REGIONAL
Committees on Trauma

RCOT Field Program
RMOCC Webinar Series

Webinar 6 – 9/17/2025

Discussion Summary – Trauma System and Coordination in Oregon

Session Overview

The sixth RMOCC webinar focused on Oregon's trauma and emergency coordination system, offering an in-depth look at how the state built resilient structures during times of crisis. Dr. David Lehrfeld, Trauma Medical Director for the Oregon Health Authority, shared a comprehensive overview of Oregon's trauma system, its real-time hospital capacity monitoring tool, and the Oregon Medical Coordination Center (OMCC). Moderated by Dr. Warren Dorlac with contributions from Dr. Jeffrey Kerby and other Committee on Trauma members, the session highlighted how Oregon transformed lessons from the COVID-19 pandemic into sustainable, systemwide improvements.

Opening Remarks

Facilitator: Dr. Jeff Kerby

Guest Speaker: Dr. David Lehrfeld – Medical Director, Oregon Health Authority EMS & Trauma Systems.

Key Presentation Highlights: Dr. David Lehrfeld

Oregon Trauma System – A Foundation for Regionalized Care

Oregon's trauma system is notable for its **broad geographic coverage and tiered hospital structure**. Spanning nearly 96,000 square miles with a population of about 4.3 million, the state has 55 acute care hospitals, of which 44 voluntarily participate as trauma centers. Two Level I centers, both located in Portland, anchor the system, supported by five Level II facilities in other cities, 11 Level III hospitals, and 26 Level IV critical access hospitals.

These Level IV hospitals form the backbone of the state's trauma network. Equipped with essential resources — resuscitation bays, CT scanners, blood banks, and established transfer protocols — they ensure that no matter where an injury occurs in Oregon, patients can be stabilized before transfer. This arrangement provides consistency of care and rapid escalation when advanced interventions are required.

The state is divided into **seven trauma regions**, structured around natural referral patterns and transportation routes. Each region has a designated regional resource hospital, usually a Level II, that coordinates transfers. An exception exists in far eastern Oregon, where hospitals transfer most patients to Boise, Idaho, reflecting the realities of geography and proximity.

The Oregon Capacity System (OCS) – A Pandemic-Era Innovation

A central theme of Dr. Lehrfeld's presentation was the Oregon Capacity System (OCS), a **real-time hospital bed and equipment tracking platform**. Its roots trace back to post-9/11 efforts to monitor bed availability nationally, but the pandemic exposed the limitations of earlier systems that relied on manual data entry. Hospitals lacked the bandwidth to continuously update spreadsheets when clinical staff were stretched to their limits.

Oregon's solution was to adopt **GE Tiles technology**, which automatically extracts data from electronic medical records (primarily Epic, used by over 97% of Oregon hospitals). This integration eliminated the need for manual updates, vastly improving accuracy and timeliness. Importantly, the system removes all patient identifiers, addressing legal and privacy concerns and easing resistance from hospitals and associations.

The platform, managed by Apprise Health Insights (a subsidiary of the Oregon Hospital Association), is **funded largely through CDC grants**. While the base cost is around $200,000 annually, added reporting functions for COVID-19, influenza, and RSV have increased costs to roughly $600,000 per year. A shared governance board oversees the system, including representation from hospitals, EMS, and the Oregon Health Authority.

In practice, OCS serves multiple stakeholders. Charge nurses and ED staff keep dashboards open to monitor diversions and nearby capacity. Transfer centers rely on it to streamline placement. EMS dispatchers use it in real time to guide ambulances to appropriate facilities. Beyond acute operations, OCS provides valuable retrospective data for public health, quality improvement, and legislative advocacy, capturing trends such as ED boarding and discharge delays.

