LTC Docs are from Mars, ER Docs are from Venus

Dr. Vu Kiet Tran, MD, MHSc, MBA, CHE, ICD.D

University of Toronto

Faculty/Presenter Disclosure

- **Faculty: Tran, Vu Kiet**

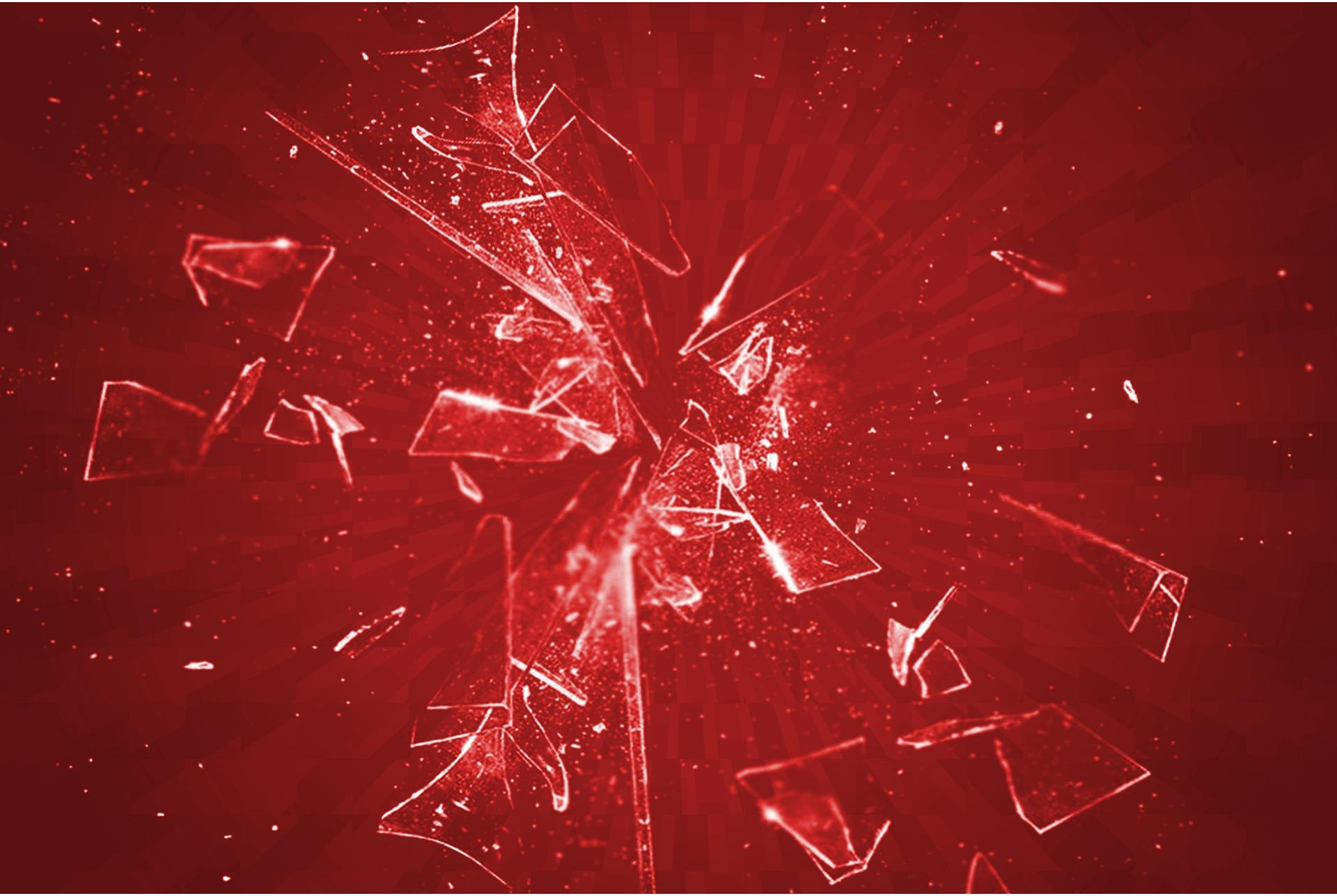
- **Relationships with financial sponsors:**
  - **Speakers Bureau/Honoraria:** OCFP, FMS
  - **Other:** President, Canadian Physicians' Pension Plan

Disclosure of Financial Support

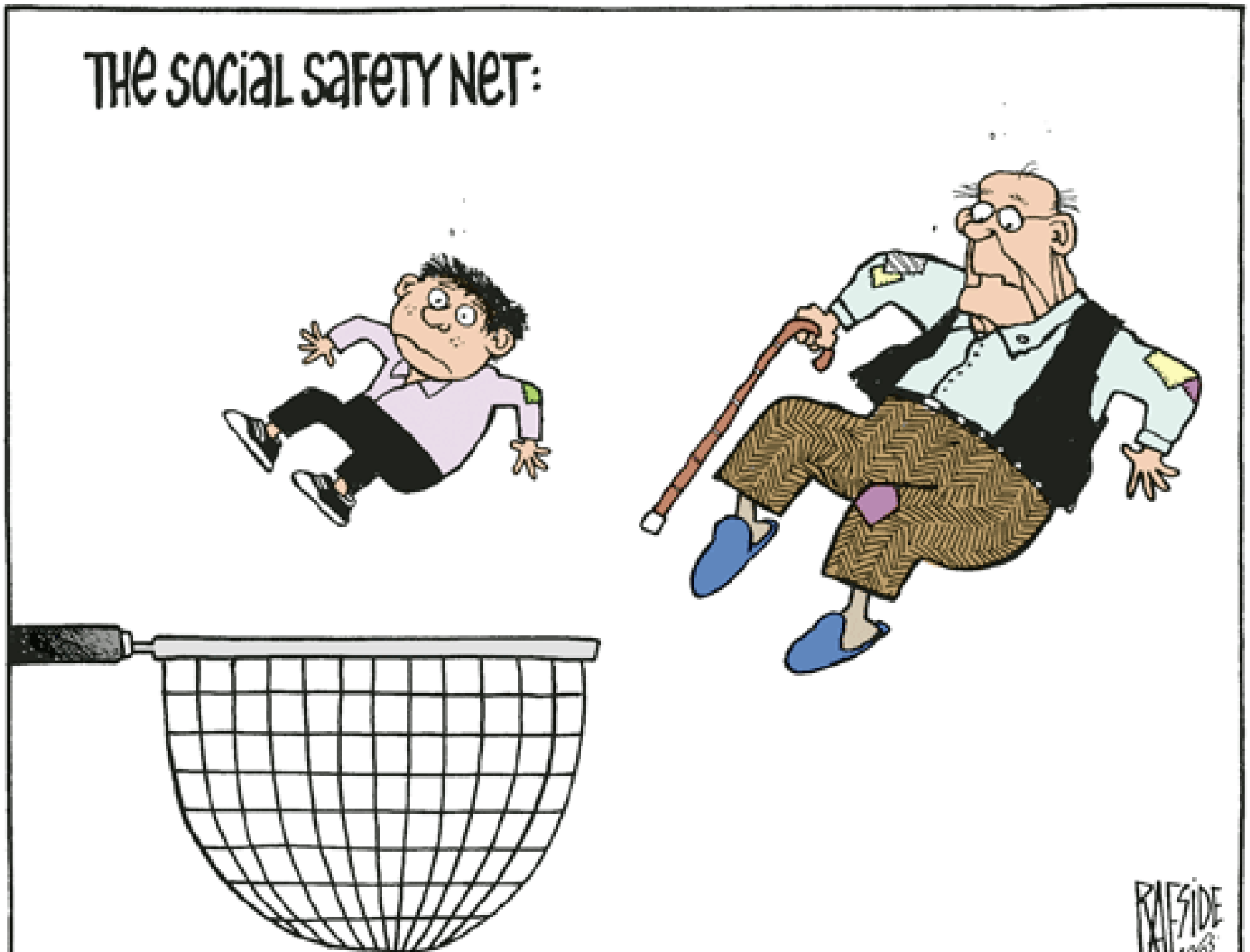
- **This program has not received financial support from anyone**
- **This program has not received in-kind support from anyone**
- **<u>Potential for conflict(s) of interest</u>:**
  - Tran, Vu kiet has not received payment from any organization for this program
  - No product will be discussed in this program

