# Table of Contents

GME Partnership for Quality & Safety Program .......................................................................................... 3-7

Culture of Safety ....................................................................................................................................... 8-9

GME/IHQSE Quality & Safety Academy .................................................................................................. 10-11

CLER Visit .............................................................................................................................................. 12

Goals for 2022-2023 ................................................................................................................................. 13
GME Quality & Safety Incentive Program

Purpose

The GME Quality & Safety Incentive Program works to align quality and safety initiatives between clinical training sites and residency and fellowship programs. The Incentive Program is a collaborative effort between GME, the affiliated hospitals, and the Housestaff Association.

Guiding principles

- All CU GME residents and fellows are eligible to participate
- The Quality & Safety Steering committee is comprised of Chief Quality Officers from Children’s Hospital of Colorado, University of Colorado Hospital, and Denver Health Medical Center, as well as representatives of the Housestaff Association, CU’s Associate Dean of GME, GME Director of Quality and Safety Programs, and GME Quality and Safety Program Coordinator.

The Quality & Safety Steering committee supports the administration of the program and guides residents to select metrics that are data-driven, align with our hospitals’ and departments’ quality/safety priorities, meaningfully impact patient care, and pertain to residents’ clinical work.

The guiding principles of the incentive program are:

- Goals can be tiered for achievement
- Meaningfully patient care improvement
- Clinical institutions value the goal/metrics
Residency and fellowship programs were assigned to hospital metrics as designated by their specialty and sites of rotation. Programs could be assigned in the following way:

- CHCO Only (Pediatric Residencies and Fellowships)
- UCH Only
- UCH and Denver Health

The maximum possible incentive payout was $1,000 per resident. The metrics for the 2021-2022 reporting period (August-April) were as follows.

**University of Colorado Hospital**

The University of Colorado Hospital (UCH) metric was based on resident/fellow attendance at certified Collaborative Case Review conferences (CCR). Metric achievement was determined at the individual resident level. Residents were required to attend at least two Collaborative Case Reviews during the reporting to earn the full incentive for the UCH metric. Depending on a program's rotation schedule, some residents were eligible to earn 50% (up to $500) payout for the UCH metric and 50% payout for the Denver Health Metric (more below).

**Denver Health Hospital**

The Denver Health (DH) metric was based on trainee submission of patient safety occurrence reports through the Safety Intelligence (SI) system. To achieve the incentive payout, training programs needed to meet a pre-specified number of report submissions determined by the monthly average of trainees in the program rotating at Denver Health. This metric achievement was determined at the program level with each resident earning the same amount based on the collective performance of the group.

**Children's Hospital Colorado**

The Children's Hospital Colorado (CHCO) metrics varied between the Pediatric Residency program and Pediatric fellowships. The Pediatric Residency program measured achievement based on three target areas: adverse event reporting, penicillin allergy de-labelling, and inpatient influenza vaccination rates. Pediatric fellowships either chose to participate in working toward the goals of these areas or create and measure their own metrics. Performance was measured throughout the reporting period with payouts determined based on final cumulative data.
Fig. 1 - Cumulative final payout statistics for all eligible residents across all three participating sites.

<table>
<thead>
<tr>
<th>Payout Percentage</th>
<th>Payout Amount</th>
<th>Number of Residents Achieving Payout</th>
<th>Percentage of Residents Achieving Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>$0.00</td>
<td>47</td>
<td>4%</td>
</tr>
<tr>
<td>≤50% (1-50%)</td>
<td>$1-500</td>
<td>166</td>
<td>13%</td>
</tr>
<tr>
<td>≥50% (51-99%)</td>
<td>$501-999</td>
<td>848</td>
<td>65%</td>
</tr>
<tr>
<td>100%</td>
<td>$1,000.00</td>
<td>241</td>
<td>19%</td>
</tr>
</tbody>
</table>

Fig. 2 - Final payout statistics from each site/metric.
GME Quality & Safety Incentive Program

Summary of Incentive Program Results

University of Colorado Hospital

<table>
<thead>
<tr>
<th>CCRs attended</th>
<th>Number of Residents</th>
<th>Percentage Meeting Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>88</td>
<td>8.57%</td>
</tr>
<tr>
<td>1</td>
<td>34</td>
<td>3.31%</td>
</tr>
<tr>
<td>2</td>
<td>744</td>
<td>72.44%</td>
</tr>
<tr>
<td>3+</td>
<td>161</td>
<td>15.68%</td>
</tr>
</tbody>
</table>

Fig. 3 - Final metric performance statistics for University of Colorado Hospital metric (CCR attendance).

