Central Region EMS & Trauma Care System Plan
July 2017 - June 2019

Submitted by
Central Region EMS and Trauma Care Council
March 1, 2017
Approved by the EMS and Trauma Care Steering Committee on May 17, 2017
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Introduction

The Central Region is located in King County. There are six paramedic agencies, twenty-four fire department based BLS agencies, five private ambulance companies, eighteen hospitals and three stand-alone emergency departments in Central Region. There is one level I trauma center, four level III trauma centers, three level IV trauma centers and one level V. Categorized Cardiac and Stroke Centers are also distributed in the heavily populated areas along I-5 and I-405 and I-90. Currently there are twelve level 1 and four level 2 cardiac centers; and four level 1, seven level 2, and five level 3 stroke centers in Central Region. The majority of the County’s 1.93 million residents live in urban and suburban communities located along the I-5 and I-405 corridors where emergency medical hospital services are located.

The Central Region has a mature and robust EMS system that began in 1969 when Leonard A. Cobb, M.D. and Chief Gordon Vickery, Seattle Fire Department, created Seattle’s paramedic program, Medic One. Beginning with the EMS and Trauma System Act of 1990, trauma system elements mandated by WAC 246-976-960 and RCW 70.168 were incorporated into the existing EMS system. Local fire district levies, the Medic One Foundation, and the King County Medic One/EMS levy support prehospital training, and quality improvement activities. This financial support and oversight allows the Central Region EMS and Trauma Care Council to focus on access to emergency department services and overall EMS system performance. The Central Region EMS and Trauma Care Council receives its funding from the state Department of Health and is required to designate no more than half of its funding to administrative expenditures; half or more of the funding is designated toward project-related work.

The Central Region EMS and Trauma Care Council accomplished numerous goals in the 2015-2017 plan cycle. The strategic plan included some goals, objectives and strategies that are required in each plan cycle, and others that were unique to the specific needs of Central Region. The region reviewed recommended minimum and maximum numbers of trauma-designated hospitals and trauma-verified EMS agencies. The region approved the increase of Level V trauma-designated hospitals from one to two, and decreased the maximum number of trauma-verified EMS agencies from six to five, to accommodate the merger of Vashon Medic One and King County Medic One. The region granted $24,000 to regional fire departments to provide training and equipment to their EMS teams. The council supported the One Step Ahead falls prevention program. As part of this program, physical therapists made home visits to 1,886 seniors who had visited emergency departments due to a fall. Of those who were seen, 88% did not have a repeat fall. The council monitored divert hours for hospitals throughout the plan cycle. In January 2016, patient census reached historically high levels. As a result, the regional council determined that it needed a reaffirmation of its no divert policy. Letters were sent to chief executives of all hospitals in the region, and the number of divert hours went from 319 in January 2016 to only five hours in February 2016. The council supported a research project that standardized pediatric medications in EMS rigs throughout the region. This program is currently in process, but has been well-received and is planned to be expanded to other regions. Finally, the region coordinated the production of an educational film about the trauma system that has been used in two movie theater-based educational campaigns, resulting in over 350,000 impressions.

Central Region representatives participate in a number of ad hoc workgroups, local and state committees and organizations related to EMS and Trauma Care in the region. Within the council, workgroups are formed on an ad hoc basis to discuss specific EMS system and patient care issues and to develop strategies to address those issues. Project-specific ad hoc committees have been formed on
an as-needed basis. Outside of the council, members actively participate in regional partnerships and on state Technical Advisory Committees.

Because of the uniquely robust EMS system that exists in Central Region, the region contains no underserved geographical areas. The council has reviewed response and transport times and found, consistently, that the number and level of trauma-verified prehospital and hospital agencies matches the demand within the county. That said, the Central Region EMS and Trauma Care Council is dedicated to addressing barriers to service, potential gaps in service and opportunities for improvement within the region. In the 2017-2019 plan cycle, the council has identified the following opportunities for improvement and project work: hemorrhage control in mass casualty incidents, opioid addiction and overdose, and community paramedicine. As part of a state-wide initiative to coordinate EMS and Trauma regions’ work with emergency planning efforts, Central Region will continue to work with the Northwest Healthcare Response Network to coordinate EMS resources in emergency planning activities in the region.

This 2017-2019 Central Region Strategic EMS & Trauma Care System Plan is made up of goals adapted from the State Strategic EMS & Trauma Care System Plan. The objectives and strategies are developed by the Regional Council and its stakeholders to meet needs of the region.

The Central Region EMS & Trauma Care Council has adopted the following mission and vision statements:

**Vision**
Central Region has an efficient, well-coordinated statewide EMS & Trauma System which reduces death, disability, human suffering and costs due to injury and medical emergencies.

**Mission**
The Central Region EMS and Trauma Care Council’s mission is to provide leadership and coordination of EMS community partners to reduce injury and to ensure provision of high-quality emergency medical and trauma care.

**GOAL 1** A sustainable Regional system of emergency care services that provides appropriate capacity and distribution of resources to support high-quality trauma, cardiac and stroke patient care.

**Need and Distribution of Services**

**Hospital Care:** There are four level III trauma centers and three level IV trauma centers in Central Region which are located in the heavily populated communities along the 1-5 and I-405 corridors. Our one level V trauma center is located along highway 410 in the mostly rural city of Enumclaw. The State’s level one trauma center is located in Seattle and serves patients from Washington, Alaska, Montana and Idaho. Central Region will be reviewing trauma center performance measures for designation purposes during this plan cycle.

Categorized Cardiac and Stroke Centers are also distributed in the heavily populated areas along 1-5 and 1-405 and I-90. Currently there are twelve level 1 and four level 2 cardiac centers; and four level 1,
seven level 2, and five level 3 stroke centers in Central Region.

Designated and categorized hospital services are listed by name and level of service in the regional PCPs and EMS guidelines. Annually, the Regional Council will compare the Patient Care Procedures (PCPs) with the current list of designated/categorized hospitals services on file with the Office of Community Health Systems to make sure the services listed in the PCPs are up to date. This process will ensure that prehospital agencies can transport their patient to the appropriate level of care.

Prehospital Care:

King County uses a tiered prehospital response system to ensure 9-1-1 calls receive medical care by the most appropriate care provider. Calls to 9-1-1 are received and triaged by professional dispatchers at five dispatch centers located throughout King County. The dispatchers are trained to identify the most appropriate level of care needed. Dispatchers provide pre-arrival instructions for most medical emergencies, and guide the caller through life-saving steps, including Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) instructions, until the Medic One/EMS provider arrives. Basic Life Support (BLS) personnel are dispatched first to an incident, providing rapid basic life support that includes advanced first aid and CPR/AED to stabilize the patient. Staffed by fire department Emergency Medical Technicians (EMTs), BLS units arrive at the scene on average in less than five minutes. There are more than 4000 EMTs employed by 30 fire departments and 450 private ambulance EMTs providing EMS care in King County.

Advanced Life Support (ALS/paramedic) personnel provide emergency medical care for critical or life-threatening injuries and illness. ALS units are dispatched simultaneous with BLS for life-threatening medical emergencies.

RCW 70.168.100 authorizes EMS Regions to identify the need for and recommend distribution and level of care of prehospital services to assure adequate availability and avoid inefficient duplication and lack of coordination of prehospital services within the region. The Regional Council also uses standardized methods provided by the Office of Community Health Systems and King County EMS Division prehospital data to determine the need and distribution of trauma verified prehospital services in King County. Need and distribution of prehospital services are reviewed during each Plan cycle.

