

# Automating DSMC Communication: Streamlining Operations and Enhancing Data-Driven Decision-Making



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## Background

The DSMC at Stanford Cancer Institute (SCI) ensures the safe and ethical conduct of clinical studies. After each meeting, outcome letters must be sent to investigators. Previously, this was a manual, email-heavy process that was time-consuming, inefficient, and prone to errors. As study volume grew, this process became unsustainable.

## Project Goals

- Automate DSMC communications and follow-ups
- Reduce manual tasks and data entry
- Improve response tracking and accountability
- Enable scalability as study volume increases

## Solution Overview

A REDCap-based system was developed to centralize communications and track study team responses. The system integrates with existing SCI infrastructure and is being expanded to support data dashboards and broader committee use. Initial outreach to study teams is conducted through REDCap to ensure standardized tracking, while follow-up communications continue via the DSMC inbox to maintain continuity with established practices.

## Features / Methods

### Automated Letter Distribution

DSMC letters are sent via REDCap using standardized templates

### Real-Time Response Tracking

Teams respond via secure REDCap survey links; system tracks status

### Past Due Reminders

Automated reminder notifications are sent out for overdue responses, helping ensure timely follow-up

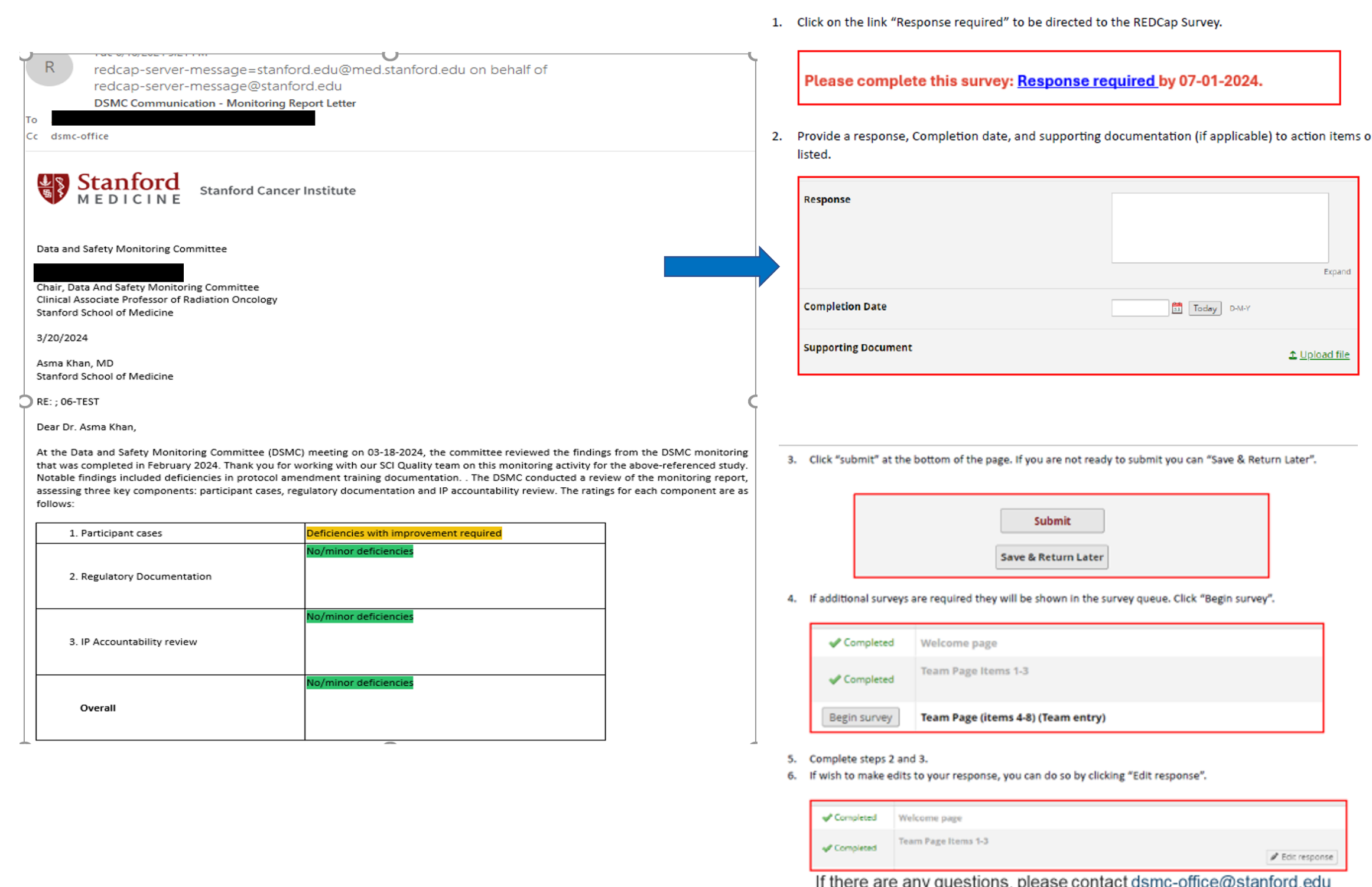
### Dashboard Integration (In Progress)