Mitigating Potential Bias

- No bias in this presentation

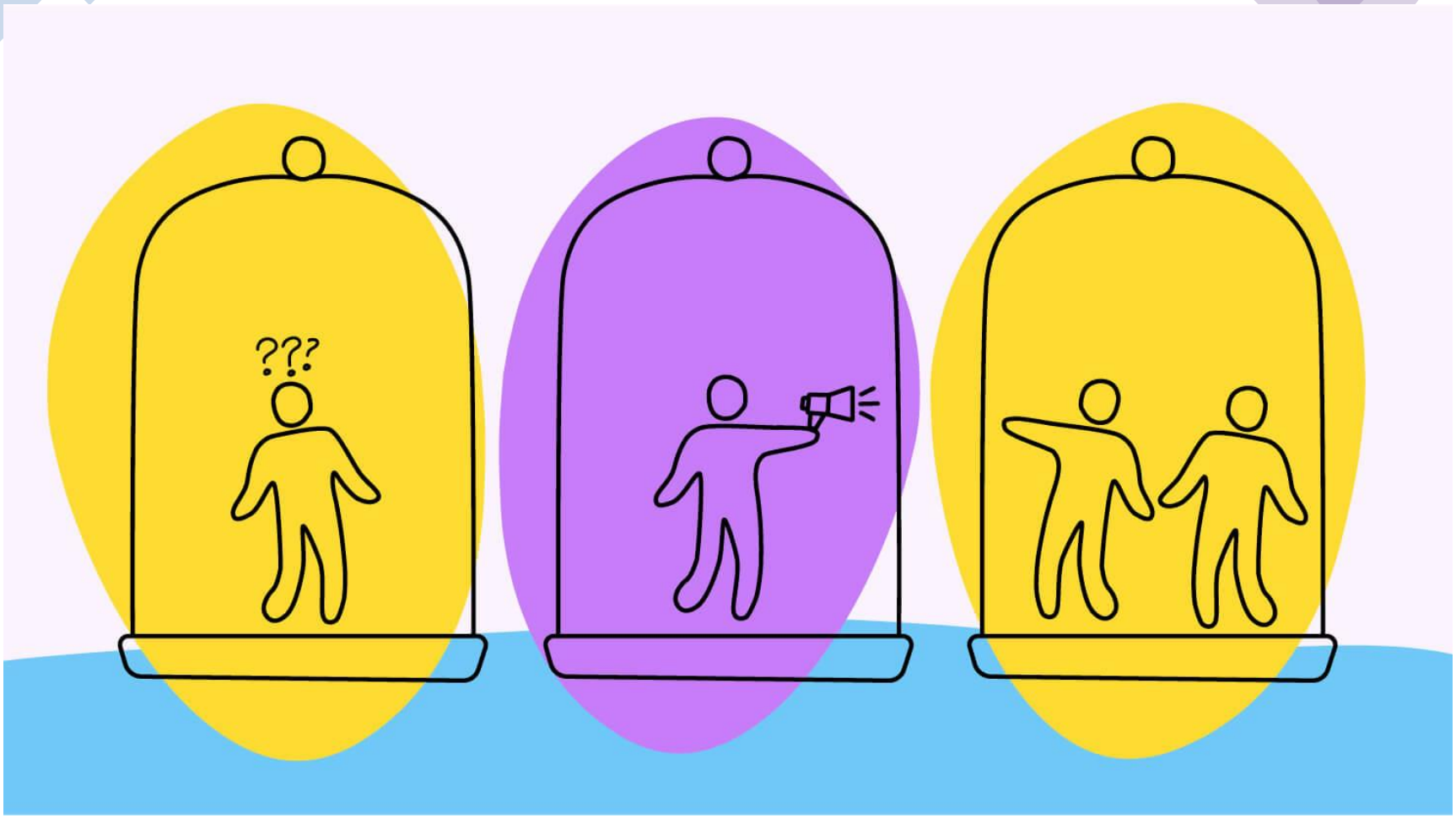


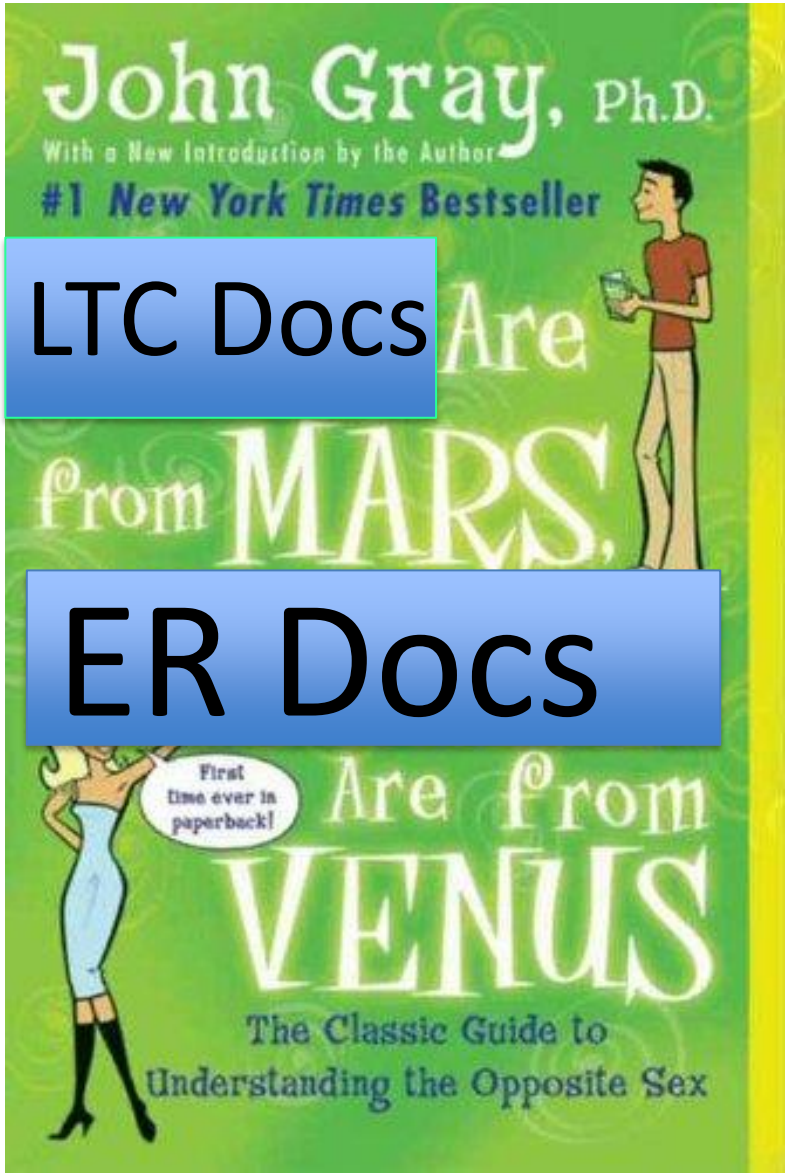

20-03


THE SOCIAL SAFETY NET:


Emergency


rudall30/Shutterstock.com




John Gray, Ph.D.
With a New Introduction by the Author
#1 New York Times Bestseller
LTC Docs
Are
from MARS,
ER Docs
First time ever in paperback!
Are from
VENUS
The Classic Guide to Understanding the Opposite Sex

YOU - THE ER DOCTOR

847553

Date:

Discharge Diagnosis: UTI. + pneumonia.

Allergies (new or change):

Goal of Care:

Physician Recommendations:

COVID swab (P)
Urine C+S sent.
C. Chan

CT head nil acute
UFA: (+) leuks
CXR: bil. infiltrates

Rx: levaquin.

Physician (Print Name)

Physician Signature

Follow-up Appointments:

Date & Time	Service	Instructions	Contact Number
n/a			

Infection Control:

Isolation / Special Precautions

☑ Yes ☐ No

Reason, if yes:

~~COVID swabbed~~
~~(27-09-20)~~

Accompanying Documents, Aids & Equipment:

- ☐ Emergency Chart
- ☑ Most recent diagnostic imaging reports (i.e X-ray, ECG)
- ☐ Physician orders
- ☑ Most recent lab results
- ☐ Consult notes
- ☐ Surgical/intervention notes
- ☐ Medical device insertion notes
- ☐ Other

Personal Belongings:

- ☐ Glasses
- ☐ Walker
- ☐ Cane
- Hearing Aid ☐ Lt ☐ Rt
- Dentures ☐ Upper ☐ Lower
- ☐ Other

Equipment and care required after discharge:

	Location	Note Attached		Location	Note Attached
☐ Dressings		☐	☐ Sutures/Staples		☐
☐ Drains		☐	☐ Wound / Ostomy		☐
☐ Casts/Braces	n/a	☐	☐ Central/Peripheral Line		☐
☐ Medical Devices		☐	☐ Other	n/a	☐

Medications:

☐ Record indicating changes (including new prescriptions) attached.
☐ Record including medication administration (last dose given) below or attached.

Drug	Dose/Frequency	Date & Time Last Given
Ceftriaxone	1 gram x 1	27-09-20 at 1900 h
Azithromycin	500 mg x 1	27-09-20 at 2000 h

Last Clinical Assessment: Temp 36.1 Blood Pressure 116/99 Pulse 98 Blood Sugar —

Oxygen Saturation: 98% / RA Respiratory Rate 18 Pain Level (1-10) — Last Eaten or Drank —

Diet / Texture ☐ Note Attached **Mobility** ☐ Note Attached

Bowels:	Bladder:	Cognitive Function:	Responsive Behaviour:
☐ Continent	☐ Continent ☐ Incontinent	☐ Alert	☐ Yes ☒ No
☐ Incontinent	Catheter	☑ Disoriented	☐ Note Attached
Last BM —	Size	☐ Other	
	Date last changed —		

Nurse (Print Name) Ana Maria Din **Nurse Signature** **Extension Number** 6585

Distribution: White - Patient, Yellow - Chart

847553 (Rev. 10/19) page 1 of 1

Date: 27/09/20
DD/MM/YY

Rx

Levofloxacin. 750mg po OD.

