Keck Hospital of USC

Life After Death: Use of a Mortality Screening App

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Learning Objectives

- Utilize a mortality screening tool application to improve the efficiency and effectiveness of mortality-related peer reviews.
- Discuss interprofessional collaboration between a Quality Team and physician domain leads to improve workflow processes.
- Outline the benefits of developing a mortality screening process to improve the quality of in-depth peer reviews.

Background

- Keck Hospital of USC is an academic medical center that provides quarternary and tertiary care within Southern California.
- Patients transferred to Keck Hospital of USC are frequently in the final stages of their disease processes and have a high relative expected mortality rate.
- In 2021, the Clinical Quality Specialist (CQS) reviewed a total of 460 mortalities including the composition, dissemination, and processing of associated case abstracts for in-depth physician peer review.
- Mortality screening is a process where the events leading to the inpatient death are objectively and methodically evaluated in a peer-review process that can illuminate the quality-of-care challenges associated with mortality[1].

Goals

Provide a standardized approach to improve patient outcomes by identifying clinical practice opportunities to prevent variances in care delivery.

Reduce total mortality reviews by 35% by highlighting mortality cases that need in-depth peer review to improve clinical practices and patient outcomes.

Optimize and minimize total physician and quality specialists time required to review cases by utilizing the mortality screening tool app.

Sources: Health Resources & Services Administration's Health Center Program and Compliance Manual. (2018).Clinical Mortality Review: A Guide. https://bphc.hrsa.gov/sites/default/files/bphc/programrequirements/pdf/hccompliance-manual.pdf[1]
Notes: **MCR1/MCR2**: Scoring nomenclature for cases screened out for in-depth review
Process: cases that highlight system-related improvement opportunities

Methods

- The medical director of quality and quality team created a standardized workflow that utilizes an evidence-based point system conferred from standard, objective metrics about the patient during their inpatient stay.
- An electronically-based Mortality Screening Tool form is completed by the CQS for every mortality and an automatic score is assigned for each case.
- Total tallied points triggers one of two variables related to the mortality; cases with 0-2 points are tracked and trended with closure; cases with scores > 2 remain open for in-depth review.
- Mortality cases that have > 2 points require further in-depth review by the Quality & Outcomes Department and physician leads within the service line.
- A physician peer reviewer scores the case, which is discussed both internally and within a larger executive level peer review committee for quality improvement opportunities.
- Only those cases that have significant learning and improvement opportunities as revealed initially by the mortality screening tool, will be discussed in larger committees and within department meetings.

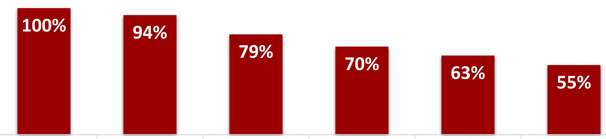
Pilot Process	Action
Clinical Quality Specialist receives a Daily Mortality report	• Performs immediate chart review • Completes electronic mortality screening tool app • App calculates a score that triggers specific variables for each case • Scores of 0-2 points, case is closed • Scores >2, remain open for in-depth review
Physician Domain Leads	• CQS assigns open cases to specific physician domain leads • Physician domain leads review and validate cases requiring in-depth peer review
Clinical Quality Specialist	• CQS receives the final score • CQS writes a case summary for all scores >2 • The final scores and case summaries are sent to a physician peer reviewer of identified service line
Physician Peer Reviewer	• Physician peer reviewer reviews the score and cases • CQS enters the score in the internal quality data base • Cases are discussed during service line meetings
Integrated Executive Peer Review Committee	• Cases are sent to Integrated Executive Peer Review Committee for final review and scoring • Quality improvement cases are discussed in larger committees and department meetings

The authors have no relevant financial relationships to disclose.

Outcomes

There was a **38% reduction** in mortality cases requiring in-depth review

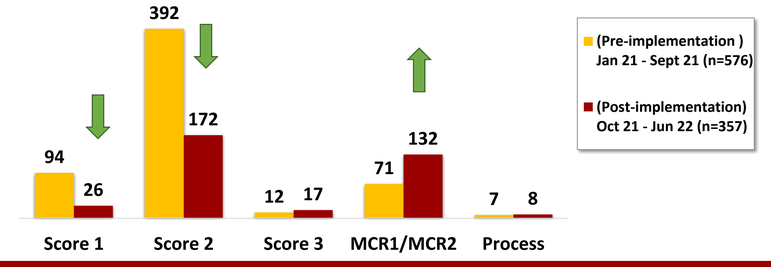
In-depth Peer Review Results by Key Service Lines



	Hem-Onc	Med Onc	Neurology	Medicine	Cardiac Surgery	Surgery
Jan 21-Jun 22	100%	94%	79%	70%	63%	55%
N	17	17	42	80	45	22
D	17	18	53	115	72	40

Numerator = total number of cases screened using the mortality screening tool app in.
Denominator = total number of mortality cases in the reporting period.

