

# Michigan Medicine OR staff want greater environmental sustainability in the operating rooms and are excited to participate in efforts to make it happen.

## Thinking green when dressed in blue: Support for environmental sustainability initiatives at Michigan Medicine.

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### INTRODUCTION

**Problem:** US healthcare industry is a top producer of greenhouse gases (GHG). Operating Rooms produce:

- 30% of a facility's waste
- 2/3rds of regulated medical waste
- use 3-6x more energy/sq ft.

Surgical GHG emission sources include anesthetic gas release, use of energy-intensive equipment, proliferation of single-use devices, and strict HVAC requirements.

**Gap:** Nationally, hospitals are becoming aware of the detrimental environmental impact of their surgical facilities. Little is known about the willingness or support of OR staff to proposed changes.

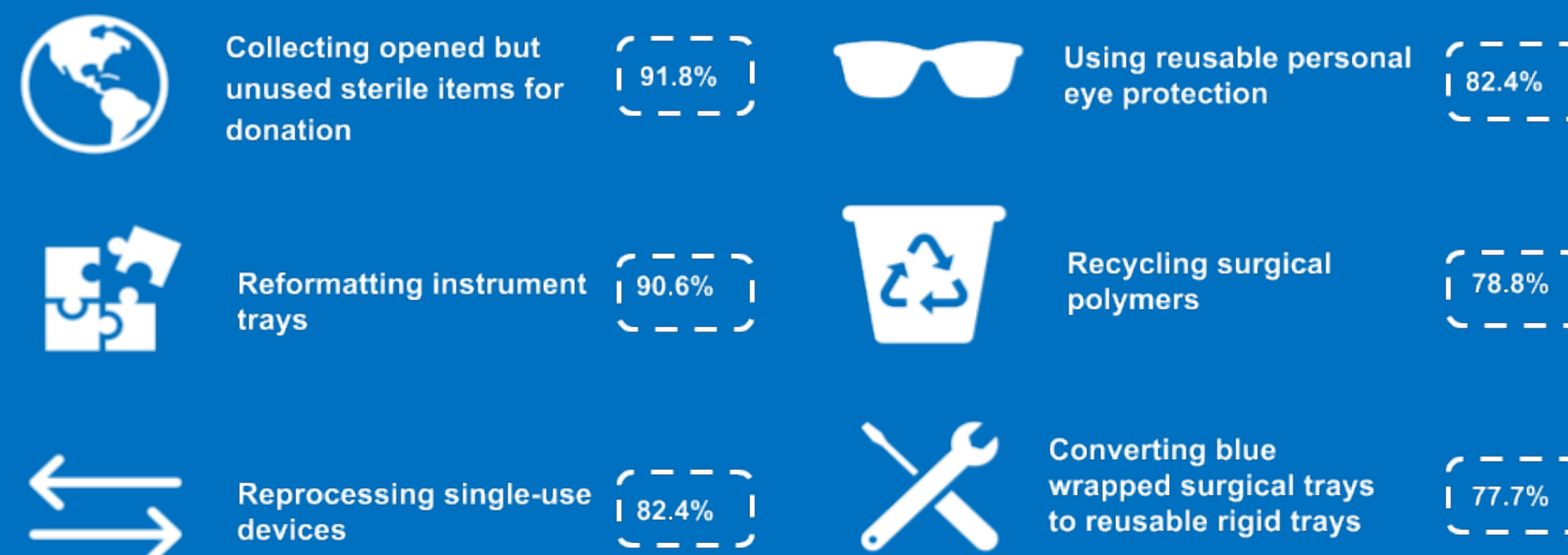
**Objective:** To characterize the perspective of operating room staff and gauge their support of OR-based sustainability initiatives.

### METHODS

The survey was modeled after similar surveys with expert consultation from Ford School of Public Policy. The survey:

- distributed to 115 OR staff from UH
- at required event, August of 2019
- completed anonymously.

