non-inferior?
X-rays better a little faster with chest tube

19

Brown 2020

Superior?
All other outcomes better with conservative MGMT

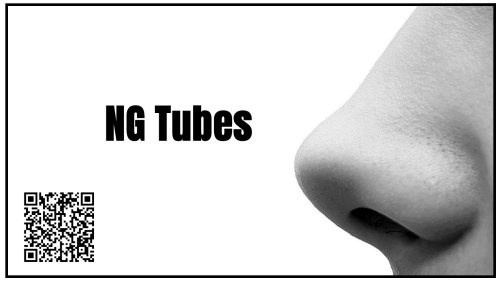
20

Is that enough to change practice?

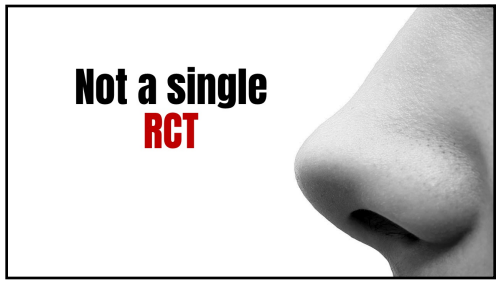
21


CONSERVATIVE MANAGEMENT
is the way to go

22


NG Tubes

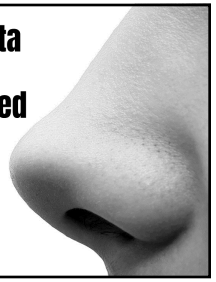
23


Not a single
RCT

24

Observational data

Many patient managed with NGs

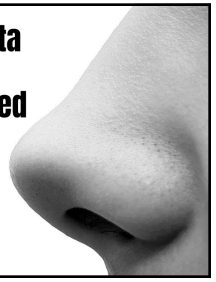


25

Observational data

Many patient managed with NGs

NG associated with WORSE OUTCOMES

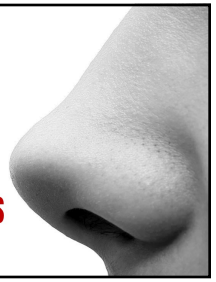


26

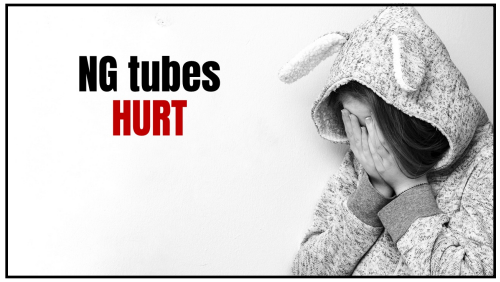
Nelson 2005

Post-OP NGs 28 RCTs

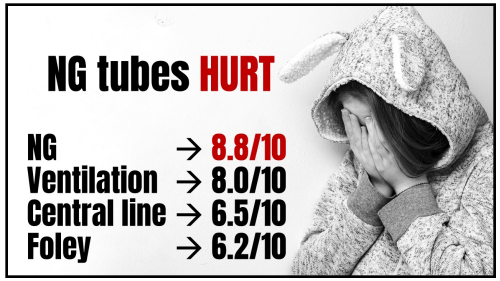
NG = WORSE OUTCOMES



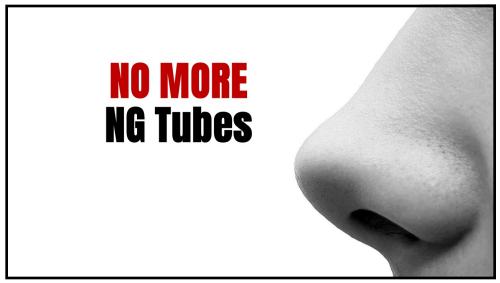
27


NG tubes
HURT

28


NG tubes HURT
NG → 8.8/10
Ventilation → 8.0/10
Central line → 6.5/10
Foley → 6.2/10

