

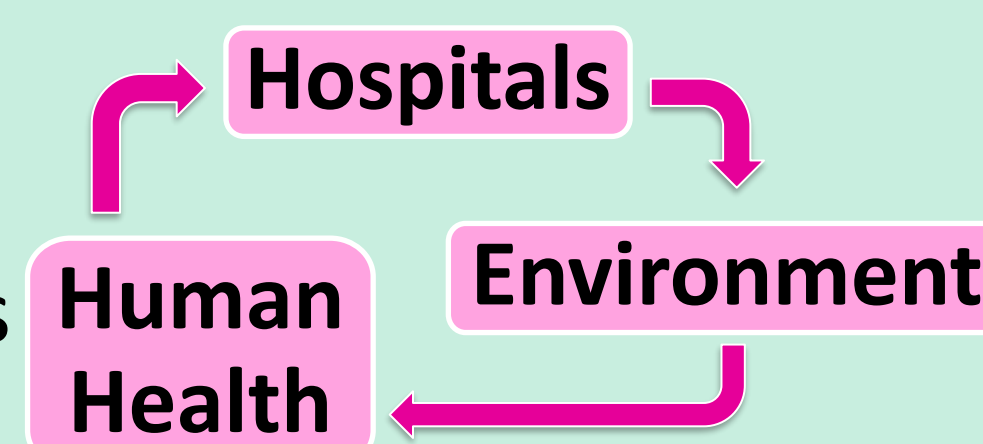
CODE GREEN: AN EXAMINATION OF THE RESILIENCE OF HOSPITAL SUSTAINABILITY IN PANDEMIC TIMES

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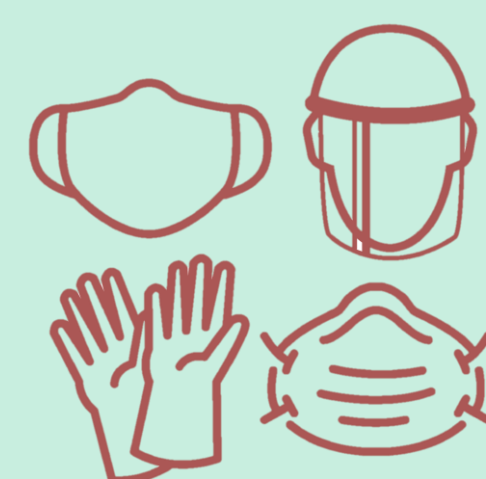
 @migoldman7

CONTEXT

- Hospitals seek to heal people, but their energy-intensive buildings and wasteful practices lead to a harmful feedback loop, which hospitals are rectifying with sustainability.



- However, with the COVID-19 virus, hospitals redirected their focus toward COVID treatment, losing track of their sustainability progress. These issues include:



- Waste from single-use personal-protective equipment (PPE)
- Frequent water flushing to prevent pathogen accumulation (Water 2021)

- Therefore, I dug into the administrative issues of COVID-era sustainability to suggest ways to improve resilience.

RESEARCHABLE QUESTIONS

- How did COVID-19 impact the motivations of hospital sustainability, as well as the limitations?
- What environmentally-sustainable measures can hospitals take to be more equipped for their next crisis?

METHODS



Figure 1: Pot feeder for a closed-loop chemical feed.

- Technical Sales Intern with Nalco Water:**
 - I serviced water treatment systems that improved sustainability for hospitals' heating and cooling systems (see Fig. 1).
 - I also worked with colleagues to identify valuable cost-savings projects for 20 clients.
- 7 semi-structured interviews with healthcare experts:**
 - Covering the state of hospital sustainability in the Pacific Northwest, Midwest, and Southeast.

