

Optimizing Teaching in the O.R. Pearls for Success

SASGOG Breakout Session
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Disclosures

- Drs. Ollendorff and Rone have no disclosures or conflicts of interest
- Dr. Ollendorff is a faculty member and co-chair of the APGO Surgical Education Scholars Program
- Dr. Rone is a graduate of the APGO Surgical Education Scholars Program

Objectives

- To provide some simple tips to improve your surgical teaching
- To learn from each other and share ideas and experiences
- To commit to apply what you learn today

What does coaching Little League baseball and teaching surgery have in common?

You need a plan

“A goal without a plan is just a wish.”

— Antoine de Saint-Exupéry

-T-

TEAMWORK

- Tell a teammate something they did well each half inning
- Communicate before, during, and after each play
- Support your teammate after they make an error
- Expect and ask for more from your teammates
- Lead the Team, Follow a Leader

-E-

EFFORT

- Run everywhere anytime you're on the baseball field
- Place your body in front of the baseball, "It's a choice!"
- When you think you can't, give more.
- Run hard, Slide hard, Swing hard, Throw hard
- Try something new
- Practice and Warm-up with full effort

-A-

ATTITUDE

- Smile, Laugh, and Have FUN!
- Sportsmanship at all times
- Believe in yourself and your teammates
- Respect your coaches and teammates
- Expect more. Work towards perfection.

-M-

MENTAL TOUGHNESS

- Know what you will do in every possible situation
- Stay engaged each and every inning
- Make an error? Who cares! Think about how to fix it
- Next Play, Next at Bat, Next Game....you can only change the future
- Be ready when it's your chance to win the game
- Losing still happens, focus on the TEAM

Little League Baseball and Surgical Teaching

- Put your body in front of the baseball, “It’s a choice”
 - It’s a choice to teach and learn
- Expect and ask for more from your teammates
 - Set expectations
- Lead the Team, Follow a Leader
 - Clearly define roles
- Communicate before, during, and after each play
 - Pre and Post Briefings
- Tell a teammate something they did well each half inning
 - Feedback

Small Group Discussion # 1

- In a group of 3-5 people, spend 5 minutes talking about what you currently do before an OR case to optimize teaching/learning
- Select a spokesperson to summarize what you discussed

It's a Choice

- To come prepared, physically and mentally
- To be willing to learn
- To be willing to teach

Set Expectations

- Make your expectations known early and often
 - Usually the easiest way to avoid failures
- Join your personal expectations with their learning expectations
 - ACGME Milestones, Residency program specific objectives/evaluations
- Residents not meeting expectations
 - Discuss with resident
 - Document on evaluations

Briefings

- Pre-Briefing
 - Review specifics of the case
 - Preoperative planning: Labs, antibiotics, DVT prophylaxis
 - Equipment needs/availability
 - Discuss possible trouble spots and how we will approach them
 - May need an extra port for a tenaculum to help with manipulation and exposure
 - May need to dissect the ureter more completely to isolate the adhered ovary
 - Assess learners ability and education needs
 - Intern: focus on preoperative planning, patient positioning, sterile preparation/draping
 - Chief: assess their needs...."Is there anything about this case you really want to focus on?"

Clearly Define Roles

- Define roles for the case
 - Roles can be different within the same case in order to maximize educational opportunities
 - Communicate these changes within the case
- Allow senior and junior residents to operate together
 - How do you define the roles when senior and junior residents operate together?

Small Group Discussion # 2

- In a group of 3-5 people, spend 5 minutes talking about what you currently do in the OR to optimize teaching/learning
- Select a spokesperson to summarize what you discussed

In The OR

- Defined roles for the case may need to change
 - Communicate these changes within the case
- Ask the learner why they chose a certain approach
 - Why did you choose to use a bipolar electrosurgical device to transect that vessel?
- Ask “what if” during downtimes of the case
 - After inserting a Veress needle and waiting for the abdomen to insufflate you could ask “what would you have done if you aspirated stool?”