<table>
<thead>
<tr>
<th>Objective 1: By November 2018 the Regional Council will use methods developed by the Washington State Department of Health Office of Community Health Services and other data to determine the recommended minimum and maximum numbers and levels of trauma designated services (including pediatric and rehabilitation services) and provide recommendations to the Washington State Department of Health, Office of Community Health Systems and the EMS &amp; Trauma Care Systems Plan.</th>
<th>Strategy 1: By July 2018 the Regional Council will review Central Region trauma data including population demographics to determine the recommended min/max number and levels of trauma designated facilities in Central Region (King County).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy 2: By September 2018 the Regional Council will vote on the recommended number and levels of trauma designated services in Central Region (King County).</td>
<td>Strategy 3: By September 2018, the Regional Council will make recommendations to the Washington State Department of Health Office of Community Health Systems regarding the number and levels of trauma designated services in Central Region (King County).</td>
</tr>
</tbody>
</table>
| Strategy 4: By November 2018, the Regional Council will submit designated services min/max number and level.
| Objective 2: By May 2019 the Regional Council will use Washington State Department of Health, Office of Community Health Systems standardized methodology and King County EMS system data to determine the minimum and maximum numbers and levels of verified prehospital service in King County and provide recommendations to the Washington State Department of Health Office of Community Health Systems and the EMS & Trauma Steering Committee. | **Strategy 1** By November 2018, the Regional Council and EMS Stakeholders will review EMS data including response and transport times, service demands, and population to determine the minimum and maximum levels of verified prehospital services in Central Region (King County).  

**Strategy 2**: By January 2018 the Regional Council will vote on the recommended minimum and maximum numbers of verified ALS and BLS aid and ambulance services in Central Region (King County). The Regional Council will review the current AID-ALS minimum level of one and either change the minimum to zero or strategize how to assess the minimum services not being met.  

**Strategy 3**: By March 2019, the Regional Council will make recommendations to the Washington State Department of Health Office of Community Health Systems regarding the minimum and maximum numbers of verified ALS and BLS aid and ambulance services in Central Region (King County).  

**Strategy 4**: By May, 2019, the Regional Council will submit verified services min/max and level recommendations to the EMS & Trauma Steering Committee as needed to be attached to the 2019-2021 Central Region EMS Council Plan. |
| Objective 3: By December 2017 annually, the Regional Council will review the categorization levels for cardiac and stroke facilities to ensure consistency with Patient Care Procedures. | **Strategy 1**: By September 2017 annually, the Regional Council will review the list of currently categorized cardiac & stroke care centers and update the Patient Care Procedures (PCPs) so that they accurately reflect current appropriate cardiac & stroke patient destinations.  

**Strategy 2**: By November 2017 annually, the Regional Council will make recommendations to the Washington State Department of Health Office of Community Health Systems regarding revisions to the Region’s PCPs so that they accurately reflect current appropriate cardiac and stroke patient destinations.  

**Strategy 3**: By December 2017, annually, the Regional Council will submit revisions to the Region’s PCPs to the EMS & Trauma Steering Committee as needed so that they accurately reflect current appropriate cardiac & stroke patient destinations. |
| Objective 4: By December 2017 annually the Regional Council will provide an updated list of all prehospital agencies in the King County per DOH requirements. | **Strategy 1**: By November 2017 annually, Regional Council staff will review the prehospital agency report provided by DOH.  

**Strategy 2**: By November 2017 annually, Regional Council staff will send each King County prehospital agency a copy of the prehospital agency report provided by DOH and |
GOAL 2
A strong, efficient region-wide system of emergency care services coordinated by the Regional Councils, comprised of multi-disciplinary coalitions of health care providers and other partners who are fully engaged in regional and local emergency care services system activities.

RCW 70.168 and WAC 246-976 identify the membership, and responsibilities of the regional and local EMS & trauma care councils. The Central Region EMS and Trauma Care Council membership includes local government, prehospital agencies, hospitals, the Medical Program Director, medical directors, rehabilitation facilities, and consumers. The Central Regional EMS and Trauma Care Council provides a forum for open discussion of EMS system and patient care issues and for sharing of information among EMS system partners. Workgroups are formed on an ad hoc basis to discuss specific EMS system and patient care issues and to develop strategies to address those issues.

Representatives from the Central Region participate on local and state planning committees, task forces, and workgroups so that EMS system issues, guidelines, plans, and information can be shared among local and state EMS partners.

Objective: 1 By July 2017 the Regional Council will implement the 2017-2019 Central Region EMS and Trauma Strategic Plan.

Strategy 1: By July 2017 and throughout the Plan cycle, the Regional Council will review the Central Region 2017-2019 Strategic Plan and assign workgroups to complete work as needed.

Strategy 2: By July 2017, the Central Region EMS & Trauma Care Council Strategic Plan will be posted on the Council website.

Strategy 3: Beginning August 2017, the Regional Council will provide bi-monthly progress reports to the Office of Community Health Systems.

Strategy 4: Beginning September 2017 and throughout the Plan cycle, Regional Council staff will provide bi-monthly progress reports to the Regional Council Board.

Objective 2: During the Plan cycle the Regional Council will facilitate the exchange of information throughout the emergency care system.

Strategy 1: By July 2017 and throughout the Plan cycle, the Regional Council will provide meeting rooms for the Regional Council and workgroups.

Strategy 2: By July 2017 and throughout the Plan cycle, Regional Council members will participate in EMS stakeholder meetings including: King County EMS Advisory Council, Medical Directors Committee, Northwest Healthcare Response Network, EMS & Trauma Steering Committee, and associated Technical Advisory Committees and share information with the Regional Council at
### Objective 1: Regularly Scheduled Meetings

| Strategy 1 | By August 2017 annually, the Regional Council will develop an annual budget and submit the annual budget to the Washington State Department of Health Office of Community Health Systems. |
| Strategy 2 | By October 2017 annually, the Regional Council will submit the previous year’s financial information and related schedules to the Washington State Auditor’s Office. |
| Strategy 3 | By January 2018 annually, the Regional Council will review semi-annual budget vs. actual revenues & expenditures and submit a report to the Washington State Department of Health Office of Community Health Systems. |
| Strategy 4 | By June 2018 annually, the Regional Council will review the end of year annual budget vs. actual revenues & expenditures and submit a report to the Washington State Department of Health Office of Community Health Systems. |
| Strategy 5 | By July 2017 annually, the Regional Council Board will review the Regional Council financial policies and Board/Staff roles and responsibilities. |

### Objective 2: Strategy

| Strategy 1 | By July 2017 and throughout the Plan cycle, meeting agendas, minutes, newsletters, reports and other items will be provided to regional EMS stakeholders in advance of each meeting through email distribution. |
| Strategy 2 | By July 2017 and throughout the Plan cycle, Regional Council staff and EMS stakeholders will bring EMS system and patient care issues forward to the Washington State Department of Health Office of Community Health Systems TACs as necessary. |

### Objective 3: During the Plan cycle, the Regional Council will work with the Washington State Department of Health Office of Community Health Systems and the State Auditor’s Office to ensure the Regional Council business structure and practices remain compliant with RCW.

| Strategy 1 | By August 2017 annually, the Regional Council will develop an annual budget and submit the annual budget to the Washington State Department of Health Office of Community Health Systems. |
| Strategy 2 | By October 2017 annually, the Regional Council will submit the previous year’s financial information and related schedules to the Washington State Auditor’s Office. |
| Strategy 3 | By January 2018 annually, the Regional Council will review semi-annual budget vs. actual revenues & expenditures and submit a report to the Washington State Department of Health Office of Community Health Systems. |
| Strategy 4 | By June 2018 annually, the Regional Council will review the end of year annual budget vs. actual revenues & expenditures and submit a report to the Washington State Department of Health Office of Community Health Systems. |
| Strategy 5 | By July 2017 annually, the Regional Council Board will review the Regional Council financial policies and Board/Staff roles and responsibilities. |

### Objective 4: At Regional Council meetings, the Regional Council will identify patient care issues and develop strategies to address the patient care issues.

| Strategy 1 | By July 2017 and throughout the Plan cycle, the Regional Council will discuss issues which affect patient care in the region. |
| Strategy 2 | By July 2017 and throughout the Plan cycle, the Regional Council will discuss best practices for addressing patient care issues that have been identified. |
| Strategy 3 | By July 2017 and throughout the Plan cycle the Regional Council will develop action plans to address patient care issues which have been identified. |
| Strategy 4 | By July 2017 and throughout the Plan cycle the Regional Council will evaluate the impact of the action plans on patient care in the region. |