M: 7 days

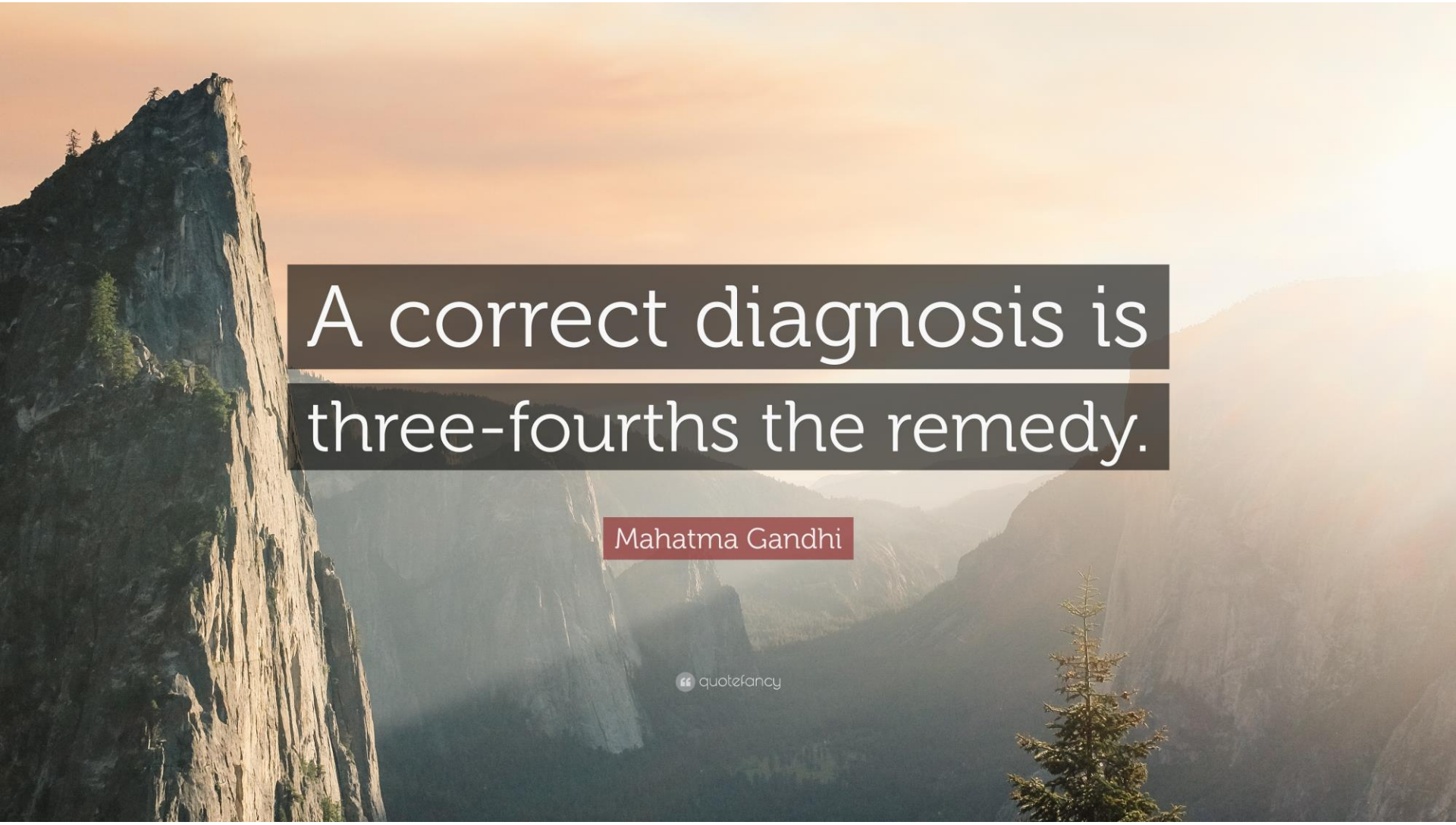
Common ED LU Codes

Advair/Symbicort	330 ☐
Aggrenox	349 ☐
Apixiban (Eliquis) AFib	448 ☐
Ciprofloxacin	336 ☐
Dalteparin (Fragmin)	186 ☐
Moxifloxacin/Levofloxacin	339 ☐
Dabigitran (Pradaxa)	431 ☐
Tamiflu Prevent 371 Treat	372 ☐
Famvir/Valtrex	147/159 ☐
Rivaroxaban (Xarelto) AFIB	435 ☐
Rivaroxaban (Xarelto) DVT and PE	444 ☐
PPIs GI Bleed	402 ☐
PPIs failed H2 blocker Rx	293 ☐
PPIs prevent NSAID ulcer	297 ☐

“Cipro-deficiency” dipstick

Asymptomatic bacteriuria

- Very common in the older patient
- Institutionalized residents more than community dwellers
- ***Abnormal urine does not always indicate UTI as the cause of their symptom(s)***


A correct diagnosis is
three-fourths the remedy.
Mahatma Gandhi
quotefancy

Who should be treated?

- Who should ***NOT*** be treated?
  - Diabetic persons
  - Elderly individuals
  - Patients with indwelling catheters

Pathway for Asymptomatic bacteriuria

MINIMUM CRITERIA FOR UTI (MODIFIED LOEB CRITERIA[1,2])

In a non-catheterized resident:	In a catheterized resident:

• Acute dysuria or 2 or more of the following:
  • fever [> 37.9°C (100°F) or a 1.5° C (2.4°F) increase above baseline on at least two occasions over the last 12 hours]
  • new or worsening urgency
  • frequency
  • suprapubic pain
  • gross hematuria
  • flank pain
  • urinary incontinence
	• Any one of the following after alternate explanations have been excluded:
	  • fever [> 37.9°C (100°F) or a 1.5° C (2.4°F) increase above baseline on at least two occasions over the last 12 hours]
	  • flank pain
	  • shaking chills
	  • new onset delirium

[1] Note that these are clinical criteria validated for diagnosis for UTI and differ from criteria that are used for surveillance.
[2] Note that confusion alone is not symptom of UTI in non-catheterized resident.

Choosing Wisely Canada

What is ***NOT*** an UTI

- These elements on their own are NOT diagnostic of UTI:
  - Worsening functional status
  - Worsening mental status (increased confusion, delirium, agitation)
  - Cloudy urine
  - Smelly urine
  - Change in urine color
  - Falls
  - Dehydration

Treatment of Uncomplicated UTI

- Uncomplicated UTI
  - Beta-lactam antibiotics
    - Amoxicillin 500mg tid for 3-7 days
    - Amoxicillin, Amoxicillin-clavulanate 500mg bid for 3-7 days
  - Nitrofurantoin (but avoid is CrCl < 35) 100mg bid for 5-7 days
  - Trimethoprim-sulfamethoxazole (TMP-SMX) DS bid for 3 days
  - Fosfomycin 3g po od x 1 single dose

Treatment of Uncomplicated UTI

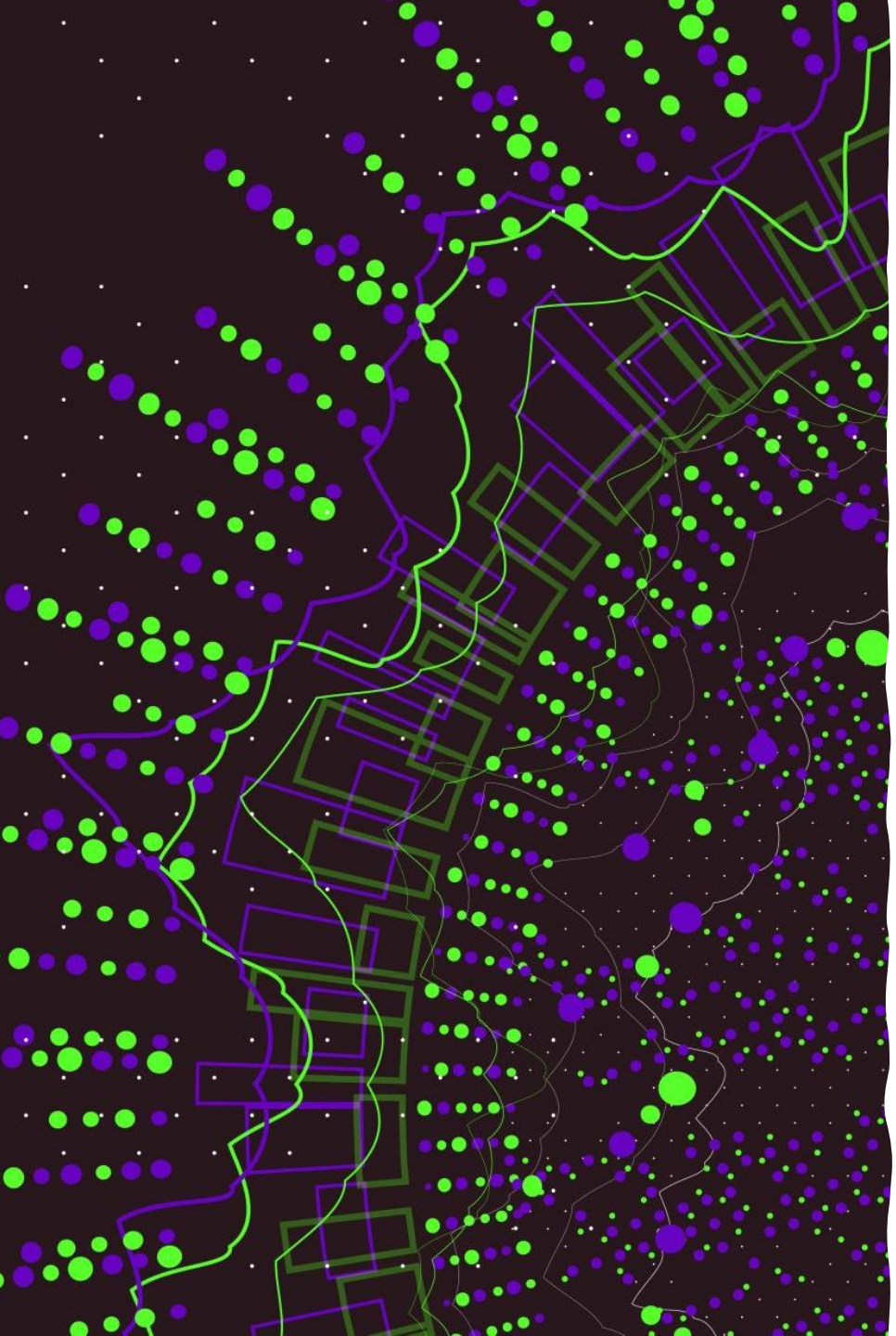
- Uncomplicated UTI
  - Cephalexine 500mg tid for 5-7 days
  - Cefadroxil 1g once daily for 5-7 days
  - Cefuroxime 5-7 days
  - Cefaclor 500mg tid for 5-7 days
  - Cefixime 400mg od or 200mg bid x 1 day