Small Group Discussion # 3

- In a group of 3-5 people, spend 5 minutes talking about what you currently do after an OR case to optimize teaching/learning
- Select a spokesperson to summarize what you discussed

Briefings

- Post-Briefing
 - Ask resident to self-evaluate their performance
 - Pictures and videos really help
 - Difficult or complicated case
 - Review the decision making step-by-step

Feedback

- Positive or Negative, both valuable
- Specificity adds more value
 - **“Good”** is perceived as positive feedback (it is a compliment, not feedback)
 - **“Good, I like how you paused and did a proper time-out prior to starting the procedure”** is perceived as positive feedback and reinforces the action that elicited the feedback
 - **“Stop, what are you doing?”** is perceived as negative feedback
 - **“Stop, make sure you keep the port perpendicular to the fascia as you’re twisting so you enter the abdomen where you want”** is perceived as negative feedback but reinforces the action you want to see and gives them an opportunity to correct it

Moving on from baseball.....

- How do we teach intraoperatively
 - Verbalization of concepts
 - Concept of task/mental saturation

Intra-Operative Teaching: Words matter

- Safety considerations
 - View laparoscopic instruments from port to operative area
 - Goal: Don't touch anything in the abdomen/pelvis that we don't want to
- Surgical Techniques
 - Enter the peritoneum when you want to, not accidentally
 - Goal: Safe entry into the peritoneal cavity
- Anatomical relationships
 - Difficult adhered ovary
 - Access retroperitoneum, identify ureter, isolate/divide infundibulopelvic ligament, everything superior to ureter along medial peritoneum is safe
 - Goal: Develop understanding of when it is safe to proceed