### Objective 5: By May 2019, the Regional Council will develop a FY 2019-2021 strategic plan.

| Strategy 1 | By November 2018, the Regional Council and Regional Council Board will begin developing a FY 2019-2021 strategic plan. |
| Strategy 2 | By March 2019, the Regional Council will approve the plan. |
| Strategy 3 | By March 2019, the Council approved plan will |
GOAL 3
A sustainable regional pre-hospital EMS system utilizing standardized, evidence-based procedures and performance measures that address out of hospital emergency health care

Prehospital Education
In Central Region emergency medical technicians receive more than 140 hours of basic training and hospital experience with additional training in defibrillation. All paramedics in King County are graduates of the University of Washington Paramedic Training Program regardless of previous training. Paramedic candidates receive 2,500 hours of rigorous training, including classroom instruction, clinical rotations at Seattle Children’s, University of Washington Medical Center and Harborview Medical Center, as well as extensive field training supervised by experienced senior paramedics. Dispatch, BLS and some ALS continuing education is provided by the King County EMS Online program which is funded through the King County Medic One/EMS levy. Paramedics receive 30 hours of continuing medical education classes each year along with surgical airway management laboratories and advanced cardiac life support and pediatric advanced life support classes. Funding for paramedic continuing education is funded through the Medic One Foundation and through the Medic One/EMS Levy. During each Plan cycle, the Central Region EMS Council surveys prehospital agencies to determine education and training needs not met through EMS online and other trainings that are funded through the EMS levy. In FY 2017, the the Regional Council appropriated $14,000 to fund training needs requested through the 2017 training needs survey. Throughout the July 1, 2017-June 30, 2019 plan cycle, the Central Region EMS Council will appropriate funding for additional training based on need and financial resources.

Patient Care Procedures and County Operating Procedures
Regional Patient Care Procedures (PCPs) have been developed to provide specific directions for how the trauma system functions within the Central Region. PCPs are developed by the King County Medical Program Director in collaboration with local medical directors and the Central Region Council to ensure consistency with the Regional Patient Care Procedures.

Objective 1: By October 2017 annually, the Regional Council will allocate available funding to support prehospital training needs.

Strategy 1: By May 2017 annually, the Regional Council will develop a budget for prehospital training support.

Strategy 2: By July 2017 annually, the Regional Council will survey EMS agencies in King County to determine training needs.

Strategy 3: By September 2017 annually, the Regional Council will review the survey results and prioritize training needs.

Strategy 4: By October 2017 annually, the Regional Council will allocate available funding for prioritized training needs.

Objective 2: By May 2018

Strategy 1: By January 2018 annually, the Regional Council,
annually, the Regional Council will provide any new or revised Patient Care Procedures to the Washington State Department of Health Office of Community Health Systems and the EMS & Trauma Steering Committee for review and approval.

MPD and other EMS stakeholders will review Central Region Patient Care Procedures and make revisions as necessary.

**Strategy 2:** By March 2018 annually, the Regional Council will submit any revised Patient Care Procedures to the Washington State Department of Health Office of Community Health Systems for review and approval.

**Strategy 3:** By May 2018 annually, the Regional Council will submit any revised Patient Care Procedures to the EMS & Trauma Steering Committee as needed.

**Objective 3:** By September 2017, annually, the Regional Council will review the Key Performance Indicators developed by the Prehospital TAC and assess prehospital performance as necessary.

**Strategy 1:** By July 2017, annually, Regional Council staff will coordinate with the MPD to review Key Performance Indicators and assess prehospital performance as necessary.

**Strategy 2:** By September 2017, annually, any recommendations for performance improvements will be communicated to the appropriate prehospital agencies.

**Strategy 3:** By September 2017, annually, any recommendations for performance improvements that affect all prehospital members of the Regional Council will be communicated and addressed at a Regional Council meeting.

**GOAL 4**
Reduce preventable/premature death and disability through targeted intervention and injury/illness prevention activities and public education programs

The Central Region EMS Council uses DOH and King County EMS injury data to identify prevention needs and to develop activities to address those needs. During this Plan cycle, the Central Region EMS and Trauma Care Council will focus prevention activities on emergency preparedness through participation in the Stop the Bleed program. This program combines public education and supplies for hemorrhage control in mass casualty situations. The council will also support community paramedicine programs in an effort to reduce hospital readmissions. Finally, the council will research, plan and implement a prevention project to reduce opioid abuse in the region. In FY 2017, the council voted to provide $5,000 in the purchase of window stops to reduce pediatric window falls in the region. In past years, the council has supported projects to reduce elderly patient falls and pediatric injury.

The Central Region collaborates with other EMS partners to develop and promote public health and public education messages for publication on the Regional Council website and through various media outlets. The council will continue to research and plan public education projects, in part through the continued distribution of the short educational film produced by the council in 2016.

**Objective 1:** By March 2019, the Regional Council will identify prevention needs and support evidence based and/or promising practices as resources are available.

**Strategy 1:** By November 2018, the Regional Council will review injury/illness data and identify injury and illness prevention needs in King County.

**Strategy 2:** By January 2019, the Regional Council will develop activities to address one or more of the injury prevention needs identified.
Central Region EMS & Trauma Care System Plan July 2017- June 2019 Revised 5-15-17

<table>
<thead>
<tr>
<th>Objective 1: By July 2017 and throughout the plan cycle Central Region hospitals will continue to support a no diversion policy.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 1:</strong> By July 2017 and throughout the Plan cycle, Regional Council staff will monitor hospital diversion as reported by WaTrac and and provide bi-monthly reports to hospitals.</td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> By July 2017 and throughout the Plan cycle, Regional Council staff will monitor hospital ED status reports on WaTrac and provide bi-monthly reports to hospitals on reporting frequency compliance and reporting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objective 2: By May 2018 annually, the Regional Council will collaborate with EMS stakeholders to educate the public and our partners on the Emergency Care System.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 1:</strong> By May 2018, and throughout the plan cycle, the Regional EMS Council and/or EMS partners will develop and release a pre-packaged public information message.</td>
</tr>
</tbody>
</table>

**GOAL 5**

There is an acute care hospital system that provides appropriate capacity to support high-quality patient care.

Local fire district levies, the Medic One Foundation, and the King County Medic One/EMS levy support prehospital training, and quality improvement activities. This financial support and oversight allows the Central Region EMS and Trauma Care Council to focus on access to emergency department services and overall EMS system performance. During this Plan cycle:

- The Central Region EMS & Trauma Care Council will continue to monitor hospital compliance with the Central Region No Diversion Policy and the regional WaTrac reporting policy.
- The Psychiatric Patient Care Task Force will continue to monitor psychiatric patient care access and work toward finding a long term solution to providing adequate psychiatric patient care in King County.
- The Central Region EMS and Trauma Care Council will support the development of the Stop the Bleed program in our region. This program combines public education and supplies for hemorrhage control in mass casualty situations.
- The council will also support community paramedicine programs in an effort to reduce hospital readmissions.
- The council will research, plan and implement a prevention project to reduce opioid abuse in the region.
### Objective 2: By July 2017 and throughout the plan cycle, the Regional Council will monitor psychiatric patient access to appropriate care in Central Region.

| Strategy 1: By July 2017 and throughout the plan cycle, Regional Council staff will schedule quarterly Psychiatric Patient Task Force (PPTF) meetings. |
| Strategy 2: By July 2017, and throughout the Plan cycle, the PPTF will discuss issues which affect psychiatric patient care in the region |
| Strategy 3: By July 2017 and throughout the Plan cycle, the PPTF will discuss best practices for addressing psychiatric patient care issues that have been identified |
| Strategy 4: By July 2017 and throughout the Plan cycle the PPTF will develop action plans to address psychiatric patient care issues which have been identified. |
| Strategy 5: By July 2017 and throughout the Plan cycle the Regional Council will evaluate the impact of the action plans on psychiatric patient care in the region. |

### Objective 3: By July 2017, and throughout the plan cycle, the Regional Council will support the development of the following programs: hemorrhage control in the event of mass casualty incidents, community paramedicine, and reduction of opioid use in Central Region.