The Oregon Medical Coordination Center (OMCC) – Filling a Critical Gap

The **Oregon Medical Coordination Center** emerged from necessity during the winter surges of 2021 and 2022. Rural hospitals were overwhelmed, patients languished in small facilities without ICU capacity, and the state lacked a centralized transfer mechanism. ICU medical directors began informally rotating pager duty to help redistribute patients. Recognizing the need for a permanent solution, the Oregon Health Authority partnered with Oregon Health & Science University (OHSU) to formally establish OMCC, initially supported by a $4.5M CDC grant and later secured with $5.4M in legislative funding.

The OMCC functions as a **last-resort safety net** when natural referral pathways fail. Staffed by experienced RNs and backed by a critical care physician 24/7, the center identifies available resources using OCS and additional outreach. While OMCC does not directly arrange transportation or perform clinical handoffs, it ensures that facilities know where appropriate beds are located, sparing rural clinicians from making dozens of calls under stressful circumstances.

Though originally focused on ICU transfers, OMCC has broadened its scope to include trauma, stroke, obstetric, and pediatric patients. Looking forward, one of its **most pressing frontiers is behavioral health**, particularly adolescent psychiatric care. Oregon has faced the troubling reality of adolescents stuck in emergency departments for months due to lack of placement. OMCC, supported by OHSU's "Mission Control" coordination infrastructure, is cataloging behavioral health resources statewide to build a parallel network for mental health crises.

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Discussion Highlights

Cross-State Collaboration

- Oregon maintains shared logins with Boise's HOSCAP system and coordinates with California in border areas.
- While Washington and Oregon operate separately, both follow ACS standards, ensuring interoperability in clinical practice.

Funding Sustainability

- Regional transfer centers are funded internally by hospital systems as part of their operational needs, while OMCC is uniquely supported by state dollars.
- The OCS remains dependent on CDC grants set to expire in 2027, raising questions about long-term funding models.

Governance

- The OCS Board of Trustees includes hospital associations, OHA, EMS, and fire chiefs, ensuring that all stakeholders shape system design and upgrades.

Future Directions

- OMCC aims to expand behavioral health capacity and strengthen pre-hospital coordination through unified medical direction.
- Legislative funding opportunities and grant stability will determine how quickly these goals can be achieved.

Key Lessons

- **Oregon's trauma system balances centralization and local autonomy,** ensuring statewide access through Level IV hospitals while leveraging regional hubs for escalation.
- **The Oregon Capacity System demonstrates the power of automated, EMR-integrated data,** replacing outdated manual reporting with real-time, actionable insights.
- **The Oregon Medical Coordination Center addresses the critical problem of stranded patients,** especially in rural areas, by providing a state-supported, last-resort mechanism for transfers.
- **Behavioral health coordination is emerging as the next major challenge,** with Oregon actively working to map resources and extend OCS/OMCC principles into mental health.
- **Sustainability depends on securing long-term funding and stakeholder buy-in** once federal pandemic-related grants expire.

Final Thoughts from Dr. Lehrfeld

The webinar closed with acknowledgment of Oregon's success in turning crisis into opportunity. Dr. Lehrfeld's presentation highlighted how innovation, collaboration, and trust between hospitals, EMS, and state agencies allowed Oregon to move from fragmented coordination to a system admired nationally. As Dr. Dorlac noted, Oregon exemplifies the principle of "not letting a crisis go to waste," building a stronger and more adaptable system for the future.

Next Steps

Next Meeting:

- **Title: National Disaster Medical System NDMS**
- **Speaker(s):** Dr. Jeffrey Freeman (Director, NDMS Pilot Program)
- **Date: Wednesday, November 12, 2025 - 4:00 pm central**
- **Goal:** Introduce the NDMS pilot program and its role in LSCO repatriation of combat casualties
- **Key message/topic:**
- Review history and current scope of the NDMS pilot; discuss communication, EHR integration, financial support, and role of the VA and hospital systems
- **Call to action:** Identify your region's NDMS pilot contact and get involved in RMOCC stakeholder meetings