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Project #10: Less Chaff, More Wheat: Clinical Decision Support Governance

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Less Chaff, More Wheat: Clinical Decision Support Governance

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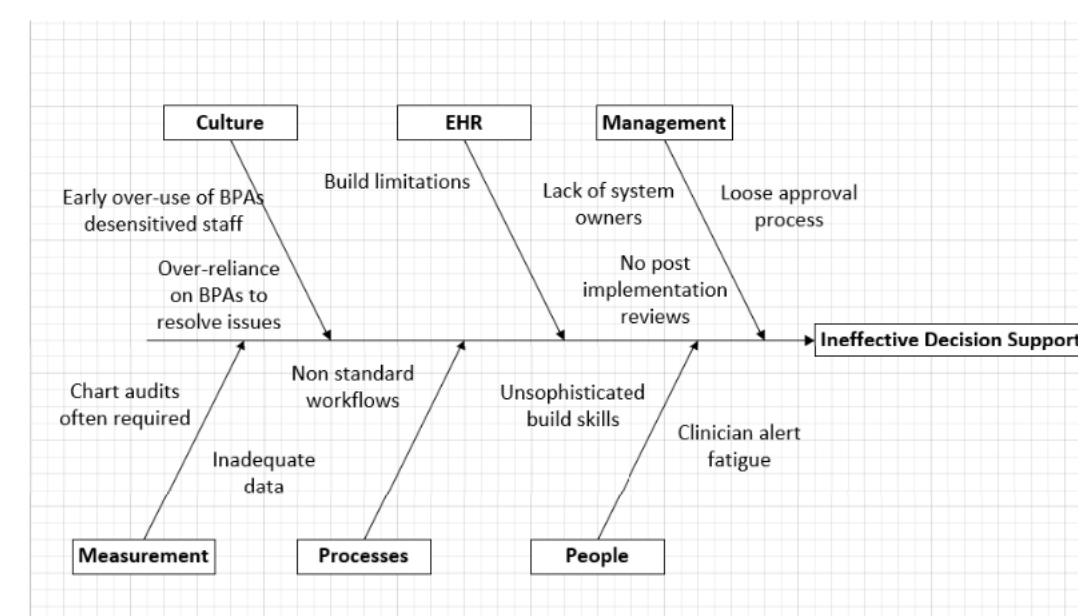
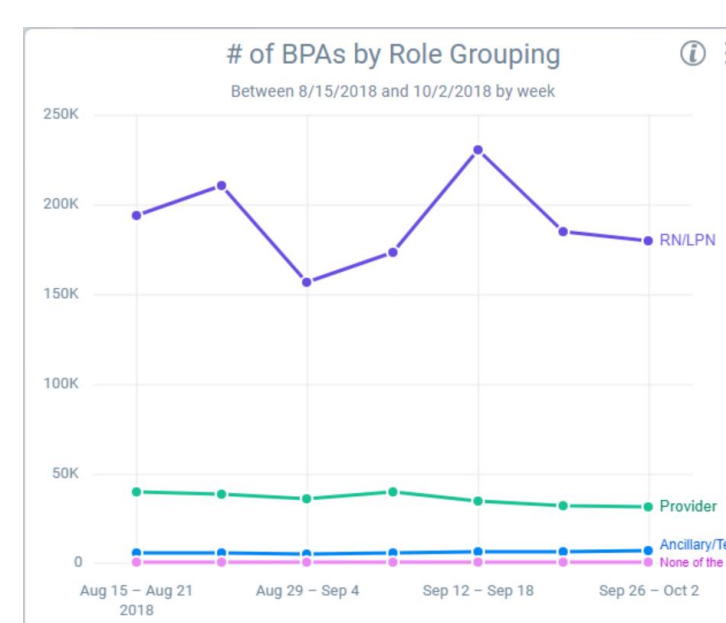
WINNER

AIM

- Use governance structures to establish guidelines for effective use, oversight, approval and post-implementation assessment of clinical decision support tools
- Improve the sophistication of team in designing and implementing effective decision support.
- Use five rights of decision support (the right information, to the right person, in the right format, through the right channel, at the right time in the workflow) as guiding framework for design and review.
- Minimize impact on clinician efficiency.
- Reduce the number of interruptive Best Practice Alerts (BPAs).

