

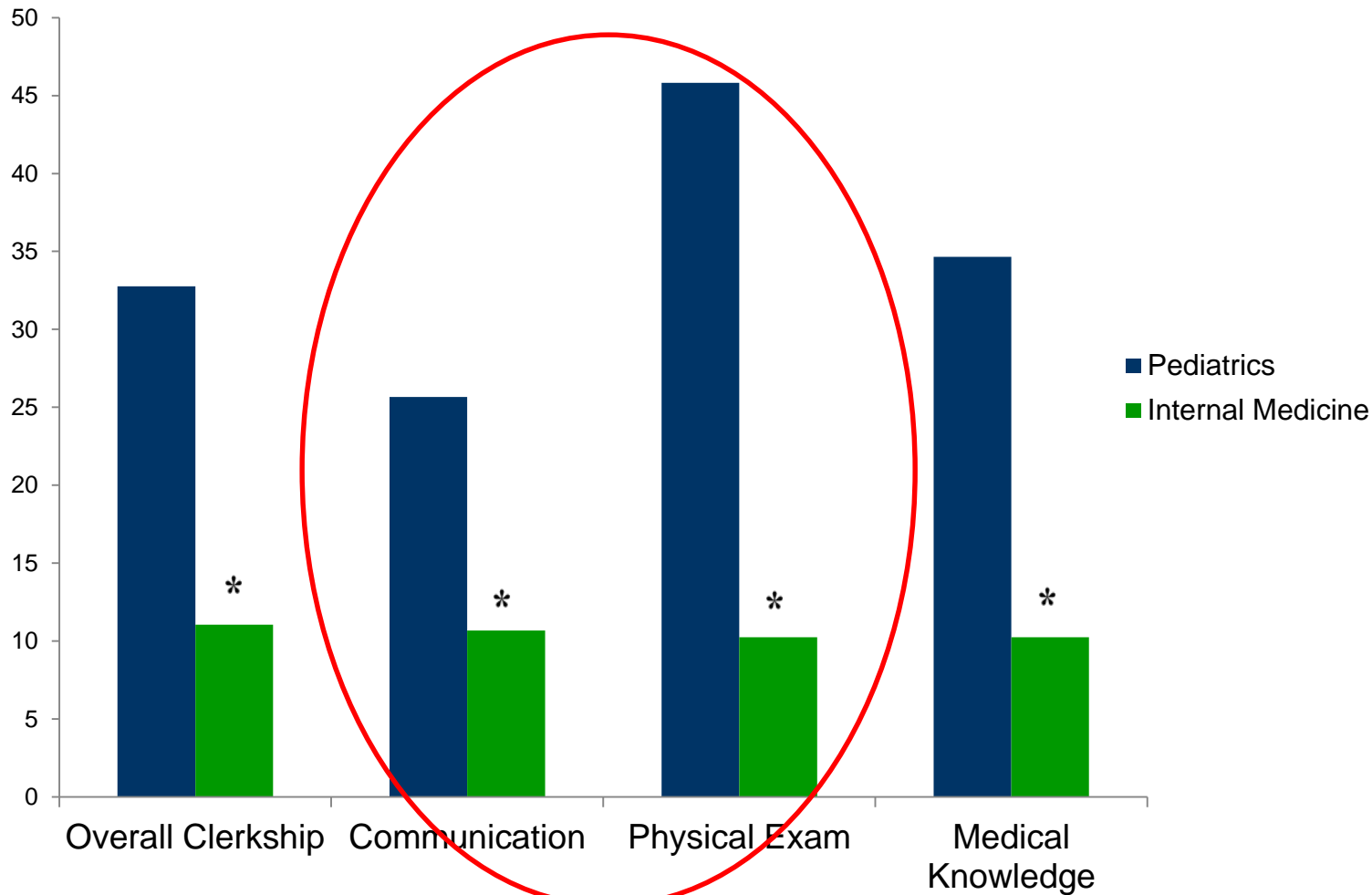
Back to Elementary School

Hands-On Pediatric Physical Exam Skills
Session

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