Oregon EMS and Trauma Data Strategic Plan



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Executive Summary

Within the Oregon Health Authority, the Emergency Medical Services and Trauma Systems Section, in partnership with the Injury and Violence Prevention Section, oversees Oregon's emergency medical services (EMS) data. EMS data systems include EMS agency and personnel licensing, EMS agency prehospital patient care reporting, and hospital trauma registry reporting. Other related data systems that may be integrated in the future include the following: hospital emergency department data, hospital discharge data, syndromic surveillance data, specialty registry data (cardiac arrest, myocardial infarction, stroke, etc.), emergency medical dispatch data, rehabilitation data, and health information exchanges.

This strategic plan will be used to implement state-level EMS system performance improvement and to encourage and support regional and local performance improvement. OHA will use data for EMS system development, workforce development, and clinical care. OHA will use EMS data to support public health policy, prevention, and practice. OHA will track the strategic plan and continue to adjust along the way.

Oregon's EMS data program has made significant achievements in the past five years:

- ✓ The adoption of Senate Bill 52 (2017), which mandates EMS reporting by licensed EMS agencies
- ✓ Implementation of a new EMS agency and personnel licensing system
- ✓ Improved communication with licensees, associations, and other stakeholders
- ✓ Implementation of a NEMSIS 3-compliant prehospital patient care reporting system
- ✓ Substantial funding through the Centers for Medicare & Medicaid Services (CMS) Health Information Technology for Economic and Clinical Health (HITECH) Act to establish and strengthen EMS data system interoperability
- ✓ Collection of most prehospital patient care reports within six hours of the incident, well under the 24-hour administrative rule requirement

There's always more work to do. In order to focus our efforts, OHA pursued a strategic planning process in 2016. The strategic plan laid out three strategic focus areas for Oregon's EMS data for three years (2017–2019). Within each area, goals and objectives were established, along with how progress will be measured.

The 2018 update to the strategic plan removed the following goals and objectives that had been fully accomplished:

- Implement a new EMS agency and EMS personnel licensing system
- Upgrade the state trauma registry
- Establish prehospital data system performance measures
- Create and test methods for linking datasets using crash, EMS, hospital, trauma, and vital records (death) data
- Implement real-time, secure health information exchange between the prehospital data system and the trauma registry data system

This 2020 update to the strategic plan includes the following updates to reflect progress and respond to challenges and opportunities for the next three years (2020–2022):

- Removes goals and objectives that have been fully accomplished:
 - o Include EMS data systems in the public health modernization plan
 - o Create a stakeholder advisory workgroup for prehospital EMS data
- Adds a few new goals, objectives, measures, and milestones
- Removes 2018–2019 milestones, modifies some 2020–2021 milestones, and adds 2022 milestones for uncompleted work

OHA will track the strategic plan and continue to adjust along the way.



OHA Vision

A healthy Oregon

OHA Mission

Helping people and communities achieve optimum physical, mental and social well-being through partnerships, prevention and access to quality, affordable health care.

OHA Values

Service Excellence

Partnership

Innovation

Leadership

Integrity

Health Equity



The Emergency Medical Services and Trauma Systems Program develops and regulates systems for quality emergency medical care in Oregon. This ensures that EMS Providers are fully trained, that emergency medical vehicles are properly equipped, and emergency medical systems are functioning efficiently and effectively.

Strengths, Weaknesses, Opportunities, and Threats

Strengths

- Increased communication and trust with stakeholders
- Strong public health mindset
- Dedicated interdisciplinary staff with a unified vision
- Legislated mandatory prehospital data reporting

Weaknesses

- Lack of adequate funding and position authority for EMS and trauma system data management
- Limited integration of EMS and trauma data systems into other public health data systems

Opportunities

- Recent developments in Mobile Integrated Healthcare—Community Paramedicine (MIH-CP) and the CMS ET3 pilot reimbursement models to potentially broaden funding mechanisms for EMS agencies
- Stakeholders want education about EMS data
- Opportunity to form and nurture partnerships
- Grant funding availability
- Increased interest among stakeholders in EMS/hospital data integration

