# Bridging the Gap: Communicating Biopsy Recommendations to Referring Providers

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## Purpose

Transitions of care, and the communication that takes place around them, are important areas of intervention to improve patient safety and reduce medical error. For patients with imaging findings that may require further evaluation with a biopsy, this represents a potentially crucial transition of care between the radiologist and the referring provider, as the subsequent biopsy results can significantly impact treatment. Clear and timely communication with the referring provider when the radiologist suggests a biopsy is essential to guide appropriate management.

The UCSF Radiology department participates in annual trainee-oriented quality improvement (QI) projects meant to engage resident and fellows with quality and safety initiatives. Consistent communication of biopsy recommendations to the referring provider aligns with multiple tenets of quality and safety, including the Joint Commission National Patient Safety Goals and the American College of Radiology Practice Parameter for Communication of Diagnostic Imaging Findings.

## Project Goal

**Baseline:**
Prior to the intervention, UCSF radiologists documented communication of recommendation for biopsy approximately 50% of the time.

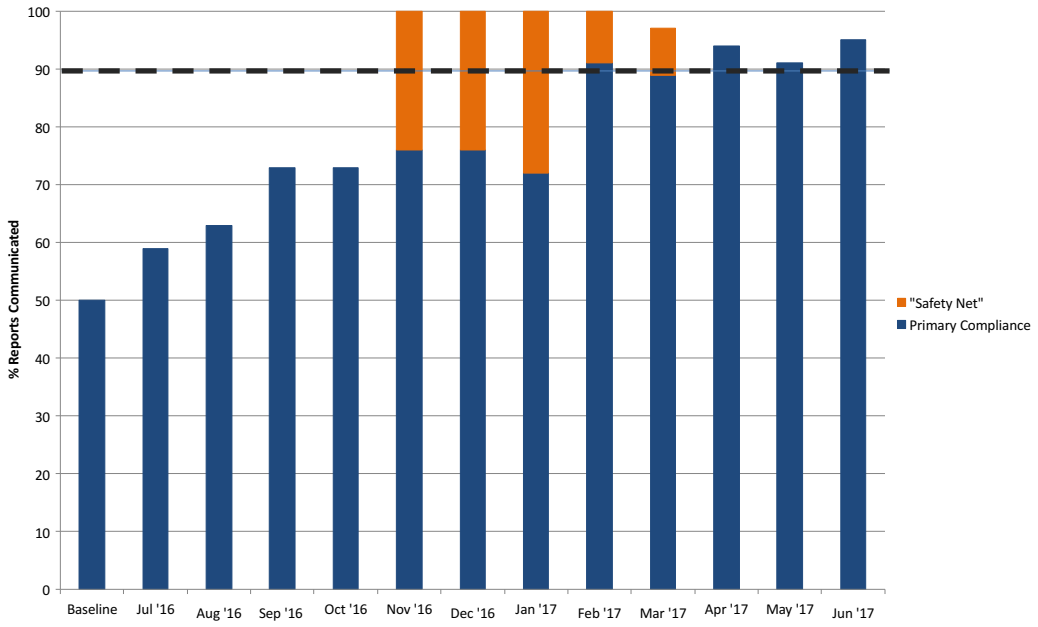
**Target:**
We felt that that a significant improvement in communication rate was both necessary and attainable. We set a high performance goal: for reports in which the radiologist recommended a biopsy, there would be documented communication of the recommendation in **90% of reports**.

## Methods & Interventions

**Methods:**
Data collection was performed over an 18 month period: 6 months pre-intervention to determine baseline performance, and 12 months post-intervention to evaluate response. Reports containing a recommendation for biopsy in the report impression were identified using mPower radiology report search software (Nuance, Burlington, MA). Of these, the total percentage containing documented communication was calculated. Qualifying forms of communication included direct in-person and phone discussion, secure email with confirmation of receipt, and via a designated Department of Radiology communication call center.

**Initial Intervention:**
The majority of radiology reports at UCSF are written and communicated by trainees. Our planned intervention included project-specific education targeted towards residents and fellows, with regular reminders about projects goals and progress updates.

**Additional Intervention:**
Four months into the project we introduced a secondary “safety net” system, which identified reports containing a biopsy recommendation that were not communicated at the time of interpretation. Once identified, this system generated a targeted reminder to the faculty member and trainee involved in the interpretation, as well as a chart review to ensure either appropriate follow up or subsequent communication of the finding and recommendation.




## Results & Discussion

**Results:**
Our initial intervention of targeted resident and fellow education did result in an increased communication rate, but we did not meet our goal for the first quarter. Subsequently, we implemented the secondary “safety net” intervention to further improve our performance. This additional intervention was successful, and we met our performance goal for the remainder of the year and for the project overall.

**Discussion:**
Our secondary intervention of the “safety net” system was successful for several reasons. First, this system was independent of any individual radiologist remembering to communicate their biopsy recommendations, reducing human error contribution to low communication rates. Second, it focused education and reminders towards those individuals who required them, providing tailored reinforcement of the project objectives. This resulted in 2 important trends: improved total compliance immediately following introduction of the “safety net” system, as well as increased primary compliance rates several months later which persisted for the remainder of the year.

This study had several limitations. The requirement for communication of a biopsy recommendation encompassed a wide range of radiologist concern, and did not distinguish between routine guidelines and highly suspicious findings. The “safety net” system was also time- and resource-intensive as a manual process, but could be adapted to an automated system which would allow for broader implementation.

## References

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