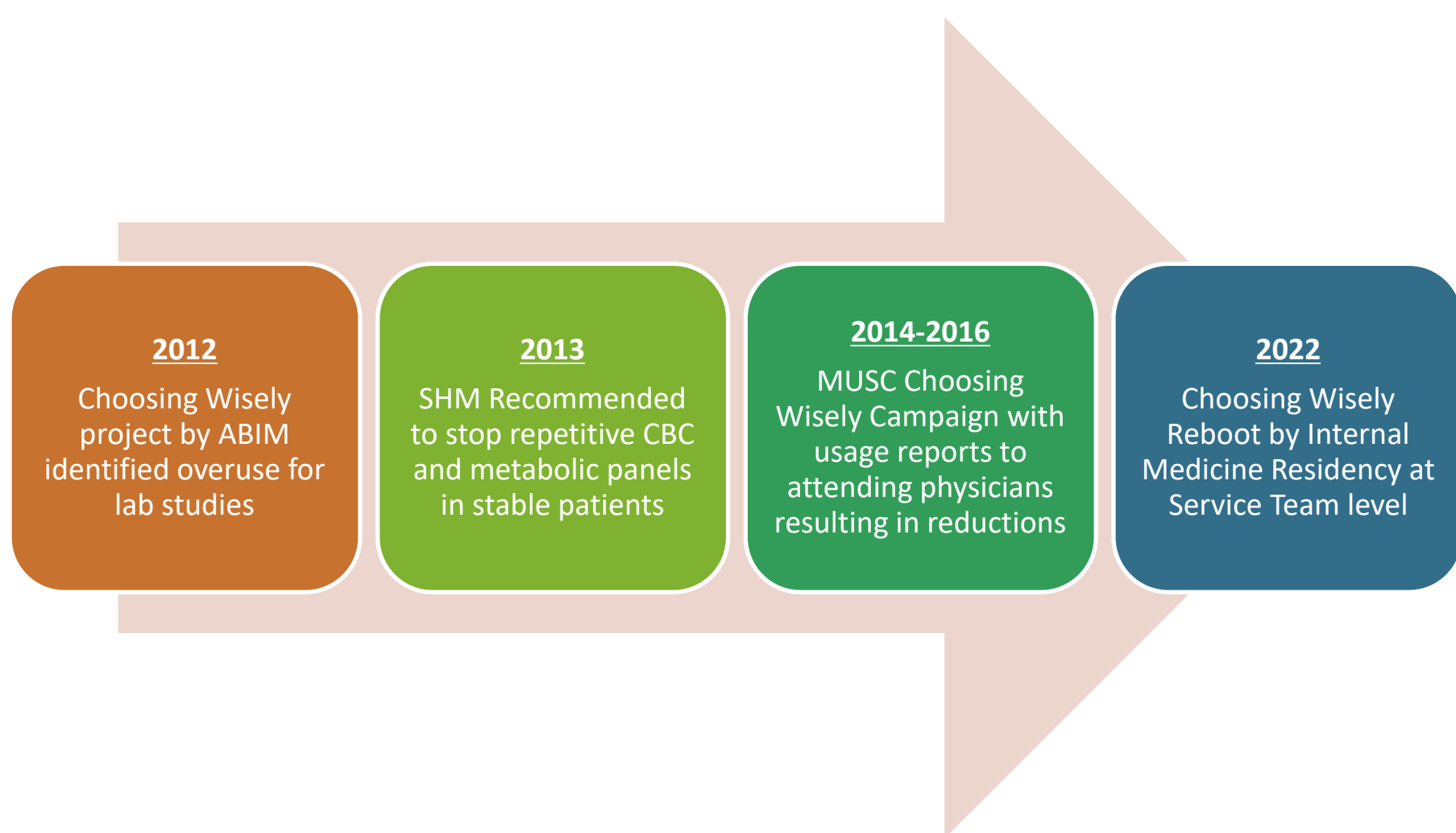


Improving Lab Over-Utilization on the General Medicine and Cardiology Services

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INTRODUCTION



OBJECTIVE

We aim to reduce the number of CBC and metabolic panels ordered by Internal Medicine residents by 10% using resident-driven interventions.

