Coping With Covid:

How NAIT's Respiratory Therapy Program Has Adapted To This New Reality

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Game Plan-Objectives

This presentation will outline some of the strategies that NAIT's RT program has utilized since the start of the pandemic to maintain on-time graduation for each cohort while still achieving all required competencies without an over-reliance on simulated sign-offs.

Modifications to clinical rotations, use of virtual patient scenarios, and an increased emphasis on simulating transferrable skills will all be discussed.

The Box We Were In

- Unpredictable campus availability
- Many practicum partners withdrew clinical placements
- Our provincial regulatory body was unwilling to soften requirements for licensure
  - Still mandated 1,500 clinical hours per student
  - Still unwilling to accept simulated sign-offs for many competencies

Problem 1: Unpredictable Campus Availability, Practicum Experience is Different

The Problem:

- Suddenly unable to do any on-campus activities/simulations
- Uncertainty even if/when able to be on campus as to how long that will last leads to scheduling and planning challenges
- Students in clinical are pretty much only looking after Covid patients – Where did all the asthmatics go? Surgical patients?

The Solution:

- Rapid development of virtual patient simulations

What is a virtual patient (VP)

- “Virtual patients are clinical scenarios that play out on the computer screen. The learner interrogates the patient (the computer) by typing or selecting (or, in some cases, speaking) questions and subsequently requesting information on physical examination findings and laboratory tests. The computer supplies patient responses or other requested information. Learners are typically required to commit to a diagnosis and management plan at some point” (Cook & Triola, 2009)

- “Virtual patients(VPs) can be defined as electronic or web-based representations of realistic clinical cases. They have been proposed as being an ideal tool to teach clinical reasoning skills…”(Bateman et al., 2012).

Some advantages of VPs…

- Excellent way to develop judgement and decision making without any chance of patient harm
  - Facing your consequences safely
- Once built they require no human resources to deliver
- Can simulate things that are impossible to do in-person
  - Ex. A scenario that an SP couldn't act out, ventilator waveforms that are challenging to mimic in real-time
- Self-directed learning
- Mobile access
- Enables us to "standardize" the clinical experience for our students to some degree

