



EMERGENCY MEDICINE COGNITIVE TOOLBOX



WHAT PROBLEM
DO EMERGENCY
PHYSICIANS NEED
TO SOLVE?



PROBLEM #1
THE WHEN CAN BE
JUST AS IMPORTANT
AS THE WHAT...

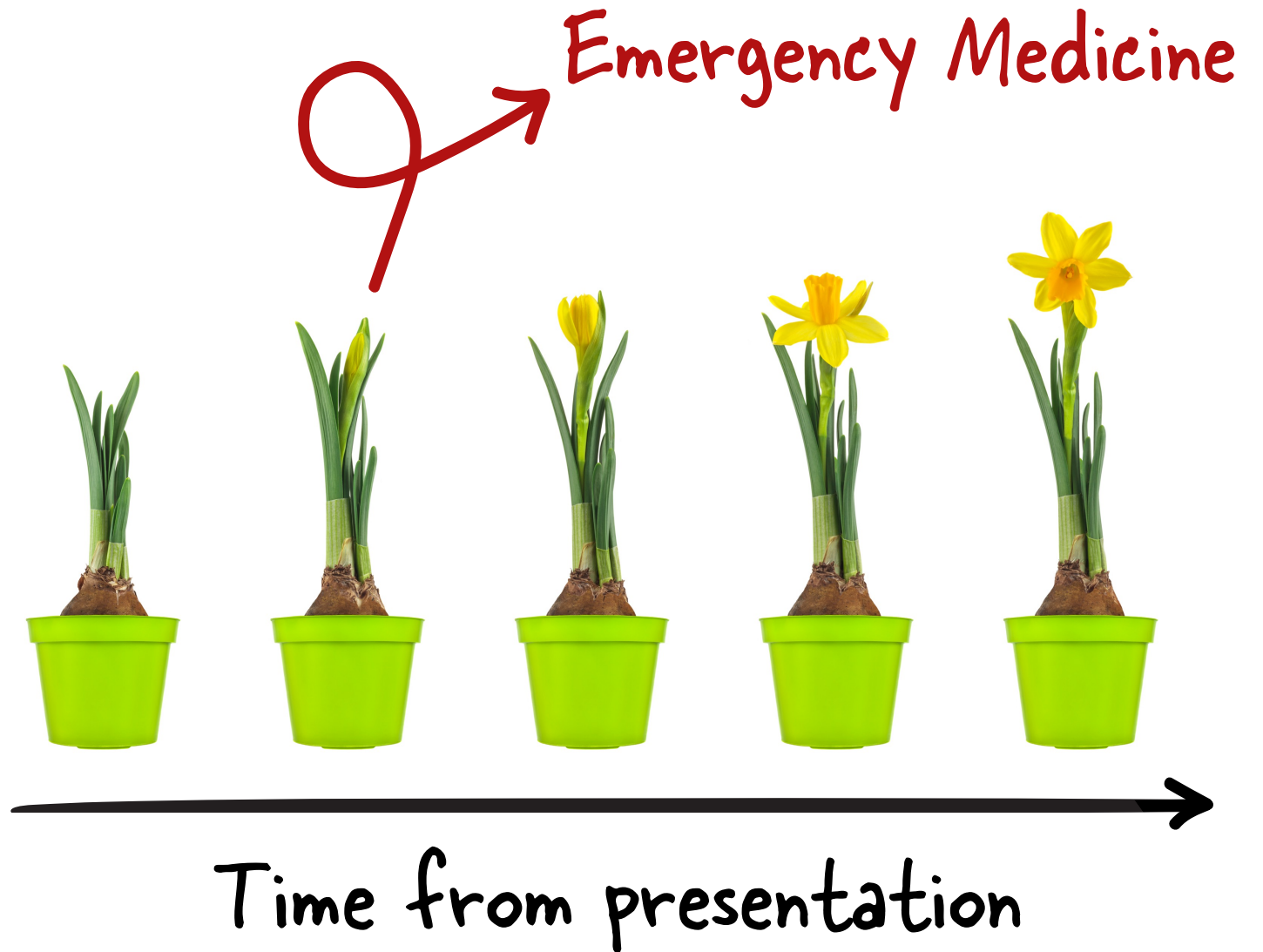
PROBLEM

#2

DIAGNOSTIC

CLARITY

VS TIME...



PROBLEM #3:

THE EASIEST
WAY TO HIDE
SOMETHING...