Tableau will provide insights into response times, deficiencies, and trends

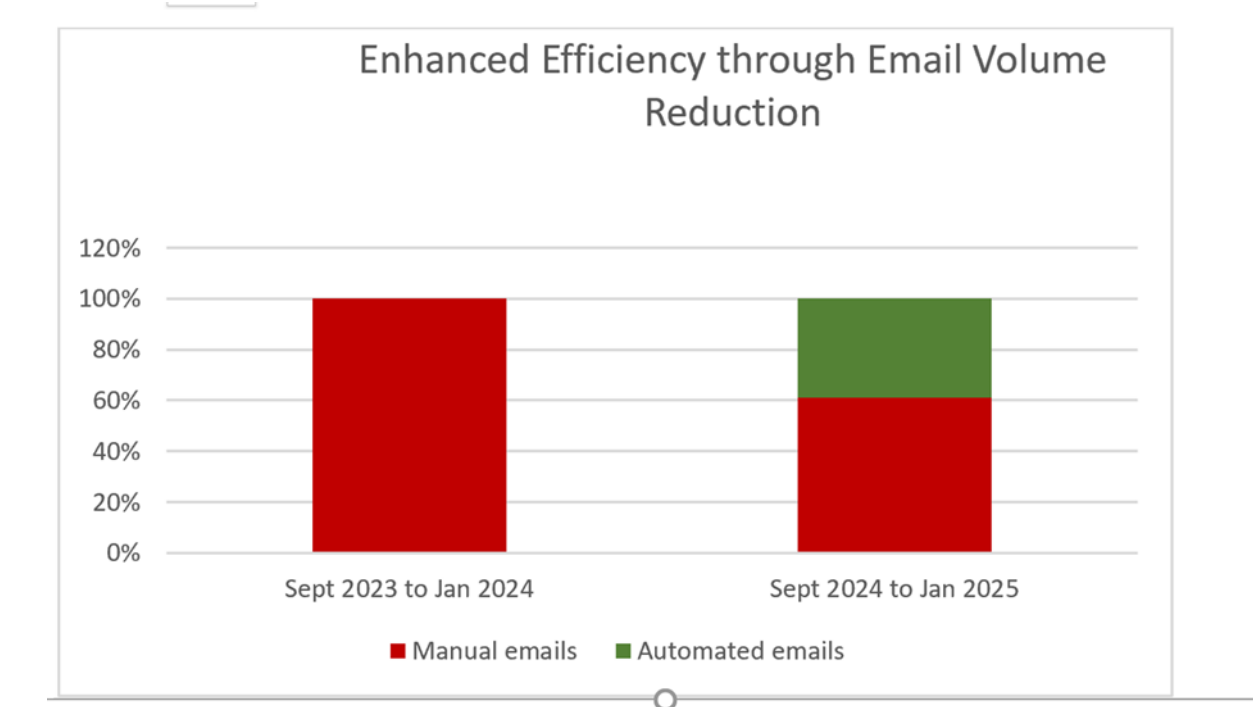
### User-Friendly Design

Pre-built templates minimize data entry and improve usability

The system also allows flexible modifications to meet evolving needs



## Outcomes



**Faster Processing:** Less time spent on admin tasks

**Improved Communication:** Fewer missed responses, clearer workflows

**Enhanced Tracking:** Real-time status visibility

**Data Insights (Coming Soon):** Trends across studies and departments; will support training and education by highlighting common gaps and process improvements

**Scalable:** System supports growing number of reviews

## Lessons Learned

- User-centered design supports adoption
- Continuous feedback improves performance
- Collaboration across teams was key

## Future Direction

**Study Team Dashboard:** View status of pending, submitted, or closed responses

**Expansion to Scientific Review Committee:** Streamline workflows and reduce manual effort