Volume of Mortality Peer Reviews



Key Takeaways

- Use of mortality screening app provides a standardized approach to identifying practice opportunities with a goal of minimizing care delivery variances.
- Internal collaboration helped improve efficiency in peer review turnaround times, resulting in higher quality of care.
- Creating a standardized workflow identified cases needing in-depth peer review, increasing clinical practices foci towards improving patient outcomes.
- Physician peer reviewers given dedicated time to detecting root cause analyses for mortalities screened for in-depth review.
- Physician domain leads contribute to insights and expertise supporting quality improvement opportunities to prevent mortalities in the future.

Keck Medicine of USC **Power Apps | Mortality Peer Review Screening App**

Keck Medicine of USC — USC University of Southern California

Mortality Peer Review Screening Request

Request Status: **Pending QS Review**

Facility * KH | Patient First Name * | Patient Last Name * | FIN * | MRN *

Admitting Service * (Search Admitting Service) | Date of Admission * | Date of Incident * | Consult(s) Services(s) *

Reason for Admission

QS Review

Quality Specialist * Rodriguez, Tusdi | QS Review Date * | Assigned Physician * | Additional Physician (Only if required)

Admitting History

- [ ] Rapid Transfer Patient
- [ ] Patient arrived to hospital obtunded or unresponsive
- [ ] Procedure performed at outside hospital prior to transfer to Keck
- [ ] Readmission within 72 hours of discharge from hospital (Keck only)

General — PTS: 0

- [ ] Death within 48 hours of admission, surgery, or procedure 1
- [ ] Death while on ECMO 1
- [ ] Massive Bleeding (inpatient only) requiring Massive Transfusion Protocol (6:4:1) 1
- [ ] Unplanned transfer from floor to ICU for decompensation (with or without Rapid Response) 2
- [ ] Diagnosis of intravascular air embolism 3
- [ ] Medication error that meets CDPH reportable event and/or Category E-I 3
- [ ] CDPH reportable condition associated with in-hospital mortality (excluding pressure ulcers) 3

Code Blue with immediate death

- [ ] On Medicine/Surgery/Telemetry floor or Norris Day Hospital 3
- [ ] In Operating Room 3
- [ ] In PACU 3
- [ ] During Moderate Sedation Procedure 3
- [ ] In Cath Lab 3
- [ ] In CT, MRI, XR, Rad Onc (Norris) 3

Surgery: Anesthesia/Radiology/Procedural Suites — PTS: 0

- [ ] Unplanned return to OR in same admission 1
- [ ] Unplanned ICU admission for outpatient procedure 3
- [ ] Central neurological deficit: c/f post-op stroke in previously healthy without deficit 3
- [ ] Unplanned repair and/or removal of an organ during surgical procedure 3
- [ ] Wrong procedure, wrong site, side, patient 3
- [ ] Reversal agent used for overdose (pain control, procedural sedation, etc) 3
- [ ] Large vessel wound vac related hypotension and hemorrhage 3
- [ ] Contrast-related complication, related anaphylaxis 3

Other — PTS: 0

- [ ] SRM, PSI, Sepsis etc. 3

Additional information (optional)

Further Action and Recommendation — TOTAL PTS: 0

- [x] No further action required; Track and trend (0,1,2 points)
- [ ] Recommend additional review by Department (> 2 points)

* Required fields cannot be blank. Please select all required fields to submit the request.

Save (Draft) | Submit

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Keck Medicine of USC — USC University of Southern California

Mortality Peer Review Screening Request

Request Status: **Pending QS Review**

Facility *	Patient First Name *	Patient Last Name *	FIN *	MRN *
KH	Tommy	Trojan		

Admitting Service *	Date of Admission *	Date of Incident *	Consult(s) Services(s) *
Surgery-Vascular	8/19/2022	8/19/2022	Surgery-Acute Care Surgery

Reason for Admission

Ruptured AAA

QS Review

Quality Specialist *	QS Review Date *	Assigned Physician *	Additional Physician (Only if required)
Rodriguez, Tusdi	8/19/2022	Kang, Tarina	

Admitting History

- [x] Rapid Transfer Patient
- [ ] Patient arrived to hospital obtunded or unresponsive
- [ ] Procedure performed at outside hospital prior to transfer to Keck
- [ ] Readmission within 72 hours of discharge from hospital (Keck only)

General PTS: 1

- [x] Death within 48 hours of admission, surgery, or procedure — 1
- [ ] Death while on ECMO — 1
- [ ] Massive Bleeding (inpatient only) requiring Massive Transfusion Protocol (6:4:1) — 1
- [ ] Unplanned transfer from floor to ICU for decompensation (with or without Rapid Response) — 2
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- [ ] In Cath Lab — 3
- [ ] In CT, MRI, XR, Rad Onc (Norris) — 3

Surgery: Anesthesia/Radiology/Procedural Suites PTS: 0

- [ ] Unplanned return to OR in same admission — 1
- [ ] Unplanned ICU admission for outpatient procedure — 3
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- [ ] Large vessel wound vac related hypotension and hemorrhage — 3
- [ ] Contrast-related complication, related anaphylaxis — 3

Other PTS: 3

- [x] SRM, PSI, Sepsis etc. — 3

Additional information (optional)

Further Action and Recommendation TOTAL PTS: 4

- [ ] No further action required: Track and trend (0,1,2 points)
- [x] Recommend additional review by Department (> 2 points)

* Required fields cannot be blank. Please select all required fields to submit the request.

Save (Draft) Submit

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