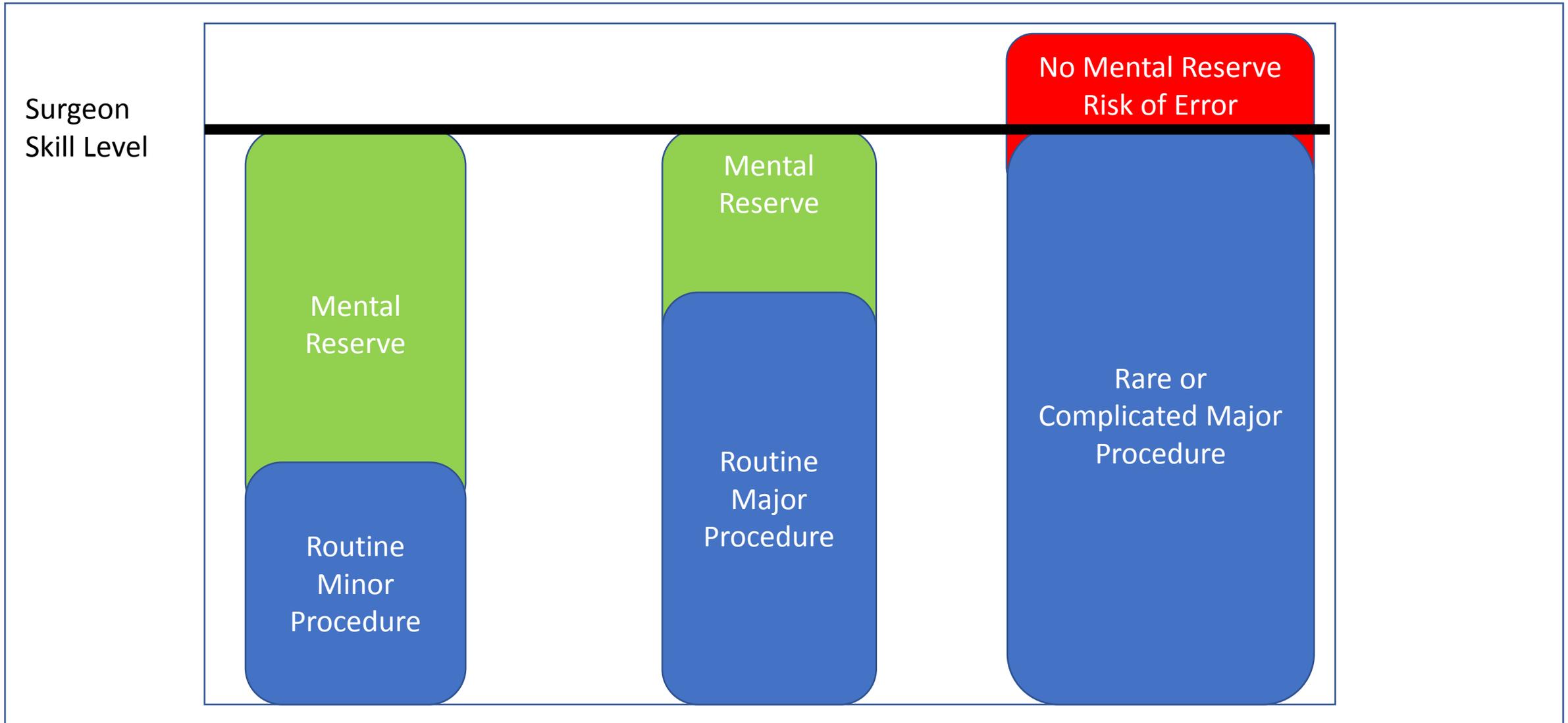
Pearls For Success

- Have a plan to how you engage your learners and teach in the OR
 - Pre-op
 - Intra-op
 - Post-op
- Have learner-appropriate expectations before you start the case
- Feedback should be specific and actionable
 - Allow the learner to make a self-assessment to initiate the conversation
 - Be sure to document the feedback to help the learner remember the feedback and to help the program director know how the resident is progressing

