# "X-COVER":

# A Learning Framework and Acting-Internship Preparation Curriculum to Approach Common On-Call Conditions

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## Background

- The Acting Internship (AI) is a culminating experience in medical school where students receive greater autonomy and patient care responsibility and includes important skills:
  - Recognizing and triaging patients with emergent conditions ("sick vs not")
  - Time management
  - Recognizing one's limitations and asking for help
  - Communicating effectively between teams
- Existing curricula on cross-cover are currently targeted to students at the end of medical school however, as these skills are required during an AI, introducing an approach to cross-cover may be beneficial earlier

## Methods

We designed a cognitive framework and mnemonic incorporating domains within the AAMC's EPA toolkit:
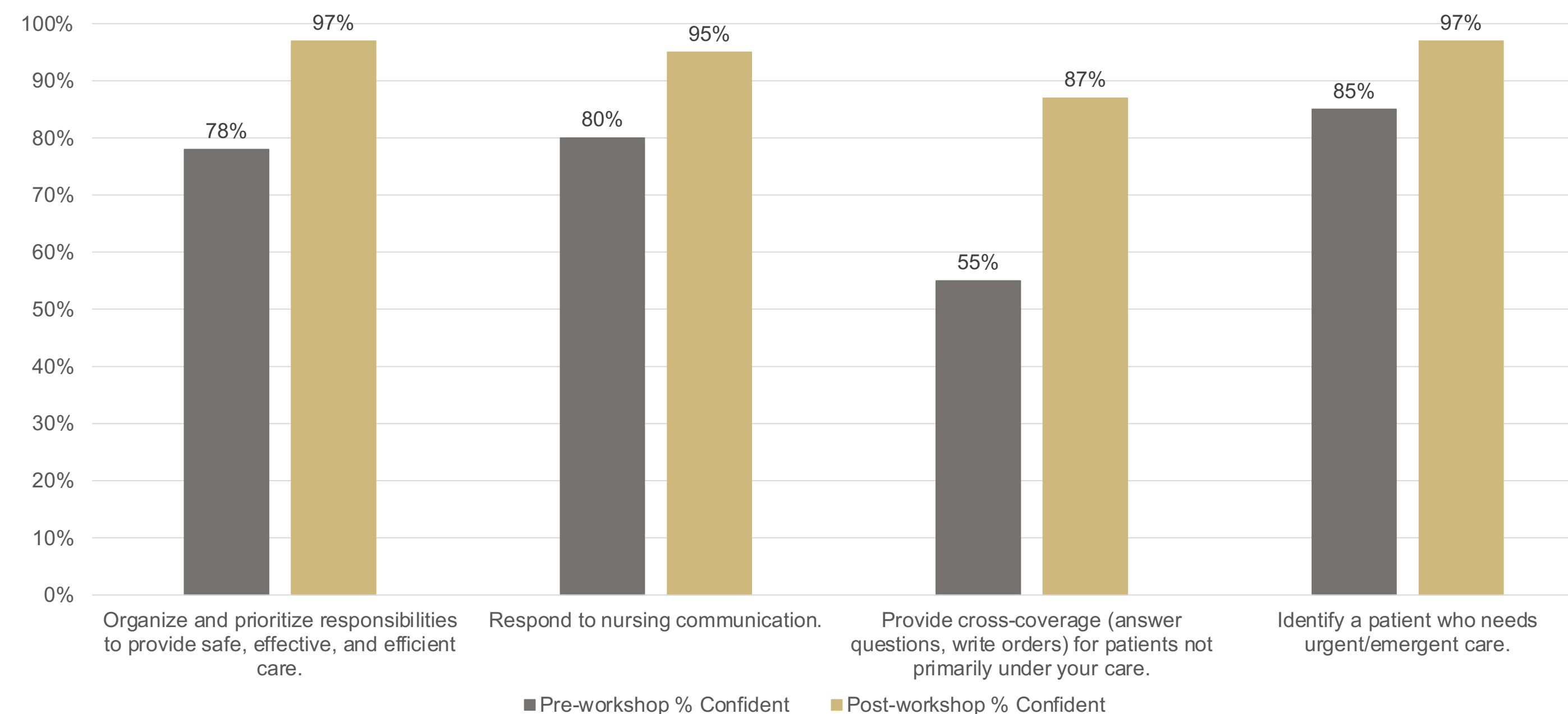
**X-COVER:**

- **C**all Triage and Help (Do you need to see the patient now and do you need to escalate and call your resident and/or attending?)
- **O**rders now (stabilizing and diagnostic orders are needed)
- **V**erify Information (What additional information do you need from the handoff or from the chart)
- **E**xamine (will you examine the patient?)
- **R**x and **R**eassess (what is your treatment, monitoring, and follow-up order plan)

- We developed a 110-minute case-based small group session for third-year students to apply the x-COVER approach to manage 11 cases of common Cross-Cover conditions.

- Pre- and Post-Learner confidence levels in triaging, providing cross-coverage, and identifying a patient with an emergent condition were assessed on 5-point Likert scale

## Results

**Prior cross-cover experiences during the Core Clerkship Year (n= 102):**
- None = 53 (52%)
- 1-5 = 36 (35%)
- 6-10+ = 13 (13%)

**Figure 1: Pre- and Post- Reports of Confidence (% moderately, very, or extremely) across AI skill domains**



Legend: Pre-workshop % Confident; Post-workshop % Confident

| Confidence Evaluation Question | Increase in Confidence |
|---|---|
| Organize and prioritize responsibilities to provide safe, effective, and efficient care. | 19% |
| Respond to nursing communication. | 15% |
| Provide cross-coverage (answer questions, write orders) for patients not primarily under your care. | 32% |
| Identify a patient who needs urgent/emergent care. | 12% |

## Discussion

- Prior to the session, students' self-assessed confidence in performing cross-cover was lowest amongst the AI skill domains.

- Post-session, student's self-assessed confidence in performing cross-cover improved, along with other core AI-skills

- As most students do not have cross-cover experiences during their core-clerkship year, introducing a management framework may be valuable to help students better prepare for their Acting Internships.

- Whether self-assessed confidence correlates with competence is unknown.

## Significance

- Cross-cover is an integral part of the internship year. However, as the first cross-cover learning experiences occur during the Acting Internship, a curriculum dedicated to managing cross-cover conditions improves learner confidence.

- The unique approach of using a cognitive framework of X-COVER has the benefit of guiding students through a systematic approach that can be re-enforced through spiral learning

## Disclosures

- The authors do not have any conflicts of interest to disclose.