Treatment of Complicated UTI

- Complicated UTI
  - TMP-SMX DS 1 tab bid for 7-14 days
  - Amoxicillin-clavulanate 875mg bid for 10-14 days
  - Fluoroquinolones
    - Ciprofloxacin 500mg bid for 7 days
    - Levofloxacin 750mg po once daily for 5 days
    - Moxifloxacin 400mg po once daily for 5 days

Treatment of uncomplicated Pyelonephritis

- Uncomplicated pyelonephritis
  - TMP-SMX DS 1 tab bid for 14 days
  - Amoxicillin-clavulanate 875mg bid for 10-14 days
  - Fluoroquinolones
    - Ciprofloxacin 500mg bid for 7 days

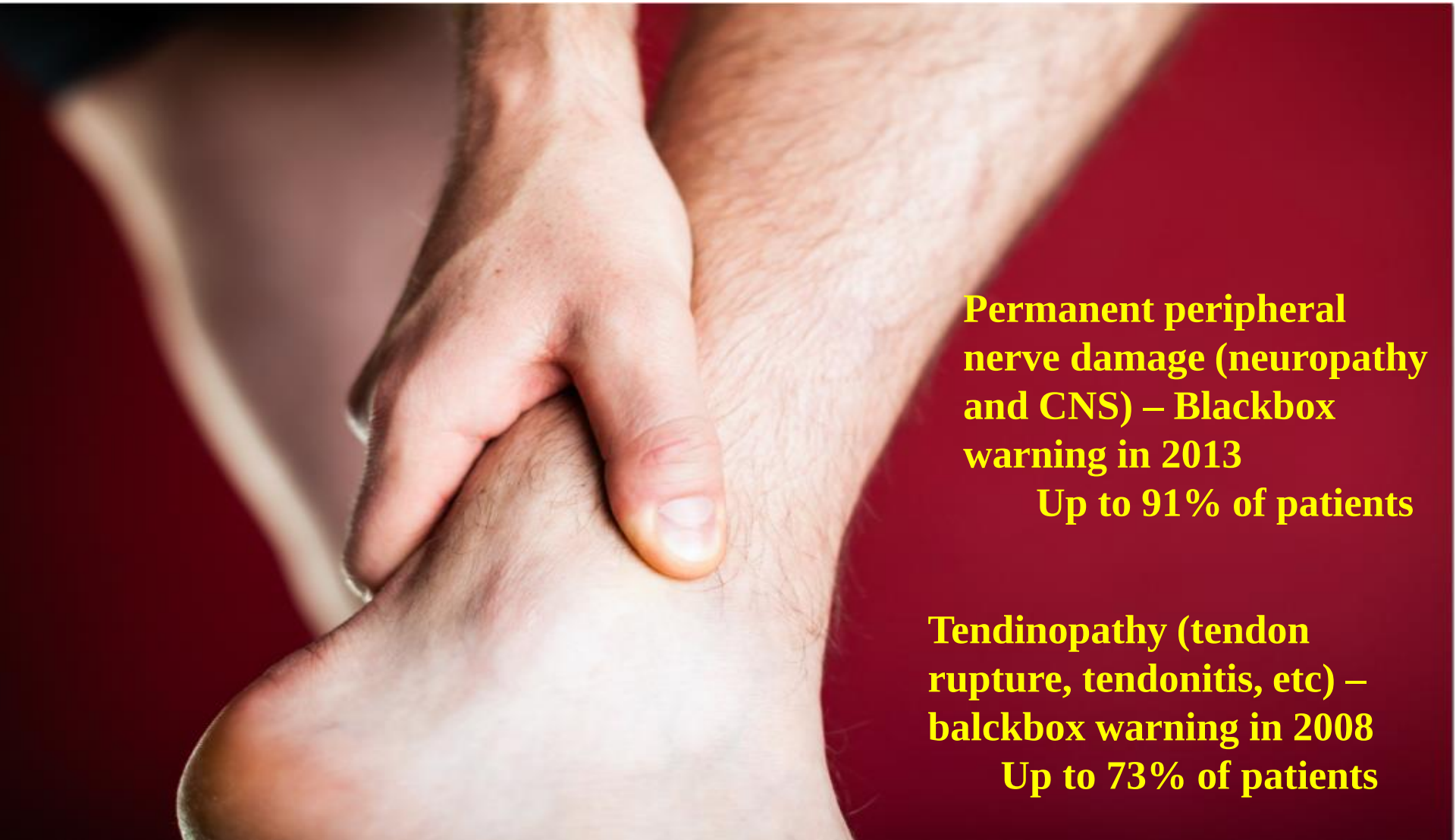


TMP-SMX CAN PRODUCE HYPERKALEMIA IN PATIENTS WITH DECREASED KIDNEY FUNCTION WHO ARE RECEIVING ACEI OR ARB

TMP-SMX WITH ORAL SULFONYLUREA WILL PRODUCE PROFOUND HYPOGLYCEMIA

FLUOROQUINOLONES WITH ORAL SULFONYLUREA WILL PRODUCE PROFOUND HYPOGLYCEMIA

Flouroquinolones



Permanent peripheral nerve damage (neuropathy and CNS) – Blackbox warning in 2013

Up to 91% of patients

Tendinopathy (tendon rupture, tendonitis, etc) – balckbox warning in 2008

Up to 73% of patients

1. Acute psychosis
2. Schizophrenia
3. Hallucinations (Visual, auditory)
4. Fearfulness

1. Dizziness
2. Headaches
3. Confusion
4. Convulsions
5. Tremors
6. Neurologic disorders

FDA Drug Safety Communication: FDA advises restricting fluoroquinolone antibiotic use for certain uncomplicated infections; warns about disabling side effects that can occur together

IN MAY 2016, FDA RECOMMENDS AVOIDANCE OF FLUOROQUINOLONES FOR UNCOMPLICATED INFECTIONS

ACUTE EXACERBATION OF CHRONIC BRONCHITIS

URINARY TRACT INFECTIONS

ACUTE BACTERIAL SINUSITIS

TEST NAME	RESULT	FLAG	REFERENCE RANGE	UNITS	TEST LOCN

MICROBIOLOGY REPORT

SOURCE: URINE 10
COLLECTION DATE: 10-NOV-2020
COLLECTION TIME: 06:00
COLONY COUNT: >100 x E6 CFU/L
CULTURE STATUS: FINAL
CULTURE REPORT: Urine Culture

ORGANISM 1: Klebsiella pneumoniae

The urinary (not systemic) interpretation for Cefazolin can be used to predict susceptibility to Cephalexin (Keflex) for uncomplicated UTI.