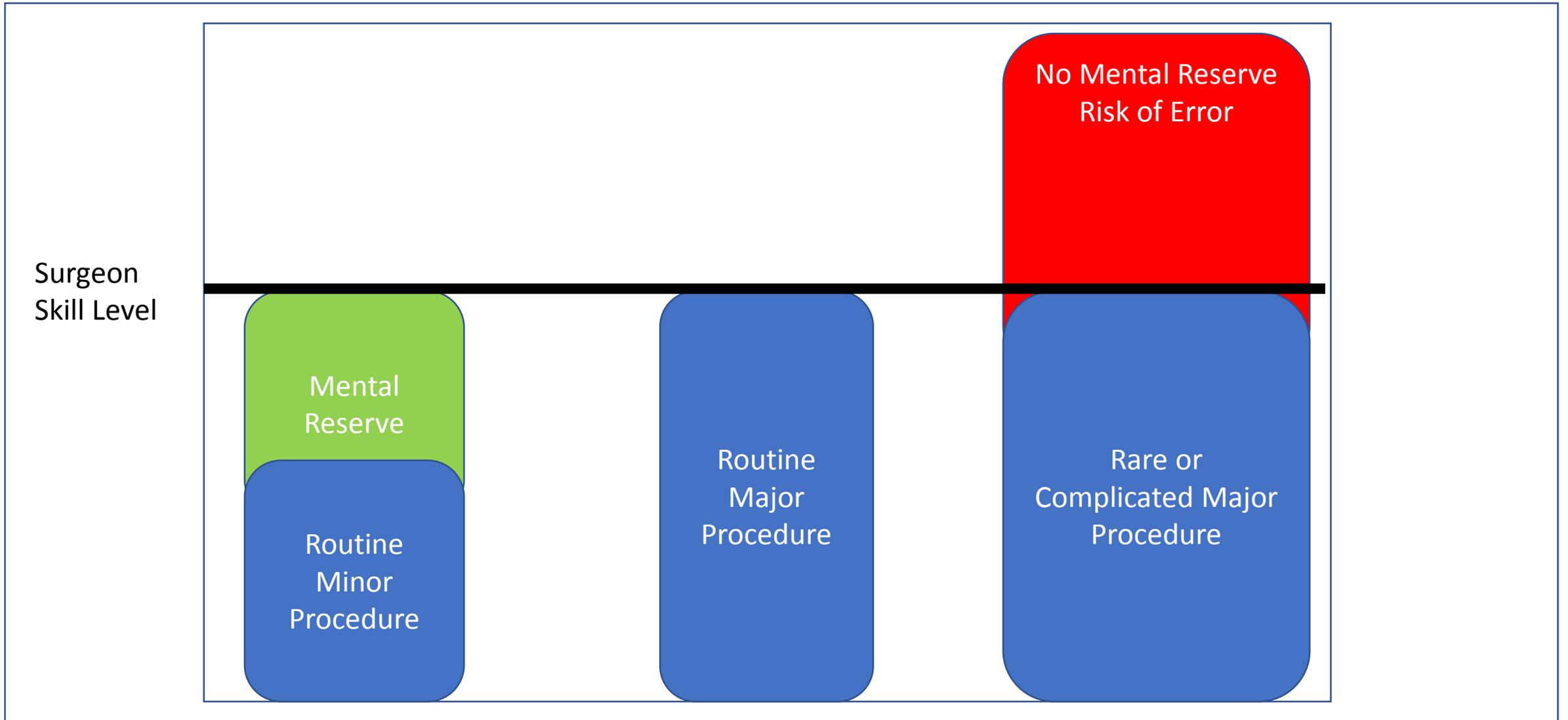
Intraoperative Teaching: Your Turn

- How would you describe when it is safe to proceed
 - Anterior peritoneal entry on TVH
 - Colpotomy during TLH
 - Uterine artery ligation on TLH
 - Bladder dissection during hysterectomy, multiple previous cesareans

