

Dylon Gookin, MD

¹Department of Medicine, Division of General Internal Medicine, Warren Alpert Medical School of Brown University;

Introduction

Good doctors are good teachers. It's as simple as that. Though not every doctor practices in academia, good doctors are constantly teaching their patients, and the best ones are effective in how they communicate. Over the course of my three years in residency, I strove to be the best clinician I could be, and constantly sought out teaching opportunities to this end. Here, I present the culmination of hours of work spent in lecture development and design for impromptu and more organized teaching sessions.

Guiding Principles

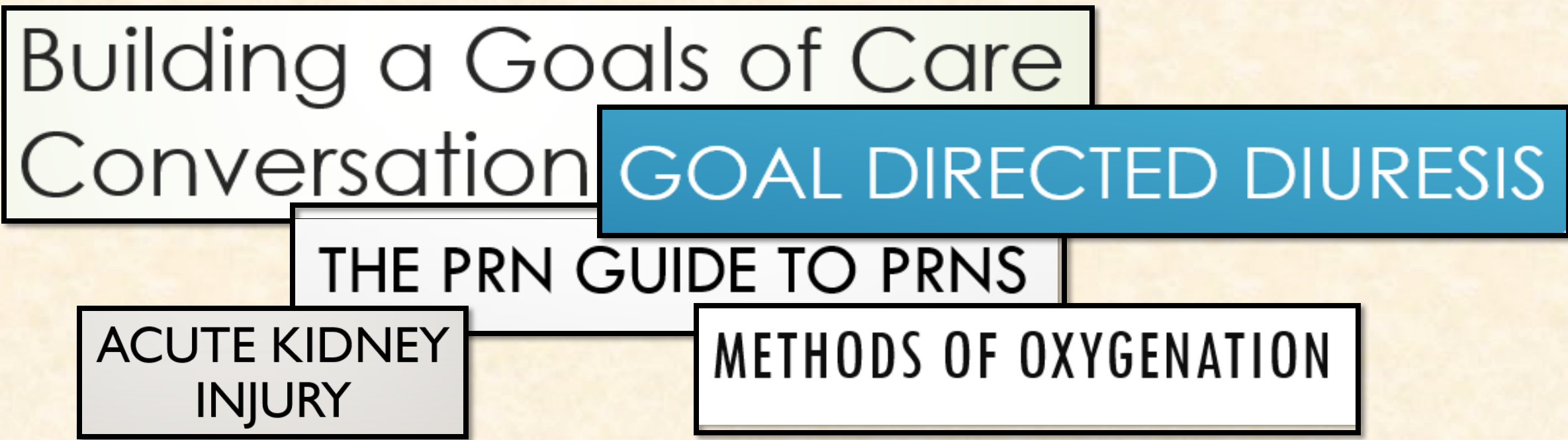
- Not "Drinking from the Fire Hydrant"**
 - Lectures should inherently identify critical information from fluff and accessory
- Audience consists of objectively capable learners**
 - Infantilizing audience members leads to over-teaching of basics and paternalistic practices that is often unnecessary, and distracts from learning
- "If you build it, they will come"**
 - Good teaching rarely mandates attendance

Challenges

- Medicine encompasses a variety of learners**
 - Large lectures will have learners that are decades apart
 - Even Chalk talks will have audience members spanning years of different learning levels
- Practice changes faster than lectures remain relevant**
 - Outdated information draws skepticism to the rest of a lecture
 - New doctors are challenged and practiced in learning more, faster than previous generations
- Students and teachers are both short on time and energy**
 - Information must be entertaining and/or direct to ensure complete delivery

A Variety of Lecture Types

Chalk Talks



Chalk Talk +

Senior Year: Survival
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Intern Year: Survival
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Lectures