Threats

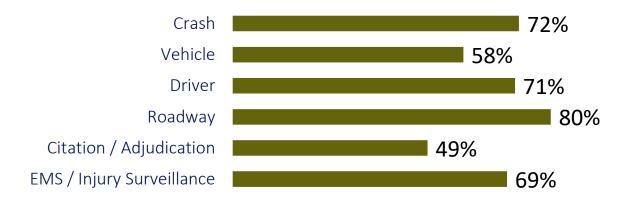
- Lack of permanent funding for EMS data systems
- Lack of quality assurance and feedback mechanisms in EMS agencies and data systems

Gap Analysis

State Traffic Records Assessment

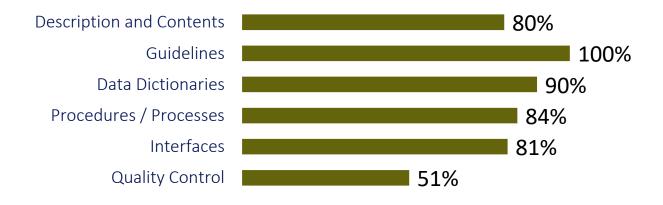
In 2015, the National Highway Traffic Safety Administration (NHTSA) conducted an assessment of Oregon's traffic records systems, including the EMS data systems. The maturity of the EMS data systems was comparable to that of the state's crash, driver, and roadway data systems.

Figure 1. Grading of Oregon's traffic records systems, including EMS data systems (ideal: 100%)



The greatest opportunity for improvement in Oregon's EMS data systems, as identified by the traffic records assessment, is quality control: "a formal, comprehensive quality management process that includes quality control metrics and quality control reports... [to ensure that data systems are] timely, accurate, uniform, complete, integrated, and accessible."²

Figure 2. Grading of key aspects of Oregon's EMS data systems (ideal: 100%)



¹ National Highway Traffic Safety Administration Technical Assessment Team, *State of Oregon Traffic Records Assessment* (2016), http://www.oregon.gov/ODOT/TS/docs/TRCC/Oregon%20TRA%20Final%20Report.pdf.

² National Highway Traffic Safety Administration, *Traffic Records Program Assessment Advisory* (2012), https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/811644, 101.

Stakeholder Voices

The strategic planning process included 13 hours of interviews with 46 individuals throughout the state, from EMS agencies, hospitals, county governments, state government, and others.

Stakeholder voices included the following key themes:

Give us Data

"I've never dealt with state data. We are not aware of what's available."

—EMS Agency Administrator

"It's important to have a user-friendly interface for people to do reports and write their own queries. Access is important."

—County EMS Administrator

"Report data in a visible way."

—University Researcher

Integrate

"I've seen untold benefits to patient care from bridging the gap between EMS agencies and hospitals."

—Hospital Administrator

Ensure Data Quality

"I'm surprised I haven't heard from the state saying, 'why haven't you uploaded data?'"

—EMS Agency Administrator

We're Ready for Performance Improvement

"Come up with measures, and allow us to benchmark our agency with the rest of the state. Then we can give ourselves goals to attain."

—EMS Agency Administrator

Lead

"Why do they need the data? Why are we giving them data?"

—EMS Agency Administrator

"The EMS office is stronger and more stable than it has been in a long time."

—Coordinated Care Organization (CCO) Administrator

Strategic Focus Areas



Leadership

Through policy leadership, OHA will make EMS a public health priority, communicate with public health leadership, establish policy partnerships, and promote advocacy of EMS data. Through operational leadership, OHA will strengthen our organizational structure, solidify staffing, establish operational partnerships, and improve communication with stakeholders.



Data System Operations

OHA will collect, share, disseminate, link, analyze, and integrate data. OHA will evaluate the performance of our EMS data systems.



Data Use

OHA will implement state-level EMS system performance improvement, and we will encourage and support regional and local performance improvement. OHA will use data for EMS system development, workforce development, and clinical care. OHA will use EMS data to support public health policy, prevention, and practice.