Susceptibilities:

ANTIBIOTIC	ORGANISM 1
TRIMETH-SULFAMETHOXAZOLE	S
GENTAMICIN	S
CEFAZOLIN	S
CIPROFLOXACIN	S
AMPICILLIN	R
CEFTRIAXONE	S
NITROFURANTOIN	S
AMOX CLAVULANIC	S

Cipro 250 mg PO BID x 7 days
Dr. Timmi [illegible]
NN 16/20

Allergy: Cephalexin

Symptoms: c/o mild dysuria (NW 10) burning sensation, urinary frequency

Rept:

BENNETT,ROSEMARY FINAL REPORT 1

PND = Pending ~ = Edited Result S = Sensitive I = Intermediate R = Resistant

Public Service Announcement

9:05 LTE

Karim Jessa liked

Jocelyn J. Fitzgerald, MD @jfit... · 14h

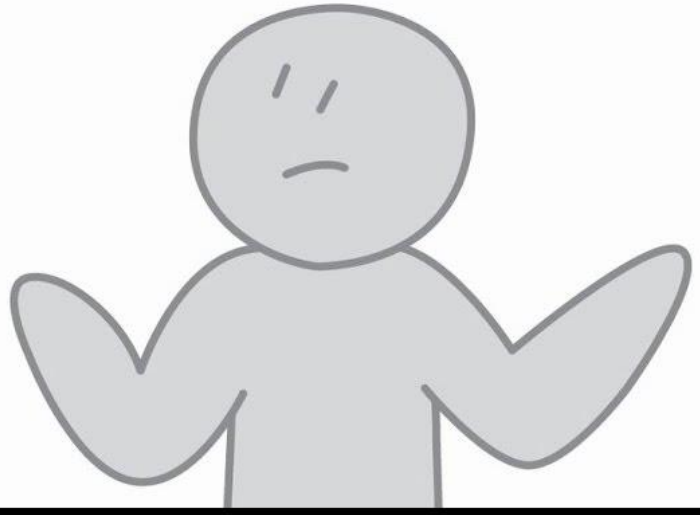
Friendly PSA! Cipro is never 🙅‍♀️ the first line antibiotic for a UTI! 🧫 It has a black box warning and a lot of community resistance. Macrobid is your move 🤩

28 56 577

My go to options…

- Amoxicillin
- Cephalexine
- Cefixime
- Nitrofurantoin
- Amoxicillin-clavulanate
- Fosfomycin
- TMP-SMX
- Ertapenem IM

“Who can make my healthcare decisions for me when I can’t make them for myself?”




Seasons

YOU – THE LTC DOCTOR

G-tube re-insertion

Emergency and urgency of the insertion?

What medications can be held until a new G-tube is re-inserted?

What medications need to be given immediately?

What alternatives can be given from the e-box?

Alternatives

Substitute medications

Hold medications

Hypodermoclysis

Send resident the next day early in the day (07:00 or 08:00am)

Collaboration with hospital (and service) for coordinated protocol

Hours of operation:

Monday	9:00 am – 4:00 pm
Tuesday	9:00 am – 4:00 pm
Wednesday	9:00 am – 4:00 pm
Thursday	9:00 am – 4:00 pm
Friday	9:00 am – 4:00 pm

☐ **Level One – Supportive/Comfort Care**

This includes, but is not limited to, the provision of measures available within the resources of the facility such as:

- Relief of pain;
- Oral fluids;
- Positioning;
- Mouth care;
- Treatment of fever;
- Oxygen administration (if available);
- Suctioning.

Diagnostic interventions and transfer to hospital will not normally be utilized for residents who request this level of Advance Directives. No cardiopulmonary resuscitation is requested.

☐ **Level Two – Limited Therapeutic Care**

Care measures will include all procedures utilized in Supportive/Comfort Car as well as the administration of antibiotics if indicated. Transfer to hospital may be arranged to provide comfort/treatment measures beyond the capability of the facility upon the direction of and at the discretion of the physician. No cardiopulmonary resuscitation is requested.

☐ **Level Three – Transfer to Acute Care Hospital**

If symptoms indicate, the resident would be transferred to an acute care hospital for treatment. Assessment would be made in the acute care hospital emergency department and a decision made whether to admit the resident or return him/her to the Extendicare facility. No cardiopulmonary resuscitation is requested and no admission to an acute care intensive care unit.

☐ **Level Four – Transfer to Acute Care with CPR**

Transfer to an acute care hospital will be arranged immediately. Cardiopulmonary resuscitation (CPR) will be provided by qualified staff, if available, and by ambulance personnel.

Substitute Decision Maker: _____
Print Name

_____ _____
Resident/Substitute Decision Maker Date

_____ _____
Physician Signature Date

Other missing information

- Transfer to hospital without notifying the family/POA
- No clear indication who the SDM is
- No clinical notes about progression of the acute presentation
- No documentation of examination
  - The sending RN is often off shift and gone home. Vital signs from a month ago
- Poor documentation of baseline function
- Advanced directives not up-to-date


BLOOD PRESSURE
DANGER
GET HELP
ELEVATED
NORMAL

Definition

- Hypertensive Emergency (HE)
  - Sudden elevation in systolic BP and/or Diastolic BP that is associated with acute end-organ damage
    - Cardiovascular
    - Cerebrovascular
    - Renal
- Hypertensive urgency (HU)
  - Sudden elevation in systolic BP and/or Diastolic BP that is *NOT* associated with acute end-organ damage

Seminars in Dialysis vol 19, No 6, 2006: 502-512

Hypertensive Emergencies

TABLE 1. Hypertensive emergencies

Hypertensive encephalopathy
Acute aortic dissection
Acute myocardial infarction
Acute coronary syndrome
Pulmonary edema with respiratory failure
Severe pre-eclampsia, HELLP syndrome, eclampsia
Acute renal failure
Microangiopathic hemolytic anemia

HELLP, Hemolysis, elevated liver enzymes, low platelets.

