TEACHING IMPROVEMENT SCIENCE (TIS) CURRICULUM: WEEK 1

Today's Agenda

- Introduction to TIS & Systems
- Break
- Individual Efficiency Outpatient
- Individual Efficiency Inpatient
- Wrap up

bit.ly/wk12022

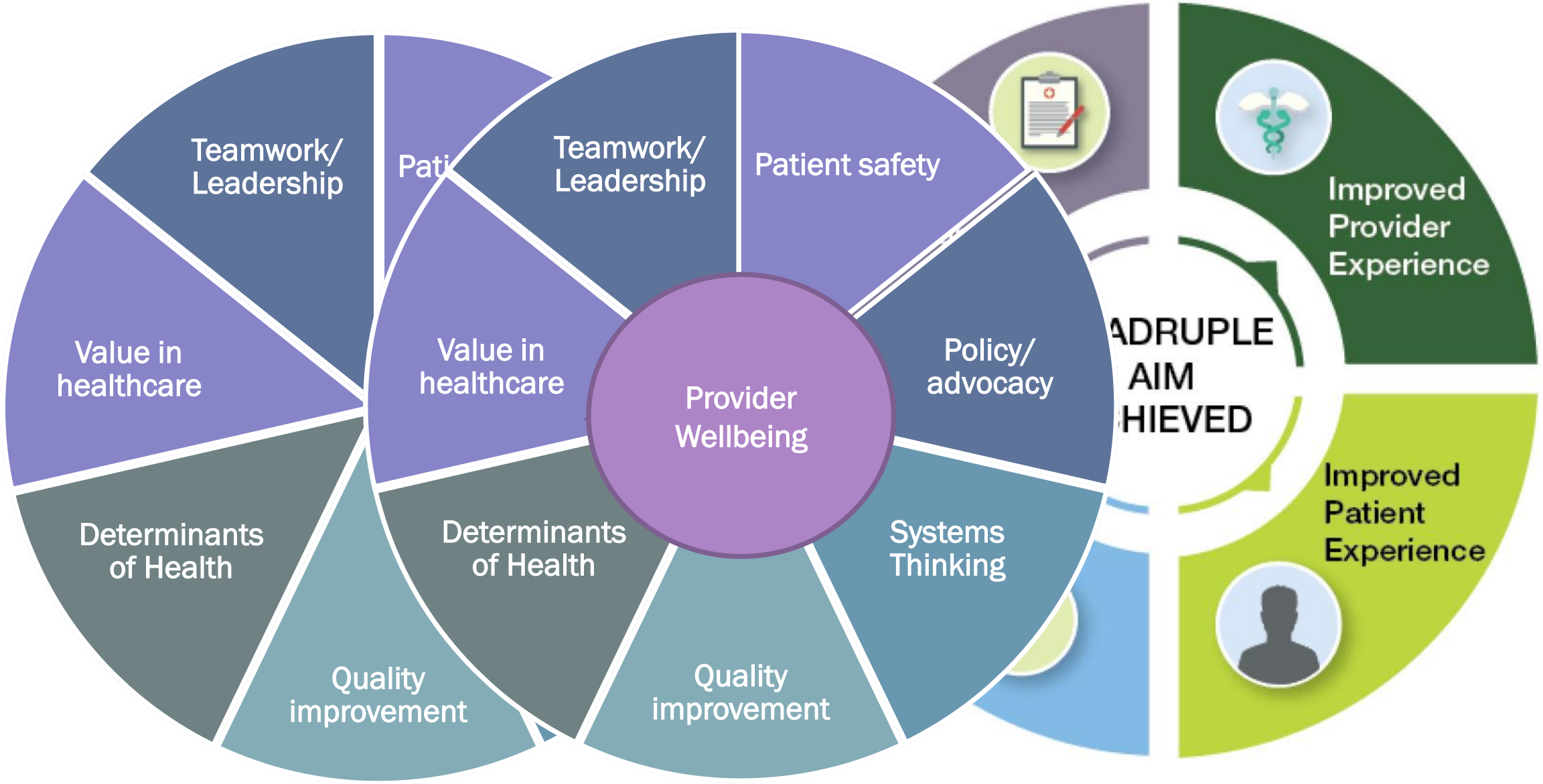
Case Sensitive!

Patient Safety Scavenger Hunt WINNERS!

- Red firm: Jeff Jung (37)
- Yellow firm: Ravneet Waraich (38)
- Green firm: Caroline McCormick, Nate Earp (38)
- Blue firm: Apoorva Bhaskara (44)

What is TIS?

- A Health Systems Science (HSS) Curriculum


Teamwork/
Leadership
Value in
healthcare
Determinants
of Health
Quality
improvement
Pati
Teamwork/
Leadership
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healthcare
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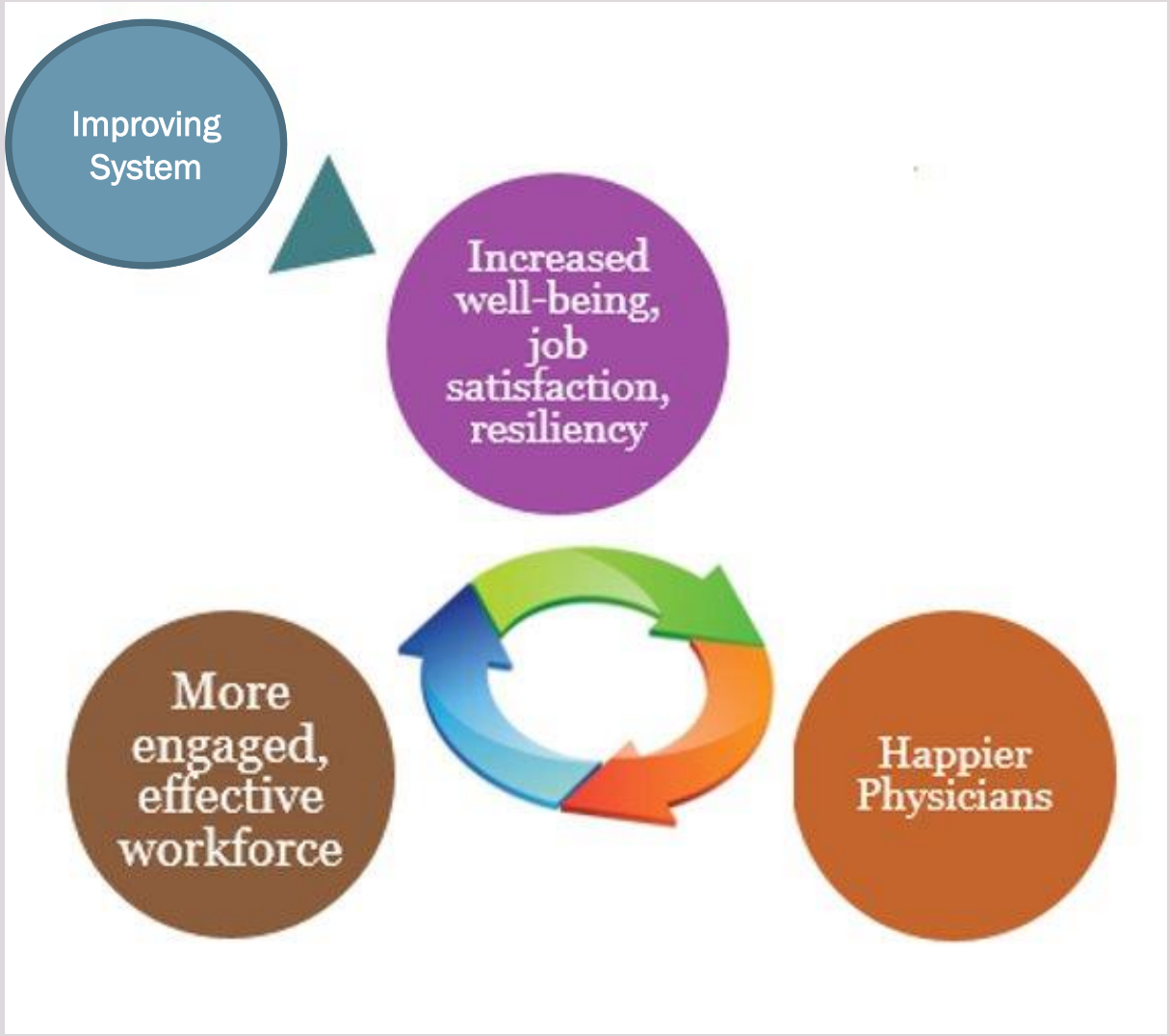
of Health
Quality
improvement
Provider
Wellbeing
Patient safety
Policy/
advocacy
Systems
Thinking
ADRUPLE
AIM
HIEVED
Improved
Provider
Experience
Improved
Patient
Experience