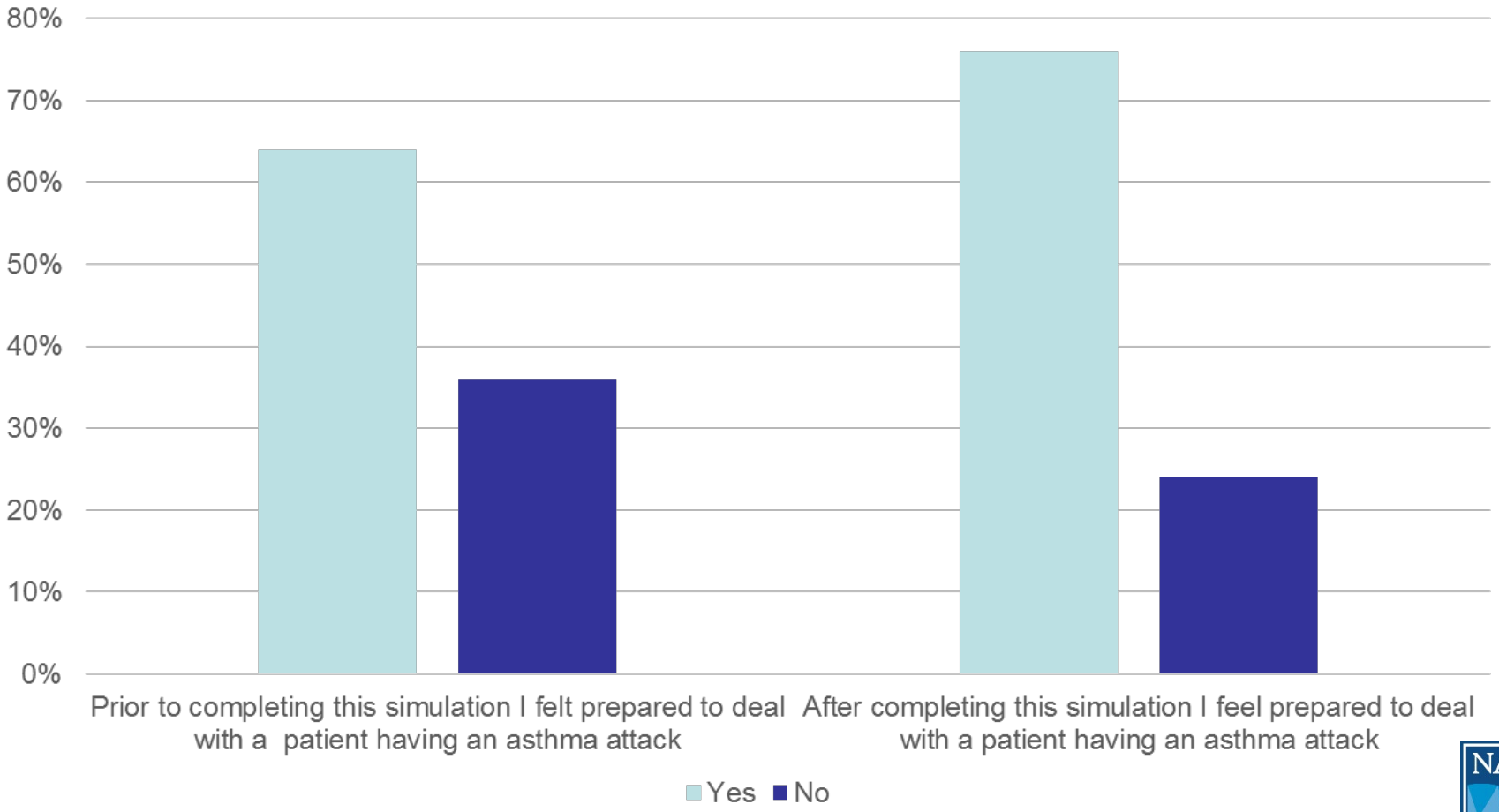
A few disadvantages of VPs…

- Resource intensive to develop
- Shelf-life issues
- Learning object tech support

