Developing a Standardized Mortality Review Process

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Problem

- Improving mortality outcomes is a quality and safety imperative in health care; this is further emphasized by external assessment programs such as CMS Stars, USNWR, and Vizient including mortality as a key measure.
- Opportunities for observed mortality improvement are difficult to identify in a complex system due to information siloes and different clinical team experiences in patient care.
- Centralized observed mortality reviews that facilitate a feedback mechanism are an identified best practice to support patient survival but were not yet implemented at UCMC.

Current State Assessment

Pre-Implementation:

- Section/department reviews being completed, but volume, consistency, and findings unknown.
- Limited integration of Risk.
- Lack of formal mortality data collection mechanism to facilitate identification of cross-cutting interventions for continuous improvement.

Project started in early January 2026 to create a structured observed mortality review process for UCMC.

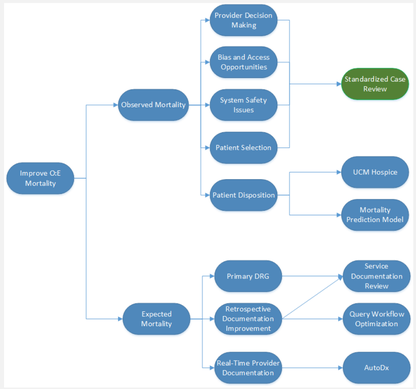


Figure 1: Mortality improvement driver diagram

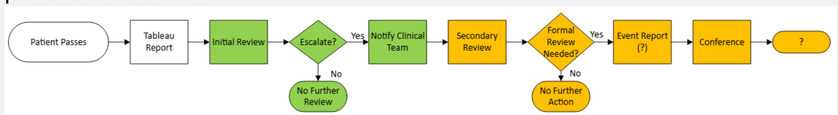


Figure 2: Pre-implementation process map

Aims

- To develop a process to notify clinical leads of attributed mortalities in a timely manner and provide a standardized and centralized process for review collection, such that 80% of all inpatient mortalities are reviewed by at least 1 stakeholder party by November 1, 2026.

Intervention

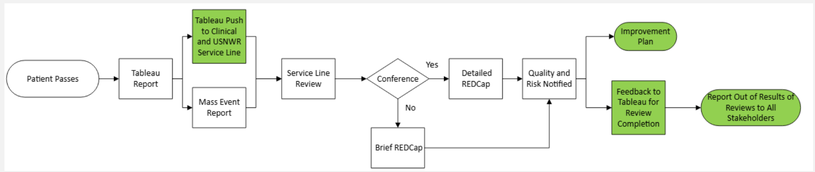
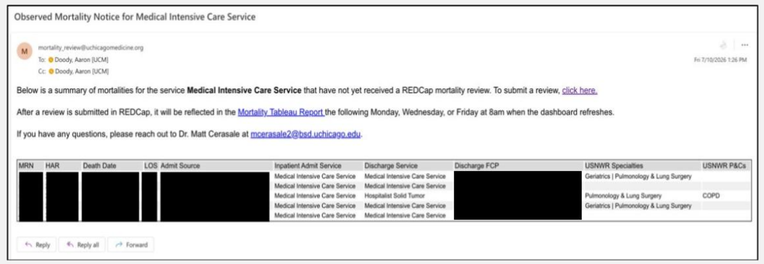


Figure 3: Post-implementation process map

Key steps in implementing the observed mortality review process:

- Development of a REDCap survey form to collect mortality findings that includes internal and external best practices for mortality case review. Items included in review:
  - Level of Impact Determination
  - Equity and Bias Assessment
  - Diagnostic Reasoning Screening
  - Referral to Other Specialties
- Creation of an automated email notification process for all in-house mortalities that occur the previous week and/or have not received a review from the attributed group(s).
- Testing of an automated process to retrieve REDCap data and incorporate into existing mortality reporting.
- Stakeholder socialization and education in various forums for months leading up to intervention, including a Tip Sheet for how to complete reviews.
- Integration of Mortality Review completion rates at monthly quality meetings with key stakeholders.


Observed Mortality Notice for Medical Intensive Care Service

mortality_review@uchicagomedicine.org
To: Doody, Aaron [UCM]
Cc: Doody, Aaron [UCM]
Fri 7/10/2026 1:26 PM

Below is a summary of mortalities for the service **Medical Intensive Care Service** that have not yet received a REDCap mortality review. To submit a review, click here.

After a review is submitted in REDCap, it will be reflected in the Mortality Tableau Report the following Monday, Wednesday, or Friday at 8am when the dashboard refreshes.

If you have any questions, please reach out to Dr. Matt Cerasale at mcerasale2@bsd.uchicago.edu.

MRN	HAR	Death Date	LOS	Admit Source	Inpatient Admit Service	Discharge Service	Discharge FCP	USNWR Specialties	USNWR PACs
[redacted]					Medical Intensive Care Service	Medical Intensive Care Service		Geriatrics | Pulmonology & Lung Surgery	
					Medical Intensive Care Service	Medical Intensive Care Service			
					Medical Intensive Care Service	Hospitalist Solid Tumor		Pulmonology & Lung Surgery	COPD
					Medical Intensive Care Service	Medical Intensive Care Service		Geriatrics | Pulmonology & Lung Surgery	
					Medical Intensive Care Service	Medical Intensive Care Service			

Reply | Reply all | Forward

Figure 4: Example observed mortality email

Results

- Pilot PDSAs:
  - Sending test mortality emails to two clinical leads.
  - Completion of reviews in REDCap.
- Go Live:
  - Reviews launched on July 21st, 2026.
  - Responsiveness to initial feedback, updates to key stakeholder list and small edits to REDCap.
- Initial Review Outcomes:
  - 35% of mortalities have been reviewed since the production go-live.
  - 54% of attributed groups have completed at least one mortality review.
  - Groups with the highest rate of mortality reviews completed include Hospitalist Solid Tumor, Neurology/Neurosurgery ICU, and Adult Surgical ICU.
  - Time savings: approximately 2.5 hours a week saved from the email automation when compared to the manual process.

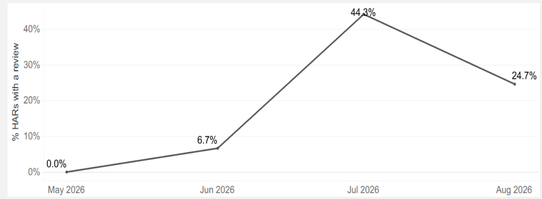


Figure 5: Percentage of HARs with a review completed over time by discharge date

Next Steps

- Streamline process to align with existing review processes.
- Identify groups with opportunities for higher completion rates.
- Investigate the cause of the drop in review percent from July to August.
- Utilize review input to identify themes and integrate opportunities for improvement into Observed Mortality improvement priorities.

Acknowledgements

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