| Strategy 1: By July 2017 annually, The Regional Council will discuss best practices for addressing hemorrhage control, community paramedicine and opioid use in Central Region. |
| Strategy 2: By September 2017 annually, The Regional Council will develop action plans to address hemorrhage control, community paramedicine and opioid use in Central Region. |
| Strategy 3: By December 2017 annually, the Regional Council will implement action plans to address hemorrhage control, community paramedicine and opioid use in Central Region. |
| Strategy 4: By January 2018 and throughout the plan cycle the Regional Council will evaluate the impact of the action plans on hemorrhage control, community paramedicine and opioid use in Central Region. |
Appendices:

- Approved Minimum and Maximum of Trauma Designated and Trauma Verified Services

- Approved Min/Max numbers of Verified Trauma Services by Level and Type by County*

<table>
<thead>
<tr>
<th>County (Name)</th>
<th>Verified Service Type</th>
<th>State Approved - Minimum number</th>
<th>State Approved - Maximum number</th>
<th>Current Status (# Verified for each Service Type)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aid – BLS</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Aid – ILS</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Aid – ALS</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Amb – BLS</td>
<td>1</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Amb – ILS</td>
<td>0</td>
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<td>0</td>
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<tr>
<td></td>
<td>Amb - ALS</td>
<td>5</td>
<td>6</td>
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</tr>
</tbody>
</table>

*Numbers current as of date submitted. For real-time numbers, please see: Trauma Designated Services List

- Trauma Response Areas by County

<table>
<thead>
<tr>
<th>County (name)</th>
<th>Trauma Response Area Number</th>
<th>Description of Trauma Response Area’s Geographic Boundaries</th>
<th>Type and # of Verified Services in each Response Areas * use key</th>
</tr>
</thead>
<tbody>
<tr>
<td>King</td>
<td>Primary Zone 1</td>
<td>From NW border of Seattle; north to Snohomish County border; east along Snohomish County border to NE corner of FD 45; south along the eastern borders of FD 45 and Eastside Fire &amp; Rescue and FD 27 FD 27 and continuing along the eastern border of Eastside Fire &amp; Rescue, FD 27 borders to the NE border of Maple Valley Fire &amp; Life Safety; west to NW border of Renton FD, north along east side of Lake Washington, including Mercer Island to the Northeast border of Seattle and west to NW border of Seattle.</td>
<td>A-1 D-10 F-3</td>
</tr>
<tr>
<td>King</td>
<td>NE Zone 1</td>
<td>Boundaries of FD 50</td>
<td>D-1</td>
</tr>
<tr>
<td>King</td>
<td>E Zone 1</td>
<td>Boundaries of FD 51</td>
<td>D-1</td>
</tr>
</tbody>
</table>
| King | Zone 3 | South border of Seattle and south end of Lake Washington along north border of Renton and Maple Valley, east: along Kittitas County Border; south along Pierce County border; west along Puget Sound including Vashon Island. | A-3  
D-11  
F-2 |
|------|-------|--------------------------------------------------------------------------------------------------|-----|
| King | Zone 5 | City of Seattle                                                                                   | A-1  
D-1  
F-1 |
| King | Zone SW | North from SE border of Zone 3 along eastern borders of Zone 3 and Primary Zone 1 to the intersection of Primary Zone 1 and I-90; east along I-90 to intersection of I-90 and E Zone 1; around the southern border of E Zone 1 to Kittitas County border; south along Kittitas County border to Pierce County border; west along Pierce County border to SE corner of Zone 3. | No designated service |
| King | Zone NW | From intersection of I-90 and Primary Zone 1; North along the eastern border of Primary Zone 1 to Snohomish County Border; east along Snohomish County border to NE border of NE Zone 1; south along western border of NE Zone 1 to SW corner of NE Zone 1; east along southern border of NE Zone 1 to Kittitas County border; south along Kittitas County border to intersection of E Zone 1 and Kittitas border; west and south around E Zone 1 to intersection of I-90 and E Zone 1, along I-90 to intersection of I-90 and Primary Zone 1. | No designated service |

Key: For each level the type and number should be indicated

- Aid-BLS = A  
- Ambulance-BLS = D  
- Aid-ALS = C  
- Ambulance-ALS = F  
- Aid-ILS = B  
- Ambulance-ILS = E

- Central Region Trauma Response Area Map:


- Regional Council Member Composition:

  **Prehospital:**
  Airlift Northwest, American Medical Response, Bellevue Fire Department Medic One, Falck Northwest, King County Medic One, King County Medical Director, Rural Metro, Seattle Fire Department Medic One, Redmond Medic One, Tri-Med Ambulance

  **Hospital:**
  Auburn Regional Medical Center, Children’s Hospital, EvergreenHealth, Kaiser Permanente, Harborview Medical Center, Highline Medical Center, Overlake Medical Center, Snoqualmie Valley Hospital, St. Elizabeth Medical Center, St. Francis Medical Center, Swedish-Ballard, Swedish-Cherry Hill, Swedish-First Hill, Swedish-Issaquah, University of Washington Medical
Center, Northwest Hospital, Valley Medical Center, Virginia Mason Medical Center.

**Other Representatives:**
Rehabilitation, local elected official, consumer, Seattle-King County Public Health, Emergency Nurses’ Association, Northwest Healthcare Response Network.
### Table A: Approved Minimum/Maximum (Min/Max) numbers of Designated Trauma Care Services (General Acute Trauma Services)

<table>
<thead>
<tr>
<th>Level</th>
<th>State Approved</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
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<td>I</td>
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<td>2</td>
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<tr>
<td>II P</td>
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<tr>
<td>III P</td>
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### Table B. Approved Minimum/Maximum (Min/Max) numbers of Designated Rehabilitation Trauma Care Services

<table>
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<th>Level</th>
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<th>Current Status</th>
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<tr>
<td></td>
<td>Min</td>
<td>Max</td>
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<td>I</td>
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<tr>
<td>II</td>
<td>4</td>
<td>6</td>
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<tr>
<td>III</td>
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### Table C. Current Stroke and Cardiac Categorized Facilities in Central Region*

<table>
<thead>
<tr>
<th>Level</th>
<th>Number of Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac: Level I</td>
<td>12</td>
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<tr>
<td>Cardiac: Level 2</td>
<td>4</td>
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<tr>
<td>Stroke: Level 1</td>
<td>4</td>
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<tr>
<td>Stroke: Level 2</td>
<td>7</td>
</tr>
<tr>
<td>Stroke: Level 3</td>
<td>5</td>
</tr>
</tbody>
</table>

*Numbers are current as of date submitted. For real-time numbers, please see: [Cardiac and Stroke Categorized Facilities](#)
CENTRAL REGION PATIENT CARE PROCEDURES

Approved

Submitted: 3-2017
Central Region Emergency Medical Services and Trauma Care Council
INTRODUCTION

WAC 246-976-960, Regional Emergency Medical Services and Trauma Care Systems, established the requirement for regions to adopt patient care procedures and specifically identified elements that must be included. The Central Region has developed and adopted patient care procedures consistent with this requirement.

WAC 246-976-960 also requires regions to adopt county operating procedures specific to county needs. Because the Central Region is made up of one county, the patient care procedures serve as county operating procedures as well. From this point on, only the term “patient care procedures” will be used.
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<th>Description</th>
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<td>III. Paramedic Training and Changes in Service Levels</td>
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</table>
PART I: PREHOSPITAL RESPONSE TO AN EMERGENCY SCENE

Dispatch

Dispatch centers are accessed through the enhanced 911 system. Regional dispatch centers dispatch EMS units in accordance with King County Criteria Based Dispatch Guidelines. Seattle dispatchers use Seattle Fire Department Dispatch Guidelines. Dispatchers provide bystander emergency medical instructions while EMS units are in route to the scene.

The Central Region EMS Trauma Committee requires that emergency dispatching protocols be based on medical criteria. All EMS dispatching guidelines and protocols must be approved by the Program Medical Director of King County EMS in consultation with the Medical Program Directors of the paramedic programs within the County.

Basic Life Support

Basic Life Support response is provided by city and county fire department units staffed by EMTs or private ambulance services staffed by EMTs. The nearest unit to an emergency scene will be dispatched following established dispatch guidelines.

