

# TRANSITIONS OF CARE: Developing tools to assess overnight provider documentation at an independent academic medical center

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## Background

- When a cross-covering provider intervenes on patients with changes in clinical status, we have observed inconsistent documentation of that encounter in the medical record
- A literature review revealed a review of end-of-shift handoffs tools,<sup>1</sup> and one article that identified cross-coverage documentation as a high-ranking concern for transition of care communication<sup>2</sup>

## Goals

- Develop a rational and feasible methodology to identify and assess cross-coverage documentation of admitted patients with changes in their clinical status
- Perform a current state analysis of the gap between the care provided by cross-covering providers and their medical record documentation
- Develop Ongoing Professional Practice Evaluation (OPPE) program to provide meaningful feedback to providers to narrow the identified documentation gap

## Methods

- Identify overnight orders (3pm-7am) on medicine units that were markers for changes in clinical status (triggers):
  - New intravenous medications, fluid boluses
  - Stat labs, imaging, and transfusions
- Excluded orders:
  - Orders placed by consultants and those for non-urgent interventions
  - Most medication dose/frequency changes
  - Orders discussed in other relevant documentation
- Remaining orders were randomized, then sampled. Charts were evaluated for the presence of documentation
- Notes were assessed utilizing “SOAP” framework
  - Subjective, objective, assessment, & plan (1 point each)
  - Score 0-4, strong inter-rater reliability (kappa 0.825)

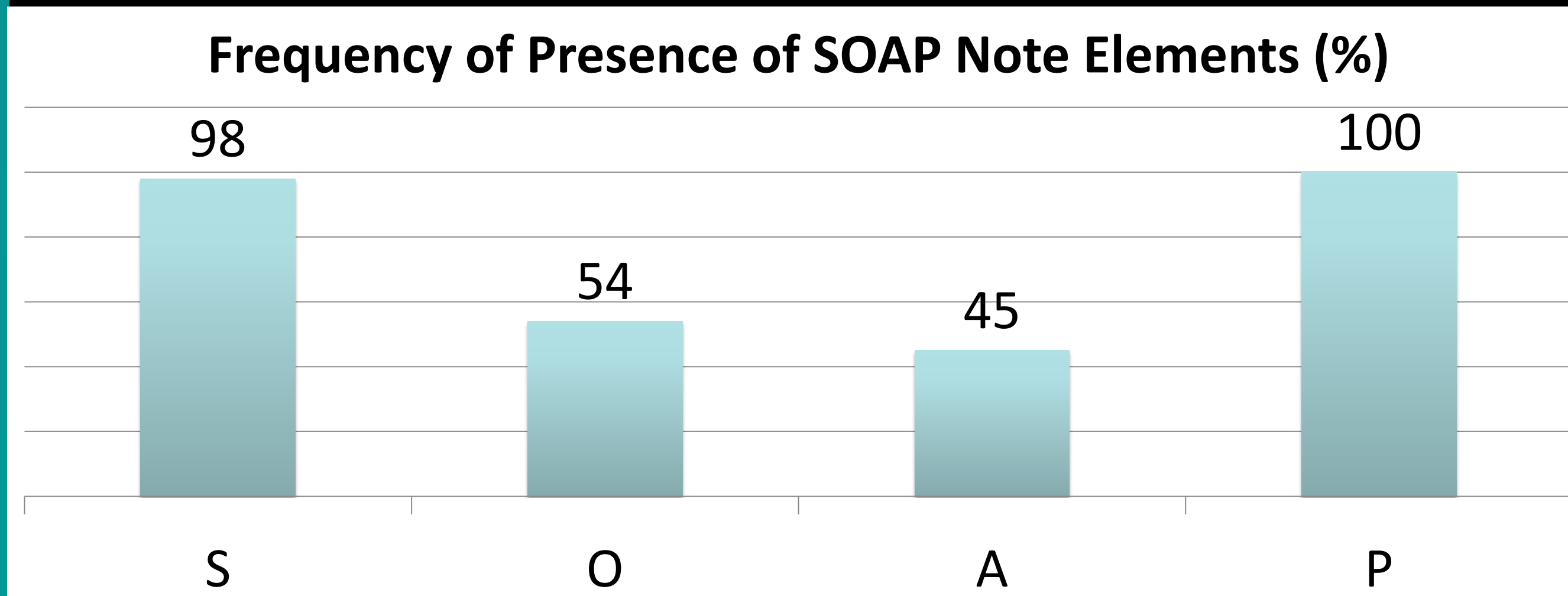
## Results

- Random chart audits for above triggers identified very few orders
- An IT tool identified approximately **1000** orders across 11 inpatient units ( $\approx 440$  beds) per week, yielding approximately 75 charts to be reviewed for documentation per week
- On average, 66.5% of reviewed orders did not have a cross-coverage note present (Table 1)
- Of 33.5% of orders with a note present, the average SOAP score was 3.0 out of 4.0
- SOAP element presence: S-98%, O-54%, A-45%, P-100% (Figure 1)
- Processing each week’s IT orders (applying exclusions, reviewing medical records, and compiling data) required roughly 5 hours

**Table 1**

Dates (11 week time frame)	12/6/15-2/20/16
Total orders from IT tool	11,026
Orders meeting primary exclusion criteria	- 4,926
Remaining orders	6,100
Remaining orders after randomization and sampling	1,925
Orders meeting secondary exclusion criteria	- 1,085
Remaining orders for note review	840
# Reviewed orders with chart note	281
% Reviewed orders with chart note	281/840 = 33.5

**Figure 1**



## Key Lessons Learned

- Attempts at random chart audits were low yield, prompting development of IT tool
- Our current IT tool process is capable of identifying instances of clinical care delivered by cross covering providers
- Our tool and process can be applied reproducibly over time

## Conclusions

- We have developed a methodology to identify patients with clinical status changes as defined in this study
- Our results substantiate our casual observation that care delivered by cross covering providers is infrequently captured by documentation in the patient’s medical record
- When documentation is present, while the plan is always stated, it is not consistently supported by either objective findings or the provider’s assessment of the patient at the time cross coverage care is being provided
- In summary, our results show clinical status changes accompanied by incomplete documentation, which poses a safety risk for patients during transitions of care

## Path Forward

- Identify clinical champions to provide feedback to clinicians
- Formally imbed the improved methodology into Departmental OPPE processes
- Develop the capability of objectively evaluating nursing documentation reflecting care coincident to these same selected orders for inpatients with changes in their clinical status

## Bibliography

1. Davis J, Riesenber LA, Mardis M, et al. Evaluating outcomes of electronic tools supporting physician shift-to-shift handoffs: a systematic review. J Grad Med Educ. 2015; 7(2):174-80.
2. Gonzalo JD, Moser E, Lehman E, Kuperman E. Quality and safety during the off hours in medicine units: A mixed methods study of front-line provider perspectives. J Hosp Med. 2014; 9: 756-763.