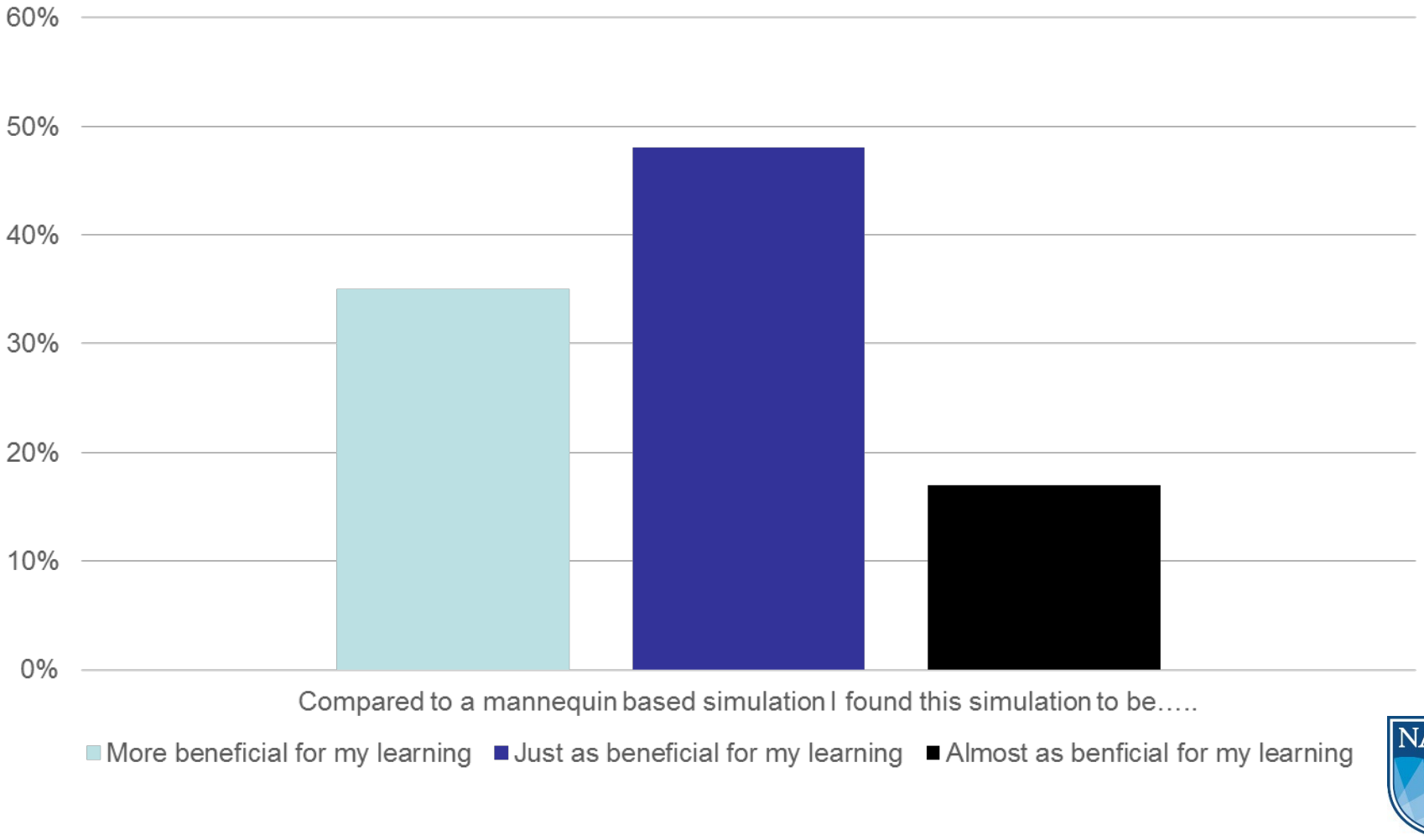
Example Simulation

https://360.articulate.com/review/content/7db201a7-7c34-4fcc-aaa5-03e217f6a2ba/review

Student Feedback



Student Feedback



Student Feedback

100% of students surveyed stated they would like to see more computer-based simulations

100% of students surveyed stated the simulation experience was realistic

Suggested Applications

- “Bread and butter” scenarios where time and chance are a barrier to real world experience…..high acuity low frequency events.

- Situations where the decisions are just as or more important than the skill itself
  - Making decisions on a ventilated patient

Problem 2: Practicum space constraints

The Problem:

- Withdrawal of clinical placements, especially from homecare, sleep and pulmonary function clinics.
- Tenuous grasp of hospital based clinical placements during the peaks of each wave
- Regulatory body still mandating 1,500 clinical hours

The Solution:

- Drastic redesign of our clinical schedule/model

Schedule Redesign

Old Model:

- Students spent time at 4-5 hospitals and 2-3 private sites
- Highly prescriptive rotation lengths, shift counts etc.