RESULTS

Key Motivations for Sustainable Healthcare

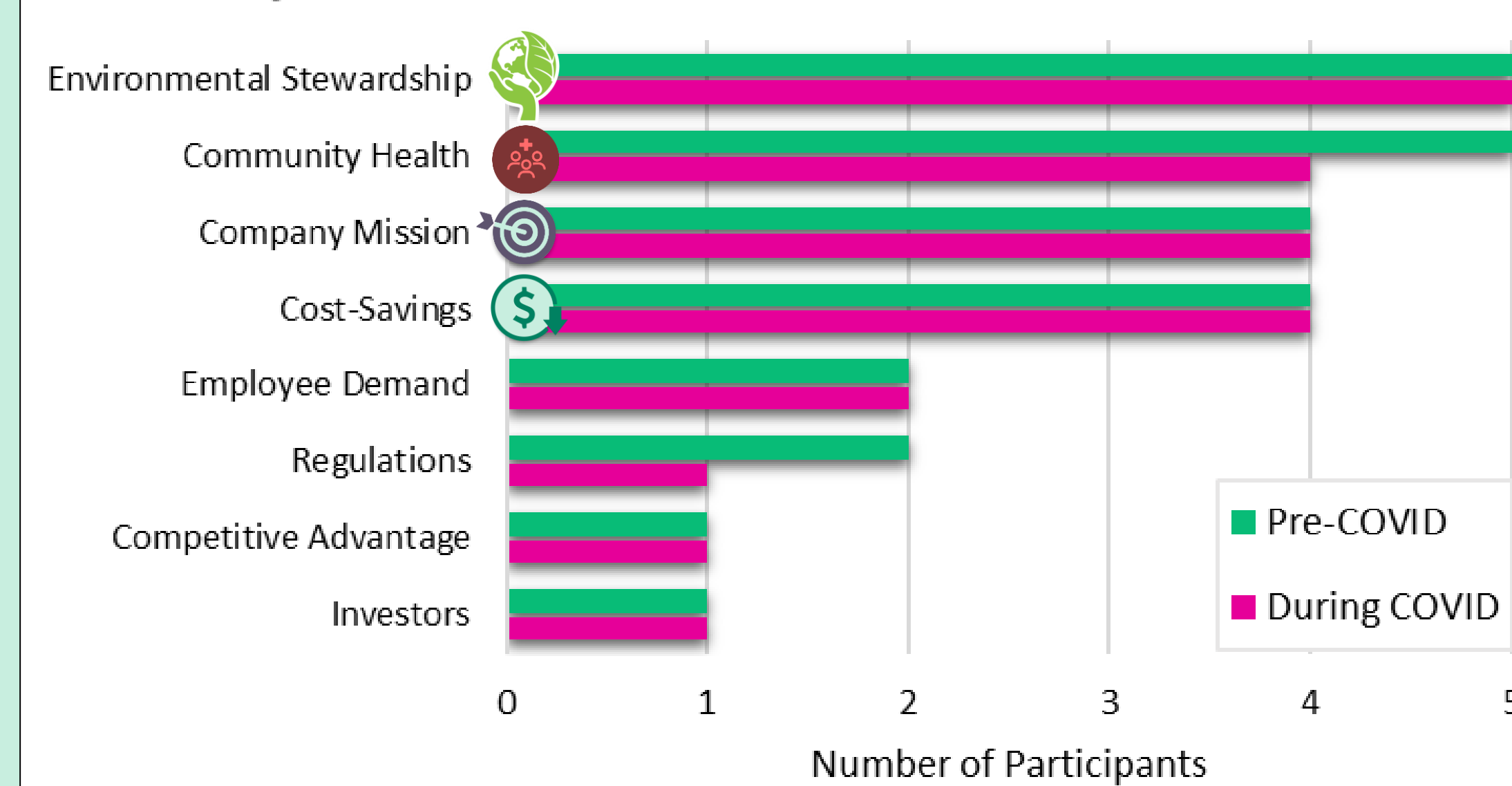


Figure 2: Comparison of the key drivers for sustainable change before and during COVID-19, based on 7 interviews with healthcare experts.

- Environmental stewardship remained the primary driver during COVID (see Fig. 2).
- My internship supported cost-savings as a key driver (e.g. sales proposals).
- No significant change in any driver.