Denver Health Hospital

![Table of metric performance statistics for Denver Health Hospital]

- Achieved Tier 2 (Max) = 100% of required submissions
- Achieved Tier 1 = 50% of required submissions
- Eligible for Tier 2 based on August proration (3 weeks of active program)

Fig. 4 - Final metric performance statistics for Denver Health Hospital Metric (SI Report Submissions).
Looking Ahead to AY 2022-2023

For AY 2022-2023, trainees will again work to achieve predetermined metrics depending on the hospital(s) to which they primarily rotate. The metrics for each hospital are:

**University of Colorado Hospital**
Attendance of 3 or more at a certified Collaborative Case Review conferences (CCR) and completion of the University of Colorado Hospital Quality & Safety Module. Residents were required to submit the module completion by 10/1/2022, otherwise they forfeit 50% of their UCH payout. They were also required to log attendance at one CCR by 10/1/2022, otherwise they forfeit 33% of their UCH payout.

**Denver Health Hospital**
The Denver Health (DH) metric will again be based on trainee submission of patient safety occurrence reports through the Safety Intelligence (SI) system.

**Children's Hospital Colorado**
There are three quality improvement metrics set by the Pediatric Residency for 2022-2023: ICU Summary Completion, QRSR/PSI Safety Event Reporting, and Flu vaccination rates. Pediatric fellowships will submit work on either a new or existing quality improvement and/or patient safety project within their program.
The concept of safety culture originated outside of healthcare in studies of “high reliability organizations”, which consistently minimize adverse events in a setting of complex work. A culture of safety includes key elements of a commitment to achieving consistently safe operations, a blame free environment where individuals report errors or near misses without fear of punishment or retribution, a flattening of hierarchical structures to solve patient safety problems and commitment of organizational resources to address safety concerns. Improving the culture of safety at the University of Colorado is critical to preventing or reducing errors and improving overall healthcare quality.

**Patient Safety Reporting**
As part of promoting a culture of safety at University of Colorado, we have emphasized the importance of patient safety event reporting to residents and fellows. Each year, new interns and residents undergo training on adverse event reporting. Housestaff adverse event reporting activity has been monitored since 2014.

### 2021 – 2022 Patient Safety Reporting Data:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Number of Reports Submitted by Residents</th>
<th>Number of Residents Reporting</th>
<th>Number of Residents in Programs</th>
<th>Number of Programs without Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCH</td>
<td>288</td>
<td>158</td>
<td>1061</td>
<td>90/151</td>
</tr>
<tr>
<td>CHCO</td>
<td>412</td>
<td>133</td>
<td>282</td>
<td>23/52</td>
</tr>
<tr>
<td>Denver Health</td>
<td>1570</td>
<td>N/A</td>
<td>913</td>
<td>0</td>
</tr>
</tbody>
</table>
University of Colorado C-Suite Patient Safety Rounds
Since June of 2020, leaders from the University of Colorado School of Medicine GME office and the University of Colorado Hospital have held a monthly meeting of residents and fellows from across the institution to meet with hospital leaders with the purpose of providing a safe, comfortable environment for housestaff to relay concerns, great saves, and success stories with a specific focus on patient safety.

Since the beginning of these rounds, over 70 residents/fellows have attended from 23 different specialties. This has produced 80 recognitions of faculty, residents, and staff and over 30 projects or systems changes at UCH have emerged from these rounds.
Quality & Safety Academy

Co-Sponsored by the **Institute for Healthcare Quality, Safety, and Efficiency** and Graduate Medical Education

The Quality & Safety Academy, offers residents, fellows, and faculty in any program affiliated with University of Colorado a series of workshops designed to build foundational knowledge in quality improvement and patient safety, which will enable them to effectively participate in quality and safety work in the clinical setting. Program content builds on itself to support progressive acquisition of competency, and program elements.