Polypharmacy

SCRATCHING THE SURFACE

Analgesia and Sedation in Mechanically Ventilated Patients

Sub-Internship Virtual Curriculum


Transitions of Care

Bleeding

Chest Pain

Dyspnea

Brown Medical School Sub-Internship Curriculum



Lessons Learned

Less is More

- Most of the information compiled for lecture is cited from well-known sources: oft-cited textbooks, journals, UpToDate articles, etc. The ease of access to this information is also its greatest barrier to entry: the sheer volume is overwhelming. Worse, contributing to that volume is a common pitfall, as an overly "comprehensive" lecture may, at first pass, seem more helpful than one that is sparse. Tending to volume is a critical, if time consuming part of lecture design.

The Highs and Lows of "Clinical Cases"

- Chalk talks are often well received because they are prompted by specific patients. Centralizing lectures around theoretical cases roots the information to concrete context in a similar way. But, at the same time, clinical cases are often designed to teach a single concept, and the nuances of interlinked diseases can lead to entirely different conclusions in real life.

Audience Engagement is Critical

- The promise of knowledge is not enough incentive for even the most focused learners. Keeping an audience engaged requires balancing content with humor, practical exercise of learned concepts, and connection to real-life relevance.

Next Steps

- Collect more** objective data on the utility of my lectures
- Experiment more** with question/engagement design
- Bridge the gap** between citing critical studies and utilizing their conclusions

Collaborators

- Chalk Talks: too many attending and resident mentors to list
- Chalk Talk +: support from faculty and chiefs to allow me to present
- ICU Morning Report: James Simmons, MD
- Sub-Internship Virtual Curriculum:
 - Hussain Khawaja, MD
 - Aishwarya Vishwanath, MD
 - Tiffany Ho, MD

Audience Engagement

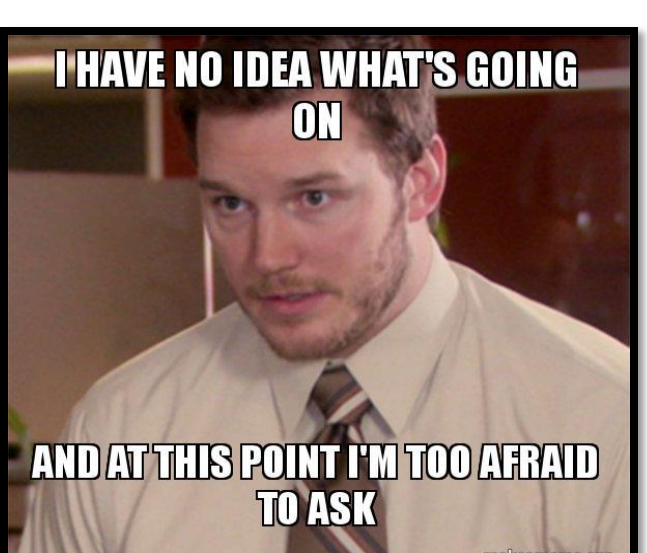
Triage Practice

What's going on? Which do you see soonest?					
A.	B.	C.	D.	E.	F.
What's going on? Which do you see soonest?					
1. Inf. MI Progressive over 10/2 radiating to L arm and jaw T: 98.6 F° BP: 88/76 HR: 39 RR: 22	4. MSK Onset 2 months ago, sharp, waxing/ waning, T: 99.1 F° BP: 105/68 HR: 88 RR: 17	1. Aor. Di. Sudden, "tearing," 9/10 sensation radiating to back T: 100.1 F° BP: 110/64 HR: 76 RR: 20	3. GERD Intermittent epigastric burning sensation, worse after eating T: 98.6 F° BP: 154/87 HR: 88 RR: 18	1. RP Bleed Sub-acute onset, generalized, S/p PCI w/ DES to LAD 2 hours prior T: 99.6 F° BP: 89/59 HR: 122 RR: 15	2. Afib Insidious onset w/ palpitations and SOB T: 97.8 F° BP: 142/71 HR: 130 RR: 21 O2: 97%; RA

Real Examples from EMR

Situation

You get your very first page.