BLS Code Red Response and Transport

Note: Primary responding EMS personnel refers to fire department EMT personnel or paramedics response originating as part of the 911 EMS system. Emergency response refers to travel with light and sirens. The following procedures are intended to maximize patient safety and minimize risk to life and limb. Common sense and good judgment must be used at all times.

1) The response mode from primary BLS response (fire department EMT personnel) shall be based on information made available to the EMS dispatchers and the decision for mode of travel made according to dispatch guidelines.

2) The default mode for travel to the scene for non-primary BLS responders shall be by non-emergency response unless a specific response for code-red (emergency response) is made by primary responding EMS personnel at the scene or specific protocols or contracts defining response modes exist between fire departments or private agencies and private ambulance companies.
3) The default mode for BLS transport from scene to hospital shall be by non-emergency response unless a specific response for code-red transport is made by primary responding EMS personnel at the scene.

4) If a patient undergoing BLS transport to hospital deteriorates, the BLS personnel should contact the EMS dispatcher and ask for paramedic assistance, unless documentary evidence exists to travel code-red to hospital (such as travel to hospital can occur faster than waiting for paramedic assistance).

**Advanced Life Support**

The paramedic unit nearest the emergency scene is simultaneously dispatched consistent with dispatch guidelines. Paramedic units provide advanced life support transport.

**Wilderness**

Wilderness response is directed by the King County Sheriff Search and Rescue Coordinator. EMS units may be dispatched to a staging area depending on the nature and location of the incident. Transportation of trauma patients from wilderness areas is primarily accomplished by helicopter. The Level I trauma center should be the primary destination of these patients.
PART II: TRIAGE OF TRAUMA PATIENTS

These procedures are intended to provide guidance to prehospital care providers and their medical control physicians in determining which trauma center will receive the patient.

1. For patients meeting the inclusion criteria of the State of Washington Prehospital Trauma Triage (Destination) Procedure, prehospital providers will contact online medical control of the closest trauma center or Harborview Medical Center (Reference: Designated Trauma Centers in King County/Paramedic Response Area). Medical Control or Harborview Medical Center will determine patient destination consistent with the State of Washington Prehospital Trauma Triage (Destination) Procedure.

2. The primary destination of pediatric patients meeting the inclusion criteria of the State of Washington Prehospital Trauma Triage (Destination) Procedure is the Level I trauma center.

3. Unstable trauma patients should be managed consistent with the State of Washington Prehospital Trauma Triage (Destination) Procedure. Unstable trauma patients are those needing a patent airway or who may benefit from the initiation of fluid resuscitation. EMS providers who are unable to secure an airway or establish an intravenous line should consider these factors in the following order:
   a. time to arrival of responding medic unit
   b. time to rendezvous with responding medic unit
   c. time to nearest trauma center
   d. time to arrival of Airlift
   e. time to nearest hospital with 24 hr emergency room
   f. unusual events such as earthquakes and other natural disasters

4. Patient destination decisions will be monitored by the Regional Quality Assurance Committee.

The goal in treating the unstable trauma patient is to provide potential life saving intervention and transportation to the highest-level trauma center able to provide definitive treatment. Ideally these interventions will be performed in a manner that does not unduly delay transport of a patient to the appropriate level of trauma center. This may require EMS providers to stop at a local hospital to stabilize and then transfer the patient to the trauma center.

Consistent with inter-facility transfer agreements, trauma patients stabilized at non-designated hospitals should be transferred to a trauma center as soon as possible. Patients stabilized at Level III or IV trauma centers and meeting the criteria for triage to the Level I trauma center should be transferred as necessary. The State’s Level I trauma center is:

   Harborview Medical Center
   325 Ninth Avenue
   Seattle, WA  98104
STATE OF WASHINGTON

PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURE

Purpose
The Trauma Triage Procedure was developed by the Centers for Disease Control in partnership with the American College of Surgeons, Committee on Trauma. The guidelines have been adopted by the Department of Health (DOH) based on the recommendation of the State EMS and Trauma Steering Committee.

The procedure is described in the attached algorithm. The guidelines represent the current best practice for the triage of trauma patients. The algorithm allows EMS and Trauma Responders to quickly and accurately determine if the patient is a major trauma patient. Major trauma patients must be taken to the highest appropriate level trauma facility in the defined system within 30 minutes transport time (Air or Ground).

The “defined system” is the trauma system that exists within an EMS and Trauma Care Region.

Explanation of Procedure
Any certified EMS and Trauma responder can identify a major trauma patient and activate the trauma system. This may include asking for Advanced Life Support response or air medical evacuation.

Step (1) Assess the patient’s vital signs and level of consciousness using the Glasgow Coma Scale. Step 1 findings require activation of the trauma system. They also require rapid transport to the highest, most appropriate trauma center within 30 minutes transport time (ground or air). If unable to manage the patient’s airway, consider meeting up with an ALS unit or transporting to the nearest facility capable of definitive airway management.

Step (2) Assess the anatomy of injury. Step 2 findings require activation of the trauma system. They also require rapid transport to the highest, most appropriate trauma center within 30 minutes transport time (ground or air). The presence of the specific anatomical injuries even with normal vital signs, lack of pain or normal levels of consciousness still require calling medical control and activating the trauma system.

Step (3) Assess biomechanics of the injury and address other risk factors. The conditions identified are reasons for the provider to transport to a trauma center. The destination trauma center need not be the highest level trauma center. Medical control should be contacted as soon as possible.

Step (4) has been added to assess special patients or system considerations. Risk factors coupled with “Provider Judgment” are reasons for the provider to contact Medical Control and discuss appropriate transport for these patients. In some cases, the decision may be to transport to the nearest trauma center.

Regional Patient Care Procedures (PCP’s) and Local County Operating Procedures (COPS) provide additional detail about the appropriate hospital destination. PCP’s and COP’s are intended to further define how the system operates. The Prehospital Trauma Triage procedure and the Regional Patient Care Procedures work in a “hand in glove” fashion to address trauma patient care needs.
WASHINGTON STATE TRAUMA TRIAGE DESTINATION PROCEDURES

Measure Vital Signs & Level Of Consciousness
- Glasgow Coma Scale < 13 or
- Systolic Blood Pressure < 90 mmHg
- Respiratory Rate <10 or ≥29 per minute or need for Ventilator support (<20 min in infant aged < 1 year)

STEP 1

Assess Anatomy of Injury
- All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee
- Chest wall instability or deformity (e.g., flail chest)
- Two or more proximal long bone fractures
- Crushed, degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis

STEP 2

Assess Mechanism of Injury & Evidence of High-Energy Impact
- Falls
  - Adults: > 20 ft (1 story = 10 ft)
  - Children: ≥10 ft or 2-3 times height of child
- High-Risk auto crash
  - Intrusion, including roof >12 inches occupant site; >18 inches any site
  - Ejection (partial or complete) from automobile
  - Death in same passenger compartment
  - Vehicle telemetry data consistent with a high risk injury
- Auto vs. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact
- Motorcycle crash > 20 mph

STEP 3

Assess Special Patient or System Considerations
- Older Adults
  - Risk of injury or death after age 55 years
  - Systolic BP < 110 may represent shock after age 65
  - Low impact mechanisms (e.g., ground level) fall may result in severe injury
- Children
  - Should be triaged preferentially to pediatric capable trauma center
- Anticoagulants and bleeding disorders
  - Patients with head injury are at high risk for rapid deterioration
- Burns
  - Without other trauma mechanism, triage to burn facility
- Pregnancy > 20 weeks
- EMS provider judgment

STEP 4

When in Doubt, Transport to a Trauma Center!
PART III: TRAUMA CARE FACILITIES

Central Region Trauma Care Facilities are as follows:

Level I Trauma Center (Pediatric and Adult)
   Harborview Medical Center

Level III Trauma Centers
   Multicare Auburn Medical Center
   EvergreenHealth Medical Center
   Overlake Hospital Medical Center
   Valley Medical Center

Level IV Trauma Centers
   Highline Community Hospital
   Northwest Hospital
   St. Francis Hospital

Level V Trauma Center
   St. Elizabeth Hospital
IV: QUALITY IMPROVEMENT:

The Central Region Prehospital Committee at the next regularly scheduled meeting will review this PCP upon receipt of suggested modifications from a local provider, the Central Region QI Committee, the Department of Health, or any other entity suggesting modifications to the document.
PART V: INTERFACILITY TRANSFERS

Private ALS and BLS agencies provide interfacility patient transfers at the direction of the hospital initiating the transfer. All interfacility patient transfers shall be consistent with the transfer procedures in WAC 246-976-890.