29


NO MORE
NG Tubes

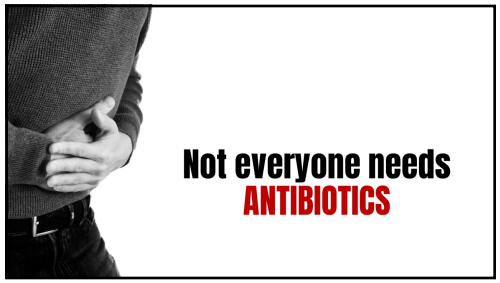
30


GET OFF THE
FENCE

31


PO is the way
to go

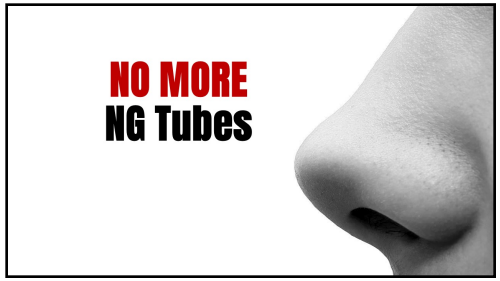
32


Not everyone needs
ANTIBIOTICS

33


CONSERVATIVE MANAGEMENT
is the way to go

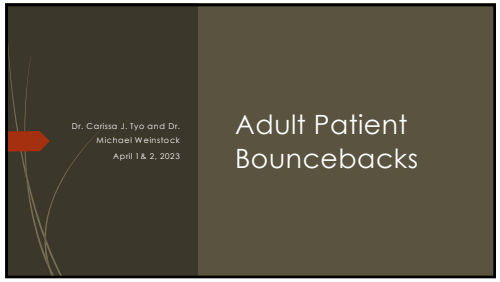
34


NO MORE
NG Tubes

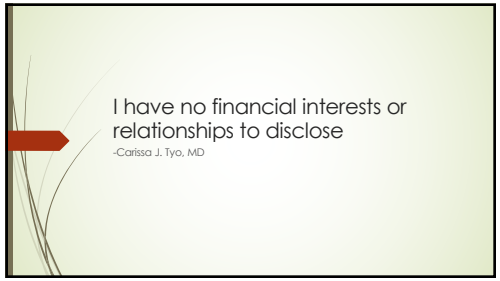
35


GET OFF THE
FENCE

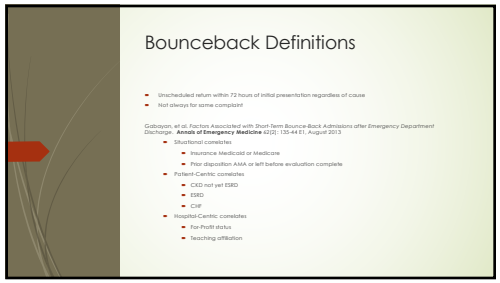
36


Dr. Carissa J. Tyo and Dr. Michael Weinstock
April 1 & 2, 2023
Adult Patient Bouncebacks

1


I have no financial interests or relationships to disclose
-Carissa J. Tyo, MD

2


Bounceback Definitions
Unscheduled return within 72 hours of initial presentation regardless of cause
Not always for same complaint
Gabayan, et al. Factors Associated with Short-Term Bounce-Back Admissions after Emergency Department Discharge. Annals of Emergency Medicine 62(2): 135-44 E1, August 2013
Situational correlates
Insurance Medicaid or Medicare
Prior disposition AMA or left before evaluation complete
Patient-Centric correlates
CKD not yet ESRD
ESRD
CHF
Hospital-Centric correlates
For-Profit status
Teaching affiliation

3

Question for the Room…

- Have you ever had a patient bounceback to the ED?
- Have you ever been confronted with the dreaded: "Hey, remember that patient you took care of… ?"
- Have you ever taken care of a patient returning as a bounceback?
- Have you ever received a bounceback patient and disagreed with the plan of care from the first provider?

4

Adult common bouncebacks

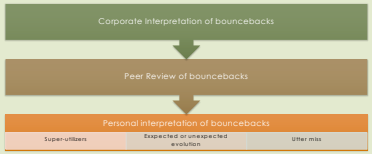
- Abdominal pain
- Chest pain
- Weak/dizzy
- CKD/ESRD
- Cardiac dysfunction (CHF)
- Substance use disorder
- Psychiatric illness
- Homelessness
- *Sickle Cell Disease

Factor Correlates:

- Lower socioeconomic status
- Lower health literacy
- Limited access to care
- Medicaid/Medicare
- Teaching institutions
- Corporate Management Groups

5

The First Medical Provider…



6

- Time to take a deeper dive?
- Breaking the news to a colleague
- Evolution of disease process-agree with prior care
- Disagree with former care
  - OSH
  - Peer
  - Specialist

The Second Medical Provider

7

8