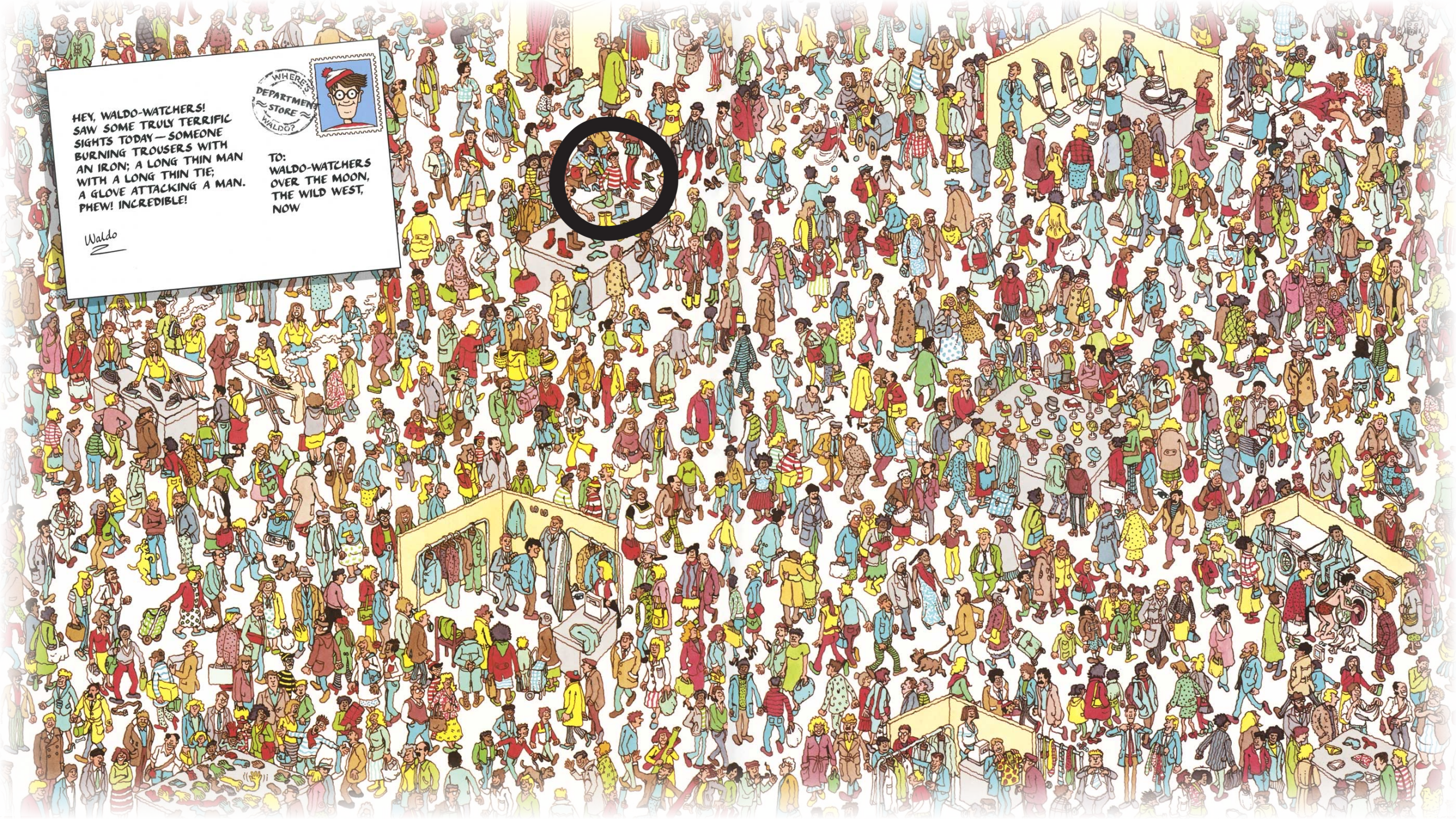


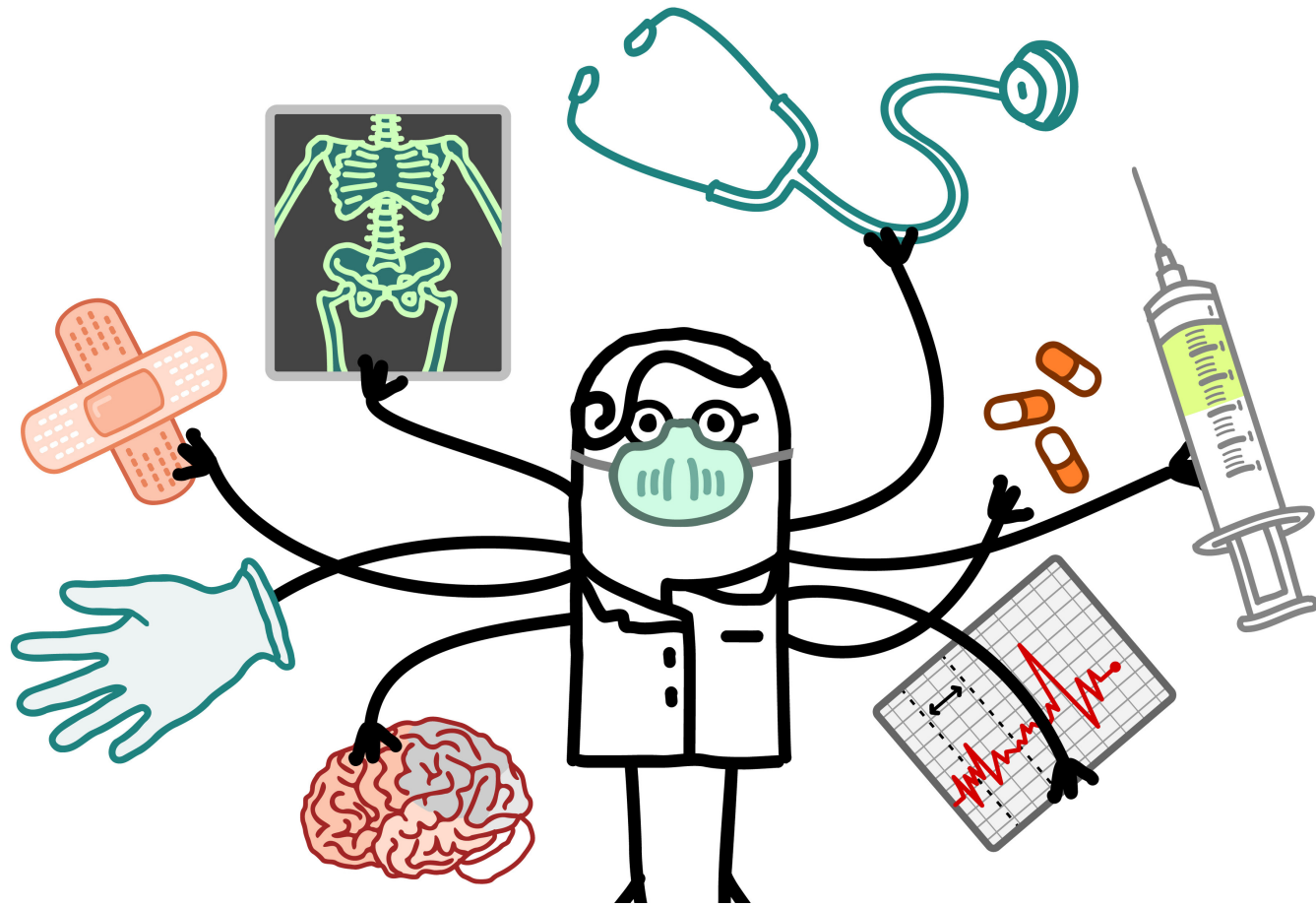
HEY, WALDO-WATCHERS!
SAW SOME TRULY TERRIFIC
SIGHTS TODAY — SOMEONE
BURNING TROUSERS WITH
AN IRON; A LONG THIN MAN
WITH A LONG THIN TIE;
A GLOVE ATTACKING A MAN.
PHEW! INCREDIBLE!

Waldo




TO:
WALDO-WATCHERS
OVER THE MOON,
THE WILD WEST,
NOW





PROBLEM #4

INTERRUPTIONS

Q5 MINUTES

(LITERALLY...)

THE SCIENCE OF EXPERTISE



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4395730572

02574935304

72890285746

593420432366

3012053893420

3957305736673

94342806478921

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659342043236672301205385437623756257493530479882089202235675