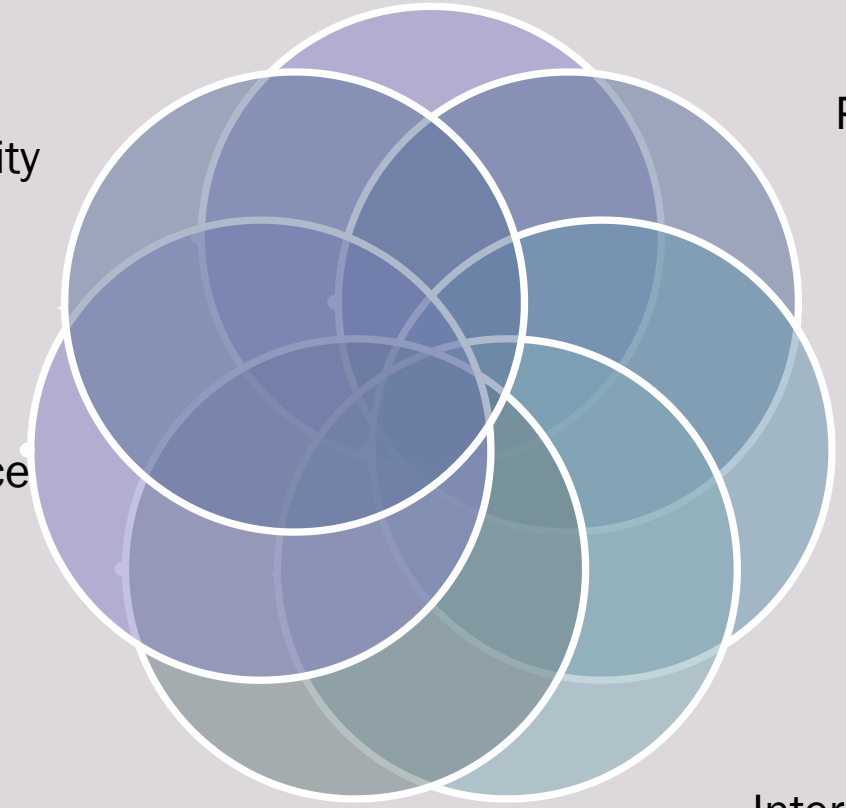
What is TIS?


Improving System
Increased well-being, job satisfaction, resiliency
Happier Physicians
More engaged, effective workforce

Your Wellbeing

What TIS addresses

Job satisfaction



Physical Health

Spirituality

Sleep

Stress/Resilience

Interpersonal relationships

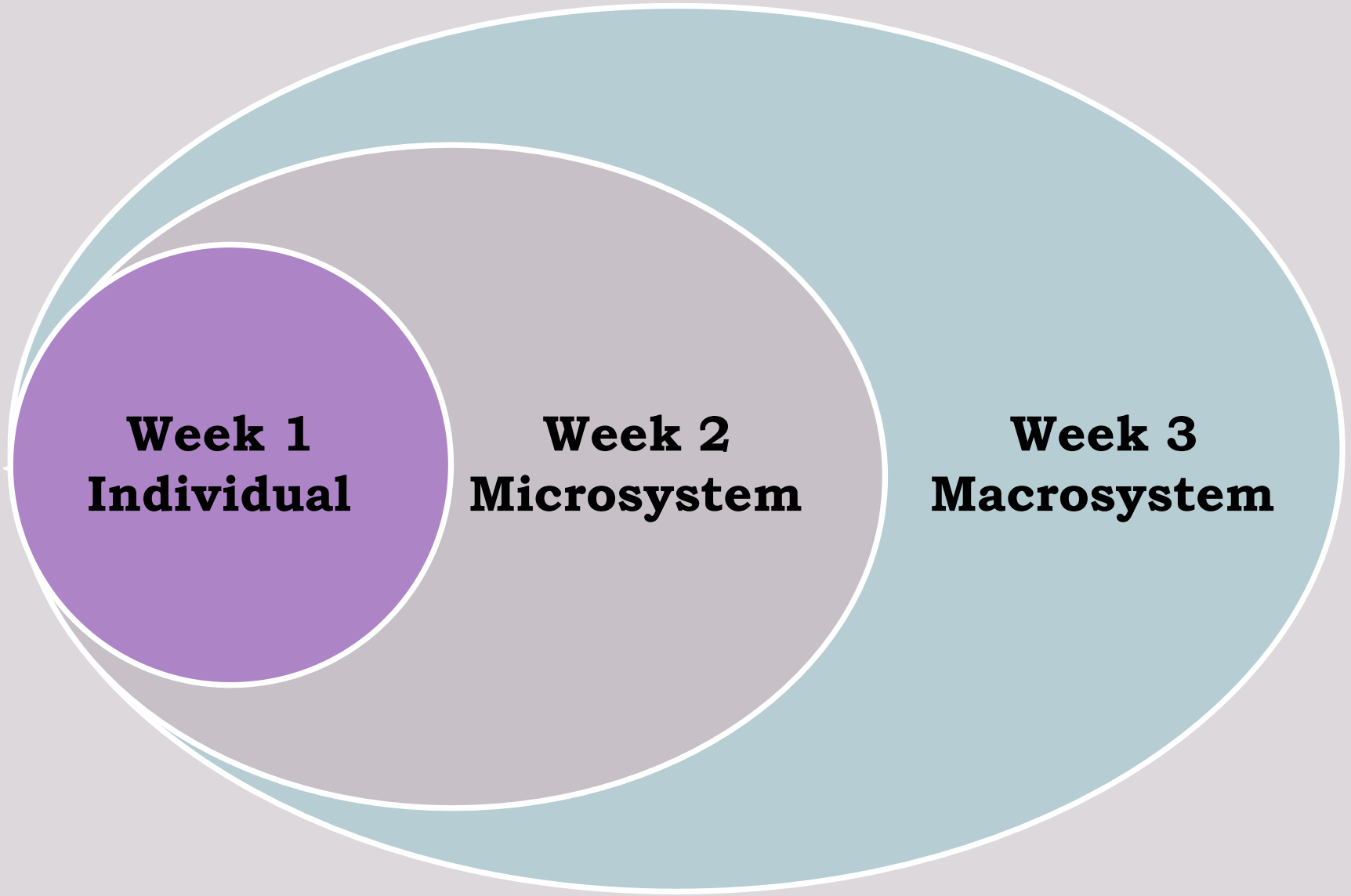
Finances

Week	1	2	3	4	5
Dates	8/10- 8/31	9/7- 9/28	10/5- 10/26	11/2-11/23	11/30-12/21
Topic	Systems 1: Intro & Clinical Efficiency	Systems 2: Microsystems & Tools for Improvement	Systems 3: Macrosystems & SDoH	Value-Based Care (+30 min)	Data Science (+30 min)

