

# Reducing dermatology specimen errors utilizing a checks and reward system



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**Key words:** checks and rewards; errors; general dermatology; intervention.

Skin biopsies are a common procedure in the field of dermatology. Accurate specimen management requires effective multidisciplinary communication, minimal distractions, and awareness of the opportunities for error.<sup>1</sup> Errors, including lost specimens, mislabeling of patient information, incorrect side of identification, and leakage of formalin from specimen bottles have negative consequences on patient care because they interfere with reading labels, proper diagnosis, and patient outcomes. Because of an unacceptable number of errors occurring at the John D. Dingell VA Dermatology clinic, a root cause analysis was conducted to identify the reason and determine an intervention.

The intervention implemented to reduce errors consisted of 2 parts. The first part was an emphasis on the preexisting checks system that delineated from the standard operating procedure outlining specific roles and responsibilities of nurses and physicians. The second aspect was added by the chief of dermatology, Dr Moossavi, which rewarded the entire staff with a pizza party when no clinic errors occurred within 60 days. The reward system was added in collaboration with the checks system to encourage teamwork and collaboration in hopes to reduce errors occurring, thus enhancing patient care.<sup>2</sup> Once an error was detected, the information was put into the Joint Patient Report System. The error report must be investigated by dermatology, and pathology errors are tracked by the Quality and Safety Department.

The percent of errors in biopsies dropped from an average of 1.1% to 0.46% after the emphasis and introduction of a checks and rewards system (Table I). There was an overall reduction of errors by 64%

**Table I.** Number of biopsies performed per year with the percent yielding errors

Year	No. of biopsies	Percent error
2017	1274	1.3%
2018	1453	1.1%
2019-pre RCA	637	0.6%
2019-post RCA	864	0.4%
2020	921	0.3%
2021	1022	0.6%

RCA, Root cause analysis.

resulting in a reduction in specimen errors at the dermatology clinic leading to better care for the veterans ( $P < .0001$ ) (Fig 1). By reducing errors, we also encourage collaboration between nurses and physicians.

Further investigation into the longevity of these interventions will continue to be studied within our clinic. Regarding clinics experiencing similar defeats with rising or high error rates, we encourage similar trials of checks and rewards. Encouraging collaboration between team members can significantly improve morale and reduce errors. Any reward, even of little value, can provide promising returns in collaboration and better clinical outcomes. We recognize research in terms of the role of checks and rewards in hospital settings for patient safety and quality has been thoroughly examined.<sup>3,4</sup> However, we aspire to look more specifically into dermatology-related specimen errors and methods in which we can improve patient outcomes. Possible confounding limitations include the pandemic interrupting the continuity in clinic

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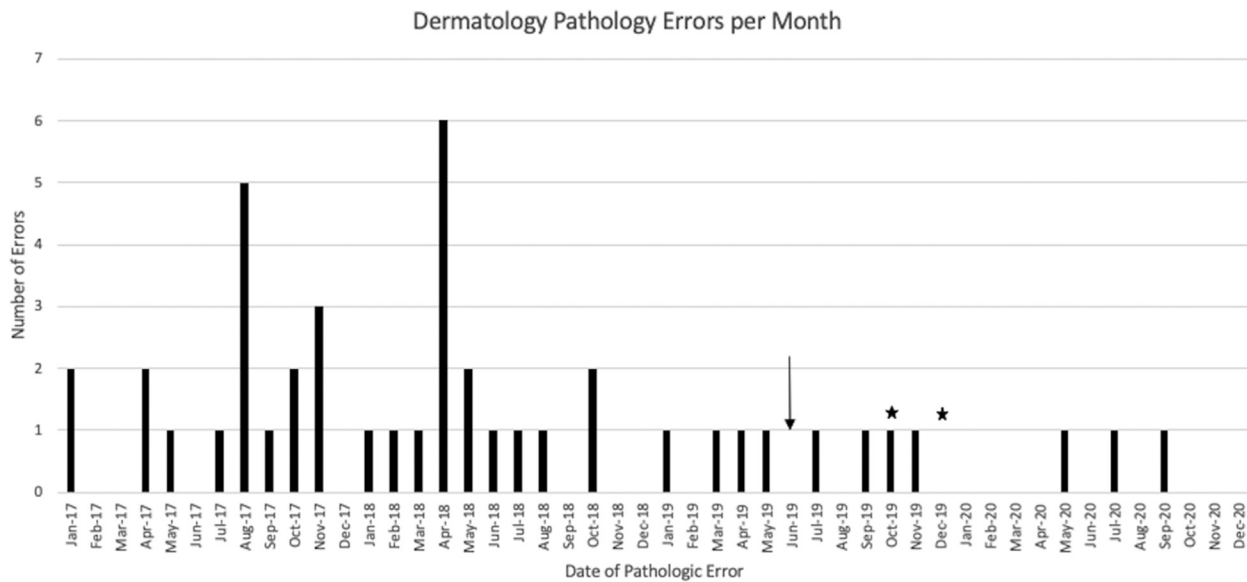
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**Fig 1.** The total number of biopsies per year was recorded and compared with their respective errors. The *arrow* indicates the date of interventions. The symbol *asterisks* indicate dates of pizza lunch rewards. Pizza lunches were often delayed up to a few weeks until organized.

functionality in addition to having a meeting just before intervention initiation reminding everyone of the current guidelines.

**Conflicts of interest**

None disclosed.

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