METHODS

Data was pulled via EHR reports.

The post-graduate year 3 (PGY-3) residents met monthly to review data.

Organized interventions included:

1. Presentation of the project at the attending hospitalist monthly meeting
2. Reminder email to specialty physicians working with residents on wards
3. Data posters displaying progress in resident work rooms
4. Reminder cards on workstations
5. Organized competition between resident teams: Residents placed a coin in a bowl for every lab they actively did not order

RESULTS

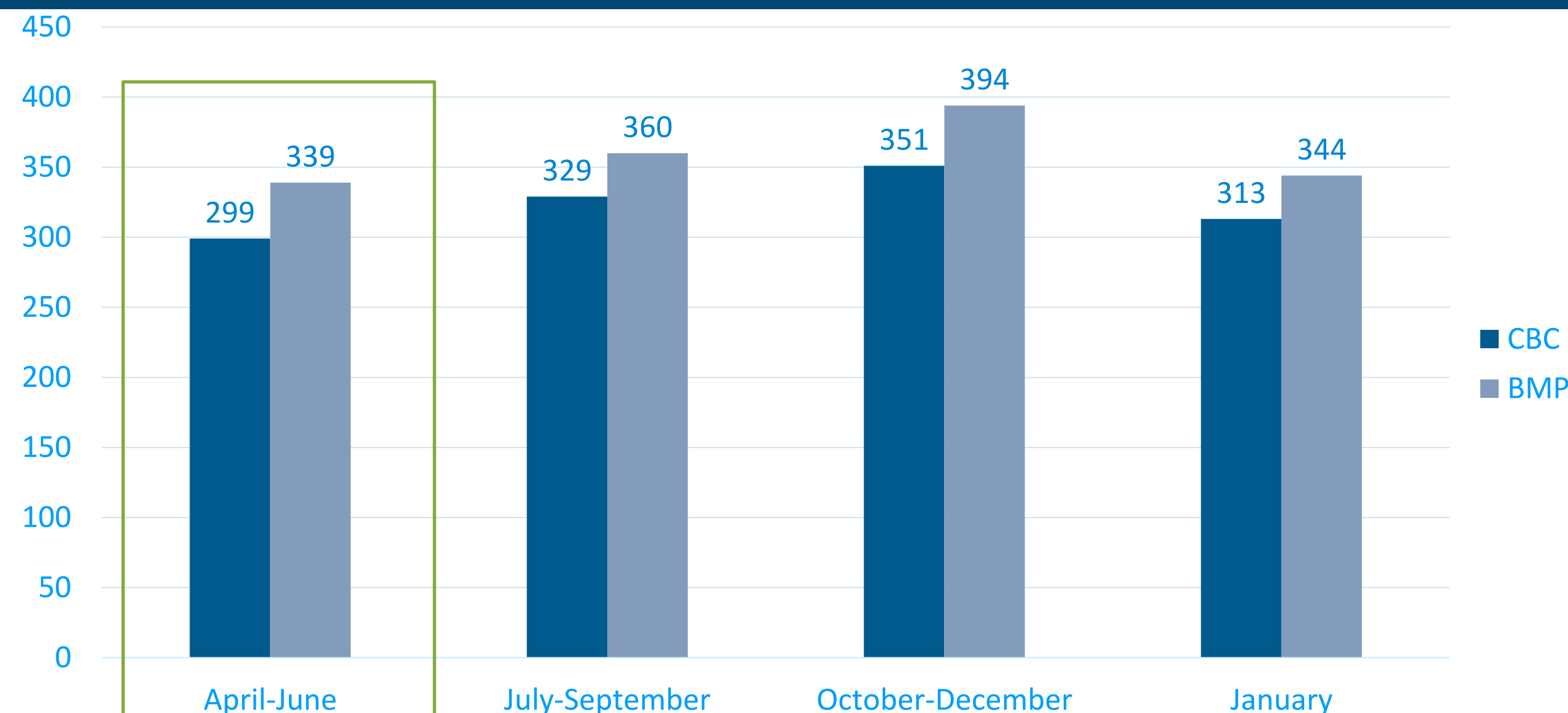


Figure 1. Total Number of lab draws averaged over all teams per 3 months.

