



WCEMS Alliance: Overview of Previous EMS Reports



WASHINGTON COUNTY
OREGON

Department of Health and Human Services



Customer Expectations

- Residents and visitors of Washington County should feel confident that when they call 9-1-1 they will receive:
 - Safe, timely, and appropriate care by an integrated, well-trained, and well-equipped care team

Timeline of Efforts to Improve Washington County's EMS System

Washington County Ambulance Franchise established in 1997

Polaris Group Audit

Review of ambulance system, recommendations for system design improvements, and assisted with process for a new contract.

EMS Retreat & EMS Strategic Plan

Two-day forum to discuss current EMS challenges and issues. Participants included leadership from the WC EMS Office, TVF&R, and MWA. The Plan identified 10 strategies/objectives to pursue over 24 months.

Key Stakeholder Interviews by Jensen Strategies

TVF&R Interactions w/ County

Email to County leadership regarding system issues; staff directed to research system breakdowns and work with County EMS; Training session held with County Leadership

EMS Advisory Council Formed

A 13-member council comprised of EMS stakeholders and 2 citizens. Role was to 'review, advise, and make policy and operational recommendations to improve the delivery of EMS in Washington County.'
Two sub-committees: Resupply and Resource Utilization

EMS Council Conducts EMS System Prioritization Session; Council Develops Vision, Mission, Foundational Principles

Fifty-three (53) items listed as needed for ideal system; Council identified top five priorities. Centralized Dispatch highest priority.

BOCC Approves EMS System Vision, Mission, Foundational Principles

County Announces Intent to Redesign EMS System

In spite of Council efforts, system-wide improvements continue to be hampered. County hires The Abaris Group to conduct a review of best practices of integrated EMS systems and recommend structures that incorporate foundational principles and fully utilize the resources and capabilities of the county's EMS system. Desired outcome is 'identification of financial, operational and governance structures that will allow Washington County to establish a fully integrated EMS system grounded in a public/private partnership.'

EMS Council Approves New EMS Governance Model

Consultant's analysis highlights three best practice models, including an EMS Alliance model (Contra Costa). Contra Costa model receives highest score from Council for its ability to achieve Foundational principles. County proposes and Council supports an EMS Alliance model (ORS 190) for the purpose of establishing a fully-integrated system grounded in a public/private partnership.

BOCC Approves New EMS Governance Model

Commission approves moving forward with ORS 190 governance change; commitment made to advance system policies to include integrated county-wide EMS Plan and budget.

EMS Alliance Formed (IGA)

2005 2013/2014 ??? 2015

2017 2018 Feb 2019 Dec 2019



Polaris: 2005

Impetus:

- Maturation of current Franchise Agreement
 - New term: 9/2006
- Polaris to:
 - Review EMS system
 - Make recommendations for design improvements
 - Assist in process to establish a new contract



Polaris: Sections

- Executive Summary
- Purpose and Methodology
 - Process
- Current System Design
 - Pt. Perspective
 - Ambulance Component (FA)
 - First Response (fire)
 - Medical Direction
- Competition in EMS
- The Role of Competition in EMS
- Legal Issues
- Quality Issues
- Emergency Ambulance Costs
- Primary Recommendation
- Additional Recommendations



Polaris: Executive Summary

Overarching recommendation:

- WCEMS to revise its EMS system plan and Ambulance Service Area plan to permit Staff to incorporate and implement numerous incremental improvements to the system design and to negotiate a new performance-based contract with Metro West.

Additional recommendations contained in the report include measures to:

- Provide incentives for Fire agencies to voluntarily accept County oversight and coordination of their EMS operations.
- Improve interagency cooperation through further integration of Fire Department first responders and the ambulance contractor's efforts.
- Improve the dispatch data interface between the County (WCCCA) and the contractor and improve coordination of the communications centers.
- Require periodic financial reporting from the ambulance contractor.
- Strengthen the role of the County Medical Supervisor and unify the medical command structure of the EMS system.
- Review and adjust, as needed, the medical protocols.
- Redesign the County EMS office to improve overall leadership of the system.



Polaris: Purpose and Methodology

Specific objectives of this portion of the study include:

- Review and recommend revisions to the County Ambulance Service Area (ASA) Plan.
- Review current contracts.
- Identify governance and regulatory issues.
- Review medical protocols.
- Review Quality Improvement Systems.
- Evaluate system performance.
- Determine and evaluate EMS system costs.
- Perform a Performance/Cost comparison to similar markets.
- Evaluate the roles of providers participating in the EMS system.
- Identify opportunities for improvement of the system as a whole.