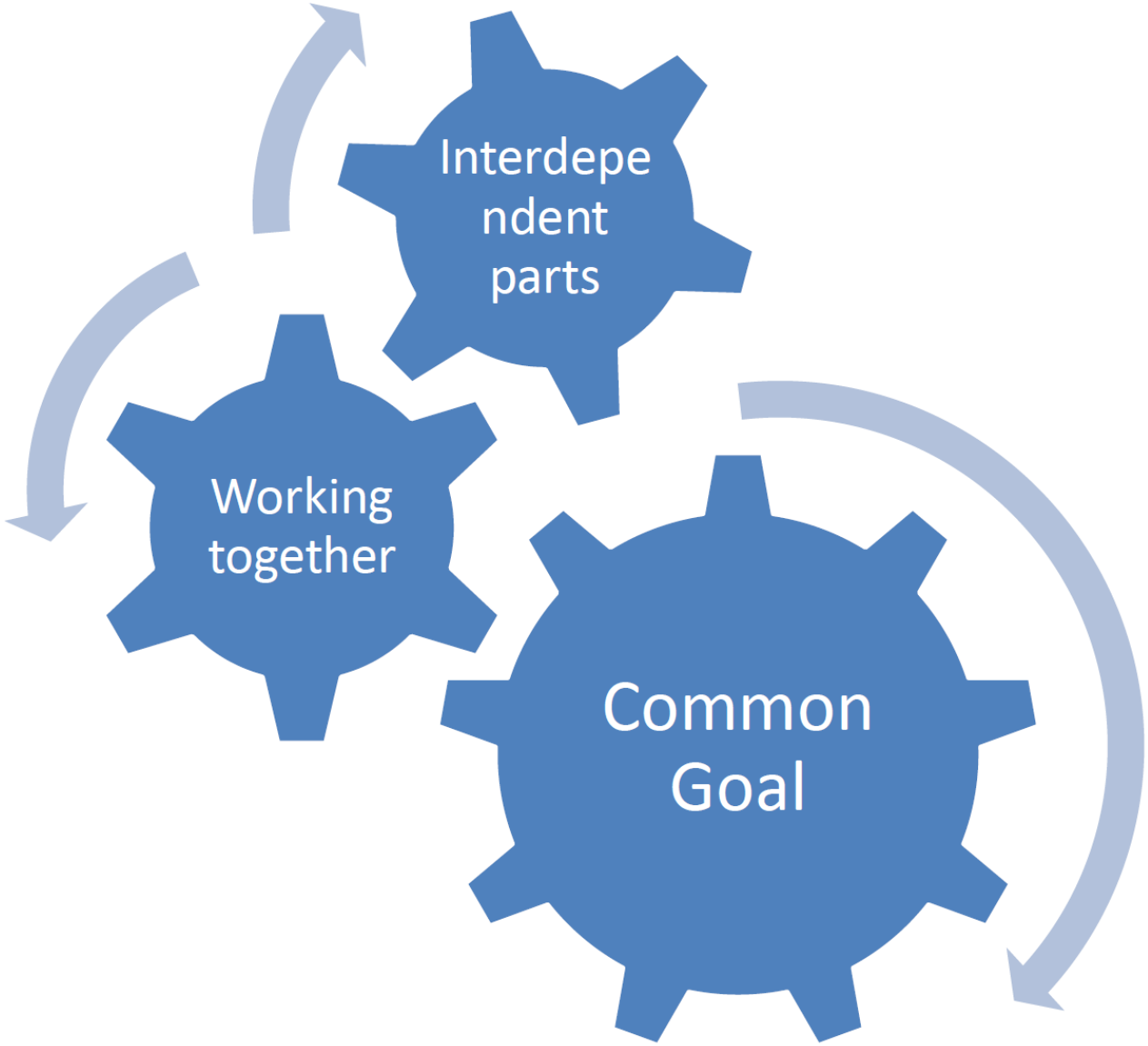
Week	6	7	8	9	10	11
Dates	1/11-2/1	2/8-3/1	3/8-3/29	4/5-4/26	5/3-5/24	5/31-6/21
Topic	Diagnostic Errors (+60 min)	Systems Errors (RCA) (+60 min)	Teamwork Simulation (+60 min)	Error Disclosure & Second Victim (+60 min)	Narrative Medicine (+60 min)	Present HSPs!

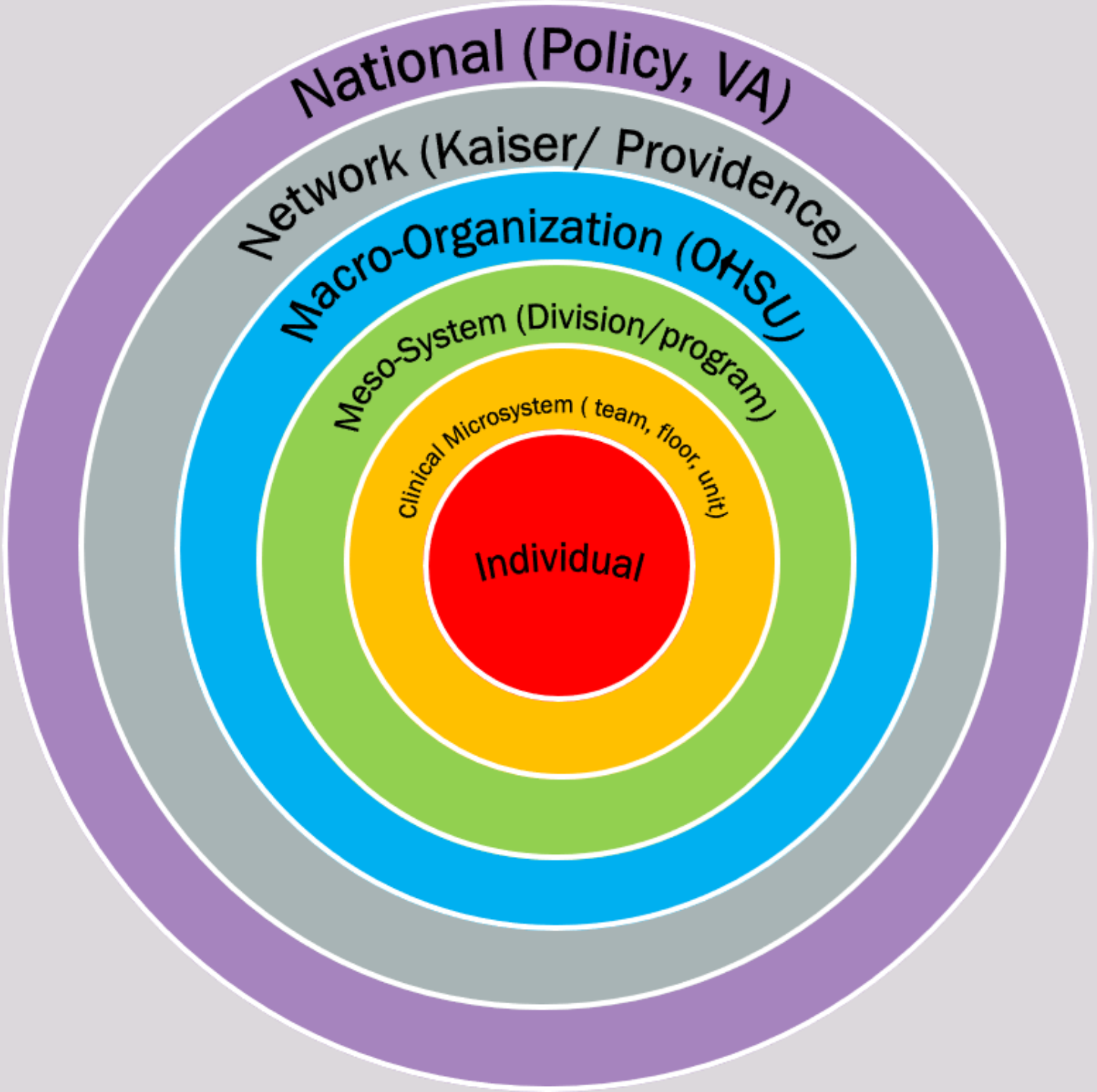
Health System Projects Will Be Completed Across Weeks 4-11

