

# The Cardiac Passport:

## Perceived Usefulness of a Bedside Education Tool for Registered Nurses in the Pediatric Cardiac Intensive Care Unit

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### BACKGROUND

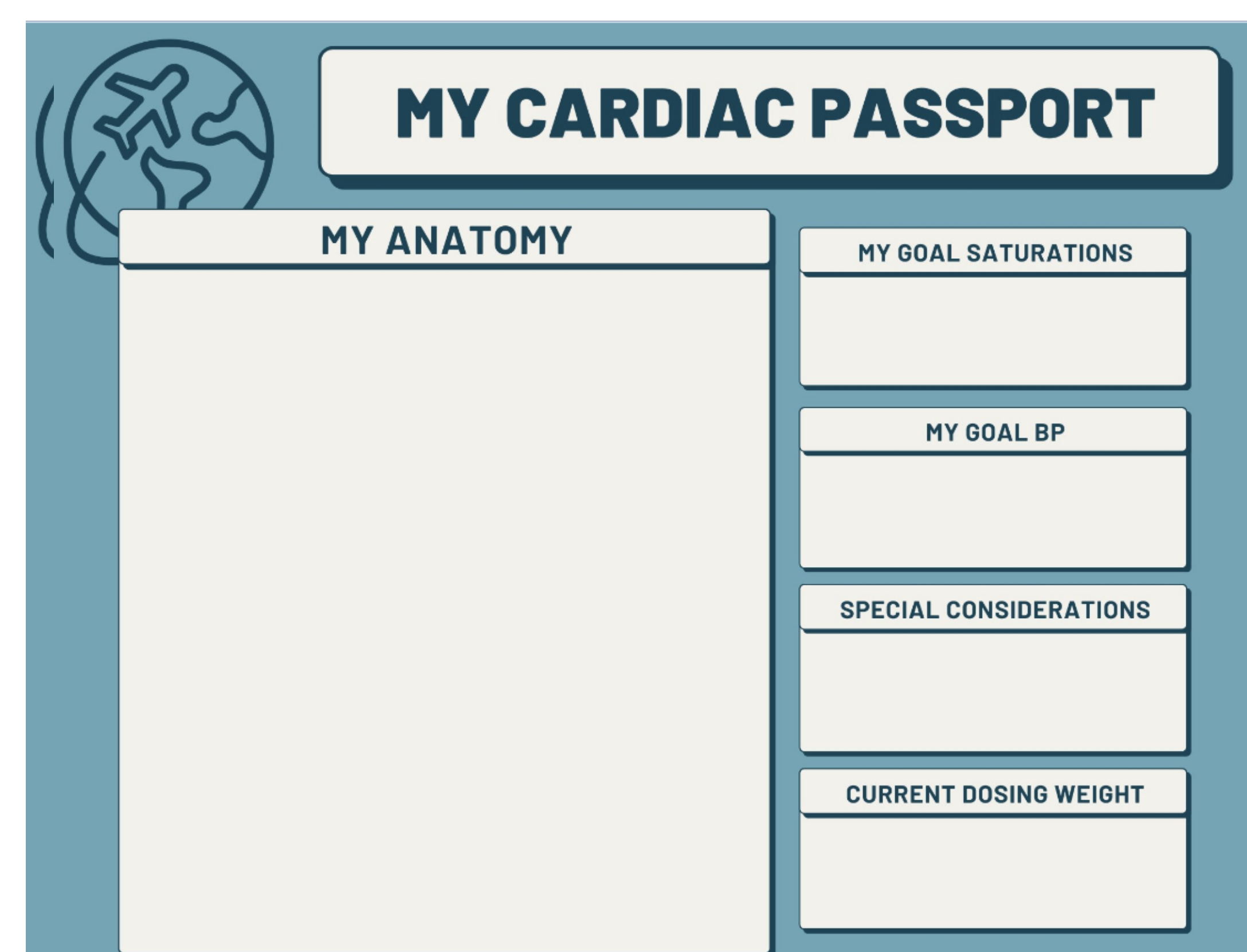
- Pediatric cardiac intensive care unit (PCICU) at a large academic medical center in Baltimore, Maryland is staffed with high percentage of novice nurses
- Nurses expressed ambiguity surrounding definitive monitoring parameters based on patient anatomy and pathophysiology
- PCICU nurses must grasp basic concepts specific to congenital heart disease in order to provide optimal care<sup>1, 2</sup>
- Given lack of experience and need for specialized knowledge, transition of novice nurses into PCICU nursing may be more challenging than transition to a unit with lesser acuity<sup>3</sup>

### PURPOSE

- Evaluate the perceived usefulness of a novel bedside education tool for registered nurses caring for patients with congenital heart disease in the PCICU