Polaris

At the end of the day...do we keep what we have and tweak it, or do we toss it and start over?



Polaris: Summary

- Primary Recommendation:

“Based on the due diligence completed in this study, The Polaris Group concludes that there is much risk in terms of system stability, performance and cost and likely little to gain in terms of community value in subjecting the Washington County EMS system to an ambulance RFP process at this time. The time and money that would be spent on in conducting an RFP or bid may be better spent on resolving the various smaller issues and opportunities identified by system stakeholders through renegotiation of the ambulance contract and restructuring of certain other system components.”

Polaris: Summary

Additional Recommendations

Based on information gathered during the stakeholder interviews, The Polaris Group recommends that the County consider the following initiatives during the revision of the ASA plan and contract renegotiation.

• **Within the renegotiated contract include provisions that:**

- Enable and encourage Fire response integration with the ambulance provider.
- Require improved methods for returning Fire medics to stations/districts.
- Improve interagency training, and PIER opportunities.
- Improve First responder resupply and equipment exchange procedures.
- Enhance the ability of the contractor to invest in the EMS system by adopting an initial term of 5-years.
- Encourage consistent performance by providing a mechanism for earned long-term contract renewals as long as the provider meets and exceeds the contract requirements.
- Require additional operational and financial reporting.
- Clarify response protocols for “staging” and rural responses.
- Resolve the CAD interface issues by requiring an advanced 2-way connection.
- Require improved dispatch “clock synchronization” to assure consistent and accurate performance reporting.



Polaris: Summary

Additional Recommendations

Based on information gathered during the stakeholder interviews, The Polaris Group recommends that the County consider the following initiatives during the revision of the ASA plan and contract renegotiation.

•Improve the Medical Control component by:

- Implementing incentives for Fire agencies to voluntarily adopt County oversight.
- Consider interim or long-term Board of Medical Advisors to assist and advise system-wide Medical Supervisor.
- Address stroke and cardiac (including 12 lead EKG) protocols at Medical Advisory committee and/or at Board of Medical Advisors.
- Investigate improved coordination with regional EMS systems.
- Assert role of County Medical Supervisor over dispatch protocols.
- Consider increasing time requirement/commitment of County Medical Supervisor.



Polaris: Summary

Additional Recommendations

Based on information gathered during the stakeholder interviews, The Polaris Group recommends that the County consider the following initiatives during the revision of the ASA plan and contract renegotiation.

- **Redesign the County EMS Office to include the following features:**
 - Improve overall leadership of entire EMS system.
 - Take leadership role in Countywide PIER programs
 - Improve participation in regional planning.
 - Investigate improvements in hospital diversion management.
 - Investigate improvements in mental health transportation.
 - Develop staffing plan and budget to meet expanded role.

Timeline of Efforts to Improve Washington County's EMS System

Washington County Ambulance Franchise established in 1997

Polaris Group Audit

Review of ambulance system, recommendations for system design improvements, and assisted with process for a new contract.

EMS Retreat & EMS Strategic Plan

Two-day forum to discuss current EMS challenges and issues. Participants included leadership from the WC EMS Office, TVF&R, and MWA. The Plan identified 10 strategies/objectives to pursue over 24 months.

Key Stakeholder Interviews by Jensen Strategies

TVF&R Interactions w/ County

Email to County leadership regarding system issues; staff directed to research system breakdowns and work with County EMS; Training session held with County Leadership

EMS Advisory Council Formed

A 13-member council comprised of EMS stakeholders and 2 citizens. Role was to 'review, advise, and make policy and operational recommendations to improve the delivery of EMS in Washington County.'
Two sub-committees: Resupply and Resource Utilization

EMS Council Conducts EMS System Prioritization Session; Council Develops Vision, Mission, Foundational Principles

Fifty-three (53) items listed as needed for ideal system; Council identified top five priorities. Centralized Dispatch highest priority.

BOCC Approves EMS System Vision, Mission, Foundational Principles

County Announces Intent to Redesign EMS System

In spite of Council efforts, system-wide improvements continue to be hampered. County hires The Abaris Group to conduct a review of best practices of integrated EMS systems and recommend structures that incorporate foundational principles and fully utilize the resources and capabilities of the county's EMS system. Desired outcome is 'identification of financial, operational and governance structures that will allow Washington County to establish a fully integrated EMS system grounded in a public/private partnership.'