Level III, Level IV, and Level V trauma centers will transfer patients to the State Level I trauma center when appropriate. The State’s Level I trauma center is:

Harborview Medical Center
325 Ninth Avenue
Seattle, WA  98104
PART VI: MULTIPLE CASUALTY INCIDENTS (TYPES AND EXPECTED VOLUME OF TRAUMA)

The Central Region has adequate resources to meet normal trauma patient volumes. The Quality Assurance Committee monitors mechanism of injury and patient volumes.

Large Multiple Casualty Incidents may require the triage of patients to non-designated King County hospitals or to trauma centers in adjacent counties.
PART VII: ALL HAZARDS-MCI-SEVERE BURNS

I. STANDARD: During a mass casualty incident (MCI) with severely burned adult and pediatric patients,
   1. All verified ambulance and verified aid services shall respond to an MCI per the King County Fire Chief’s MCI Plan
   2. All licensed ambulance and licensed aid services shall assist during an MCI per King County Fire Chief’s MCI Plan when activated by incident command through dispatch in support of the King County Fire Chief’s MCI Plan and/or in support of verified EMS services
   3. All EMS certified personnel shall assist during an MCI per King County Fire Chief’s MCI Plans when requested by incident command through dispatch in support of the King County Fire Chief’s MCI Plan and/or in support of verified EMS services
   4. Pre-identified patient mass transportation, EMS staff and equipment to support patient care may be used.
   5. All EMS agencies working during an MCI event shall operate within the Incident Command System as identified in local protocol and MCI plan.

II. PURPOSE:
   1. To develop and communicate the information of regional trauma plan section VII prior to an MCI.
   2. To implement King County Fire Chief’s MCI Plan during an MCI.
   3. To provide trauma and burn care to at least 50 severely injured adult and pediatric patients per region.
   4. To provide safe mass transportation with pre-identified medical staff, equipment, and supplies per mass transport vehicle.

III. PROCEDURES:
   1. Incident Command shall follow the King County Fire Chief’s MCI Plan and will notify Disaster Medical Control Center (DMCC) when an MCI condition exists, including factors identifying severe burn injuries and number of adult/pediatric patients.
   2. Medical program directors agree that protocols being used by responding agencies shall continue to be used throughout transport of patients regardless of county, state or country.
   3. EMS personnel may use the “Prehospital Mass Casualty Incident (MCI) general Algorithm during the MCI incident.
      A. The “SAMPLE ONLY” algorithm is intended as a boilerplate or skeleton outline only. It is not intended as a state directed requirement.
      B. the DRAFT-SAMPLE Algorithm is attached below.
**Prehospital Mass Causality Incident (MCI) General Algorithm**

1. Receive dispatch
2. Respond as directed
3. Arrive at scene
4. Determine mass causality conditions exist
5. Establish Incident Command (IC)
6. Scene assessment and size-up

<table>
<thead>
<tr>
<th>CBRNE</th>
<th>NON-CBRNE</th>
</tr>
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<tbody>
<tr>
<td>1) Notify the DMCC and IC of CBRNE situation</td>
<td>Notify medical control and/or the DMCC and local Emergency Management Office</td>
</tr>
<tr>
<td>2) Standby for HazMat/LE to clear scene</td>
<td>1) Ensure scene is safe</td>
</tr>
<tr>
<td>3) Don PPE if needed</td>
<td>2) Begin Initial Triage and Treatment of Critically Injured Patients</td>
</tr>
<tr>
<td>4) Establish hot, warm, and cold zones</td>
<td>3) Establish a staging area</td>
</tr>
<tr>
<td>5) Begin Initial Triage of Patients</td>
<td>4) Follow EMS patient care procedures (PCPs) and MCI Plans</td>
</tr>
<tr>
<td>6) Notify medical control and IC of patients conditions</td>
<td>5) Request additional resources that may include activating MAA</td>
</tr>
<tr>
<td>7) Decontaminate patients as needed</td>
<td>6) Initiate patient transport to medical centers as directed by medical</td>
</tr>
<tr>
<td>8) Begin initial treatment</td>
<td>control and/or the DMCC</td>
</tr>
<tr>
<td>9) Follow PCPs and MCI Plans</td>
<td>7) Upon arrival at Medical Center, transfer care of patients to</td>
</tr>
<tr>
<td>10) Request additional resources that may include activating MAA</td>
<td>medical centers staff (medical center should activate their</td>
</tr>
<tr>
<td>11) Initiate patient transport to medical centers as directed by medical</td>
<td>respective MCI Plan as necessary)</td>
</tr>
<tr>
<td>control and/or the DMCC</td>
<td></td>
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<tr>
<td>12) Upon arrival at Medical Center, transfer care of patients to</td>
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<td>medical centers staff (medical center should activate their</td>
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<tr>
<td>respective MCI Plan as necessary)</td>
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<td></td>
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<tr>
<td>Prepare transport vehicle to return to service</td>
<td></td>
</tr>
</tbody>
</table>
PART VIII: ACTIVATION OF TRAUMA TEAM

Trauma team activation is accomplished at the time of contact with Medical Control. Online medical control at the receiving trauma center will activate the trauma team upon notification of the transporting agency or dispatcher. All designated trauma centers will activate their trauma team per WAC 246-976-870.
**Part IX: CARDIAC CARE**

**State of Washington**

**Prehospital Cardiac Triage Destination Procedure**

---

**Assess Applicability for Triage**
- Post cardiac arrest with ROSC OR:
  - ≥ 21 years of age with symptoms lasting more than 10 minutes but less than 12 hours suspected to be caused by coronary artery disease:
    - **Chest discomfort** (pressure, crushing pain, tightness, heaviness, cramping, burning, aching sensation), usually in the center of the chest lasting more than a few minutes, or that goes away and comes back.
    - **Pain or discomfort in 1 or both arms, neck, jaw, shoulders, or back**.
    - **Shortness of breath** with or without chest discomfort.
    - **Epigastric (stomach) discomfort**, such as unexplained indigestion, belching, or pain.
    - **Other symptoms** may include sweating, nausea/vomiting, lightheadedness.

**NOTE:** Women, diabetics, and geriatric patients might not have chest discomfort or pain. Instead they might have nausea/vomiting, back or jaw pain, fatigue/weakness, or generalized complaints.

---

**Assess High Risk Criteria**
- In addition to symptoms in Box 1, pt. has 4 or more of the following:
  - Age ≥ 75
  - 3 or more CAD risk factors:
    - Family history
    - High blood pressure
    - High cholesterol
    - Diabetes
    - Current smoker
  - Aspirin use in last 7 days
  - ≥2 anginal events in last 24 hours, including current episode
  - Known coronary disease
  - ST deviation ≥ 0.5 (if available)
  - Elevated cardiac markers (if available)

**If EMS personnel still suspect an acute coronary event, contact medical control for destination. If not, transport per regional patient care procedures.**

---

**Assess Immediate Criteria**
- Post cardiac arrest with return of spontaneous circulation
- Hypotension or pulmonary edema
- EKG positive for STEMI (if available)

**If ALS has not been dispatched, upgrade if available.**

---

**Assess Transport Time and Determine Destination by Level of Prehospital Care**

**BLS/ILS**
- Level I Cardiac Hospital win 30 minutes
  - Go to Level I Cardiac Hospital and alert destination hospital en route ASAP

**ALS**
- Level I Cardiac Hospital win 60 minutes
  - Go to Level I Cardiac Hospital and alert destination hospital en route ASAP

---

**Unstable patients (life-threatening arrhythmias, severe respiratory distress, shock) unresponsive to EMS treatment should be taken to the closest hospital.**

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* Slight modifications to the transport times may be made in county operating procedures. See page 2.