025749353047289806478923820854376237569202857463439573022500228

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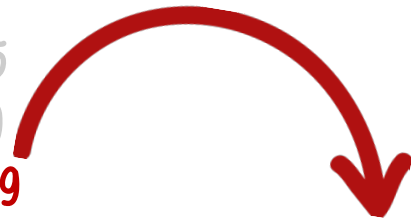
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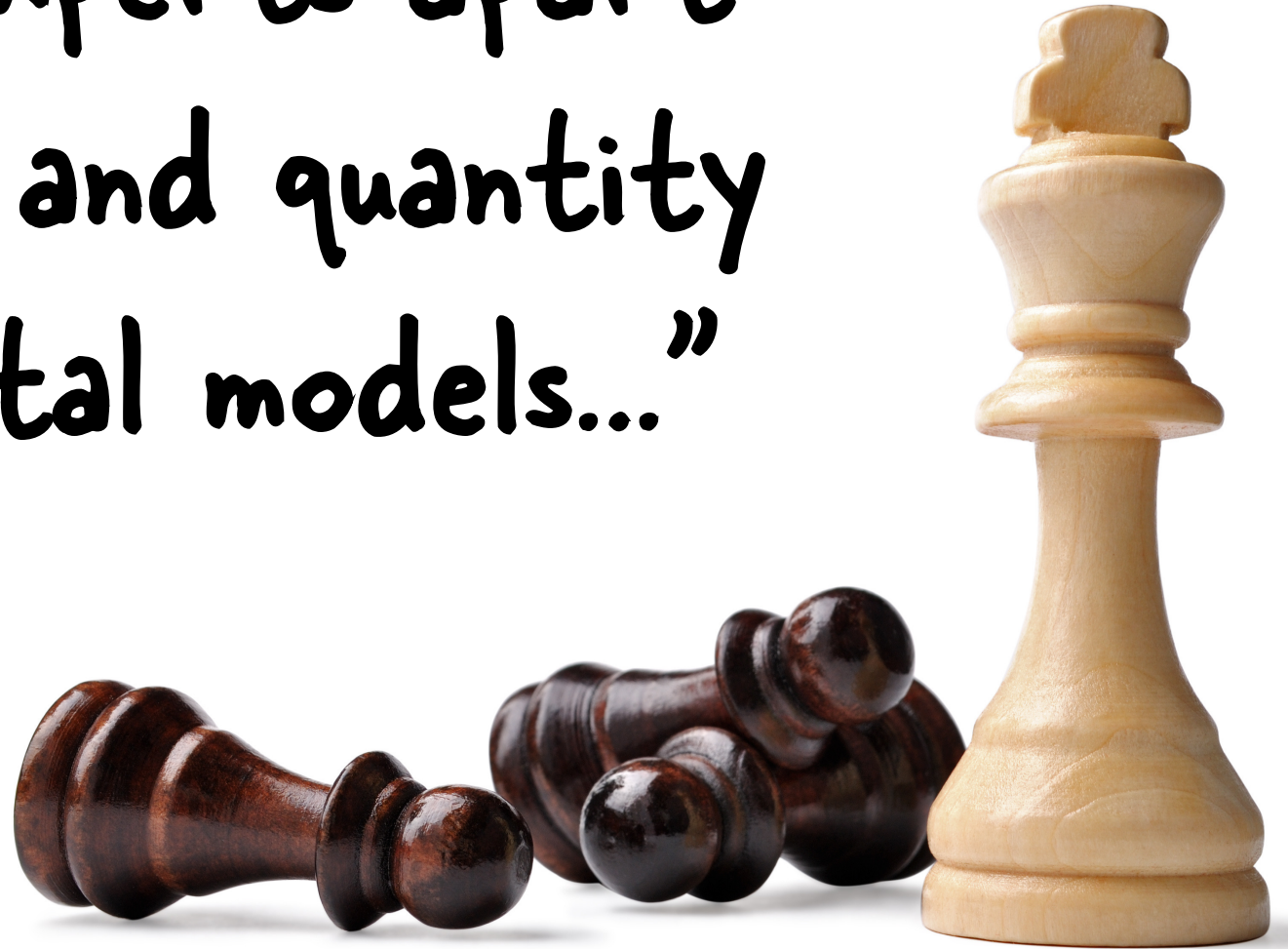
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QUANTUM LEARNING LEAP?



“What sets experts apart is the quality and quantity of their mental models...”



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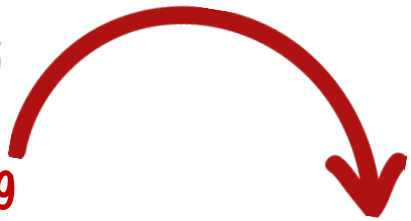
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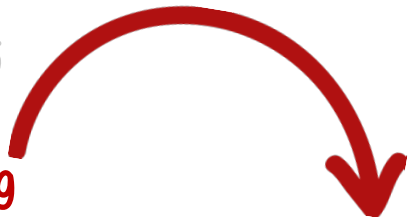
ACQUISITION OF NEW MENTAL MODEL!



Teaching
Expertise?



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20285746593420
672301205383439



WHEN THEY TAUGHT THE NEXT PERSON...