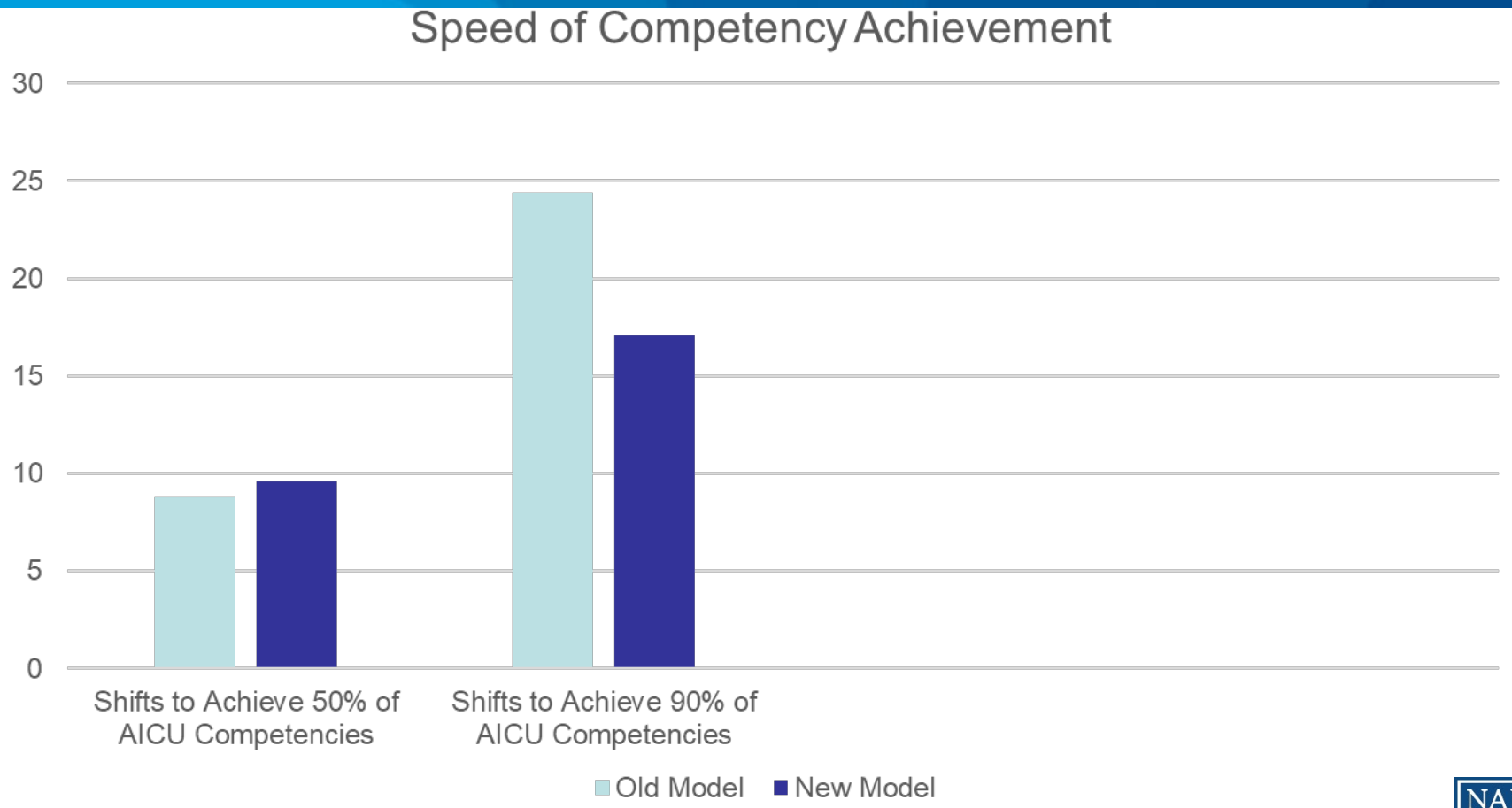
New Model:

- Students spent time at 2 hospitals and 1-2 private sites
- Highly flexible rotation lengths, shift counts etc.
- Competency based approach

Benefits of Redesign

- Decreased burden of preceptorship as students became more comfortable/competent at their “home base”
- Faster attainment of competencies
  - Likely due to preceptors becoming more comfortable with students they’ve seen/heard of before
- Increased ability for clinical instructors to accommodate illnesses/isolations etc.
- Ability to “throttle up” and “throttle down” students towards the end of the year

Improved Competency Attainment



Thank you.

Questions?

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