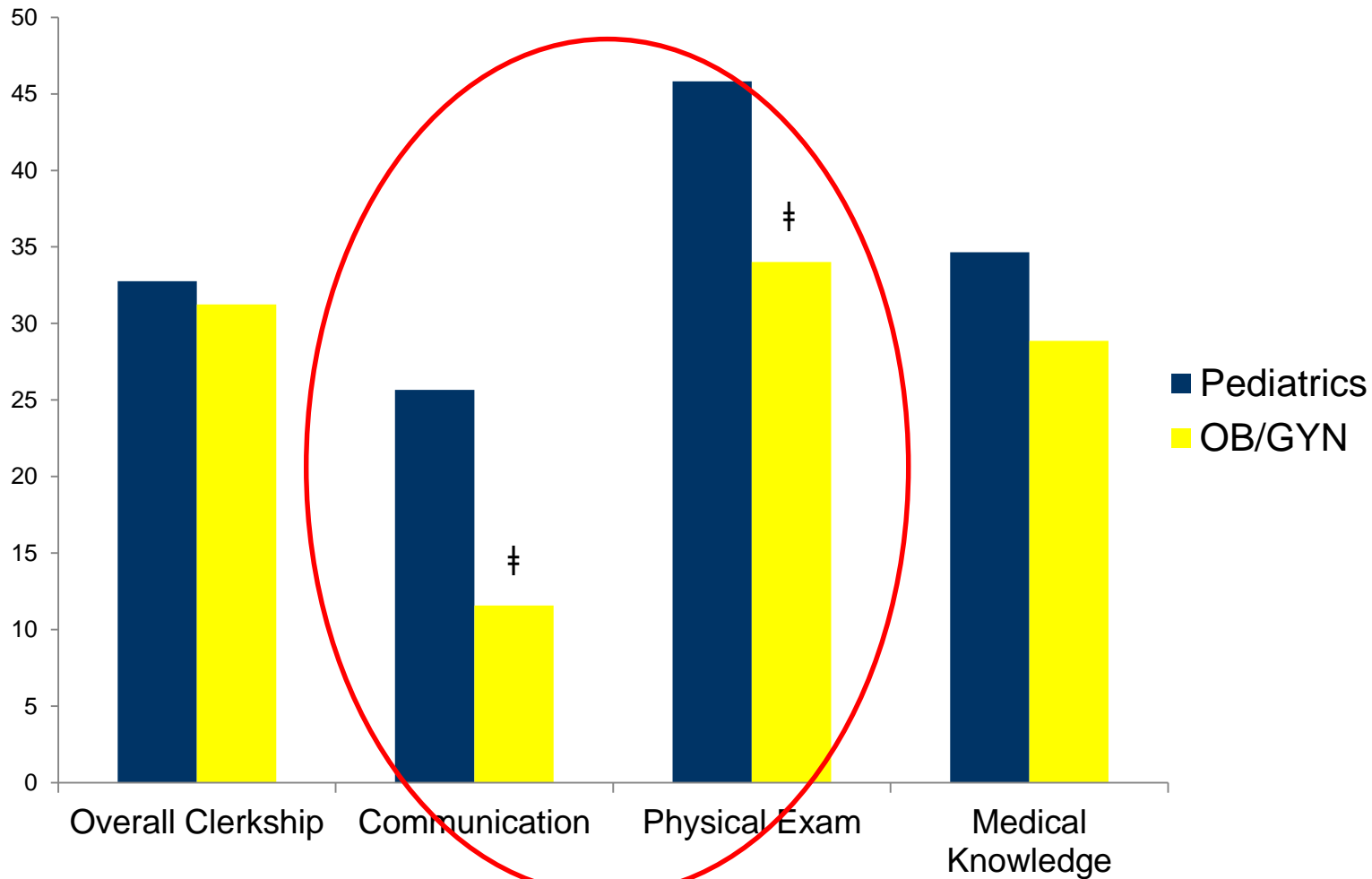
Percent students reporting “inadequate” preparation: Pediatrics vs Internal Medicine