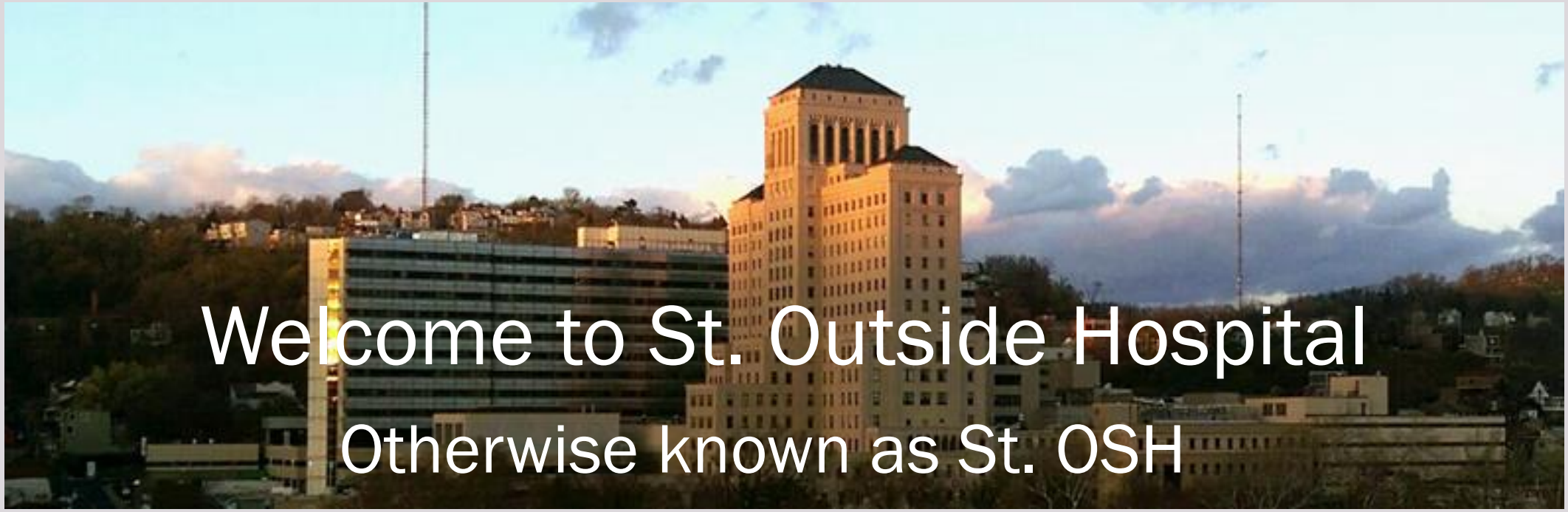
Systems Mini-Series



Systems Science




National (Policy, VA)
Network (Kaiser/ Providence)
Macro-Organization (OHSU)
Meso-System (Division/program)
Clinical Microsystem (team, floor, unit)
Individual



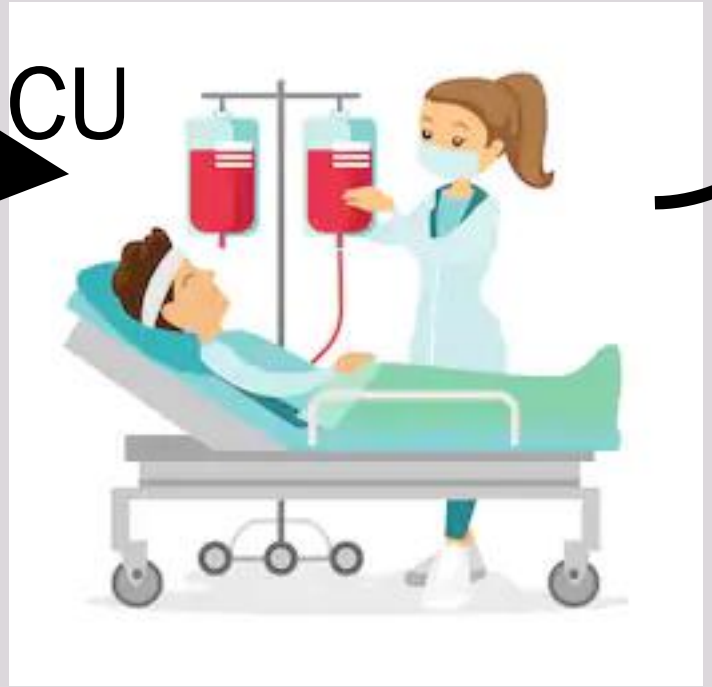
Welcome to St. Outside Hospital

Otherwise known as St. OSH

Credit: IHI Hospital Flow Academy

ED

ICU

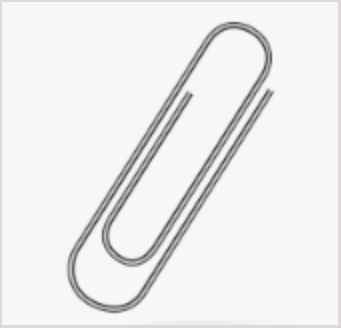


WARD

DC

A few baseline rules:

VS.



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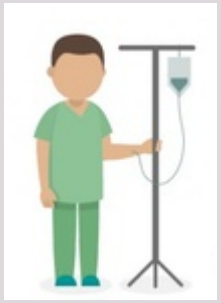

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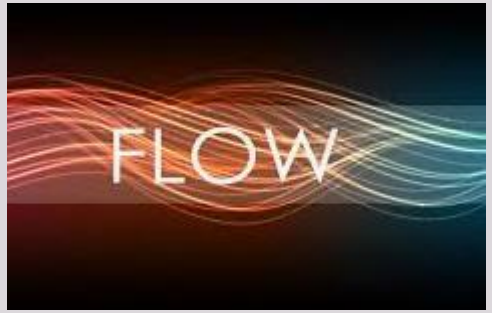


Basic overview:

Employees seated in order:

ED, ICU, Ward, Discharge Planner

Roll both die (two dice) with each roll.

