Implementation of a Hospital Medicine Mortality Review Process with Division-wide Participation

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Introduction

Intentional retrospective analysis of patient deaths can uncover trends to support healthcare systems. Mortality reviews are common practice for this reason; however, it is unknown whether a division-wide review process in a large academic tertiary medical center within hospital medicine is feasible.

We designed and implemented a peer-review mortality review process that involved the entire Division of Hospital Medicine at UC Davis Health using Qview, an electronic protected health information platform. The process was modified ad hoc during implementation.

Located in Sacramento, California, UC Davis Health serves as a multispecialty tertiary care center covering a large radius of 33 counties and 65,000 square miles.
Approximately a 650-bed hospital and rapidly growing. About 33,000 admissions per year and the Division of Hospital Medicine is responsible for a quarter of those.

Recognizing that meaningful quality improvement is data-driven, the team at Qview Health is focused on delivering a system that gets the right data in the right hands at the right time, all for the purpose of improving patient outcomes.
*Note: This is not an official endorsement of Qview.

Design

The Division of Hospital Medicine consists of 59 physicians with varying levels of clinical experience. All physicians were required to participate in the primary and secondary mortality review processes and provided feedback for ongoing iterative changes.

Years since graduating residency	Number of hospitalists
1-5 years	27
6-10 years	17
11-20 years	8
20-30 years	7

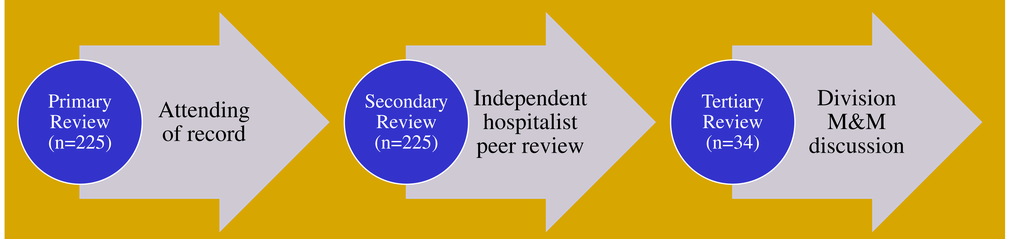
All the patient deaths from **August 2021 to September 2022** under the Division of Hospital Medicine at UC Davis Health were retrospectively reviewed in a three-step process:

Primary Review: The attending of record reviews the case to identify any individual/ system issues and areas for improvement

Secondary Review: An independent hospitalist reviews the case to identify any individual/ system issues and areas for improvement

Tertiary Review: If the reviewers identify any issues and areas for improvement, the case is further escalated for discussion at a division-wide Morbidity and Mortality conference. If the case is not escalated, it is simply closed.

An electronic, peer-reviewed mortality review process with division-wide participation was feasible and acceptable.



Nearly 1 in 7 cases had an area for improvement noted during review, most related to systems issues and advance care planning.

Division-wide participation helped to streamline a key process for identifying quality initiatives to improve patient safety and healthcare quality.

Results

From the **primary review**,

- Top causes of death were cancer (32%) and sepsis (13%).
- Most patients expired on inpatient hospice (43%) or comfort care (35%).
- Palliative care was consulted in 58% of the cases. Physicians encountered difficulties in goals of care discussion in 7% of cases.
- 11% of hospitalists expressed feeling emotionally impacted by the patient's death.

From the **secondary review**, deaths were retrospectively categorized:

Medical Error	3
Delay	4
Communication	3
Healthcare acquired infection	0
Post procedural complication	2
Systems issue	9
Advanced care planning	10

From the **tertiary review**, the following changes were implemented:

- Re-engage palliative care and hospice for patients
- Open M&M discussions with other departments
- Transfer center to include code status when accepting patients
- Decoding hospital ethics - learning when/ how to consult them
- Modify note templates to improve communication
- Multiple wellness initiatives to help process patient deaths/ burnout

Hospitalist feedback:

#	Field	5 - Strongly Disagree	4 - Disagree	3 - Undecided	2 - Agree	1 - Strongly Agree
1	It is important for every hospitalist to review the division's mortality cases	10.53%	10.53%	15.79%	36.84%	26.32%
2	The current QView platform for reviewing mortality cases is user friendly and efficient	0.00%	10.53%	36.84%	47.37%	5.26%
3	Completing rapid mortality reviews for my own patients (primary review) has helped me gain more appreciation for patient safety and quality	0.00%	21.05%	31.58%	31.58%	15.79%
4	I am willing to continue rapid mortality reviews for patients of other hospitalists (secondary review)	0.00%	5.26%	15.79%	68.42%	10.53%
5	Participating in rapid mortality reviews and/or M&M discussions has improved our group's culture around patient safety and quality	0.00%	5.56%	44.44%	33.33%	16.67%

Acknowledgements

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