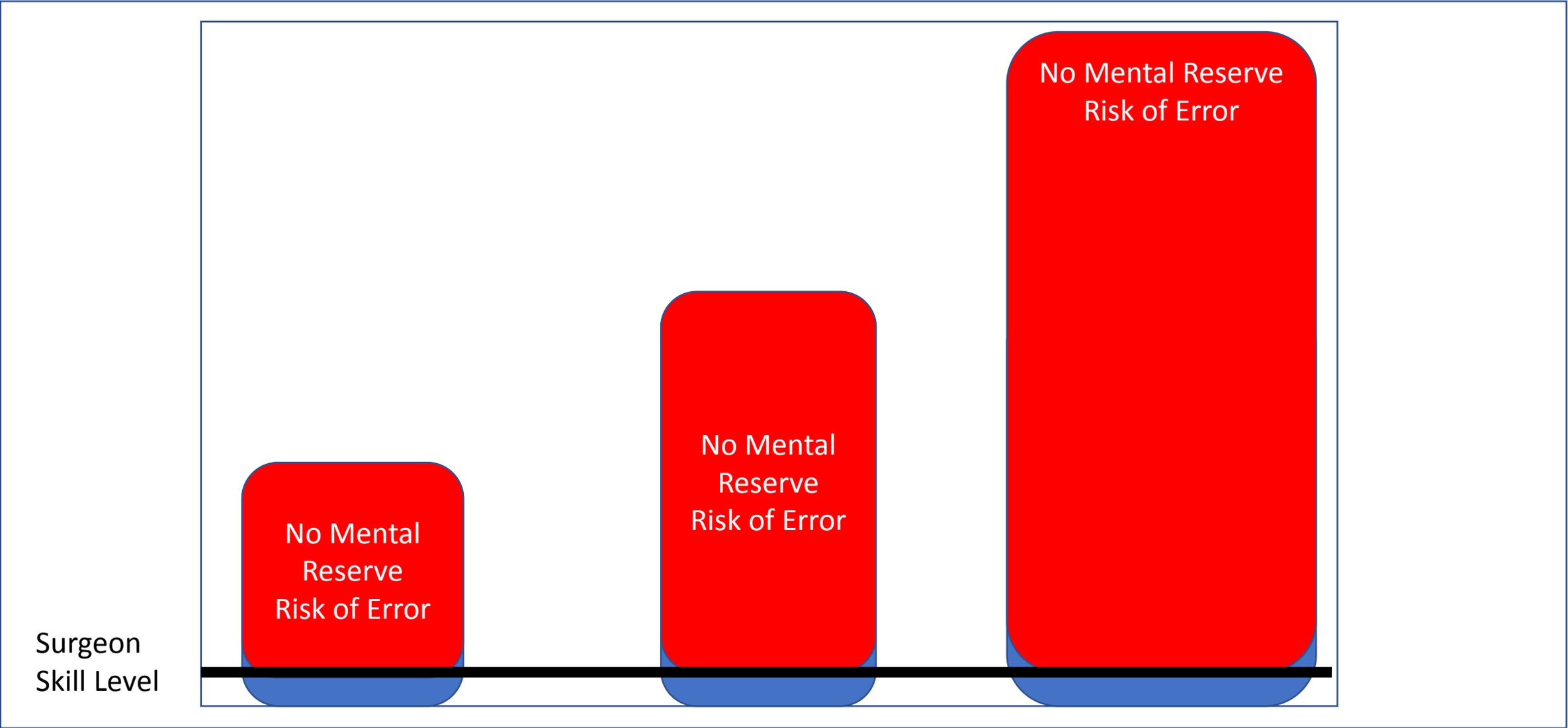
Task/Mental Saturation: Attending Level



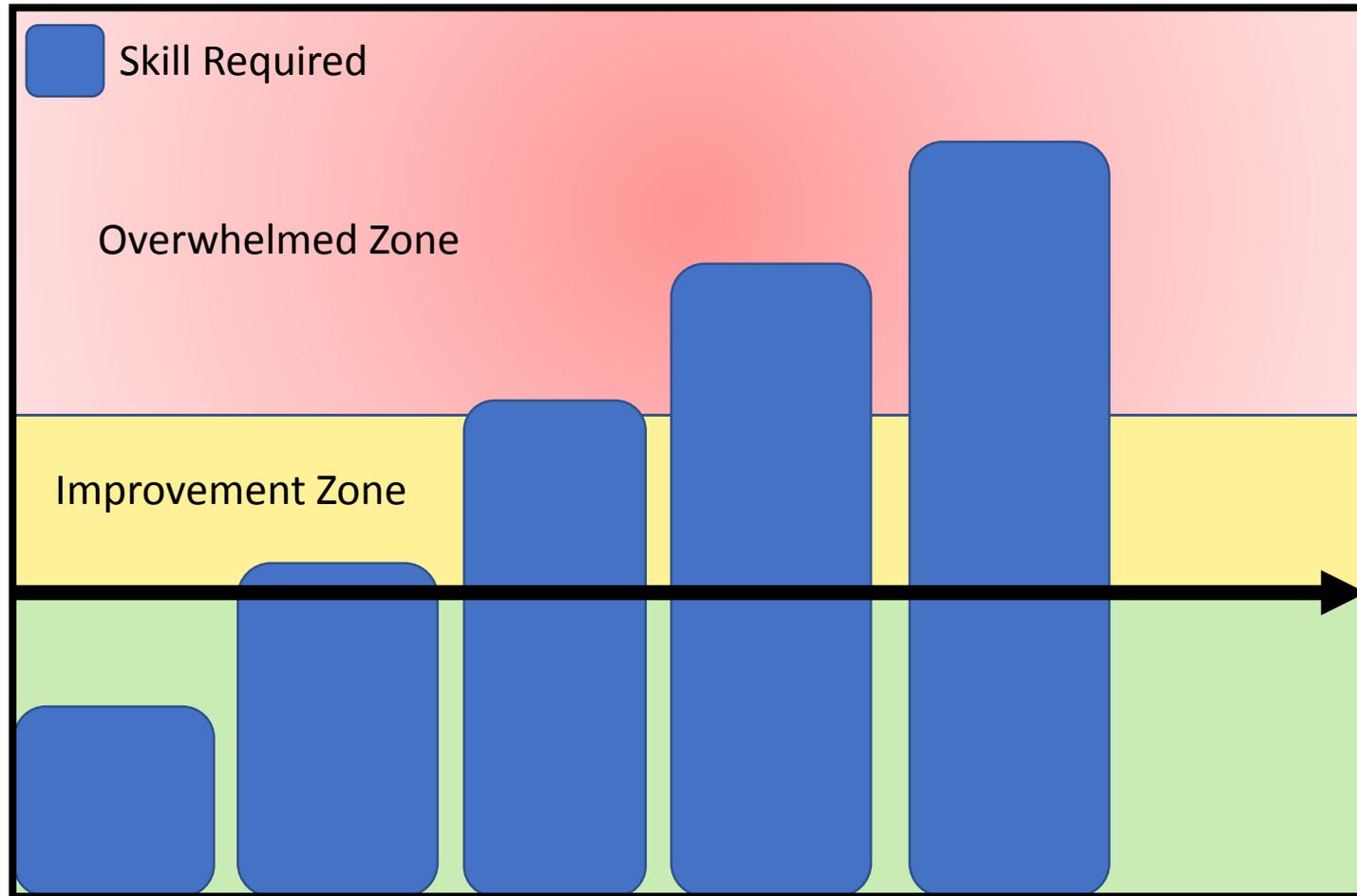
Task/Mental Saturation: Junior Attending