ICU Orders from Order Sets

ICU MICU Analgesia-Based Sedation & Delirium Protocol

Maintain RASS Score 0 to Neg 2

Routine. Until discontinued. Starting today at 1537. Until Specified

Goal of agitation treatment is to obtain and maintain RASS Score 0 to Neg 2.

Maintain CPOT Score < 3

Routine. Until discontinued. Starting today at 1537. Until Specified

Goal of analgesia treatment is to obtain and maintain CPOT < 3.

Maintain CAM-ICU Negative

Routine. Until discontinued. Starting today at 1537. Until Specified

Goal of delirium treatment is to obtain and maintain CAM-ICU negative.

Assess for Pain

Routine. Until discontinued. Starting today at 1537. Until Specified

Every 2 hours at minimum and/or when pain medication is administered. Using CPOT score.

Assess for Agitation

Routine. Until discontinued. Starting today at 1537. Until Specified

Every 2 hours at minimum and/or when medication is administered/rate changes. Using RASS score.

Assess for Delirium

Routine. Until discontinued. Starting today at 1537. Until Specified

Every 4 hours at minimum. Maintain RASS Score of 0 to Neg 2 first. Using CAM-ICU.

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Guiding Principles

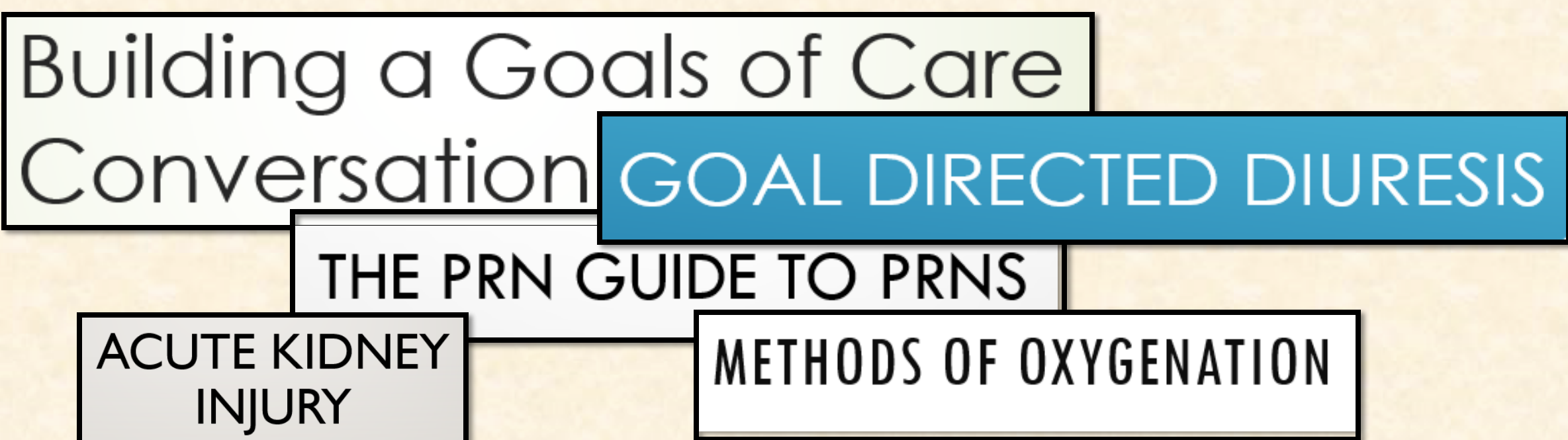
- **"Drinking from the Fire Hydrant" isn't healthy or helpful**
 - **Students struggle to parse critical information from fluff**
- **Medical students are Adults**
 - **Could not reach medical school without proven capacity and talent to learn**
- **"If you build it, they will come"**
 - **Good teaching rarely mandates attendance**