PLAN: CURRENT STATE

- Henry Ford Health implemented Epic’s Electronic Health Record (EHR) between 2012 – 2014. By 2018, we were receiving regular complaints about the number of BPAs. In August 2018, Epic added BPA data to their slicer/dicer tool, making it much easier to track the impact of changes.
- RNs/LPNs and providers were impacted most by interruptive BPAs, which fire in the workflow and require at least one click to move past.



- System Decision Support Oversight Committee created by System Clinical Quality Committee.
- Charter was to refine the HFHS deployed decision support alerts and tools so that, by being of higher value, they will have greater impact on behavior and outcomes. This includes removing low value alerts, refining existing alerts and creating high value alerts.

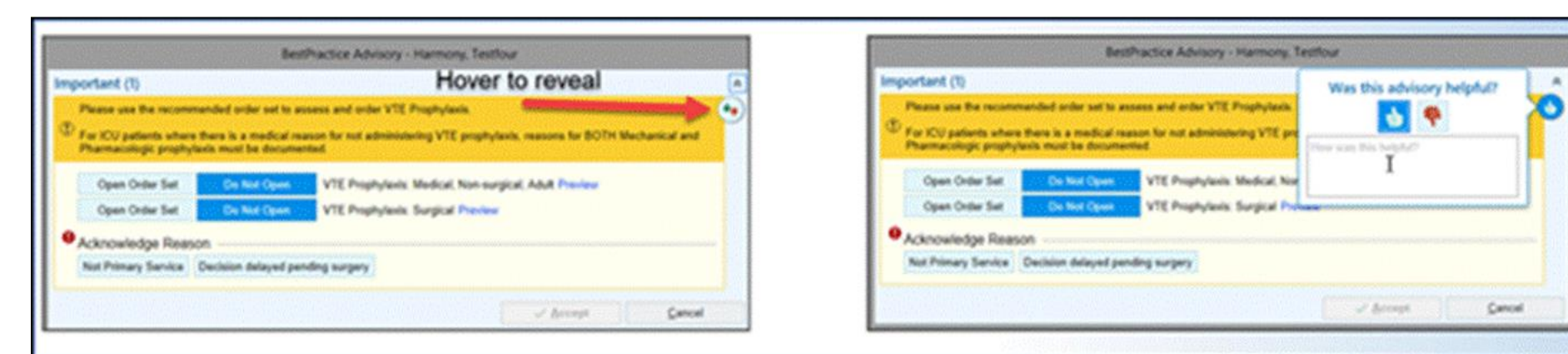
Key Metrics	Data Source	Baseline (FY 2016)	Target Value
Degree to which Epic alerts are followed	Stanson analytic tools and Epic reports	3% in aggregate	5 - 10%
Individual quality outcomes	Epic and EDW reports	Varies by outcome	Varies by outcome
Numbers of alerts/ workflow or day by discipline	Stanson analytics	Varies by discipline	10% reduction
Cost of care savings	Stanson analytics	Varies by alert	