### ENGAGEMENT

#### AY 2022 GME Attendees

<table>
<thead>
<tr>
<th>Session</th>
<th>Session Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Safety</td>
<td>Attendees will review the historical origins of the patient safety movement and leave with an understanding of what attributes are necessary to create a Culture of Safety. Specific focus will be given to creating a Just Culture and Reporting Culture. Finally, we will explore the second victim phenomenon and discuss how to support caregivers when errors occur.</td>
</tr>
<tr>
<td>Applied Patient Safety</td>
<td>Building on the Patient Safety Session, this session will further enhance the concepts of Just Culture and discuss and guide the development and participation in a systems-based case review conference. Attendees will emerge being able to build, facilitate or better participate in these important patient safety tools at their institution.</td>
</tr>
<tr>
<td>Quality Improvement &amp; Change Management</td>
<td>This session will focus on the basics of Quality Improvement, following a step-wise guide for implementing a successful QI project. The classic QI teaching is coupled with a practical Change Management framework which facilitates success and makes change more likely to stick.</td>
</tr>
<tr>
<td>Acquiring Data to Drive Change</td>
<td>Critical to any change effort is finding, sharing and tracking data. Attendees to this session will emerge with skills for obtaining the necessary data for tracking improvement as well as a basic understanding of how to interpret data to identify when a change has occurred.</td>
</tr>
<tr>
<td>Spreading Change Locally and Nationally</td>
<td>Success can and should beget more change. This session will show how to spread QI project success within your institution as well as nationally. This session will discuss critical differences between QI and traditional research as well as how and where to share your work through presentations and publications.</td>
</tr>
<tr>
<td>Coaching and Teaching Quality Improvement</td>
<td>Quality Improvement is a team sport. Thus, leaders of any project need to be able to teach and coach others through the QI process. This session will teach attendees how to coach and teach the principles of Quality Improvement to inexperienced team members in a way that stokes their passion and ensures project success.</td>
</tr>
</tbody>
</table>

#### AY 2022 # of GME Programs Represented

- **46**

#### AY 2022 Series Completions

- **23**

- **90%** Attendees would recommend QSA to others

- **85%** Attendees reported being “satisfied” or “somewhat satisfied with QSA courses

---

**pg. 10**
Quality & Safety Academy

Faculty & Staff

Tyler Anstett, DO, SFHM
QSA Director

Emily Gottenborg, MD
QSA Faculty

Katie Raffel, MD
QSA Faculty

Michele Loi, MD
QSA Faculty

Sam Porter, MD
QSA Faculty

Anna Neumeier, MD
QSA Faculty

Janet Kukreja, MD
QSA Faculty

Moksha Patel, MD
QSA Faculty

Joe LaFond
QSA Program Coordinator
ACGME Clinical Learning Environment Review (CLER) Visit to University of Colorado Hospital

In September, 2021, the ACGME CLER Committee visited. The major themes that emerged in quality and safety are as follows:

- Health Care Disparities
  - “University of Colorado Hospital does not appear to have a systematic approach to identifying variability in the care provided to or the clinical outcomes of their known vulnerable patient populations, including the steps of periodic review of performance measures to identify disparities in patient care or outcomes, targeted QI efforts to address these disparities, and ongoing analyses to assess these efforts.”

- Resident and Fellows Perceptions of Supervision
  - 36% of residents reported that they have occasionally encountered a physician who has made them feel uncomfortable about asking for assistance; 4% indicated that they have frequently encountered one or more physicians who have made them feel uncomfortable about asking for assistance.

- Resident and Fellow engagement in Quality Improvement activities
  - 17% of the residents and fellows indicated that they are currently experiencing challenges in participating in health care QI activities at University of Colorado Hospital. When asked to describe the challenges, they mentioned that staff turnover necessitates ongoing education and orienting of new team members involved in QI projects; and the need to spend more time in direct clinical care during the pandemic limited time available for QI activities. 51% of the residents and fellows and 85% of the program directors agreed or strongly agreed that COVID-19 related QI activities are well-communicated at University of Colorado Hospital.

- Patient Safety Investigations
  - Of the residents and fellows in the group interviews who were PGY-2 and above, 60% indicated that they had participated in an interprofessional investigation of a patient safety event (e.g., an RCA). Of these, 84% reported that they had participated in a group analysis discussion and action plan development and 77% reported that in addition to physicians and advanced practice providers, other health care professionals had participated in the event analysis and action planning.
  - 51% of the residents and fellows and 85% of the program directors agreed or strongly agreed that COVID-19 related QI activities are well-communicated at University of Colorado Hospital.

- Integration of Patient Safety and Quality Improvement efforts with Well-Being Initiatives
Goals for AY 2022-2023

Patient Safety reporting accuracy and improvement
- Accurately capture all the patient safety reports submitted by residents at each institution.
- Increase the number of reports submitted. Improve the perception of loop closure from submitted reports.

Engage with the VA around quality and safety
- Receive patient safety reports submitted
- Identify quality initiatives and how residents are engaged
- Capture systems-based case review conferences

Transition away from pagers across CUGME/CUSOM by July 2023

Improve communication between health-system and GME/Housestaff about patient safety and quality initiatives

Expand Quality and Safety Academy
- Increase number of programs sending residents and number of residents who attend
- Increase number of tailored sessions
- Offer mentored implementation for programs/residents
  - Quality Improvement (via IHQSE Improvement Academy)
  - Patient Safety Case Review Process