Consider ALS and air transport for all transports greater than 30 minutes.
If there are two or more Level I facilities to choose from within the transport timeframe, patient preference, insurance coverage, physician practice patterns, and local rotation agreements may be considered in determining destination.
This also applies if there are two or more Level II facilities to choose from.

April 2011

---
State of Washington
Prehospital Cardiac Triage Destination Procedure

Why triage cardiac patients?
The faster a patient having a heart attack or who's been resuscitated gets treatment, the less likely he or she will die or be permanently disabled. Patients with unstable angina and non-ST elevation acute coronary syndromes (UANSTE) are included in the triage procedure because they often need immediate specialized cardiac care. This triage procedure is intended to be part of a coordinated regional system of care that includes dispatch, EMS, and both Level I and Level II Cardiac Hospitals.

How do I use the Cardiac Triage Destination Procedure?
A. Assess applicability for triage – If a patient is post cardiac arrest with ROSC, or is over 21 and has any of the symptoms listed, the triage tool is applicable to the patient. Go to the “Assess Immediate Criteria” box. NOTE: Women, diabetics, and geriatric patients often have symptoms other than chest pain/discomfort so review all symptoms with the patient.
B. Assess immediate criteria – If the patient meets any one of these criteria, he or she is very likely experiencing a heart attack or other heart emergency needing immediate specialized cardiac care. Go to “Assess Transport Time and Determine Destination” box. If the patient does not meet immediate criteria, or you can’t do an ECG, go to the “Assess High Risk Criteria” box.
C. Assess high risk criteria – If, in addition to meeting criteria in box 1, the patient meets four or more of these high risk criteria, he or she is considered high risk for a heart attack or other heart emergency needing immediate specialized cardiac care. These criteria are based on the TIMI risk assessment for unstable angina/non-STEMI. If the patient does not meet the high risk criteria in this box, but you believe the patient is having an acute coronary event based on presentation and history, consult with medical control to determine appropriate destination. High risk criteria definitions:

- 3 or more CAD (coronary artery disease) risk factors:
  - Age ≥ 55; epidemiological data for WA show that incidence of heart attack increases at this age
  - Family history: father or brother with heart disease before 55, or mother or sister before 65
  - High blood pressure: ≥140/90, or patient/family report, or patient on blood pressure medication
  - High cholesterol: patient/family report or patient on cholesterol medication
  - Diabetes: patient/family report
  - Current smoker; patient/family report.
- Aspirin use in last 7 days; any aspirin use in last 7 days.
- ≥2 anginal events in last 24 hours; 2 or more episodes of symptoms described in box 1 of the triage tool, including the current event.
- Known coronary disease: history of angina, heart attack, cardiac arrest, congestive heart failure, balloon angioplasty, stent, or bypass surgery
- ST segment ≥ 0.5 mm (if available): ST depression ≥ 0.5 mm is significant; transient ST elevation ≥ 0.5 mm for < 20 minutes is treated as ST-segment depression and is high risk; ST elevation > 1 mm for more than 20 minutes places these patients in the STEMI treatment category.
- Elevated cardiac markers (if available): CK-MB or Troponin I in the “high probability” range of the device used. Only definitely positive results should be used in triage decisions.
D. Determine destination – The general guideline is to take a patient meeting the triage criteria directly to a Level 1 Cardiac Hospital within reasonable transport times. For BLS, this is generally within 30 minutes transport time, and for ALS, generally 60 minutes transport time. See below for further guidance. Regional patient care procedures and county operating procedures may provide additional guidance.
E. Inform the hospital en route so staff can activate the cath lab and call in staff as necessary.

What if a Level I Cardiac Hospital is just a little farther down the road than a Level II?
You can make slight changes to the 30/60 minute timeframe. The benefits of opening an artery faster at a Level I can outweigh the extra transport time. To determine whether to transport beyond the 30 or 60 minutes, figure the difference in transport time between the Level I Cardiac Hospital and the Level II Cardiac Hospital. For BLS, if the difference is more than 30 minutes, go to the Level II Cardiac Hospital. For ALS, if the difference is more than 60 minutes, go to the Level II Cardiac Hospital.

- BLS examples: A) minutes to Level I minus minutes to Level II = 29: go to Level I
  B) Minutes to Level I minus minutes to Level II = 35: go to Level II

- ALS examples: A) minutes to Level I minus minutes to Level II = 45: go to Level I
  B) Minutes to Level I minus minutes to Level II = 68: go to Level II

NOTE: We recommend ALS use a fibrinolytic checklist to determine if a patient is ineligible for fibrinolysis. If ineligible, transport to closest Level I hospital even if it’s greater than 60 minutes or rendezvous with air transport.

What if there are two or more Level I or II facilities to choose from?
If there are two or more of the same level facilities to choose from within the transport times, patient preference, insurance coverage, physician practice patterns, and local rotation agreements may be considered in destination decision.
Cardiac Patient Triage and Destination

These procedures are intended to provide guidance to prehospital care providers and their medical control physicians in determining which Cardiac Center will receive the patient.

1. Prehospital providers will contact established medical control. Medical Control will determine patient destination consistent with Washington State Cardiac Patient Care Triage Destination Procedure.

2. Patients shall be managed consistent with the State of Washington Prehospital Cardiac Triage Destination Procedure.

3. Patient destination decisions and patient outcome will be monitored by the Regional Quality Assurance Committee

Current Approved Cardiac Care Centers

Level I
- EvergreenHealth Medical Center
- Harborview Medical Center
- Highline Medical Center
- Multicare Auburn Medical Center
- Northwest Hospital and Medical Center
- Overlake Hospital Medical Center
- St. Francis Hospital
- Swedish – Cherry Hill
- Swedish – Issaquah
- University of Washington Medical Center
- Valley Medical Center
- Virginia Mason Medical Center

Level II
- Snoqualmie Valley Hospital
- St. Elizabeth Hospital
- Swedish – Ballard
- Swedish - First Hill
PART X: STROKE CARE

State of Washington
Prehospital Stroke Triage Destination Procedure

Assess Applicability for Triage
Report from patient or bystander of one or more sudden:
- Numbness or weakness of the face, arm or leg, especially on one side of the body
- Confusion, trouble speaking or understanding
- Trouble seeing in one or both eyes
- Trouble walking, dizziness, loss of balance or coordination
- Severe headache with no known cause

NO
Transport per regional patient care procedures and county operating procedures where they exist

YES

Perform F.A.S.T. Assessment
- Face: unilateral facial droop?
- Arms: unilateral drift or weakness?
- Speech: abnormal or slurred?
- Time last normal (determine time patient last known normal)
  Yes to any one sign (Face, Arms, Speech) = YES
  No to all three signs = NO

NO
Transport per regional patient care procedures and county operating procedures where they exist

YES

Determine Destination
- Transport the patient to the nearest Level I, II, or III Stroke Center.
- If the nearest center is a Level III, and there’s a Level I or II available with no more than 15 minutes increase in transport time, go to the nearest Level I or II Stroke Center.

See side box for additional destination considerations

Limit scene time and alert destination hospital ASAP

Additional Destination Considerations:
- Any additional transport time should not take the patient outside of the IV thrombolysis window of 3.5 hours from the time last seen normal.
- For patients last seen normal plus transport time ≥ 3.5 hours to ≤ 6 hours, consider transport to a Level I Stroke Center or a Level II Stroke Center with intra-arterial intervention capability.
- Assess availability of critical care air transport if it can help get the patient to a Stroke Center within the window of time for intervention.
- If unable to manage airway, consider rendezvous with ALS or intermediate stop at nearest facility capable of definitive airway management.
- If there are two or more Stroke Centers of the same level to choose from within the transport timeframe, patient preference, insurance, physician practice patterns, and local rotation agreements may be considered.
State of Washington
Prehospital Stroke Triage Destination Procedure

Purpose
The purpose of the Prehospital Stroke Triage and Destination Procedure is to identify stroke patients in the field and take them to the most appropriate hospital. Like trauma, stroke treatment is time-critical – the sooner patients are treated, the better their chances of survival and recovering function. For strokes caused by a blood clot in the brain (ischemic), clot-busting medication must be administered within 4.5 hours from the time they first have symptoms. For most bleeding strokes (hemorrhagic), time is also critical. Currently, there are no accurate tools to distinguish between an ischemic and hemorrhagic stroke in the field so there is no difference in prehospital triage.