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659342043236672301205385437623756257493530479882089202235675
025749353047289806478923820854376237569202857463439573022500228
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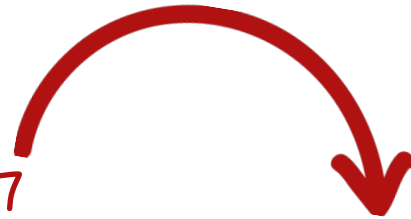
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THE QUANTUM LEAP CAME FASTER!

792305720257493530472898064789228574653820854376263078863

3820854376237569202878574935304798064572105321278923439573

78574935304798064789238208543762375692028343957305721053212

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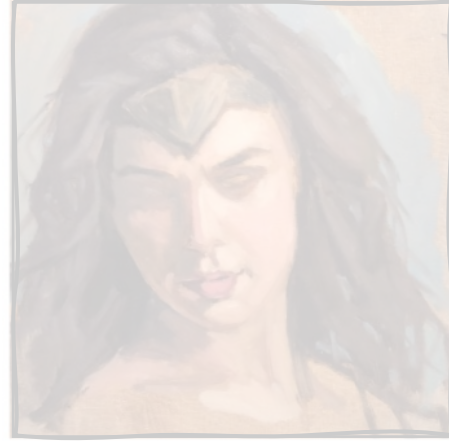
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LEARNING ISN'T LINEAR



