

INSTITUTING PRO-ACTIVE MULTI-DISCIPLINARY RISK MITIGATION TO IMPROVE OUTCOMES AND TEAM DYNAMICS IN A PEDIATRIC HEART PROGRAM

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BACKGROUND

- Complex pediatric cardiac patients are at high risk for poor outcome after cardiac procedures
- Serious event and mortality rates for these complex patients at Nationwide Children's Hospital, though improving, were higher than desired.
- During high acuity situations and events, communication and teamwork are fundamental to successful outcomes but can be challenging. We noted a breakdown in teamwork and development of a non-collaborative culture amongst our team members.
- Pro-active mitigation (called "Safety II") has been shown to decrease safety events and improve reliability.



OBJECTIVES

- Primary-** Improve outcomes in cardiac patients at high risk for post-procedure morbidity/mortality
- Secondary** - Improve communication, teamwork and culture in our Heart Center

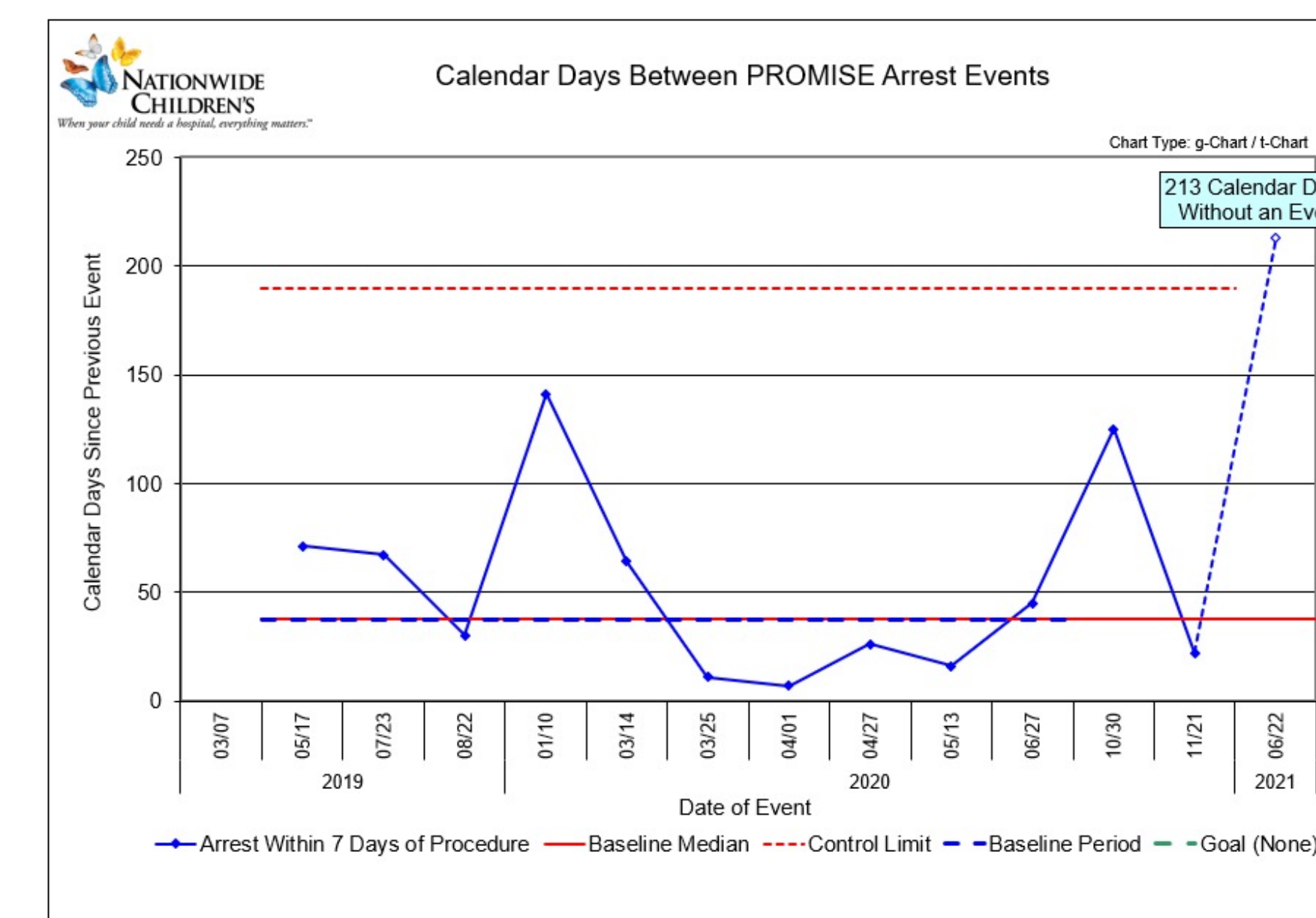
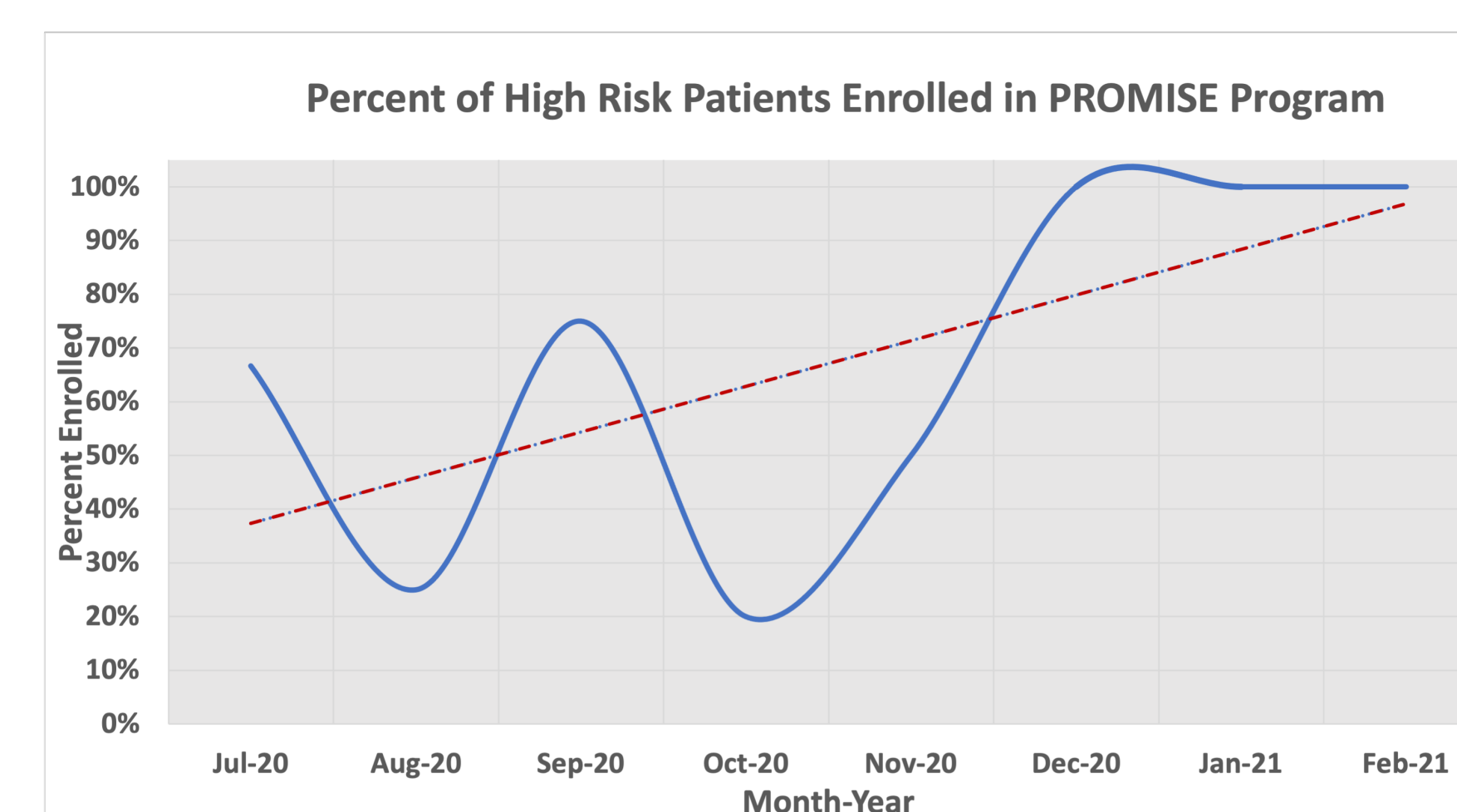
DEVELOPING AN INTERVENTION

- Pre-procedure planning for every patient includes a formal multi-disciplinary case review. Post-procedure care, however, is typically provided by a smaller group and may be limited to the input of as few as one or two physicians.