Seminars in Dialysis vol 19, No 6, 2006: 502-512

Initial Dx evaluation

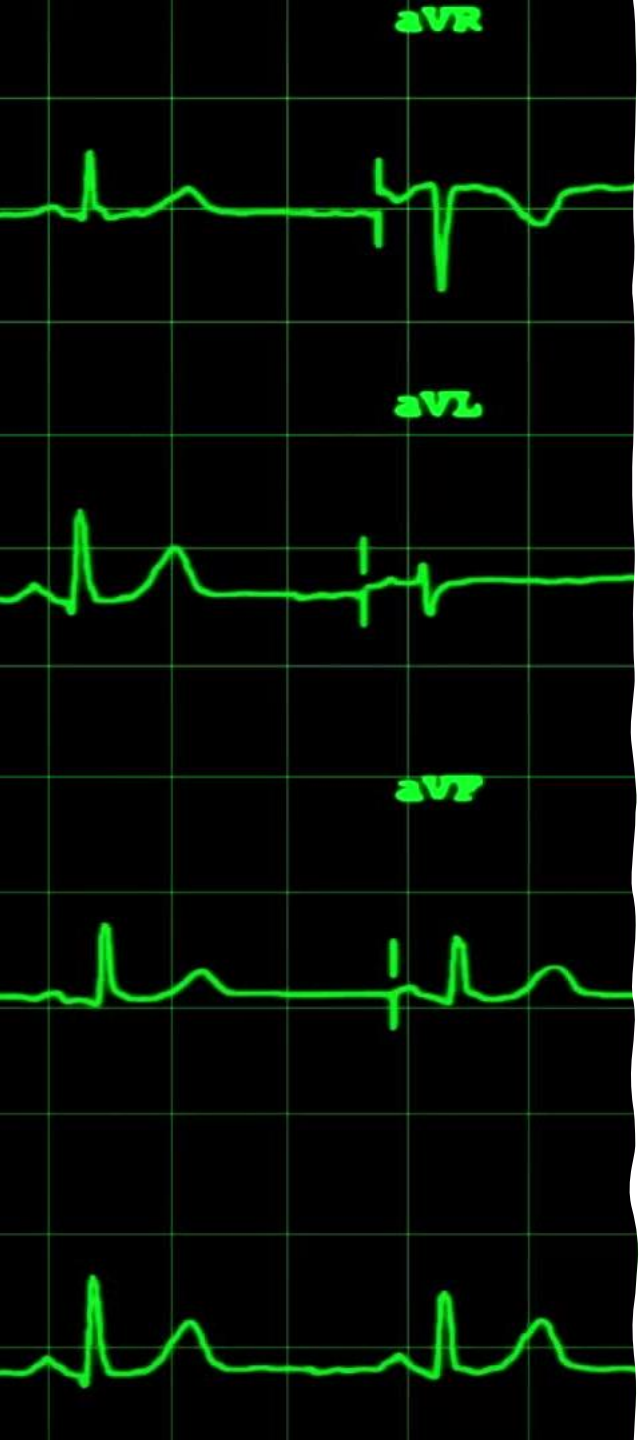
- Tests
  - Non contributory most of the time
  - Can include
    - CBC
    - BUN
    - Electrolytes
    - Serum Creatinine
    - Urinalysis and sediment examination
  - ECG and Chest XR changed diagnostic or therapeutic decisions in only 2 out 116 patients in one study

- It is not necessary to perform any additional tests in this type of patients if they show no symptoms suggestive of end-organ damage

Ann Emerg Med. 2006; 47: 237-249

Management principles

- Hypertensive urgency can be treated in an outpatient setting with oral medications over 24-48 hours
- Medications could be
  - Beta-blockers
  - Diuretics
  - ACEI
  - ARB
  - CCB



Hospitalization

- Total of 426 patients were referred to the hospital
  - 100 (0.17%) were admitted
    - At 7 days:
      - Primary outcomes (composite MI, stroke, TIA) were reached
        - » 0.1% in the discharged home pts
        - » 0.5% in the hospital pts
  - In those with SBP > 220
    - At 7 days:
      - Primary outcomes were reached
        - » 0.2% in the discharged home pts
        - » 0% in the hospital pts

What should we do?

- ACC/AHA 2017
  - “There is no indication for referral to the ED, immediate reduction in BP in the ED, or hospitalization for pts with hypertensive urgency”

YOU – THE ER DOCTOR

CEDIS Complaint: fall

Family MD: Not found,In Epr

CTAS	HR (/minute)	RR (/minute)	BP (mmHg)	SPO2 (%)	TEMP (°C)	BG (mmol/L)	GCS (/15)
2 Emergent	60	16	167/93	92	36.5		15

Allergies: No known medication allergy/adverse reaction, No known food allergy/adverse reaction, No known latex/other allergy/adverse reaction

Presenting Complaint: fall

Triage Note: as per ems, pt from NH and had unwitnessed fall. pt last seen in bed at 0400, checked by staff at 0520 and found pt on floor. awake, french ...(more in EPR)

Initial Assessment Time: 08:35

Assessed By: [redacted]

Time	Orders	Ordered By	Done By	Time
	Please get whole chart from recent ER visit ē medicine consult note to oct 10th.			
	Please ask clerk to contact his NH & ask one of the pt's nurses at NH to call Dr Ng on his cell phone # ē number attached			
	CT head cutover			
	Dress & clean wound.			
1107	N.O Ramipril 10mg PO x 1 now D. [illegible]	RN		

Consultation	Called	Arrived	Consultation	Called	Arrived	Consultation	Called	Arrived

Discharge Instructions: Take all medications as prescribed. Return to ED if worse. Follow up with your family doctor in 2 days

please call [illegible] (RN) at 416-781-6438 to inform of discharge.

follow up of Fam MD for blood pressure control

If unwell return to ER

Laceration repaired. Bloodwork & CT normal.

☐ Discharge instructions given

Follow up Clinic	Follow up Date	Follow up Time

☐ LWBS ☐ LAMA ☐ DOA ☐ Died

Diagnosis	Admit/Transfer to	Admitting Physician
Fall (C) D3 lac repair		

doctors' strike

EHR and digital discharge summary

- Legible handwritting
- EPIC
- Meditech
- Lab reports
- Imaging reports

Comments from LTC docs

I don't think that ER physicians understand who is in long-term care and/or what our resources are

They also seem to have issues with retirement home vs LTC

I am often aggravated by ER physicians who criticize the LTC home openly to the family when they have no idea of what happened

Comments from LTC docs

When we send documentation (admission note, progress notes, vitals, MAR), it is rarely read

I wonder if ER doctors has any appreciation of who we don't send

I hate the very common illegible ER reports which are very common

A direct phone call to ER doc does not usually work. Lucky to get a nurse

Comments from ER docs

I do find a clear MRP/transferring MD cell phone is key.

The scribbles are usually not helpful so a conversation is best.

Perhaps a paragraph that succinctly states the doc's concern would be possible? I find that goes so far to understanding why the transfer occurred.

POSSIBLE SOLUTIONS

For ER docs

Use	Use Frailty tool consistently
Understand	Understand what type of facility the patient is coming from
Consider	Consider the family support system (who are the SDM?)
Understand	Understand the levels of care and the guidance it provides
Refer	Refer to BEERS/STOP medication list before prescribing medications to elderly patients with frailty

For ER docs

Write	Write legibly
Provide	Provide discharge labs, imaging, and summary notes
Provide	Provide less nebulous specialty follow-ups (or provide name of specialist and clinic number if possible)

For LTC docs

For hospital interventions, figure out an ideal time for such interventions (unless it is an emergency)