EMS Council Approves New EMS Governance Model

Consultant's analysis highlights three best practice models, including an EMS Alliance model (Contra Costa). Contra Costa model receives highest score from Council for its ability to achieve Foundational principles. County proposes and Council supports an EMS Alliance model (ORS 190) for the purpose of establishing a fully-integrated system grounded in a public/private partnership.

BOCC Approves New EMS Governance Model

Commission approves moving forward with ORS 190 governance change; commitment made to advance system policies to include integrated county-wide EMS Plan and budget.

EMS Alliance Formed (IGA)

2005 2013/2014 ??? 2015

2017 2018 Feb 2019 Dec 2019

Abaris: 2018

The Abaris Group was selected to support the stakeholders of the Emergency Medical Services (EMS) system in Washington County, Oregon. The objective was to develop a new governance model that delivered an integrated public/private system that meets the Foundation Principles established by the EMS Council.

- Integrated EMS system based on a collaborative public/private partnership
- Transparency and Accountability
- Responsive
- Fiscally Responsible
- Clinical Excellence
- Operational Effectiveness
- Culture of Safety and Mindfulness

Abaris: Sections

Introduction

- EMS Council Interviews
 - Concerns
 - Suggested improvements
- Strategic Process
- Recommended System Components and Improvements
 - Centralized dispatch
 - First Responder Integration
 - Data-Driven EMS
 - Systemwide QI
 - Centralized Medical Direction
- Governance Options
 - Three options
- Financial Models
- EMS System Performance
- Policy Decisions and Changes
- Timeline and Process
- EMS System Compliance and Oversight

Abaris

EMS System Concerns Mentioned by Council Members

- Not patient-centric focused
- Fragmented quality improvement program
- Lack of central data repository (dispatch to discharge)
- Unclear if there are clinical issues currently
- System values response times over clinical care
- Coordination lacking between first response and transport crews
- Only reactive use of fire transport units
- Lack of coordination between medical directors
- Different protocols possible for each provider
- Significant use of lights and siren response, ability to reduce?
- Minimal accountability of current agreement
- Stagnant EMS system due to evergreen transport agreement



Abaris

Suggested System Improvements by Council Members

- Patient-centric focus throughout EMS system
- Coordinated, systemwide quality improvement program
- Establish systemwide performance tracking
- Ensure clinical care is valued over response times
- Centralized location for all EMS data
- More transparency with current ambulance provider
- Greater visibility enforcing current ambulance contract
- Consolidated fire/EMS dispatch center
- Greater Fire/EMS coordination
- Proactive use of fire-based ambulances
- Coordinated and centralized medical direction
- Consider best practice system innovations every 18 months



Abaris

- Santa Cruz County, California
- San Mateo County, California
- Contra Costa County, California

All three innovative EMS systems shared certain best practice commonalities:

- Single, consolidated dispatch center
- Formalized inclusion and value of first responders
- Single electronic patient care report (ePCR) software platform
- System-level quality improvement – coordinated approach on all issues
- High level of transparency
- Centralized medical direction
- Standardized EMS equipment

Abaris

Heat Map Overall

Best Practice Summary	Santa Cruz		San Mateo		Contra Costa	
	Applicability	Value	Applicability	Value	Applicability	Value
Integrated EMS system	3.0	3.1	2.9	3.0	4.1	4.4
Transparency & Accountability	3.1	2.9	2.5	2.5	4.4	4.6
Responsive	3.3	3.0	2.8	2.5	4.4	4.0
Fiscally Responsible	2.0	2.0	1.6	1.9	3.6	3.6
Clinical Excellence	3.1	3.1	2.6	2.5	3.5	3.6
Operational Effectiveness	2.8	2.5	2.0	2.4	4.4	4.4
Culture of Safety and Mindfulness	3.1	2.7	2.9	3.0	3.9	4.1
Average	2.9	2.8	2.5	2.5	4.0	4.1

Abaris

EMS Standards, Core Measures, & Benchmarks

Organization	SCEMS	MedStar	EMSA	NEMSIS	Compass	NHS-UK	AHA	CMS
Cardiac Arrest								
Response interval < 5 minutes for CPR/AED		●						
Bystander CPR rate	●	●		●			●	
Bystander AED rate	●	●		●			●	
Appropriate airway management		●						
End-tidal CO2 monitored				●			●	
Pit crew/focused CPR	●							
Transport to "Resuscitation Center"		●						
ROSC percentage	●	●	●	●		●		
Survival to discharge (e.g., overall, Utstein)	●	●	●	●		●		
Hypoglycemia								
Glucose recorded before treatment					●	●		
Hypoglycemia corrected through treatment					●			
Glucose recorded after treatment						●		
Correct disposition (e.g., transport, referral, home)						●		
Pain Management								
Offered pain meds prior to movement		●	●					●
Pain score decreased		●			●			●