LEARNING HAPPENS IN LAYERS





5 CONCEPTS TO START BUILDING
EMERGENCY MEDICINE MENTAL MODELS



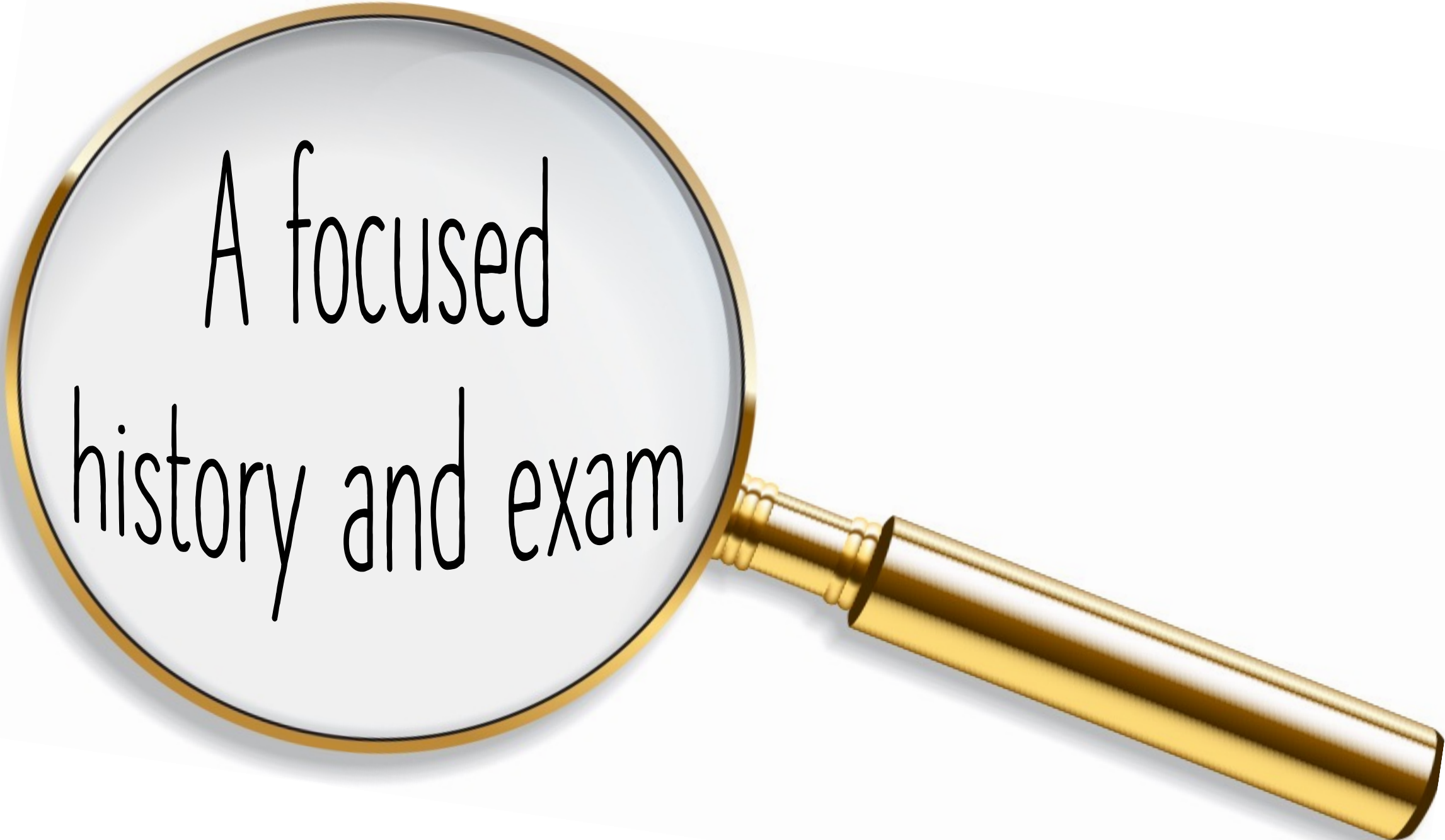
CONCEPT ONE

SICK OR
NOT SICK





CONCEPT TWO



A focused
history and exam

How to perform a rapid
history and physical exam
without missing anything...?

STRATEGIC FOCUS



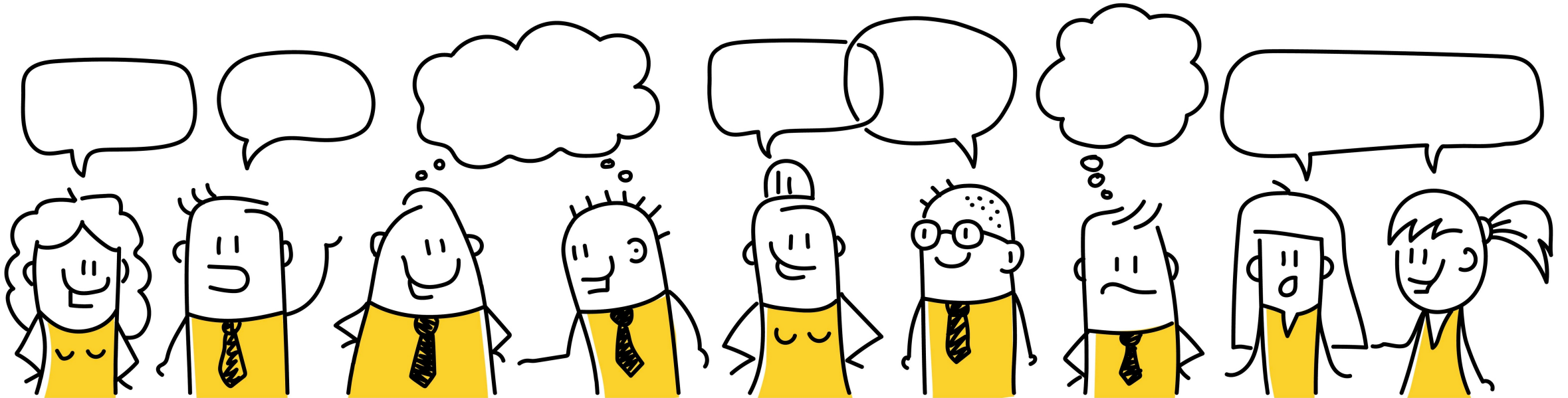
THREE PARTS OF A FOCUSED H&P

1. What is the **ACTUAL** chief complaint?
2. What is the emergency medicine differential diagnosis for that chief complaint?
3. What are the "red flag" signs & symptoms for that differential diagnosis?

Internal Medicine = Epic Novel

Surgery = The Cliff's Notes version

Emergency Medicine = Newspaper article



"All the News That's
Fit to Print."

The New York Times.

THE WEATHER.

Unsettled Tuesday; Wednesday,
fair, cooler; moderate southerly
winds, becoming variable.
For full weather report see Page 21.

VOL. LXXI...NO. 12,856.

NEW YORK, TUESDAY, APRIL 16, 1912.—TWENTY-FOUR PAGES.

ONE CENT

In Greater New York, 1 Cent
Jersey City, and Newark, TWO CENTS.

TITANIC SINKS FOUR HOURS AFTER HITTING ICEBERG; 866 RESCUED BY CARPATHIA, PROBABLY 1250 PERISH; ISMAY SAFE, MRS. ASTOR MAYBE, NOTED NAMES MISSING

Col. Astor and Bride,
Isidor Straus and Wife,
and Maj. Butt Aboard.

"RULE OF SEA" FOLLOWED

Women and Children Put Over
in Lifeboats and Are Supposed
to be Safe on Carpathia.