Three school comparison: ‡ $p < 0.05$

* $p < 0.005$

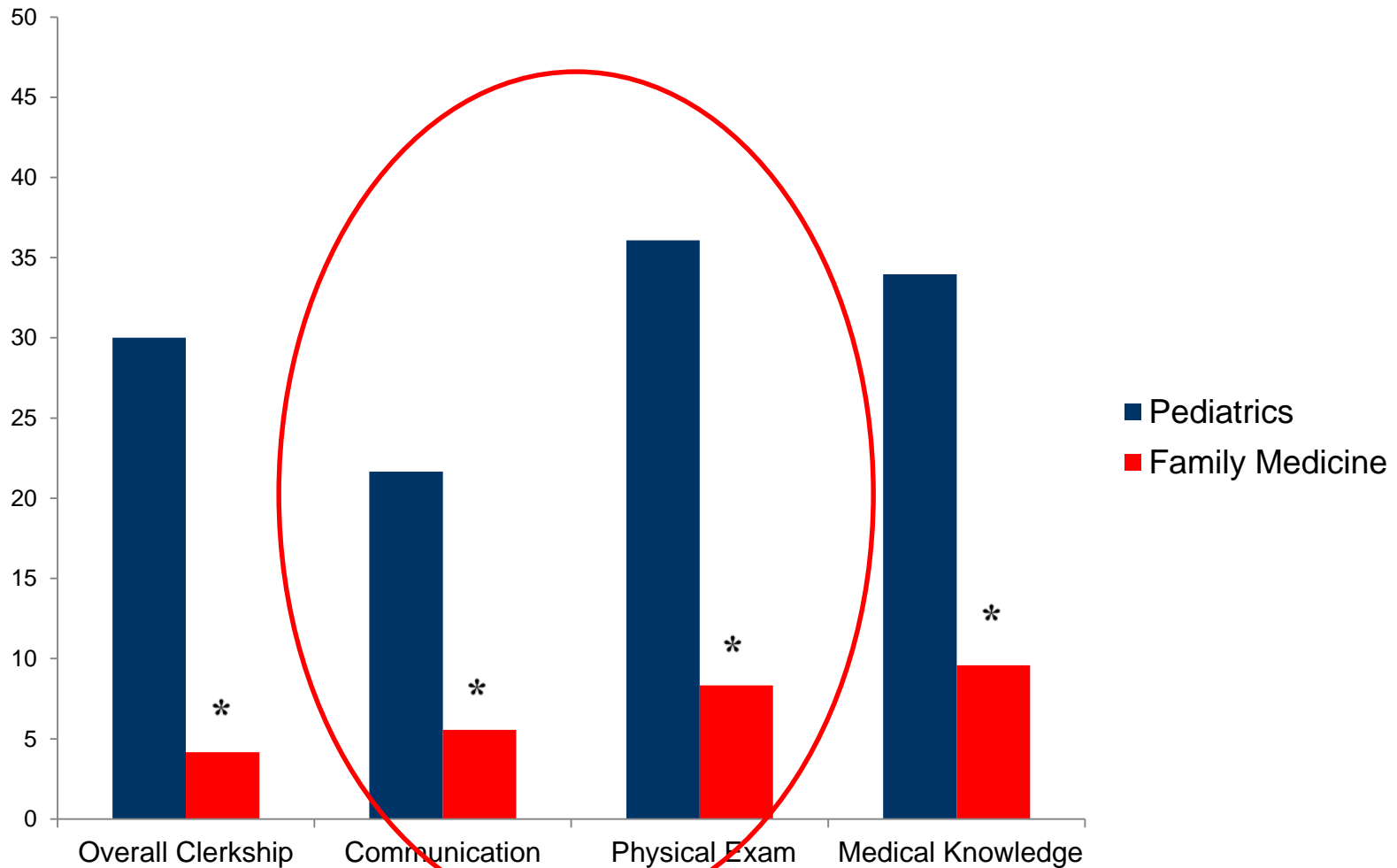
Percent students reporting “inadequate” preparation: Pediatrics vs Ob/Gyn