Key Limitations for Sustainable Healthcare

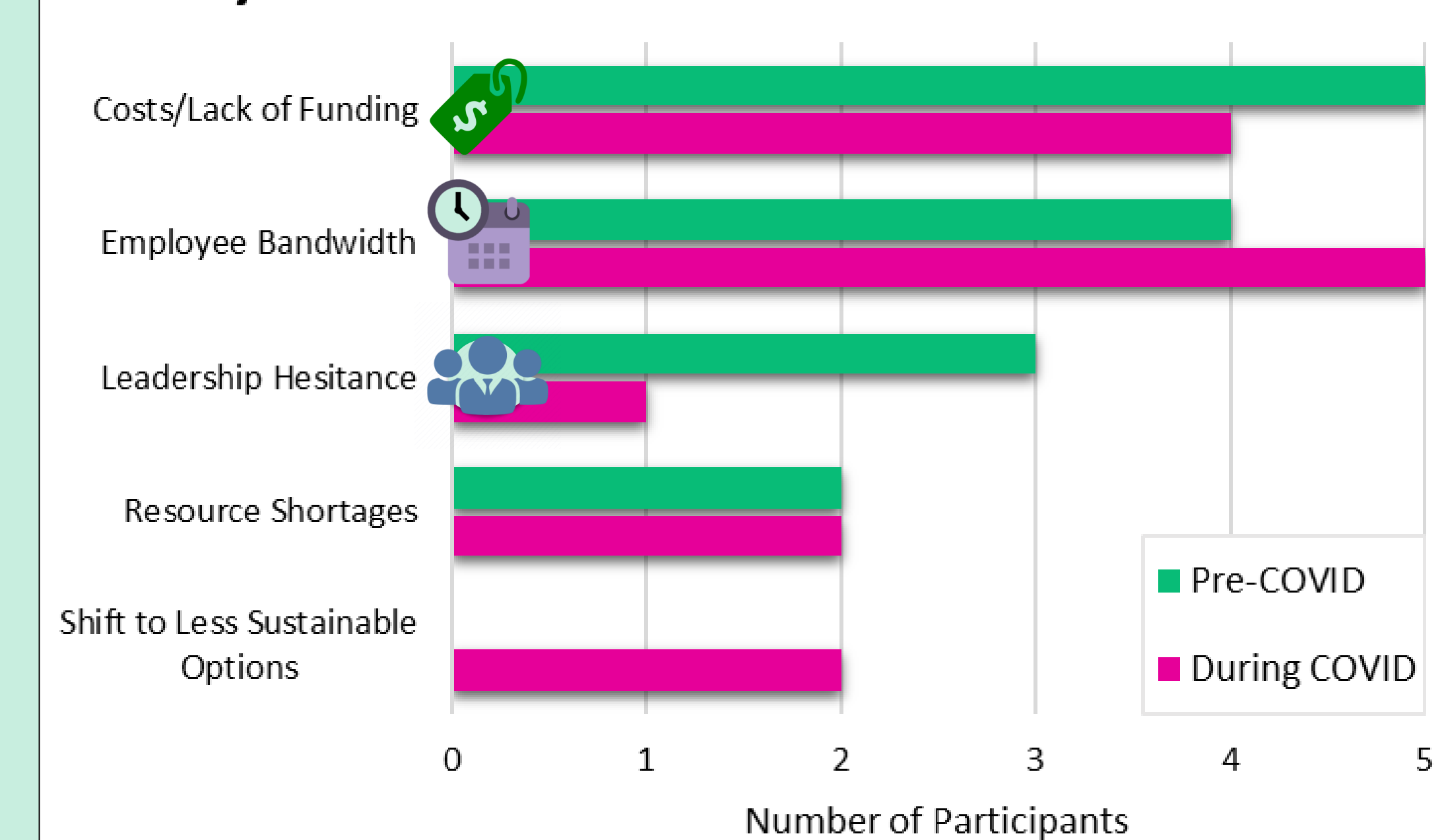


Figure 3: Comparison of the key limitations for sustainable change before and during COVID-19, based on 7 interviews with healthcare experts.

- Cost was the primary limitation pre-COVID, but became second to employee bandwidth during the pandemic (see Fig. 3).
- COVID made leaders less hesitant to change.



PREPARING FOR RESILIENCE



- Perform a life-cycle analysis to understand the cyclical nature of harmful practices.
- Start sooner than later—invest in sustainable solutions now to prepare for the next crisis.
- Mission-focused organizations were the most resilient to financial stress during COVID.



Examples of resilient practices:



Reusable gowns
(HealthPartners)



Transit initiatives + parking fees
(Seattle Children's)



Medicine takeback program
(HealthPartners)



Tree-planting COVID-19 memorial
(Advocate)

RECOMMENDATIONS

For Hospital Managers:

- Dedicate more personnel/time to sustainability projects
- Assess the feasibility of projects that improve environmental health
- Set a clear, ambitious mission(s)

For Lawmakers:

- Develop regulations that target weaknesses in hospital sustainability

For the Public:

- Advocate for sustainable change in healthcare as YOU are their priority

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