PICKED UP AFTER 8 HOURS

Vincent Astor Called
Office for Information

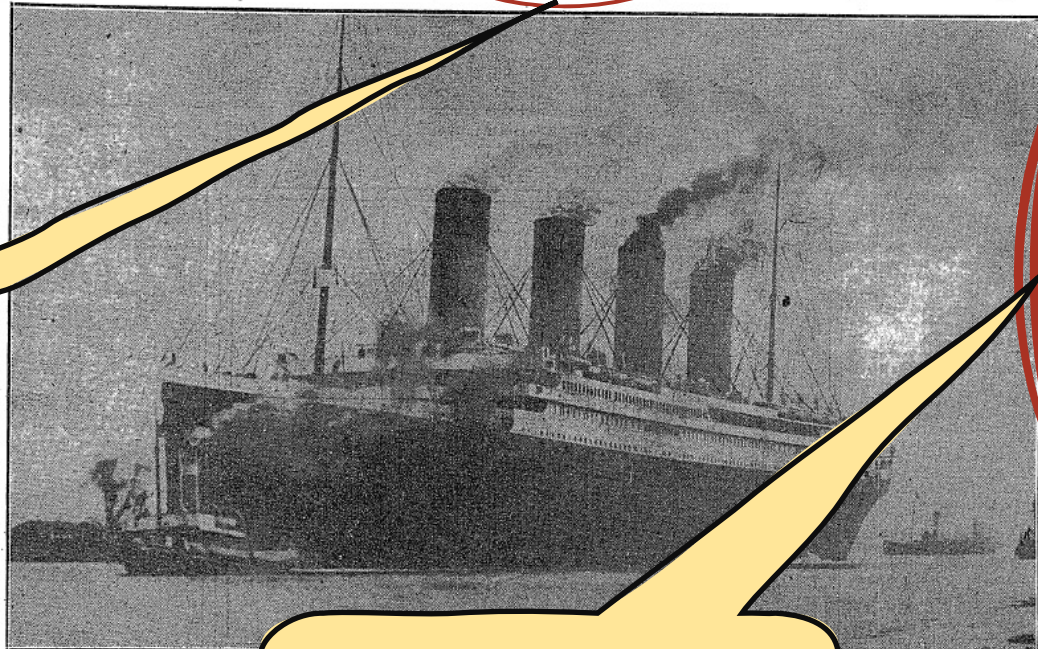
HOPEFUL ALL DAY

Manager of the Line Insisted
Titanic Was Unsinkable Even
After She Had Gone Down.

HEAD OF THE LINE ABOARD

J. Bruce Ismay Making First Trip on
Gigantic Ship That Was to
Surpass All Others.

The admission that the Titanic, the
biggest steamship in the world, had
been sunk by an iceberg and had gone
to the bottom of the Atlantic, probably
carrying more than 1,400 of her pas-
sengers and crew with her, was made
at the White Star Line offices, 9
Broadway, at 8:30 o'clock last night.
Than P. A. S. Franklin, Vice President



The Lost

Harbor.

Biggest Liner Plunges
to the Bottom
at 2:20 A. M.

RESCUERS THERE TOO LATE

Except to Pick Up the Few Hun-
dreds Who Took to the
Lifeboats.

WOMEN AND CHILDREN FIRST

Cunarder Carpathia Rushing to
New York with the
Survivors.

SEA SEARCH FOR OTHERS

The California Stands By on
Chance of Picking Up Other
Boats or Rafts.

OLYMPIC SENDS THE NEWS

Only Trip to Flash Wireless Mes-
sage to Shore After the
Disaster.

LATER REPORT SAVES 866.
BOSTON, April 15.—A wireless
message picked up late to-night,
relayed from the Olympic, says
that the Carpathia is on her way
to New York with 866 passengers
from the steamer Titanic aboard.
They are mostly women and chil-

Critical
relevant
details

Best
current
assessment

Additional details
and supporting data

Bottom-line
up front

Key info
still needed



CONCEPT THREE

DURING AN EMERGENCY DEPARTMENT VISIT,
THERE ARE 2 THINGS YOU NEED TO DO:

#1 DISPOSITION

#2 TIME DEPENDENT INTERVENTIONS

*Note: one of these things is *NOT* a definitive diagnosis!

OUR JOB IN THE ED...



What the patient HAS



What the patient does NOT have



CONCEPT FOUR



NOT MULTI-TASKING...

RAPID TASK
SWITCHING!