Challenges

- **Medicine encompasses a variety of learners**
 - **Large lectures will have learners that are decades apart**
 - **Chalk talks address learners that are an entire medical class apart**
- **Practice changes faster than lectures remain relevant**
 - **Outdated information draws skepticism to the rest of a lecture**
 - **New doctors are challenged and practiced in learning more, faster than previous generations**
- **Students and teachers are both short on time and energy**
 - **Information must be entertaining or direct; ideally both**

A Variety of Lectures

Chalk Talks

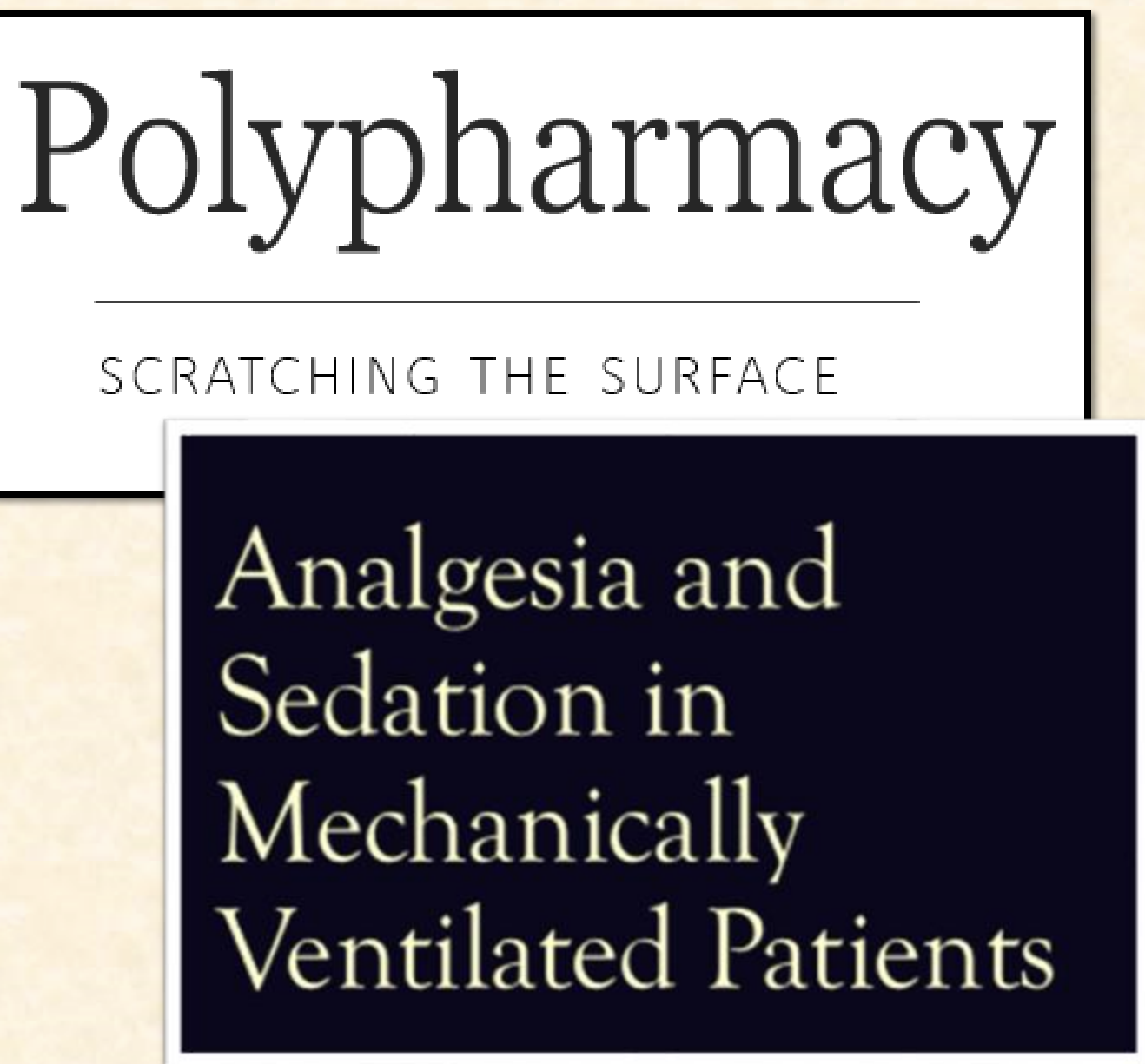


Chalk Talk +

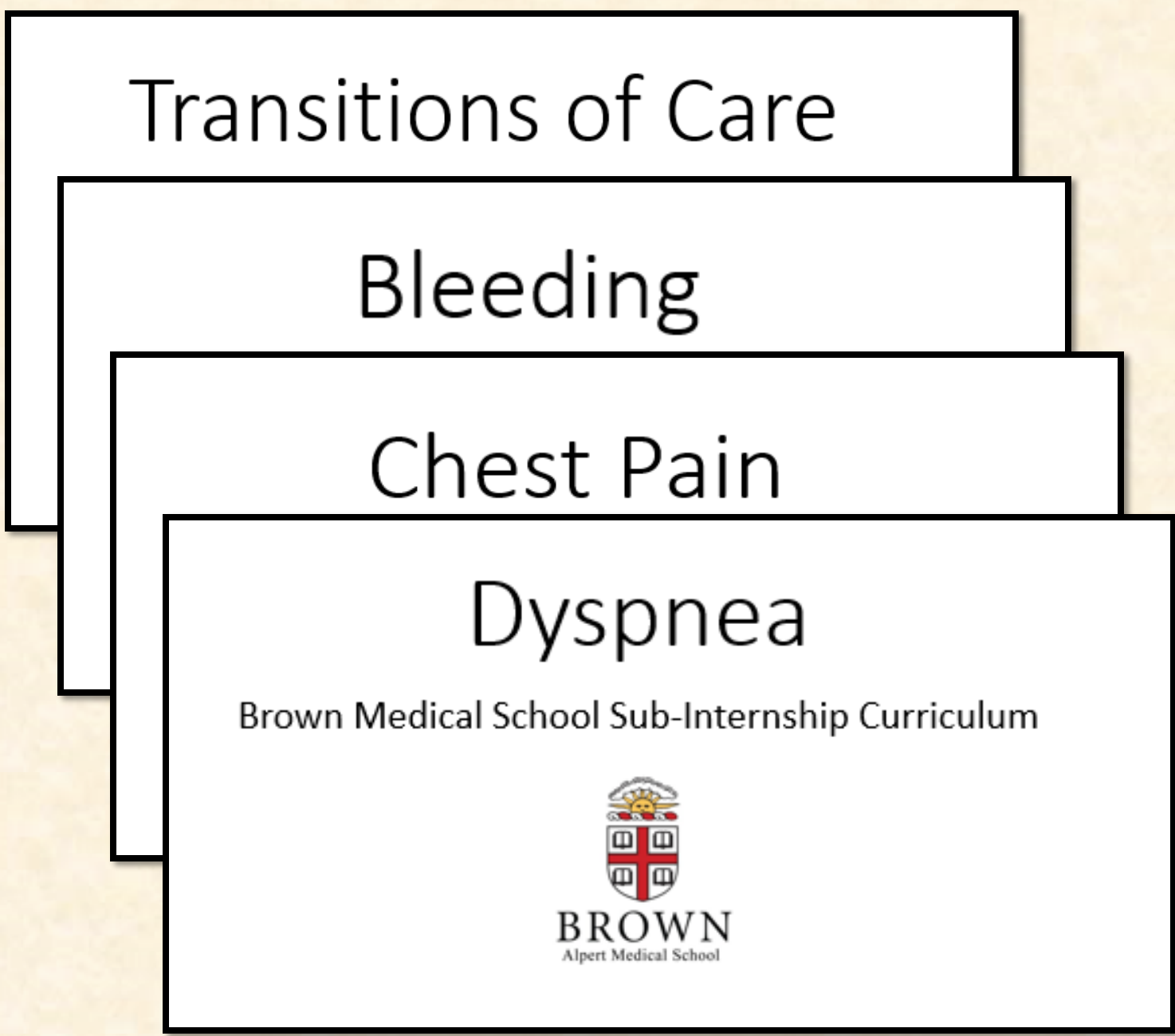
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Lectures