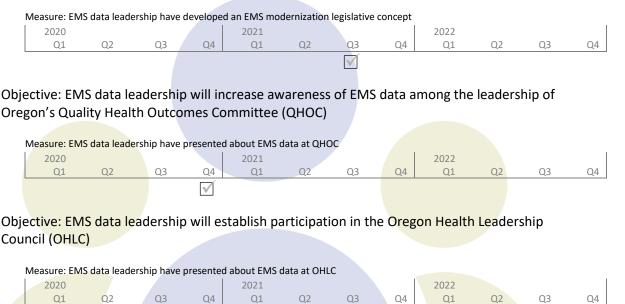
Goals, Objectives, Measures, and Milestones

The following sections establish the work to be accomplished with Oregon's EMS data systems in 2020–2022, organized by strategic focus area.

Leadership

Goal: Integrate EMS data systems into public health modernization

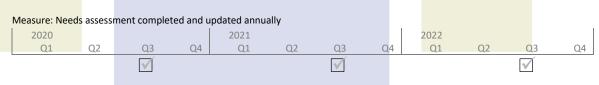
Objective: EMS data leadership will identify the appropriate place to include EMS data systems in Oregon's public health modernization initiative



Goal: Identify and obtain needed resources to implement EMS data systems and ensure that they are sustained and able to grow with health system needs over time

 \checkmark

Objective: EMS data leadership will complete an assessment of needed resources to support EMS data systems



Objective: EMS data leadership will obtain dedicated resource allocation for EMS data

No measures for 2020–2022.

Goal: Create and implement a communications plan for the development and maintenance of the EMS data systems

Objective: EMS data leadership, with the participation of Public Health Division (PHD) center administrators, will create a communications plan

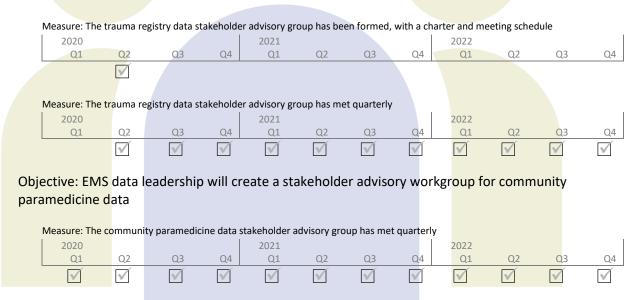


Goal: Create stakeholder advisory workgroups for EMS data

Objective: EMS data leadership will create a stakeholder advisory workgroup for prehospital EMS data



Objective: EMS data leadership will create a stakeholder advisory workgroup for trauma registry data



Data System Operations

Goal: Collect complete, accurate, and usable data

Objective: Implement NEMSIS version 3.5

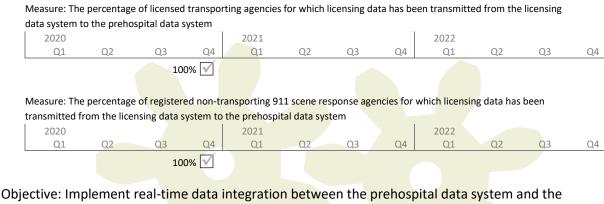
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Objective: Update the state prehospital data elements and data quality rules semiannually to meet national and Oregon needs

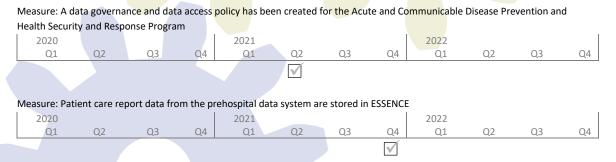
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Goal: Implement timely, secure health information exchange using EMS data and other healthcare data

Objective: Implement real-time data integration between the EMS licensing data system and the prehospital data system

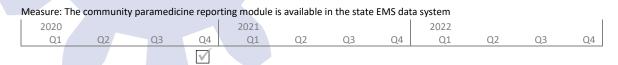


Objective: Implement real-time data integration between the prehospital data system and the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)



Goal: Implement community paramedicine data reporting

Objective: Implement a community paramedicine reporting module in the state EMS data system.