COGNITIVE OFFLOADING

ALL INFORMATION IS NOT CREATED EQUAL

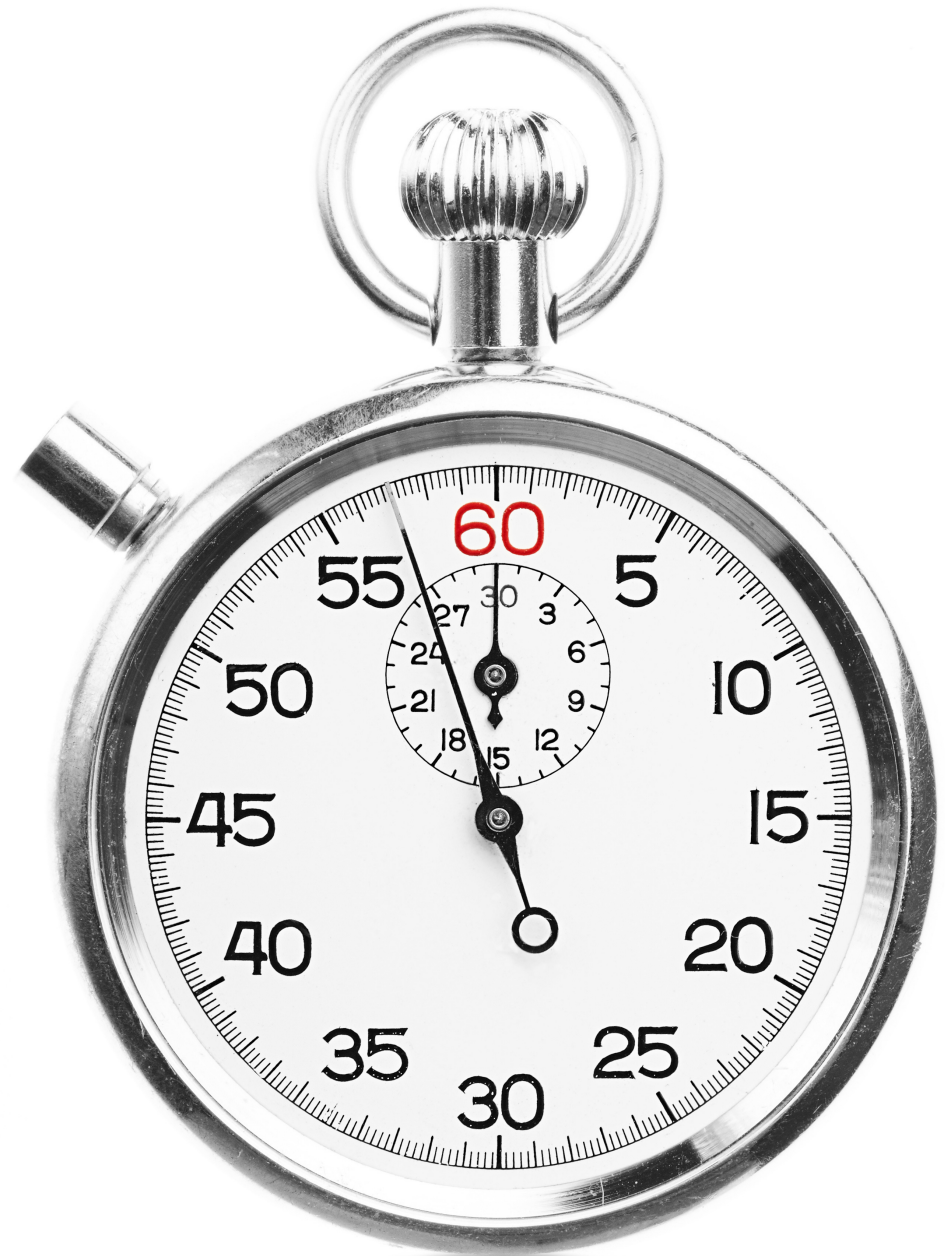


IT'S NOT YOUR
JOB TO KNOW
EVERYTHING ABOUT
EVERY PATIENT
EVERY TIME...



YOUR JOB IS NOT TO MISS ANYTHING BIG

YOUR TIME
IS A ZERO
SUM GAME





WHICH MISSES
MATTER MOST?



CONCEPT FIVE

YES

NO

MAYBE

?????

**YOU ARE
THE
DECIDER!**

KEY
DECISION
POINTS?





AND FINALLY...

KNOW WHEN YOU KNOW

MORE IMPORTANTLY...

KNOW WHEN YOU DON'T!



Don't let feelings get
in the way of thinking...





MEDICINE IS NOT A
GAME OF HOT
POTATO



INEVITABLY,
YOU WILL MAKE
MISTAKES

BE HUMBLE,
BE CURIOUS,
BE TENACIOUS