Sub-Internship Virtual Curriculum



Lessons Learned

- **More is fast, Less is slow**
 - Most of the information I've taught is easily found in the most often cited textbooks, journals, or UpToDate articles. The ease of access to this information makes it feel like it's useless to recite, but physical access to the information isn't the biggest barrier to utilizing it: the sheer volume of it simply overwhelming. Worse, contributing to that volume is easy, as an overly "comprehensive" lecture may seem more helpful than one that is sparse.
- **The Highs and Lows of "Clinical Cases"**
 - Chalk talks are often well received because they are prompted by specific patients. Centralizing lectures around theoretical cases roots the information to concrete context in a similar way. But, at the same time, clinical cases are often designed to teach a single concept, and the nuances of interlinked diseases can lead to entirely different conclusions in real life.
- **Audience Attention = Goals of Care**
 - The promise of knowledge is not enough incentive to keep an audience engaged. And without audience engagement, a lecture is merely a practice in ego stroking. But good engagement design is another challenge entirely.

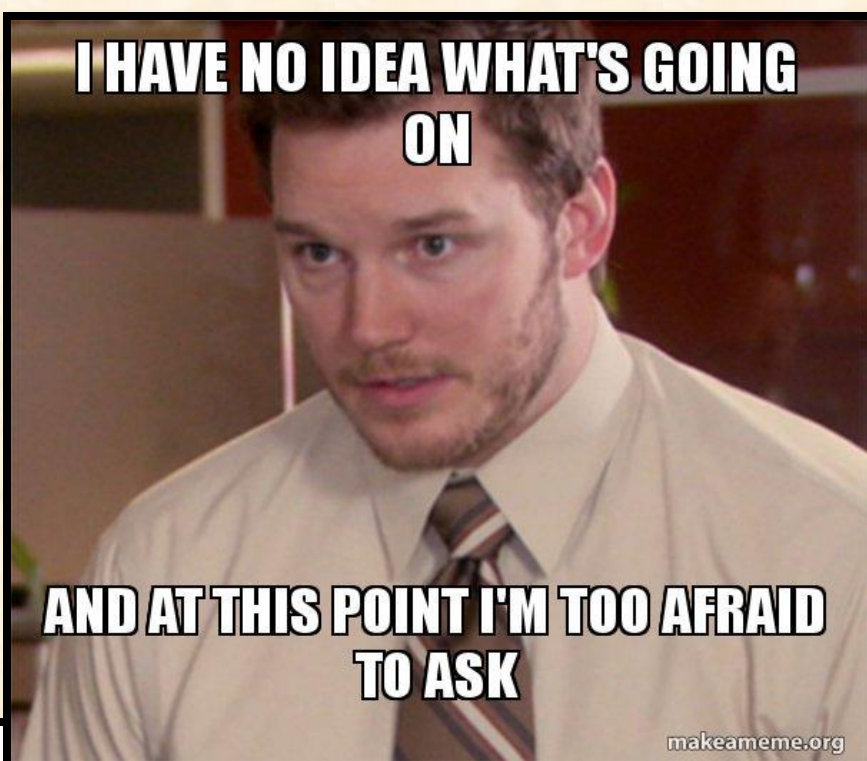
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