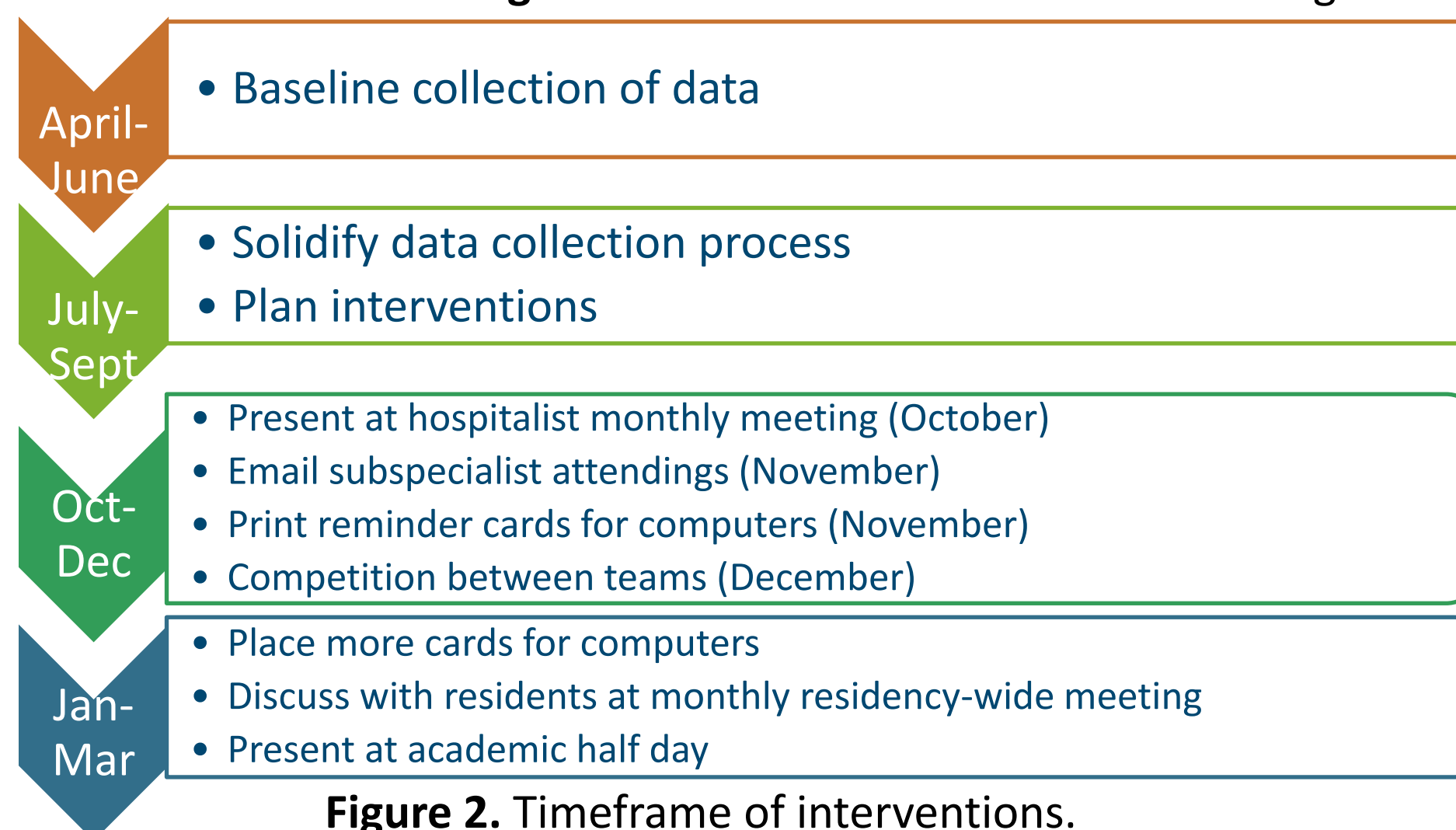


Figure 2. Timeframe of interventions.