DO: CORRECTIVE ACTIONS / INTERVENTIONS

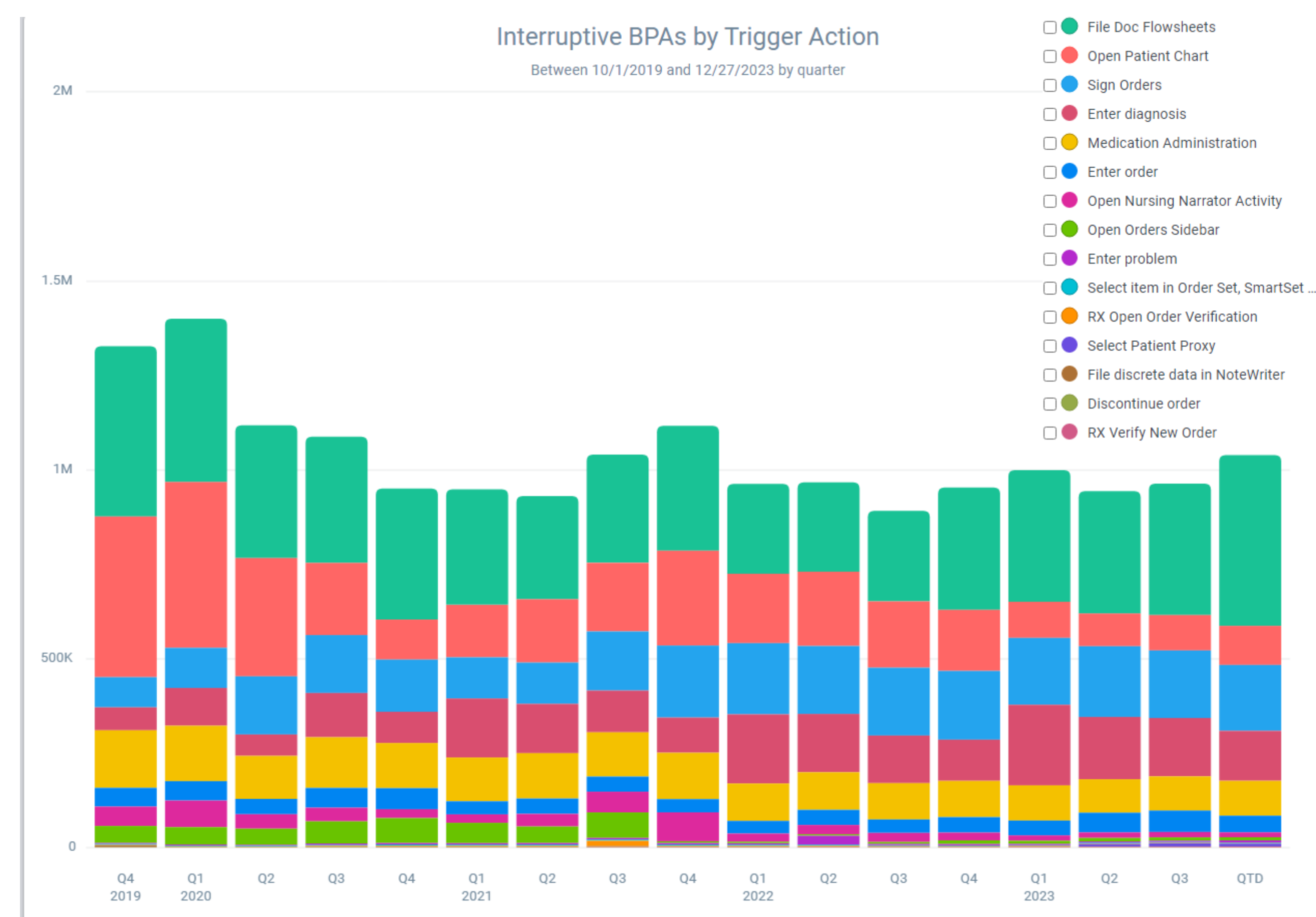
- Established workgroups to review BPAs in the inpatient, ambulatory and emergency department settings. Some of these workgroups continue to meet actively to this date to approve and improve BPAs.
- Instituted regular post implementation reviews of decision support.
- Delegated approval and review of targeted BPAs to clinician committees most familiar with the specific workflows.
- Conducted review of our progress in major areas including decision support in Ambulatory, Emergency Department, Inpatient settings as well as the use of predictive models.
- Created standard template for requests and review.
- Required checklist elements are completed including metrics, system group approval, people responsible for monitoring.

CHECK (EVALUATION OF CHANGES)

- Initial significant decrease in number of interruptive BPAs.
- Held gains with rigorous review of new BPA requests.
- Used BPA feedback tool as voice of customer.