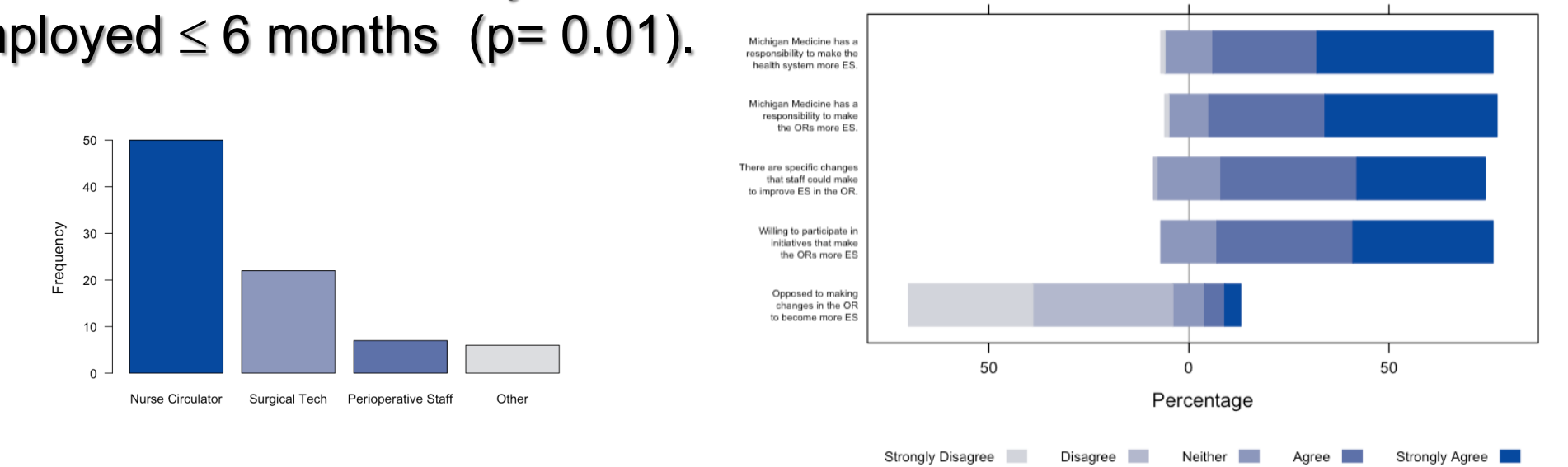
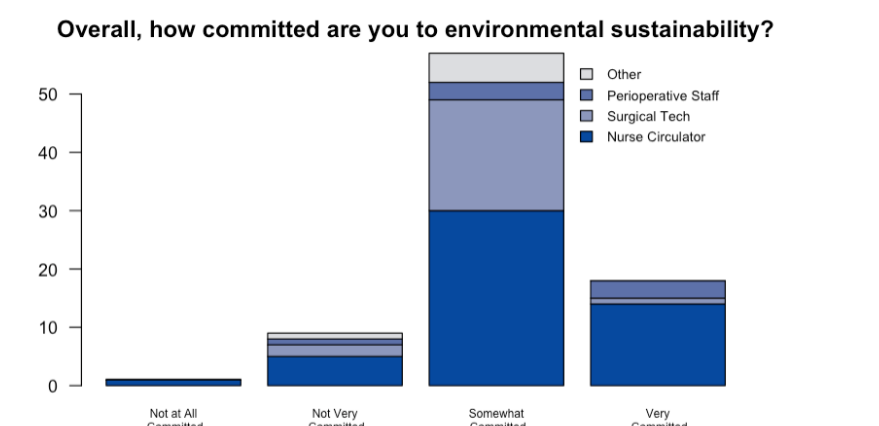
Employees were asked about their individual behaviors and opinions related to environmental sustainability, support for specific OR-based initiatives being considered by management, and measures of self-efficacy and response efficacy of employees.



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Level of support, % respondents answering "Strongly Support" or "Support"

### RESULTS

Survey completion: 85 employees with median employment duration of 18 mo. Staff supported personal environmental action with 60% using time outside of work to 'help the environment'. Staff who had been employed by Michigan Medicine >6 mo demonstrated greater commitment to individual sustainability than staff employed ≤ 6 months (p= 0.01).



### CONCLUSIONS

The results of this survey demonstrate that Michigan Medicine surgical staff support greater environmental sustainability in the OR. Several specific initiatives could be introduced, with staff support, to decrease landfill bound-waste, and energy and water use to reduce Michigan Medicine's GHG production.

### ACKNOWLEDGEMENTS

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