Three school comparison: ‡ $p < 0.05$

* $p < 0.005$

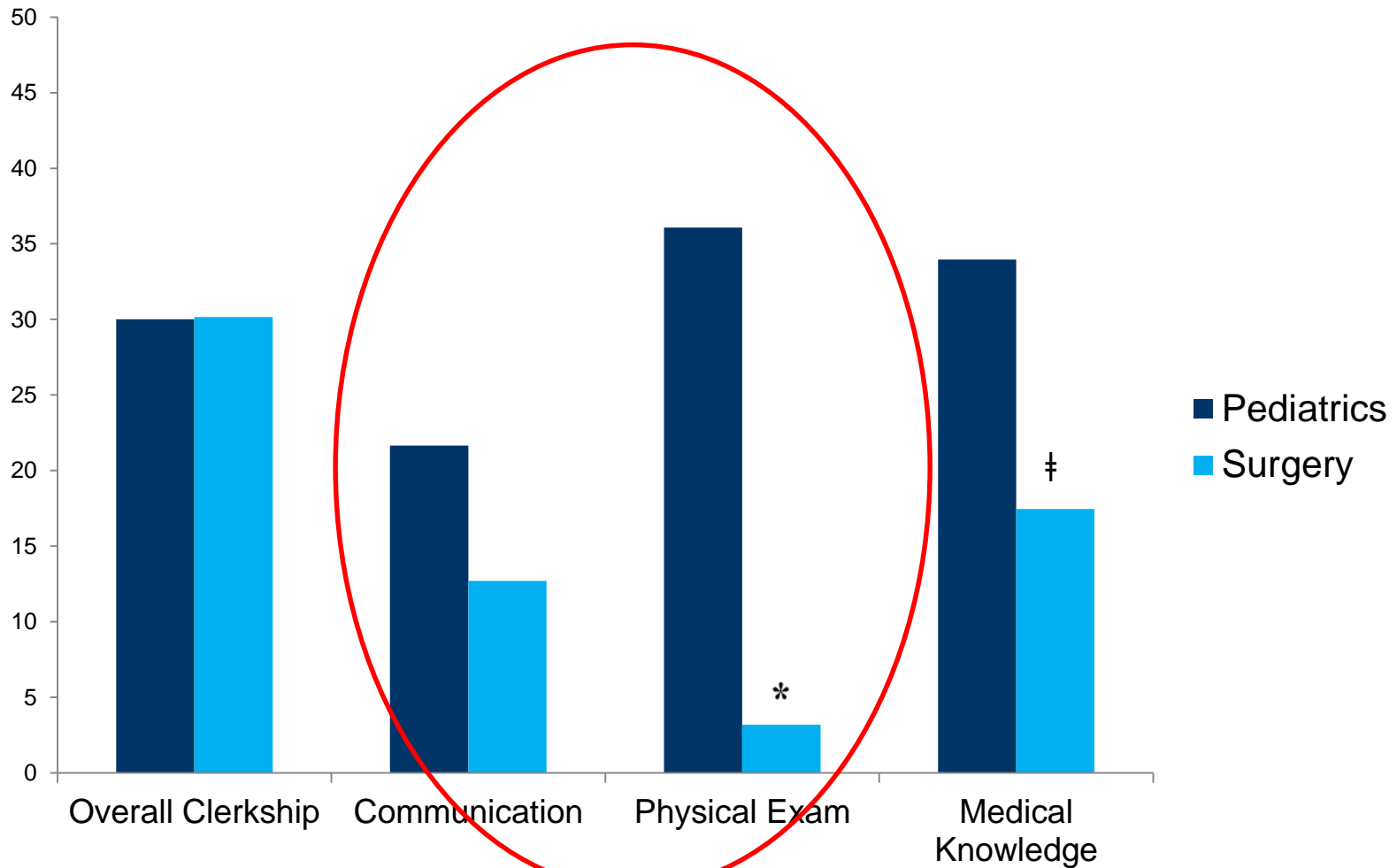
Percent students reporting “inadequate” preparation: Pediatrics vs Family Medicine



Two school comparison: ‡ $p < 0.05$

* $p < 0.005$

Percent students reporting “inadequate” preparation: Pediatrics vs Surgery



Two school comparison: ‡ $p < 0.05$

* $p < 0.005$

Overview

Medical students felt less prepared for Pediatrics in the areas of communication and physical exam compared to other clerkships

COMSEP Pre-Clinical Curriculum

Goal

- Gain exposure to families and children of various ages throughout medical school to enhance communication and physical exam skills

Objective

- Practice pediatric physical exam maneuvers with appropriate techniques on different age groups