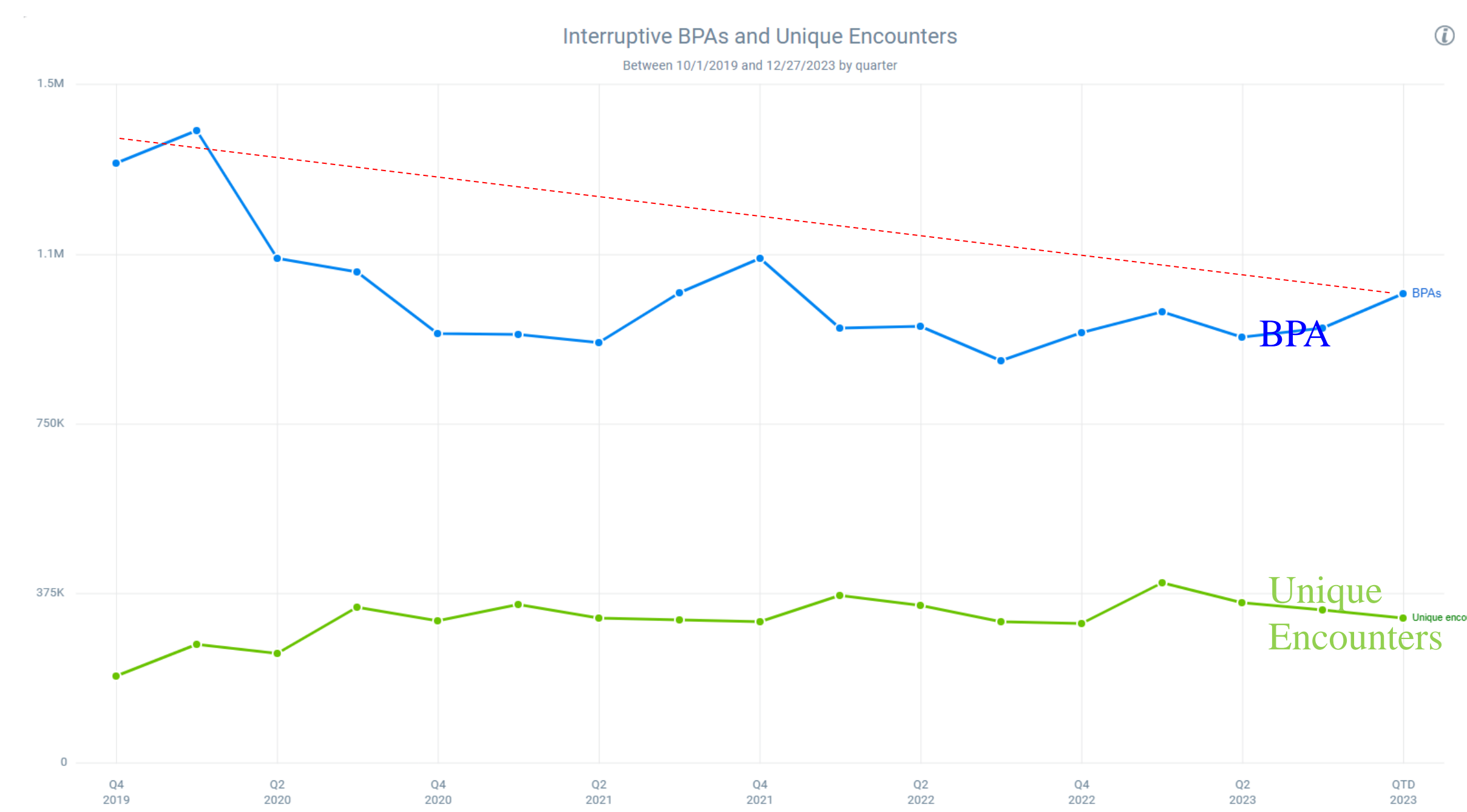


- Looked critically at trigger actions, with focus on firing at appropriate time in workflow. Reduction in open chart is example of targeted triggers.