1. ED rolls the die: move that many patients into the ED
2. ED rolls the die a second time: move that many patients to the ICU
3. ICU rolls the die: move that many patients (if available) to the Ward
4. Ward rolls the die: move that many patients (if available) to the DC planner
5. DC planner rolls the die: discharge that many patients (if available)

Keep a tally of all “discharged” patients to compare to the other team at the end!

Let’s get discharging!

Individual Behavior

You and your patient- this system can be impacted by:

- Time allocation
- Priorities
- Responses and Actions

Hospitalist got a puppy!

Subtract 1 from their roll

Microsystem

The team(s) you work with- this system can be impacted by:

- Expectations
- Responsibilities
- Workload

Discharge planner covering 2 teams

Divide their roll in half

Mesosystem

Local healthcare facilities- this system can be impacted by:

- Larger systems
- Subsystems
- Interactions

ICU patients diverted to your hospital

Double number of patients going to ICU

Macrosystem

National organizations and initiatives- this system *can impact your work with*:

- New theories
- Behavior changes
- Structural organization

New guidelines!

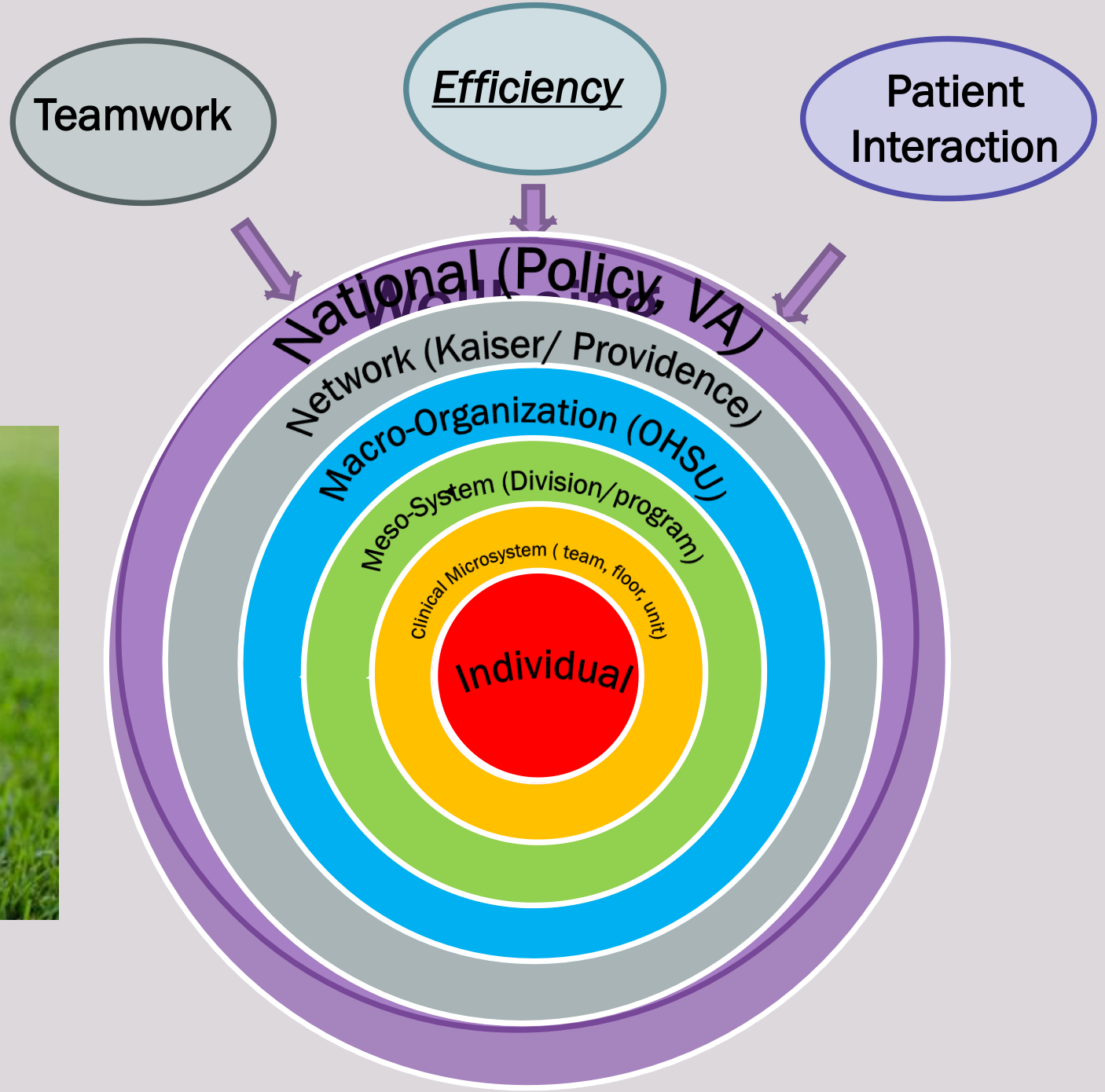
ICU skips a turn, resume next round

Wrap up

Individual Behavior	Microsystem
You and your patient- this system can be impacted by: • Time allocation • Priorities • Responses and Actions	Local healthcare facilities- this system can be impacted by: • Larger systems • Subsystems • Interactions
Mesosystem	**Macrosystem**
Local healthcare facilities- this system can be impacted by: • Larger systems • Subsystems • Interactions	National organizations and initiatives- this system *can impact your work with*: • New theories • Behavior changes • Structural organization

- What did you notice?
- How could these changes impact patient care?
- How could these changes impact provider and staff wellbeing?

- What would you tell the CEO when she asks for a report on length-of-stay at St. OSH?


Teamwork
Efficiency
Patient Interaction
National (Policy, VA)
Network (Kaiser/ Providence)
Macro-Organization (OHSU)
Meso-System (Division/program)
Clinical Microsystem (team, floor, unit)
Individual

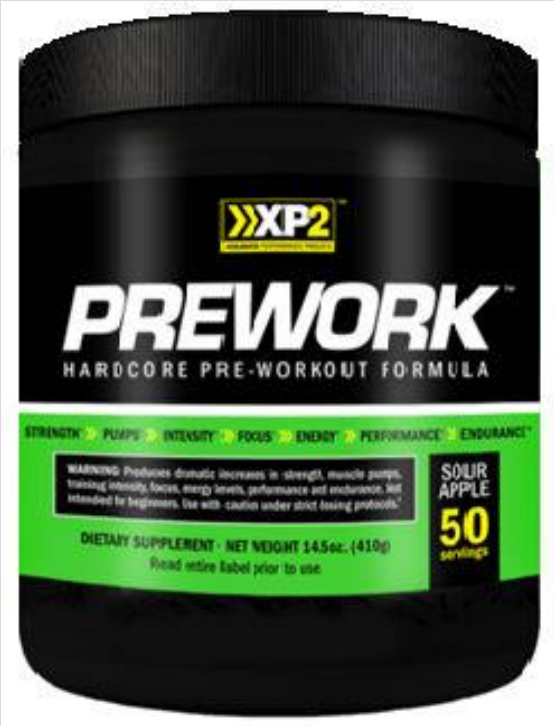
Why efficiency is important?