Task/Mental Saturation: Intern



Increasing Skill Level



Surgical
Skill

1

2

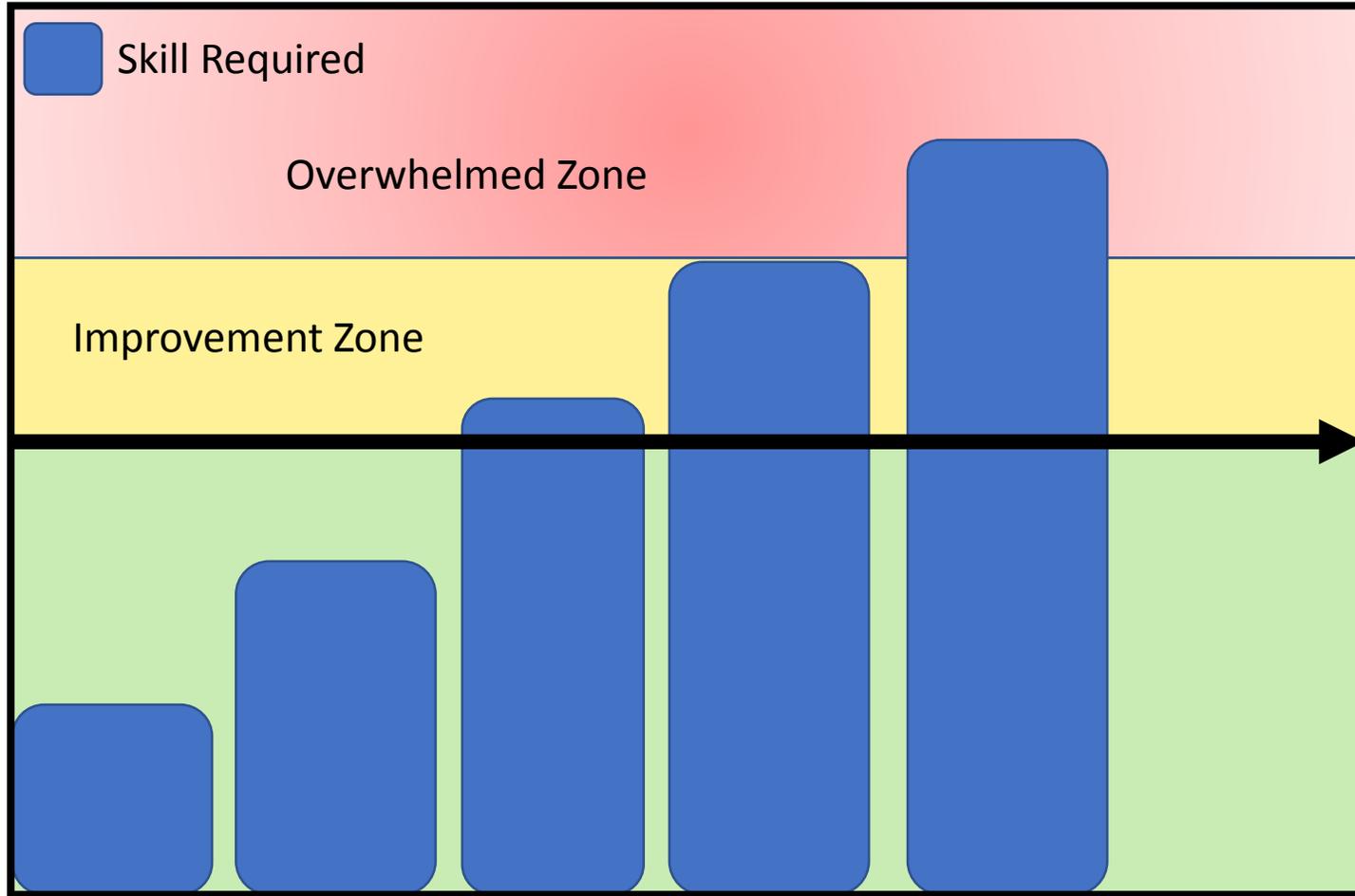
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4

5

- 1: Know surgical steps
- 2: Assist with the steps
- 3: Perform the steps
- 4: Improve the steps
- 5: Perform independently

Increasing Skill Level



Surgical Skill

1

2

3

4

5

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