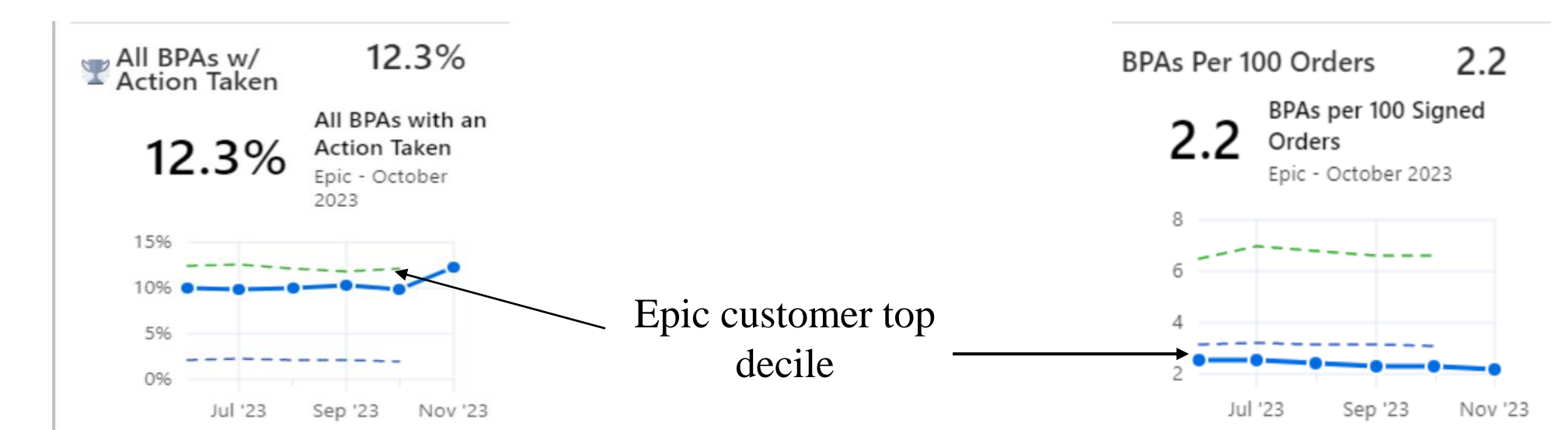
MEASURES

- Overall decrease in interruptive BPAs
- Reduction in BPAs/encounter

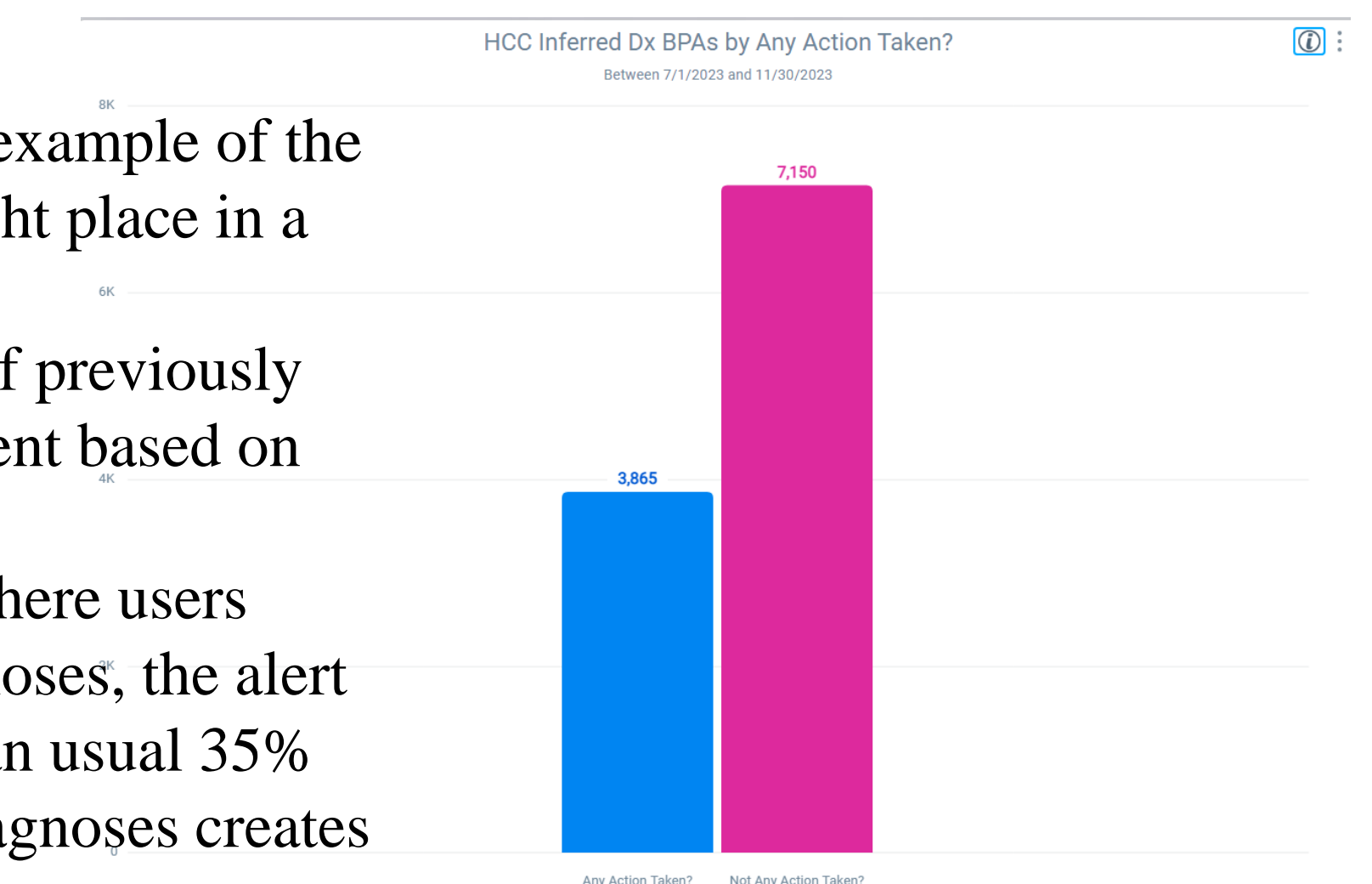


ACT: SUSTAIN AND SPREAD

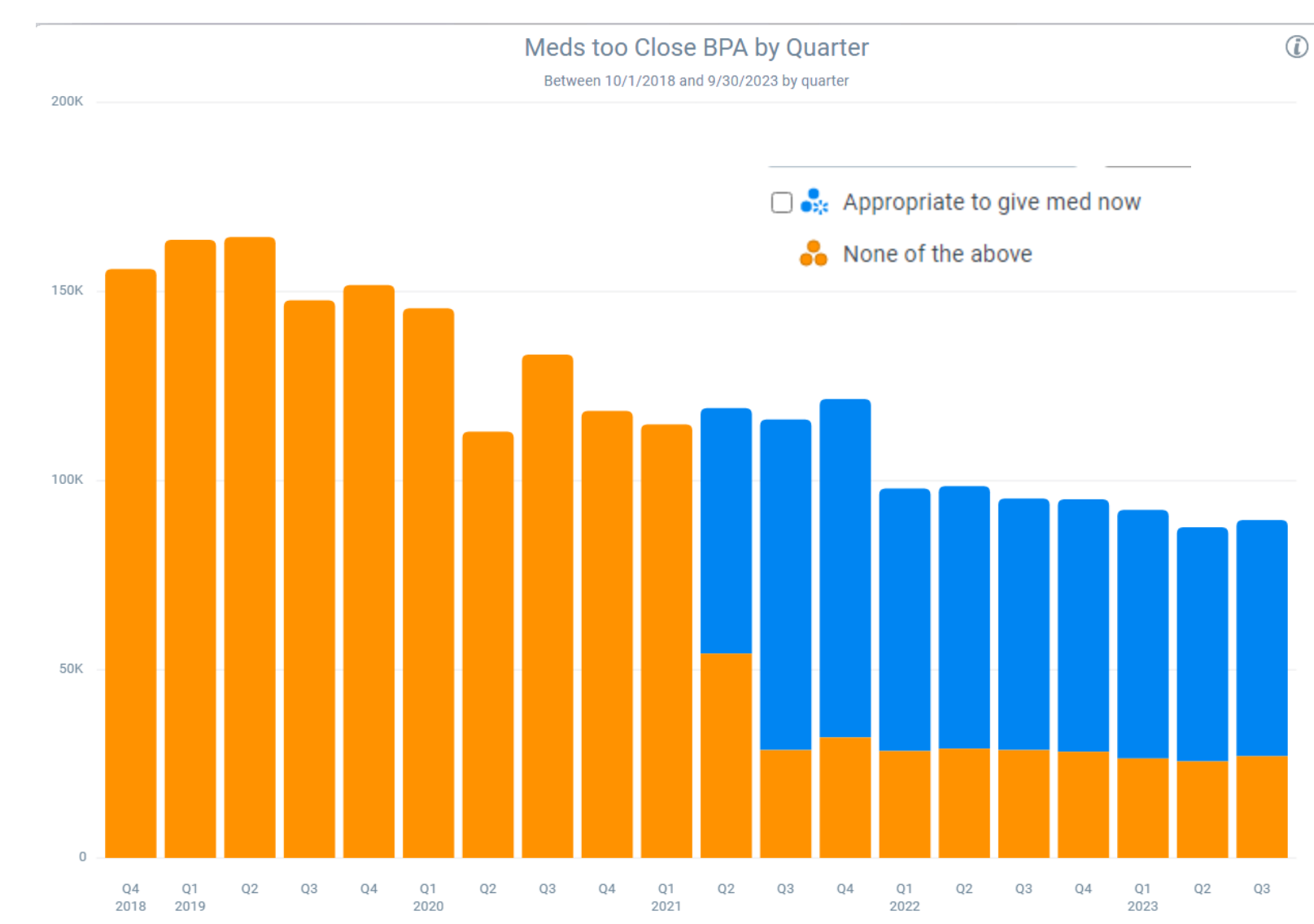
- Implemented Decision Support Guidelines, stored in Policy Stat, to standardize our approach to decision support requests, design and approval.
- More emphasis on putting intervention at the right place in the workflow.
- HFH is at the top decile of Epic customers on the metrics of BPAs with an action taken (people responded as designed to a BPA) and BPAs per 100 signed orders (judicious use of BPAs).



- HCC Inferred Diagnoses BPAs – an example of the importance of putting alerts at the right place in a workflow
 - These alerts informed clinicians of previously undiagnosed conditions for a patient based on chart evidence
 - By putting the alert at the point where users were already assigning visit diagnoses, the alert follow rate was a much higher than usual 35%
 - The improved capture of these diagnoses creates both quality and financial improvements.



- “Meds too close” is an Epic foundational BPA that been problematic for many Epic users but does provide a safety net for busy RNs. Using governance and analytical approaches, we’ve taken many incremental steps to reduce the inappropriate firing of this BPA.



KEYS TO SUCCESS / LESSONS LEARNED

- Potential harm of improper use of decision support. Leaving an ineffective BPA in place can be detrimental by creating alert fatigue, noise, distraction and noncompliance.
- Thoughtful design is crucial. Need to understand problem, apply the Five Rights of decision support, simplify design, and test decision support.
- Approval by knowledgeable governance group who conduct rigorous review, ensures that meaningful measurement and implementation plans are in place.
- Post implementation review is a critical step in the process. Evaluation includes both the performance of the decision support and the impact on the problem. Turning off a BPA is a responsible choice when improvement in the outcome is not achieved.