- Helps us get to other activities
  - *Exercise, dinner with friends, sleep*
- Better for patient care
  - *Happy patients*
  - *Spend more time at the bedside*
- Keeps staff and other team members happy and functional

- Efficiency training has been shown to decrease chart closure:
  - *4.42 days to 3.97 days*
  - *Both residents and faculty*
  - *84% of residents found workshops to be helpful*

https://www.aafp.org/dam/AAFP/documents/events/rps_pdw/handouts/res-47-skelly.pdf

Pre-work



- Assignment:
  - *Come prepared to talk about an area in which you would like to improve your clinical efficiency.*
    - Example: “Admitting a patient takes 2.5 hours. This causes me to stay too late at work.”
  - *Create a SMART goal for your problem.*

SMART

Specific

Can the detail in the information sufficient to pinpoint problems or opportunities? Is the objective sufficiently detailed to measure real-world problems and opportunities?

Measureable

Can a quantitative or qualitative attribute be applied to create a metric?

Actionable

Can the information be used to improve performance? If the objective doesn't change behaviour in staff to help them improve performance, there is little point in it!

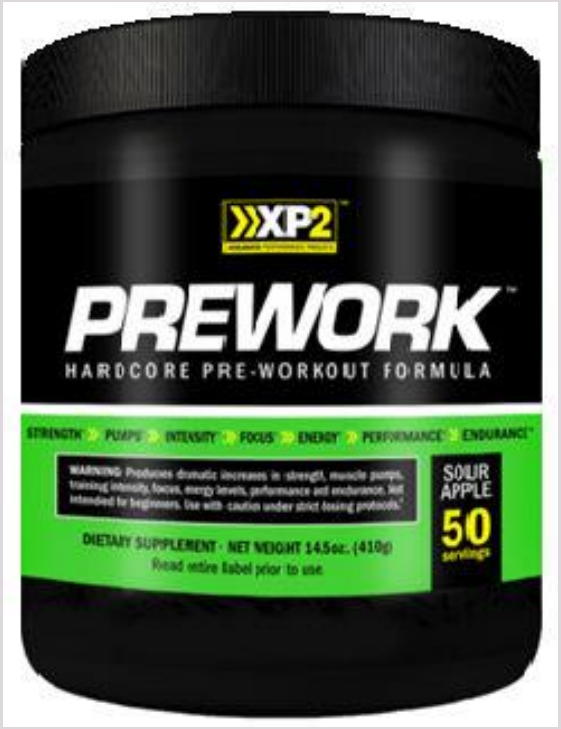
Relevant

Can the information be applied to the specific problem faced by the marketer?

Time-bound

Can objectives be set for different time periods as targets to review against?

Pre-work



- Assignment:
  - *Come prepared to talk about an area in which you would like to improve your clinical efficiency.*
    - Example: “Admitting a patient takes 2.5 hours. This causes me to stay too late at work.”
  - *SMART goal: “I aim to reduce my admission time by 45 minutes over the next rotation (three weeks).”*


BREAK

Today's Agenda

- Introduction to Systems
- Break
- Individual Efficiency Outpatient
- Individual Efficiency Inpatient
- Wrap up

Am I Outpatient Efficient?

- Efficiency Categories:
  - *Chronically inefficient*
  - *Volume-dependent inefficient*
    - High volume drives efficiency out of necessity, but low volume can tease you into relaxing and becoming inefficient.
  - *Efficient*
  - **Long-term efficient**
    - Unique to Primary Care!
    - Management of chronic diseases, health maintenance over time
    - **Use of EHR to support your work**
- **You might be outpatient inefficient if…**
  - *You finish your notes many days after the visit.*
  - *You stay in clinic until 6 pm finishing your notes.*
  - *You spend more time in the computer than talking with your patient.*
  - *Clinic is frustrating!*

Outpatient Activity

Before The Visit

Problem List & Disease Centered Care:
- Chart review last PCP note
- Problem list

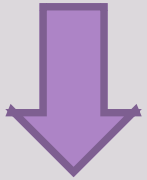
Medications
- Review medication list- anything you can stop?
- Are there any missing medications?

Recent clinical contacts:
- Recent messages or calls
- Consults
- Office visits/admissions
- Labs

Social history/Context
- Important social determinants of health
- Something fun!

Preventive Healthcare:
- Cancer screenings
- Immunizations

Your pre-visit agenda with patient:
1.
2.
3.
4.



Your To Do List:
1.
2.
3.
4.

Outpatient Activity

During the Visit

- Build the relationship
- Patient's perspective
- Agenda set
- Patient Interview & Exam
- Provide closure

1. Build the Relationship

- ALWAYS start by addressing the patient directly
- Introduce yourself (first name, last name), smile, (shake hands/bump elbows)
- Talk about the weather, “where are you from?”
- Informal conversation
- Eye contact
- Open posture, sit forward
- Tie in LPN/MA comments about reason for visit→ this moves you to patient’s perspective
    - Reduces lawsuits
    - Increases adherence
    - Build trust→ Patients sharing more information
    - Influence health outcomes
    - Patients are more likely to return for follow up
    - Provider satisfaction

2. Patient's Perspective

Ask the patient what topics they would like to cover

- The goal is to get a list
- You do NOT have to cover everything on their list today

Avoid premature diving

- Postpone diagnostic interviewing until their entire list is revealed

Helpful Phrasing: *"Before we address any of your problems today, I would like to hear a list of all your concerns." (return visits: "what's on your list today?")*

Patient's Perspective:

What Are We Actually Doing?

- Most physicians interrupt in 18-23 seconds to redirect the interview
  - *Marvel M, Epstein RM, Flowers K, Beckman HB. Soliciting the patient's agenda: Have we improved? JAMA. 1999;281(3):283-287.*
- 50% interrupt after 1 concern and 25% interrupt before any concerns are expressed
  - *Braddock IC, Edwards KA, Hasenberg NM, Laidley TL, Levinson W. Informed decision making in outpatient practice: Time to get back to basics. JAMA. 1999;282(24):2313-2320.*
- Between 30-80% of patient expectations are not addressed or identified
  - *Kravitz RL, Callahan EJ, Paterniti D, Antonius D, Dunham M, Lewis CE. PRevalence and sources of patients& unmet expectations for care. Annals of Internal Medicine. 1996;125(9):730-737.*
  - *Marple RL, Kroenke K, Lucey CR, Wilder J, Lucas CA. Concerns and expectations in patients presenting with physical complaints: Frequency, physician perceptions and actions, and 2-week outcome. Archives of Internal Medicine. 1997;157(13):1482-1488.*

3. Agenda Setting

Ask the patient to prioritize their list	Review your Pre-visit agenda of items you want to discuss	Ensure patients know that all their problems are important
• Decide if you can address all the issues at hand	• Negotiate order of items to be covered	• Encourage a return visit for any topics not able to be covered

Some Helpful Phrasing: “The problems on your list are complex and to do a good job may mean we can't cover all these issues today. I want to set the expectation up front that you may need to make another appointment to address the issues we can't get to today."

3. Agenda Setting- How To

Mr. Smith is a 68 yo M w/ HTN, DLD, obesity, uncontrolled DM2, moderate COPD, chronic lumbago on 60 MMEs/day, depression, tobacco and occasional alcohol use.

Your Agenda:
1. A1C 14%
2. Chronic opioid taper plan
3. Smoking cessation

What else?

What else?

What else?

Is there something else?