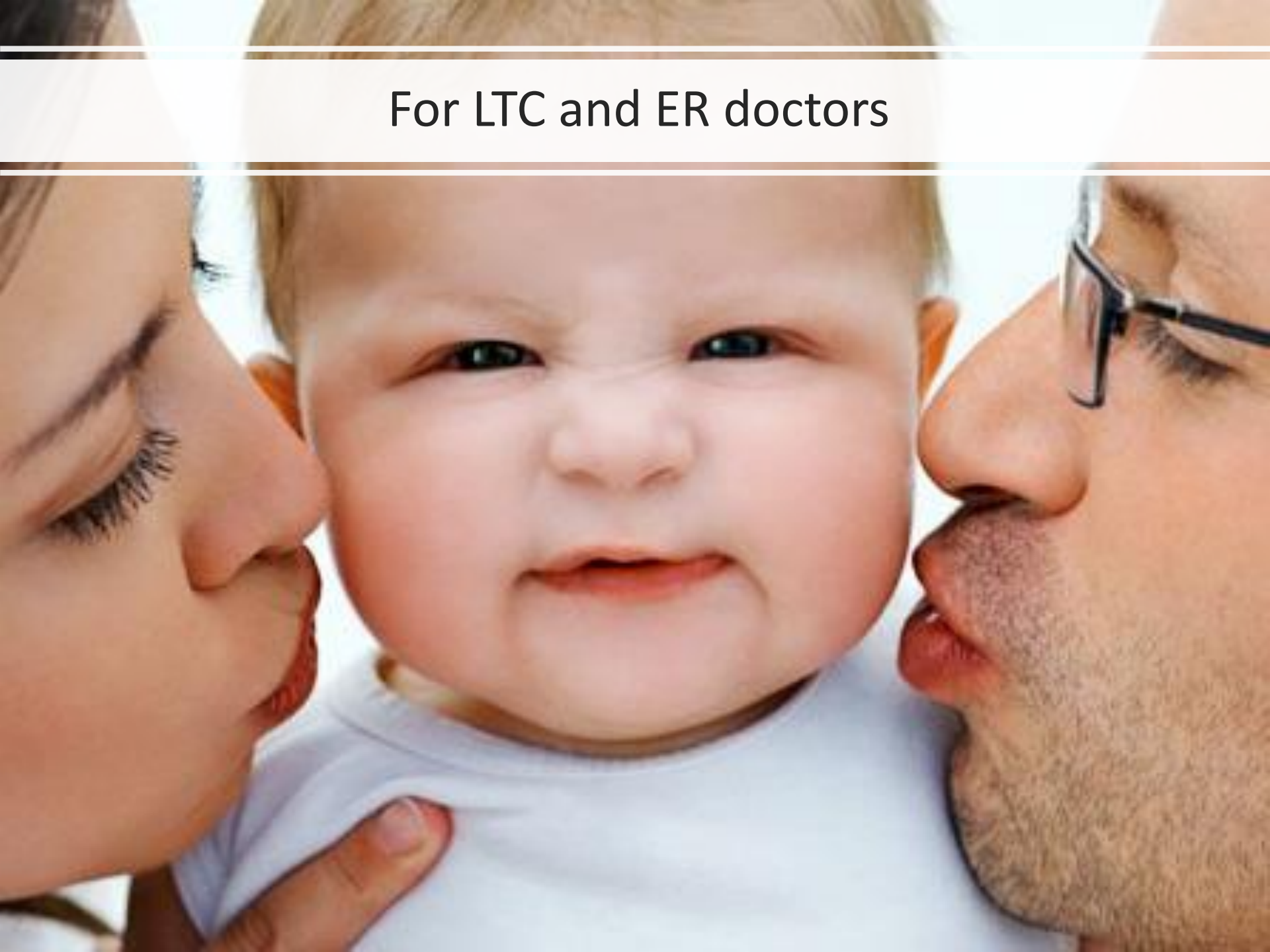
Patients with Acute high Blood Pressure without end-organ damage do not need hospitalization

Discuss case with on-call MD and find alternative solutions other than “sending to the ER”

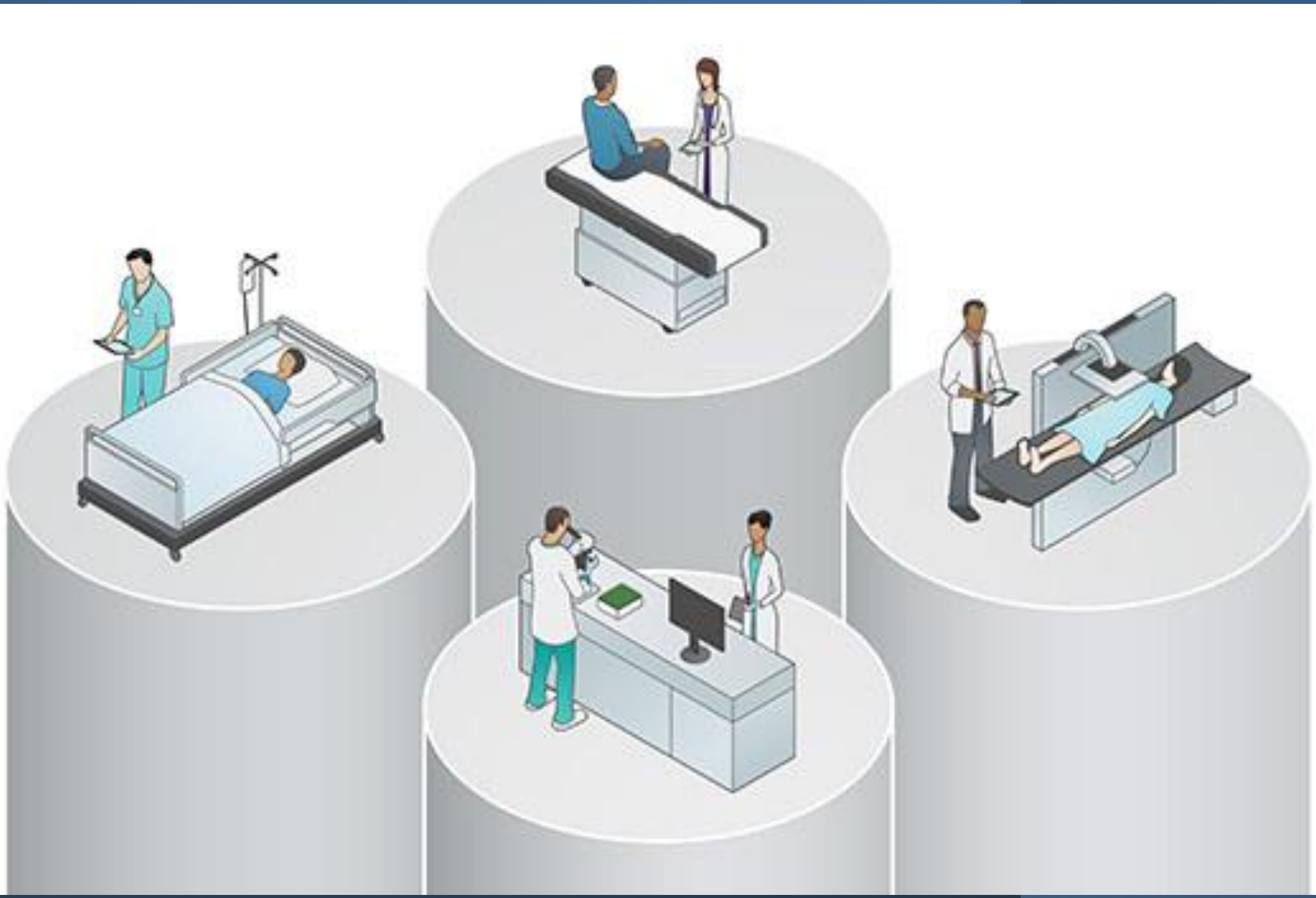
For LTC docs

- Notes from RN/MD of the last few days (see progression of condition) - notes from PCC
- A direct phone (with extension) to reach the RN of the unit
- Phone number to reach the on-call physician
- Call the ER and speak to the ER doctor

For LTC and ER doctors



For LTC and ER doctors




KEEP
CALM
AND
LET'S HELP
EACH OTHER

THANK YOU