INTERVENTION/ WORK TO DATE

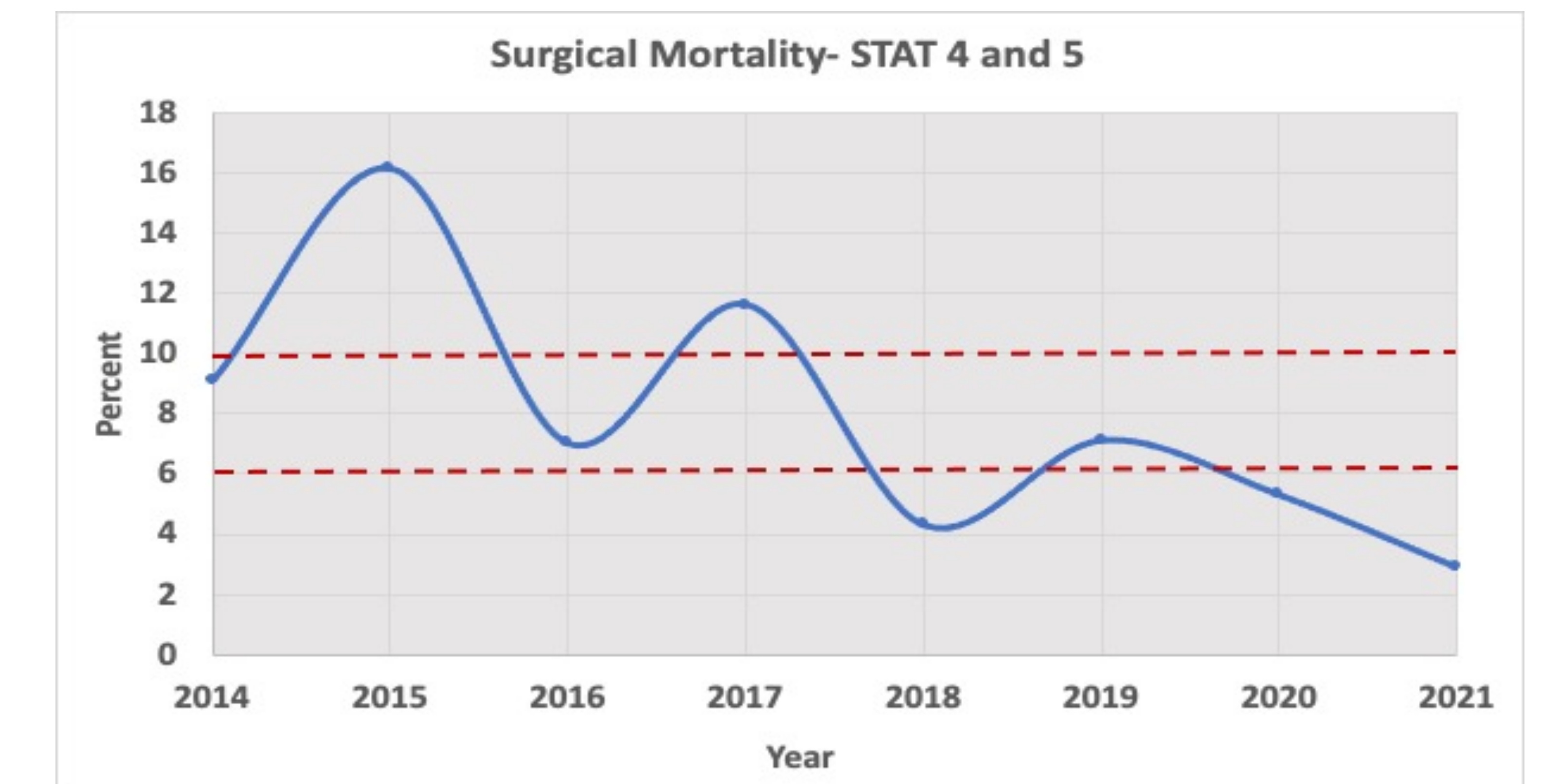
- The Heart Center (HC) **PROMISE** program: **PRO-active MITigation to decrease Serious adverse Events**
- Scheduled multi-disciplinary consultative review in pre-identified high-risk patients
- Virtual platform at 4 timepoints pre-procedure and post-procedure
- Brief discussion: patient and procedural risks, pro-active mitigation plan, guidelines for invasive interventions, planned follow-up
- Required participants: HC leadership, cardiac surgeon, cardiac ICU physician, cardiac anesthesiologist, interventionalist, imager
- Key elements of call developed
- EMR (EPIC) document template created to facilitate documentation and communication with front line providers
- Multi-disciplinary work group established to review data, assess results and provide input for modifications

OUTCOMES



- Initial patient enrolled July 2020; 35+ patients enrolled to date
- Outstanding participation by team, with typical attendance by >15 physicians plus additional "listeners"
- Process measures: appropriate patient enrollment, diagnosis, completion and content of calls, documentation of calls
- Outcome measures: mortality, morbidities (eg cardiac arrest, unplanned procedure), culture/communication

OUTCOMES



Culture Survey:

- 70% of faculty agreed or strongly agreed that "The PROMISE program is improving communication amongst HC staff", with only 8% disagreeing
- Comments from survey:
"This is the single most useful thing that has been done to improve communication in patient care"
"PROMISE has had an extremely positive impact on HC culture"

NEXT STEPS

- Ongoing tracking of process/outcome measures
- Creation of EPIC "Flag" for rapid communication
- Dissemination to other programs nationally

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