Mr. Smith's Agenda:
1. Back pain
2. Power scooter
3. Can't sleep
4. Dry mouth
5. Chest hurts

Shared Agenda:
1. New exertional chest pain
2. Chronic pain plan
3. A1C 14%

- *Some*thing eliminated 78% of unmet concerns
- NO increase in number of problems addressed per visit
- May reduce doorknob complaints
- NO increase in visit length

Heritage et al, Reducing Patients' Unmet Concerns in Primary Care: the Difference One Word Can Make. JGIM 2007.
Effectiveness of Intensive Physician Training in Upfront Agenda Setting, Brock et al, JGIM 2011.

4. Patient Interview & Exam

Go in order of the agenda of which you set

It’s time to hear the patient’s story

Ask targeted questions

5. Provide Closure

In the room:

- Signal Closure
- Summarize the visit
- Review your plan

Out of the room:

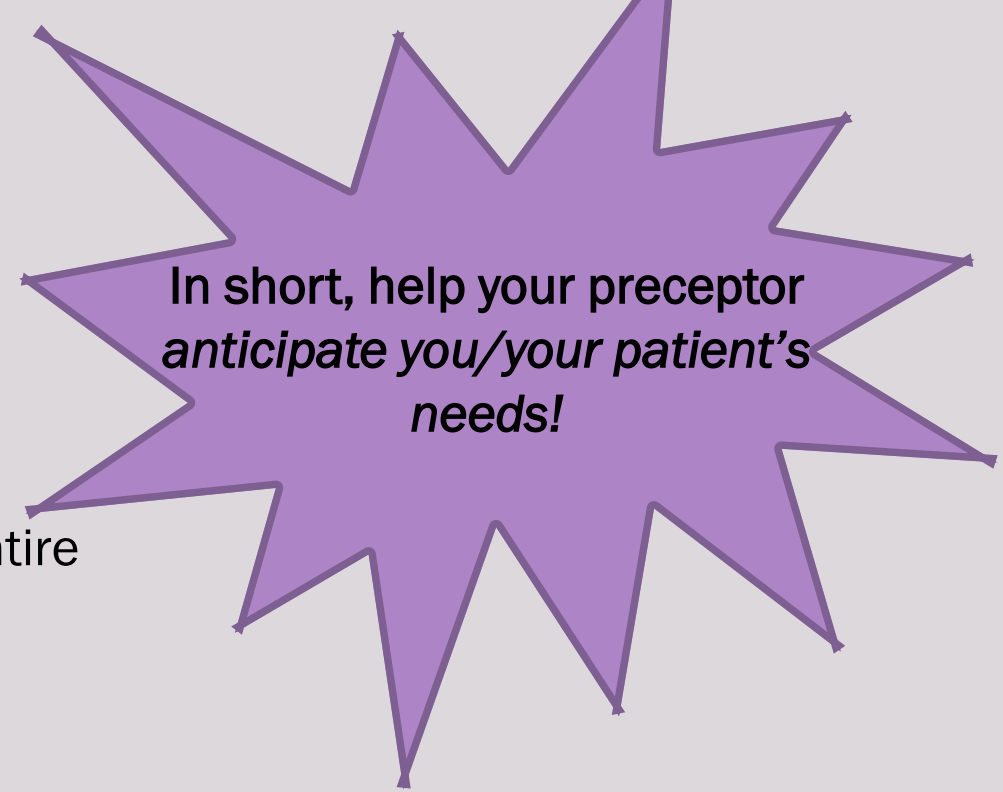
- Staff with your preceptor

Back in the room:

- Review the AVS with your patient.
- Ask the patient to teach back
- Ask the patient if they have any questions.

Stuff to tell your preceptor:

- If you're running behind
- If you need a minute to look stuff up
- Patient's context within the practice
- The vital signs (easy to over-look, but can change entire visit)
- Need for higher level of care (always lead with this)
- Things that may increase staffing time:
  - *Controlled substance prescriptions*
  - *Wound that will need examining*
  - *Potential procedure*
- Tell them what you're trying to improve on
- Bring a question and have fun



Outpatient Activity

After the Visit

DOCUMENT TOPICS COVERED THIS VISIT

DOCUMENT WHAT NEEDS TO BE ADDRESSED NEXT TIME

MANAGE YOUR IN-BASKET

After the Visit
How can I be “in-basket” efficient?

- Use the EHR
- Maintain positivity
- Delegate
- Know your resources
- Set expectations about non-visit-based care
- Make improvements!

You are covering for a colleague: “We talked about that pill for my private area at the visit last week. Can I try it?” You look and no documentation is found.

“So your MA sent my Oxy prescription to the wrong pharmacy again, and I’m still upset that you wouldn’t give me the sleeping pills, just FYI.”

“Hi there I was hoping you could make sure my med list is accurate, here’s the list of the 32 I mentioned the other day…”

“Hey Doc, the other day I noticed blood in my stool and so I thought about what I had ate that day and realized I hadn’t checked my sugar and I did and it was 450. I haven’t been peeing a lot but I haven’t peed in a while and I think I’m out of my Wymbax?

Can you help with that?”

COVID has really opened up use of non-visit based care (MyChart, secure messaging).

Set expectations about appropriate use of this (length of messaging/question, urgency, ability to respond)

Full day of clinic

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  - *Volume dependent inefficient*
    - High volume drives efficiency out of necessity, but low volume can tease you into relaxing and becoming inefficient.
  - *Efficient*
- You might be inpatient inefficient if…
  - *You MUST be here until 7pm whether you have 2 or 7 patients.*
  - *You are starting late call without having completed plans/notes on old patients*
  - *You can't see all your patients before rounds*
  - *Admitting a patient takes longer than 1.5 hours on average*

Inpatient Activity: CPRS Efficiency

- Your senior tells you that the AOD just called. You are getting a new patient Mr. Jones 1234 from the ER.
- Write down what steps you would typically do next when admitting a new patient.

Journal of Hospital Medicine® Presented by shm®

HOW MUCH TIME DOES AN INTERN NEED TO ADMIT A NEW PATIENT?

Alexis Visotcky[2]; Jason Slagle[3]; Kathlyn Fletcher[1]; Marilyn Schapira[4]; Matthew Weinger[3]; Sergey Tarima[2]

[1]Milwaukee VAMCMedical College of Wisconsin, Milwaukee, WI

[2]Medical College of Wisconsin, Milwaukee, WI

[3]Nashville VAMCVanderbilt University, Nashville, TN

[4]Philadelphia VAMCUniversity of Pennsylvania, Philadelphia, PA

- Abstract at SHM 2012
- 25 Interns at a single VAMC
- Spent on average 107 min during first 8 hours after admission
  - *In the first 4 hours they spent:*
    - 32min documenting
    - 16min communicating w/other healthcare professions
    - 15min at the bedside
  - *Number of months an intern was in training negatively correlated with time spent on admission*
  - *Team census was not correlated with time spent on patients*

Inpatient Efficiency: Admitting a Patient

Data Collection

- **Primary Data**
  - *Labs*
  - *Vitals Signs*
  - *Medications/allergies*
  - *Imaging*
  - *Procedures*
  - *(Past Medical Hx)*
- **Secondary Data**
  - *Specialist Notes*
  - *PCP Notes*
  - *DC summaries*
  - *ED verbal sign out*
  - *ED notes*
  - *(Past Medical Hx)*


COME ON
DOWN!
GET TICKETS


Denise
I Was Born
9 Days
CRUISE/CAR

What’s your bid??

Anchoring Bias

- Anchoring effect occurs when individuals use initial pieces of information to make subsequent judgements.