### IMPLEMENTATION

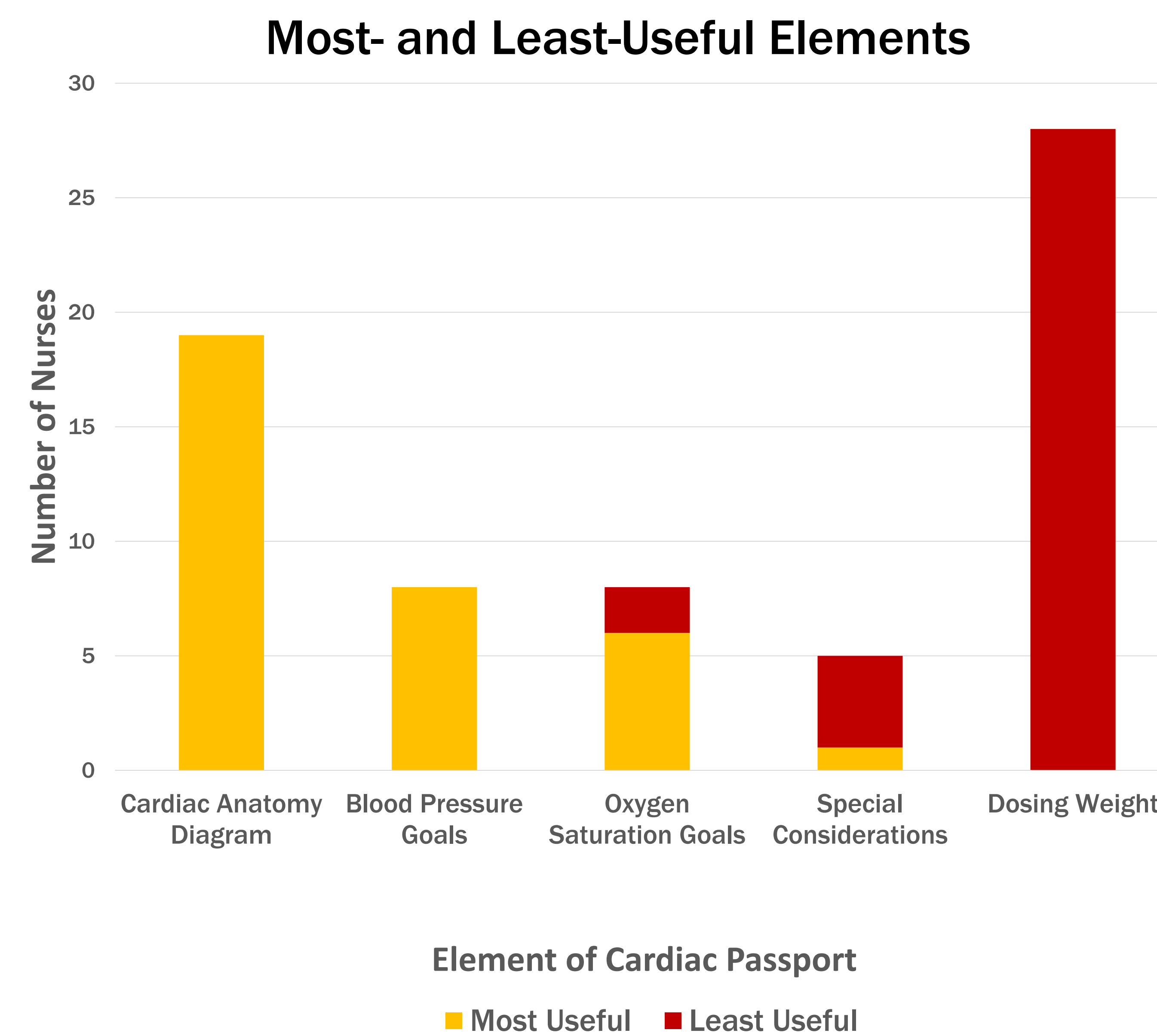
- Passport implemented in May 2022 on all PCICU patients
  - Contains anatomy diagram, goal oxygen saturation and blood pressure parameters, “special considerations” free-text section, and dosing weight
- 10-question survey distributed after 6-months of use including:
  - Modified Intervention Appropriateness Measure<sup>4</sup>
  - Questions regarding perceived usefulness, most- and least-useful components, and improvement feedback
  - Nurse-reported years of experience caring for this population



**MY CARDIAC PASSPORT**

MY ANATOMY	MY GOAL SATURATIONS
	MY GOAL BP
	SPECIAL CONSIDERATIONS
	CURRENT DOSING WEIGHT

### RESULTS



- Of the 34 respondents, 100% agreed or strongly agreed that the cardiac passport is:
  - Suitable for and applicable to this patient population
  - A good match for providing essential data that helps care for these patients
  - Helpful in improving understanding of patients' unique needs based on their anatomy and physiology
- Suggested areas for improvement:
  - Notes on surgical history and trajectory (n = 6)
  - Intracardiac shunting delineated through color images (n = 6)
  - Ensuring the passport is updated at regular intervals by providers (n = 3)
- 70% of respondents (n = 24) had less than 5 years of nursing experience in care of children with congenital heart disease
  - This subgroup also made up 82% of the nurses who agreed or strongly agreed this tool helped provide bedside education to families and caregivers

### CONCLUSIONS

- Universal perception of the cardiac passport amongst nurses of all experience levels is positive
- Successful implementation on our unit requires attention from both nursing and provider teams to ensure accuracy
- Novice nurses find cardiac passport useful in providing bedside education to families
- Further education is needed on our unit regarding surgical repairs and intracardiac shunts in various anatomies

### NEXT STEPS

- Future iterations of the cardiac passport will be adapted to:
  - Remove dosing weight
  - Incorporate color in anatomy diagrams to denote intracardiac shunt(s)
  - Annotate elements of surgical repair within diagram
  - Include an area for “last updated” with date
- Evaluate if this bedside educational tool is transferrable to general pediatric critical care population or pediatric intermediate care unit

### REFERENCES



### ACKNOWLEDGEMENTS

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