Abaris

NON-CLINICAL STANDARDS, CORE MEASURES, BENCHMARKS

NON-CLINICAL STANDARDS, CORE MEASURES, BENCHMARKS								
Efficiency Domain								
Cost per patient contact								
Cost per transport		●						
Cost per unit hour		●						
Employee turnover rate								
Patient Safety								
Drops per 1,000 patient contacts								
AMA to new call within X hours (e.g., 24-72)		●				●		
AMA to hospital within 24 hours								
Mission failures per X responses/miles		●						
Ambulance crashes per X responses/miles								
Chart Review (random, manager, MD)								
Protocol compliance rate (note: this can be overall or individual)								
Total Standards	19	39	15	19	8	25	22	5

Legend:

- SCEMS = Santa Cruz EMS System
- MedStar = MedStar Mobile Integrated Healthcare (Fort Worth, TX)
- EMSA = California EMS Authority (2015)
- NEMSIS = National EMS Information Systems (version 3.0)
- Compass = EMS Compass produced by National Association of EMS Officials (NAEMSO)
- NHS-UK = National Health Service-United Kingdom (version 1.31, 2016)
- AHA = American Heart Association
- CMS = Centers for Medicare and Medicaid Services (ED standards applicable to EMS)



Abaris

At the end of the day...here is what we have, how do we make it better?

Report COMPARISON

Polaris

- Improve interagency cooperation through further integration of Fire Department first responders and the ambulance contractor's efforts.
- Improve the dispatch data interface between the County (WCCCA) and the contractor and improve coordination of the communications centers.
- Strengthen the role of the County Medical Supervisor and unify the medical command structure of the EMS system.

Abaris

- First responder integration: Establish strong partnership between first response and transport services through formally integrating it into system.
- Centralized Dispatch: All fire and ambulance units are dispatched through the same dispatcher, at the same time, using the same radio system for EMS calls.
- Centralized Medical Direction: A uniform approach to medical direction across all providers with a consistent approach and input to review, education, and policy creation.

Timeline of Efforts to Improve Washington County's EMS System

Washington County Ambulance Franchise established in 1997

Polaris Group Audit

Review of ambulance system, recommendations for system design improvements, and assisted with process for a new contract.

EMS Retreat & EMS Strategic Plan

Two-day forum to discuss current EMS challenges and issues. Participants included leadership from the WC EMS Office, TVF&R, and MWA. The Plan identified 10 strategies/objectives to pursue over 24 months.

Key Stakeholder Interviews by Jensen Strategies

TVF&R Interactions w/ County

Email to County leadership regarding system issues; staff directed to research system breakdowns and work with County EMS; Training session held with County Leadership

EMS Advisory Council Formed

A 13-member council comprised of EMS stakeholders and 2 citizens. Role was to 'review, advise, and make policy and operational recommendations to improve the delivery of EMS in Washington County.'
Two sub-committees: Resupply and Resource Utilization

EMS Council Conducts EMS System Prioritization Session; Council Develops Vision, Mission, Foundational Principles

Fifty-three (53) items listed as needed for ideal system; Council identified top five priorities. Centralized Dispatch highest priority.

BOCC Approves EMS System Vision, Mission, Foundational Principles

County Announces Intent to Redesign EMS System

In spite of Council efforts, system-wide improvements continue to be hampered. County hires The Abaris Group to conduct a review of best practices of integrated EMS systems and recommend structures that incorporate foundational principles and fully utilize the resources and capabilities of the county's EMS system. Desired outcome is 'identification of financial, operational and governance structures that will allow Washington County to establish a fully integrated EMS system grounded in a public/private partnership.'

EMS Council Approves New EMS Governance Model

Consultant's analysis highlights three best practice models, including an EMS Alliance model (Contra Costa). Contra Costa model receives highest score from Council for its ability to achieve Foundational principles. County proposes and Council supports an EMS Alliance model (ORS 190) for the purpose of establishing a fully-integrated system grounded in a public/private partnership.

BOCC Approves New EMS Governance Model

Commission approves moving forward with ORS 190 governance change; commitment made to advance system policies to include integrated county-wide EMS Plan and budget.

EMS Alliance Formed (IGA)

2005 2013/2014 ??? 2015

2017 2018 Feb 2019 Dec 2019