- The rationale of an anchor is not always justified or conscious.

Inpatient Efficiency: Admitting a Patient
-The problem with secondary data

- <u>Secondary Data</u>
  - *Specialist Notes*
  - *PCP Notes*
  - *DC summaries*
  - *ED verbal sign out*
  - *ED notes*
  - *(Past Medical Hx)*

Bias

Not always accurate

Time consuming

Steps to Admitting a Patient

Whatever you do. Make it standard. Always review the same way every time.

- *It will help you to not miss anything*
- *Become much faster*

Steps to Admitting a Patient

Before ED sign out whenever possible:

1) Chart review primary data
    1. Vitals
    2. Labs
    3. Imaging
    4. Procedures
    5. Medications/Allergies
2) ED RN Triage note with chief complaint

Less likely to miss what will kill them in next 12 hours

Faster

Differential Generating

Steps to Admitting a Patient

During ED sign out:

3) Keep it professional and brief

- The ED is there to triage the patient, not necessarily diagnose them
- They have a bunch of other patients to care for (and so do you)
- Mitigate anchoring bias
  - *I often prefer to READ the ED notes once I've come to my own conclusions rather than hear about it during verbal sign out BEFORE I've been able to see the patient*
- If there is a concern about level of care or appropriateness for the floor, then talk to your senior/attending

Steps to Admitting a Patient

After ED sign out:

4) Limit yourself to 5 minutes of directed chart review

- Ask specific questions of the chart using DC summary & PCP/Specialist notes
  - Recent phone calls from patient to the VA, often reveal social issues
  - Recent med changes
  - Concerns from recent visits that might be pertinent
  - Procedures
  - Disease specific concerns/plans
    - *Cancer patient's chemo regimen*
    - *CHF patient's last medication changes/plans per cards*
    - *PCP visit noting any med changes or referrals*

Steps to Admitting a Patient

Interview:

5) See the patient

- The patient interview is PRIMARY DATA
- Ask the PATIENT questions, not just the chart
- Bring a written or printed out medication list to do med rec on your initial encounter

Steps to Admitting a Patient

Orders & Notes:

6) Orders

- **Skeleton orders (bed order, VS, tele, etc.) should be put in ASAP after ED sign out**
    - *This allows patient to transition to floor and RN to start their workflow*
    - *Home meds should NOT be added until after you have confirmed during patient interview and have run the problem list/plan with your senior*

7) Notes

- **Dependent on your personal workflow:**
    - Concurrent w/primary data chart review
    - *After sign out and before seeing the patient*
    - After seeing the patient
    - *All the above*

Steps to Admitting a Patient

Further Reading:

8) Further Chart Reading

- *Only after orders are done, patient is seen/examined, and you've nearly completed your note*
- *This is time-independent and can occur as you have availability*
  - Might read as you put more thought into your H&P if you have time
  - Some might occur the following day

Summary Inpatient Admission

Find a pattern and stick to it

- Less likely to miss things
- Get faster

Use PRIMARY data

- Helps limit anchoring
- More likely to catch lab & vital sign abnormalities
- Helps you focus on the problem at hand
- Limits note reading time

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WISC Wrap-Up

Problem Statement

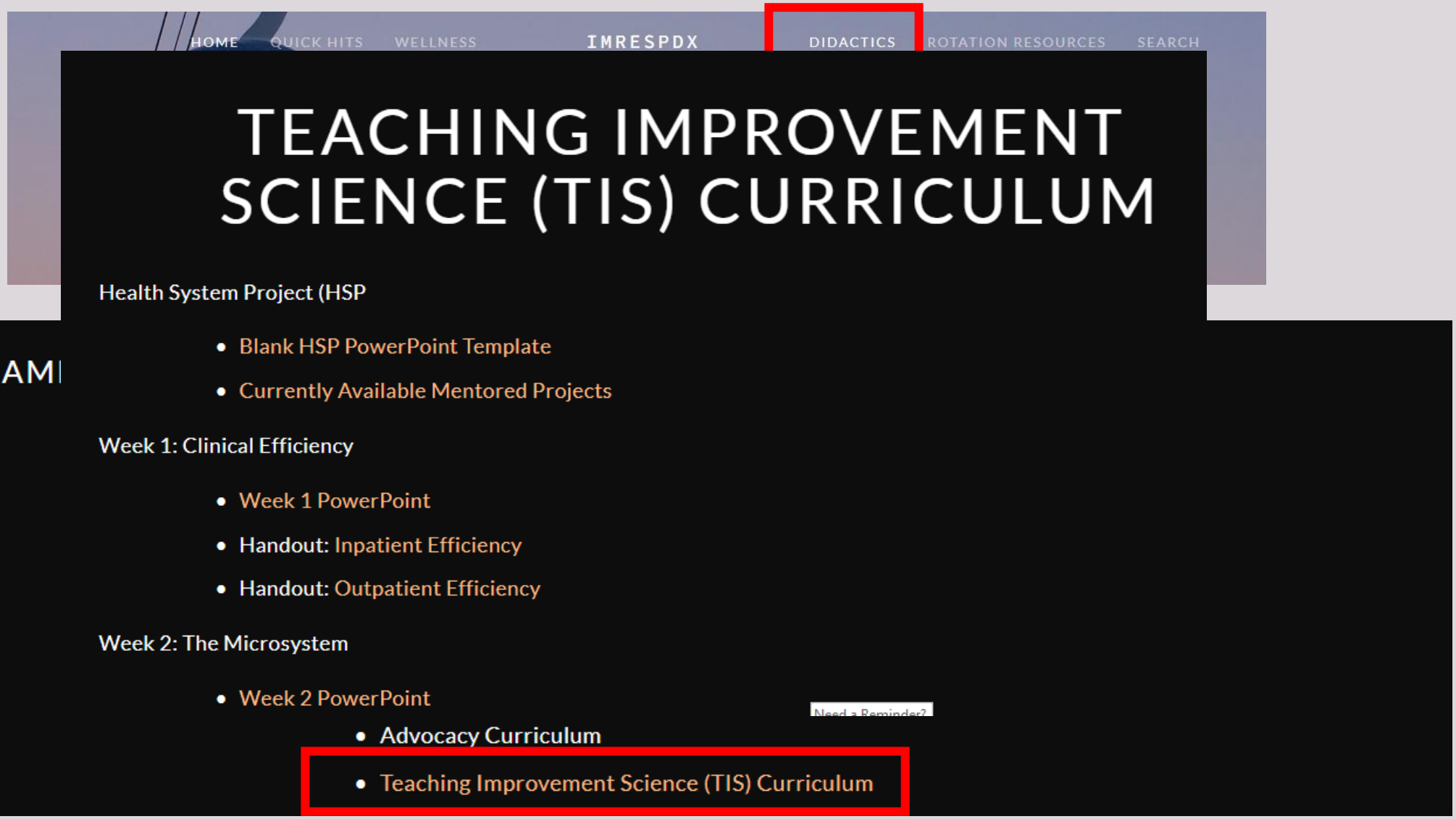
Admitting a patient takes 2.5 hours. This causes me to stay too late at work."

SMART goal

"I aim to reduce my admission time by 45 minutes over the next rotation (three weeks)."

Need a reminder?

- All this information is available on IMRESPDX.com



PSI Reporting

Reminder: The firm with the most PSI reports by November 1st will win a prize!

FEEDBACK

bit.ly/wk1fb

Case Sensitive!