Figure 4. Representation of least to most useful intervention, left to right.

DISCUSSION

Project End Date: April 2023

Project Goal: 10% Reduction – **Not Met**

- Most of our interventions were ineffective or not long lasting
- Data assessed at the service team level, and residents were included in the campaign
- Card intervention had similar effect to alarm fatigue
- The hospitalist presentation was effective in the short term
- The subspecialist email had unknown (and likely minimal) effect).
- The competition was difficult to organize and track as several teams did not participate at all
- The data posters were motivating, but also easily overlooked.
- A data-related issue was that service team was captured on admission, rather than discharge

CONCLUSION

Although the ultimate benchmark of reducing lab draws was unsuccessful by our measured goal, the project accomplished several other measures:

- The PGY3s actively designed and carried out a quality improvement project that can affect the hospital as a whole.
- It prepared the path for a similar project led by the academic hospitalists for their teams.
- Data was assessed at the resident-level that had not been done previously.
- It illustrated the need for a culture change amongst medicine residents at MUSC as the ordering of daily labs was well established as part of resident workflow.
- In the long run, we hope to reduce cost and personnel.

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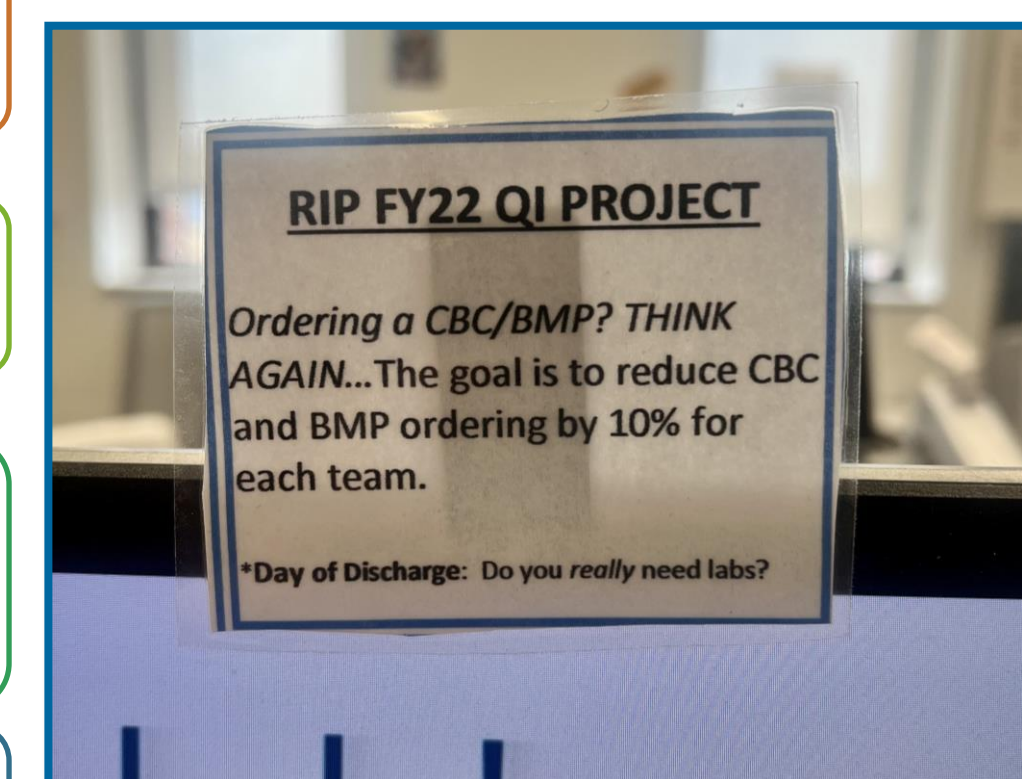


Figure 3. Reminder cards on workstation