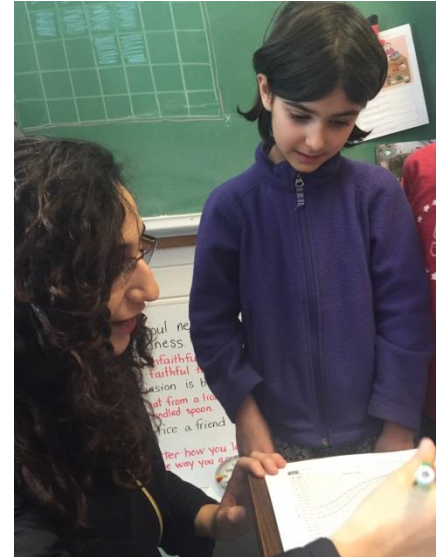
Back To Elementary School Session

- Create a hands-on pediatric physical exam curriculum that would give our pre-clinical students practice to be successful at the start of their pediatrics clerkship



What we did

- We collaborated with a local elementary school to pair year 2 students with 5-6 year olds to provide hands-on practice performing the non-invasive pediatric physical exam while concurrently teaching the children about the human body
- Exam included HR, RR, height and weight (and growth charting), non-invasive HEENT, Heart, Lungs, Neurologic, and Musculoskeletal



Student Comments

Fun

Exposure and
practice are
key

Interacting in
a
comfortable
setting helps
reveal what
children are
like

Previous
experience
with children
makes this
session less
useful

New Approaches They Found Helpful

Letting the child
use exam tools

Being playful and
using games to
interact

Explaining things
in terms easily
understood

What Could Be Improved

Handouts	An experience with parents	More sessions like this	Having varying ages of children to work with	More time to debrief
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Results

- The session enabled our students to practice pediatric exam and communication skills
- Overall, our students found the session effective and helpful, identifying approaches they would be able to apply in their future care of children
- The enhanced pediatric clinical skills content enhanced students perception of how well they were prepared for their pediatrics clerkship overall, and particularly with regarding pediatric physical exam and communication skills

Barriers/Challenges and --Solutions

- Time in Medical School Curriculum—need commitment for “field trip”
 - Pediatric Pre-Clinical Educators
 - Share Needs Assessment Data with Deans/Course Directors
 - Targeted Needs Assessment at your own School

Barriers/Challenges and --Solutions

- School
 - Sometimes takes a special themed school, magnet school, or private school—one that is not shy for innovation
 - Faculty with kids in the school system can provide insider
 - School Nurse can be an incredible advocate and partner in this session
 - Don't forget to include instructions on transportation to the elementary school (parking, public transport!)

Barriers/Challenges and --Solutions

- Parents
 - Permission forms, clear and concise and emphasize the non-invasiveness
 - Strong messaging of support and community from the principal and/or nurse to parents
 - Consider noting that their child can opt out for certain “sensitive” parts like the height and weight measurements

Barriers/Challenges and --Solutions

- School Teachers
 - Introduce yourself in person, meet face to face and explain goals, the actual activity, and how they can help
 - Find ways to tailor the activity to what they are doing in class
 - Growth Charts can be a nice lesson for Statistics
 - Sometimes they have a human body curriculum in their elementary science class and can make sure med students cover this content

Barriers/Challenges and --Solutions

- Children—what about ones with ADHD, other chronic illness (Trisomy 21) or abnormal exam findings (murmur)?
 - Meet with School Nurse ahead of time to match the more challenging children with students that are up for that challenge
 - Clinical Skills Course faculty to circulate in the classrooms
 - Invite Pediatricians (great opportunity for pediatric residents) to circulate in the classrooms
 - They can confirm any potential abnormal findings
 - They can report these to school nurse, who would then either already know about it vs inform parents

Barriers/Challenges and --Solutions

Preparation

- Updated all physical exam syllabi to include information on pediatric content for each part of the exam
- Enhanced a pediatric “toolbox” on our course platform
 - Pediatric history guidelines
 - Vital Sign Charts including weight, length/height, and HC
 - Health maintenance guidelines (Bright Futures) and Immunization information
 - COMSEP video on Pediatric PE
 - Slideshow on age-appropriate pediatric physical exam
- Chapter in our Pre-Clinical Course Ibook on the pediatric exam
 - summarizing the above content in high yield snippets
 - sharing the logistics for the school based session)

Changes since we implemented

- Multiple grades
 - 2nd year medical students spend 45 minutes with K-2nd grader and 30 minutes with 5th or 6th grader
- 10 to 15 minute debrief at the end
 - What strategies they employed to perform the exam
 - What were they surprised by
 - Did they notice different strategies and approaches in interacting with the younger children vs older children