Objective: Adopt a minimum data set and data dictionary for community paramedicine reporting that includes a list of data elements, definitions, data types, and other constraints

Measure: A community paramedicine dataset has been adopted											
2020				2021				2022			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
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Objective: Collect community paramedicine data

Measure: The number of community paramedicine programs submitting data in a given month.



Goal: Train users on data entry and administration

Objective: Train users and agency administrators of the prehospital data system on submitting data and managing agency reporting to the state

Measure: The number of training sessions conducted each year



Objective: Train users and agency administrators of the community paramedicine reporting module on submitting data and managing agency reporting to the state

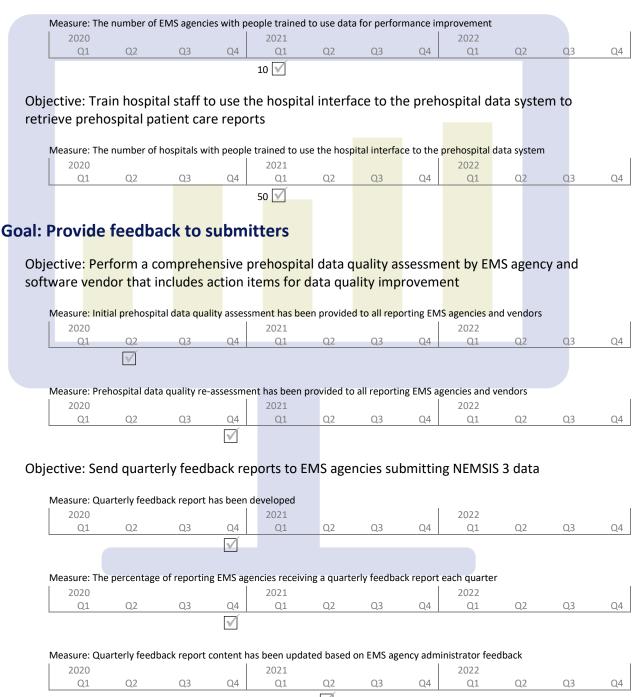
Measure: The number of community paramedicine data training sessions conducted

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Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
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Data Use

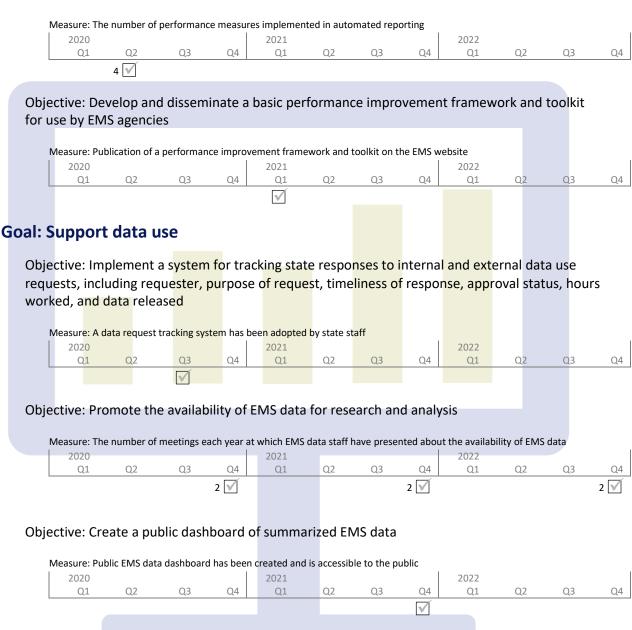
Goal: Train users on data use

Objective: Train users of the prehospital data system on using data for performance improvement



Goal: Develop performance improvement

Objective: Adopt state-level operational, clinical, or public health surveillance performance measures for EMS and trauma



Oregon EMS Data Strategic Plan 2020–2022

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