This triage tool, along with protocol guidelines and other state policies, are the framework for the Washington State Emergency Cardiac and Stroke System. Regional patient care procedures (PCPs) and especially county operating procedures (COPs) define exactly how the system will work in each community based on its unique EMS resources and stroke centers. The formula for success will look slightly different in each community. Use this tool to develop PCPs and COPs that get the right patient to the right treatment in time, using local resources effectively and efficiently.

Stroke Assessment – F.A.S.T.
The F.A.S.T. assessment tool (also known as the Cincinnati Prehospital Stroke Scale + Time) is a simple but pretty accurate way to tell if someone might be having a stroke. It’s easy to remember: Facial droop, Arm drift, Speech, + Time. If face, arms, or speech is abnormal, it’s likely the patient is having a stroke. Immediately transport the patient to a stroke center. Regional patient care procedures and county operating procedures may provide additional guidance. Alert the hospital on the way. Transport should not be delayed for IV or EKG monitoring.

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<thead>
<tr>
<th>TEST</th>
<th>NORMAL</th>
<th>ABNORMAL</th>
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<tr>
<td>Facial droop: Ask the patient to show his or her teeth or smile.</td>
<td>Both sides of the face move equally.</td>
<td>One side of the face does not move as well as the other.</td>
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<td>Arm drift: Ask the patient to close his or her eyes and extend both arms straight out for 10 seconds. The palms should be up, thumbs pointing out.</td>
<td>Both arms move the same or both arms do not move at all.</td>
<td>One arm drifts down, or one arm does not move at all.</td>
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<td>Speech: Ask the patient to repeat a simple phrase such as “Firefighters are my friends.”</td>
<td>The patient says it correctly, with no slurring.</td>
<td>The patient slurs, says the wrong words, or is unable to speak.</td>
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<td>Time: Ask the patient, family or bystanders the last time the patient was seen normal. Encourage family to go to the hospital to provide medical history, or obtain contact information for a person who can provide medical history.</td>
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Stroke Warning Signs
- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache with no known cause

DOH 346-049 October 2012
**Stroke Patient Triage and Destination**

These procedures are intended to provide guidance to prehospital care providers and their medical control physicians in determining which Stroke Center will receive the patient.

EMTs shall transport patient to the closest appropriate level Stroke Center consistent with the Washington State Stroke Patient Care Triage Destination Procedure and with regard to the patient or family preference.

1. For all patients with suspected stroke, EMS personnel will contact the closest Level 1 or II or III stroke center and describe the situation. The hospital will advise EMS of appropriate patient destination consistent with the Washington State Patient Care Triage Destination Procedure.

2. For unstable stroke patients, EMTs shall request Paramedic assistance.

3. Paramedics shall contact established medical control. Medical Control will determine patient destination consistent with Washington State Stroke Patient Care Triage Destination Procedure.

4. Patients should be managed consistent with the King County ALS Protocols and State of Washington Prehospital Stroke Triage Destination Procedure.

5. Patients should be managed consistent with the King County ALS Protocols and State of Washington Prehospital Stroke Triage Destination Procedure.

6. Patient destination decisions and patient outcome will be monitored by the Regional Quality Assurance Committee.

**Current Approved Stroke Centers**

**Level 1**
- Harborview Medical Center
- Northwest Hospital and Medical Center
- Swedish – Cherry Hill
- Virginia Mason Medical Center

**Level II**
- EvergreenHealth Medical Center
- Highline Medical Center
- Multicare Auburn Medical Center
- Overlake Medical Center
- Swedish – First Hill
- Swedish – Issaquah
- Valley Medical Center
Level III

Snoqualmie Valley Hospital
St. Elizabeth Hospital
St. Francis Hospital
Swedish – Ballard
University of Washington Medical Center
PART XI: MEDICAL AND MINOR TRAUMA PATIENTS TRANSPORTATION GUIDELINES

1. Prehospital care providers respect the right of the patient to choose a hospital destination and will make reasonable efforts to assure that choice is observed. Alternately and under ADAPT guidelines, fire department-based BLS providers may transport or suggest transport of patients to non-hospital settings such as stand alone emergency rooms and clinics. Reference Appendix II – ADAPT Guidelines

Factors including patient’s choices may be:

1. Personal Preference
2. Personal physician’s affiliation
3. HMO or preferred provider

Modifying factors which may influence the prehospital provider’s response:

1. Patient unable to communicate choice
2. Unstable patient who would benefit from transportation to nearest hospital or to hospital providing specialized services.
3. Transport to patient’s choice of hospital would put medic unit or aid car out of service for extended period and alternative transport is not appropriate or available.

II. Prehospital providers should transport unstable patients, i.e. compromised airway, post arrest, shock from non-traumatic causes, etc. to the nearest hospital able to accept the patient.

II. Emergency patients requiring specialized care such as hyperbaric treatment, neonatal ICU, or high-risk OB care should be transported to the nearest hospital able to provide such care.

IV. When in doubt, prehospital care providers should contact online medical control.
APPENDIX I HOSPITAL NO MEDICAL SURGICAL DIVERSION POLICY

Ambulance diversion is defined as an active statement by a hospital, whether verbal or via WaTrac ED Status, that patients arriving by ambulance will not be accepted. King County hospitals have unanimously adopted a No Diversion Policy for all medical and surgical patients effective May 31, 2011.

Hospitals may close their emergency departments only in an internal emergency such as facility damage or lockdown. There may be circumstances where an advisory to prehospital agencies will allow ambulance services to make transport destination decisions in the best interest of their patient; for example when a hospital reports “CT down” or “specialty care unavailable.” Prehospital service may use this information to make an appropriate transport decision. The decision on where to transport a patient will remain at the discretion of the prehospital provider unless directed to a specific facility by medical control.
APPENDIX II: ADAPT CLINIC AND URGENT CARE CLINIC TRANSPORTATION POLICY

Selected patients may be transported to a clinic, urgent care clinic, free standing emergency department, or hospital based emergency department via BLS transport if the patient meets the criteria listed below. These policies apply to non-primary (private) BLS ambulance when EMS personnel request private BLS ambulance to transport the patient.

1) The fire department based (primary) EMT provider considers a taxi to be an appropriate and safe method of transportation for the particular clinical problem.
2) Paramedic care is NOT required
3) Patient is ambulatory
4) Patient has a non-urgent condition (clinically stable) including
   a) Low index of suspicion for:
      a. Cardiac problem
      b. Stroke
      c. Abdominal aortic aneurysm
      d. GI bleed problems
   b) Low index of suspicion for major mechanism of injury
5) Patient must not have
   a) Need for a backboard
   b) Uncontrolled bleeding
   c) Uncontrolled pain
   d) Need for oxygen (except patient self administered oxygen)
6) Patient should be masked if there are respiratory symptoms

For guidance regarding transport decisions EMTs may consult with paramedics or with emergency department personnel at the medical control hospital.
The EMT must notify the destination facility of the clinical problem and the facility must agree to accept the patient.

ADAPT Taxi Voucher Transportation Policy

Selected patients may be transported to a clinic, urgent care clinic, free standing emergency department, or hospital based emergency department via taxi if the following conditions listed above are met and the fire department-based EMT considers a taxi to be an appropriate and safe method of transportation for the particular clinical problem.
APPENDIX III: PARAMEDIC TRAINING AND CHANGES IN SERVICE LEVELS

In order to maintain the highest quality care for prehospital emergencies it shall be required that:

1. The standard level response of ALS service shall be two paramedics. Exceptions may be authorized by the King County MPD for outlying districts and when split crews are required to respond to mass casualties.
2. King County paramedics shall be trained through and satisfy the educational requirements of the Paramedic Training program at the University of Washington/Harborview Medical Center.
3. Requests to expand or reduce service to a trauma response area, to change the level of EMS service provided, and new applications for EMS agencies seeking trauma verification must be reviewed and receive a recommendation by the Regional EMS Council in accordance with WAC 246-976-395(4).