Washington State Department of HEALTH

Community Health Systems
PO Box 47853
Olympia WA, 98504-7853

Cardiac and Stroke Center General Information

What is the Washington State Emergency Cardiac and Stroke (ECS) System?

The ECS System is a coordinated systems approach to improving emergency response and treatment for acute coronary syndrome*, cardiac arrest, and stroke patients. The goal of the system is improve patient outcomes by reducing time to treatment and getting patients into a dedicated system of comprehensive care. The ECS System is based on the same principles as the Trauma System – get the right patient to the right place in the right amount of time to save lives and reduce disability.

State law passed in March 2010 authorizes the ECS System. The law is based on recommendations of the Emergency Cardiac and Stroke Work Group convened by the Emergency Medical Services and Trauma Care Steering Committee in 2006. The law required the Department of Health to support an emergency cardiac and stroke system by 2011, including cardiac- and stroke-specific protocols and destination procedures for emergency medical services (EMS), and encouraging hospitals to voluntarily participate in the system. To participate, hospitals self-identify their cardiac and stroke resources and capabilities by applying for categorization as a Level I, II, or III Stroke Center, or Level I or II Cardiac Center. These levels are defined by the recommendations of the Emergency Cardiac and Stroke Technical Advisory Committee, as required by the law.

Why do we need a system for emergency cardiac and stroke care?

Too many people become disabled or die from heart attack, cardiac arrest, and stroke because they don't get treatment in time.

- Most strokes (80%) are caused by clots. In 2018, only 11 percent of this type of stroke were given the clot-busting drug t-PA, and less than 5 percent were treated with mechanical thrombectomy, the two best options for treating stroke.
- Primary percutaneous coronary intervention (PCI) is the most effective treatment for most people having a heart attack. PCI includes angioplasty and stenting. In Washington, less than half of all people who have a heart attack get PCI.
- Access to resources for diagnosing and treating heart attacks and strokes varies, especially in rural areas.
- Heart attack and stroke patients are often transported to the nearest hospital only to be transferred to another hospital. This can delay treatment for hours. Cardiac and stroke patients don't have hours.

The ECS System addresses all of these problems by reducing time to life-saving treatments. It gets patients to facilities committed to providing the most timely and optimal evaluation and care. Heart attack and stroke patients treated in time will likely need less rehabilitation, suffer fewer disabling conditions like paralysis and congestive heart failure, and can often go home after their hospitalization.

*Acute coronary syndrome includes ST elevation myocardial infarction (STEMI), non-STEMI, and unstable angina.

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email doh.information@doh.wa.gov.

Why should my hospital participate?

- EMS needs to know what cardiac and stroke resources hospitals have so they can get their patients to the right treatment in time. By participating, you will be:
  - Strengthening our emergency medical services system.
  - Ensuring people get the treatment they need.
  - Saving lives, reducing disability, and improving quality of life.
- The destination and triage tools EMS uses to determine where to take their patients directs them to transport patients only to participating hospitals. Exceptions to the destination triage guidance are for extremely unstable patients or when there is no other option within specified transport times.
- People in your community will benefit by having a participating hospital close by. They'll know that if they go to your hospital, whether they are brought in by family or ambulance, that you'll do the right thing for them. In some cases, that might mean immediately transferring them. In others, EMS might take them directly to another hospital if it means getting treatment that will save their lives and get them home faster.
- You'll be part of the statewide effort to increase access to quality emergency cardiac and stroke care through an organized system of care. Washington is the only state in the country to have a statewide system for cardiac and stroke care.

How will we know if the ECS System is successful?

The 2010 legislation, codified in RCW 70.168.150, requires participating hospitals to "participate in internal, as well as regional, quality improvement activities." It also requires "participation in a national, state, or local data collection system that measures cardiac and stroke system performance from patient onset of symptoms to treatment or intervention, and includes, at a minimum, the nationally recognized consensus measures for stroke."

The legislation did not include authority or funding to establish a state data collection system. We can get at least an indication of the system's success through existing data collection resources and quality improvement initiatives. Many hospitals are participating directly or indirectly in Get With the Guidelines for stroke (GWTG-S), the Clinical Outcomes Assessment Program (COAP) for heart attack, and the Washington Cardiac Arrest Registry to Enhance Survival for cardiac arrest. The Department of Health can use aggregate reports from these sources to evaluate the ECS System.

The law also amended the EMS and Trauma System law to expand the scope of the EMS and Trauma Regional Quality Improvement (QI) programs to allow protected discussion and evaluation of regional cardiac and stroke systems and care delivery. All of the Regional QI programs have incorporated cardiac and stroke evaluation to some degree. Participating hospitals should send their cardiac and stroke coordinators to these regional QI meetings. Contact the Regional administrator listed in the key on the Hospital and Personnel page.

How long is the categorization period?

Three years.

Can we change our categorization level?

Yes, you can apply to change your level anytime. Request a current application from the department contact listed below.

What if we no longer want to participate in the system?

You can withdraw at any time. Send written notice to the department contact listed below.

What if we no longer meet the categorization criteria?

Notify the department as soon as your status changes, and send written notice to the department contact.

Who are the Region contacts?

Region:	Includes the following counties:	Contact name - email:
Central	King	Randi Riesenberg - randi@centralregionems.org
East	Ferry, Stevens, Pend Oreille, Lincoln, Spokane, Adams, Whitman, Asotin, Garfield	Rinita Cook - Rcook@ncecc.org
North	Whatcom, Skagit, San Juan Island, Snohomish	Mike Hilley - Mike@northregionems.com
North Central	Okanogan, Chelan, Douglas, Grant	Rinita Cook – Rcook@ncecc.org
North West	Clallam, Jefferson, Kitsap, Mason	Randi Riesenberg - admin@nwrems.org
South Central	Yakima, Kittitas, Benton, Franklin, Walla Walla, Columbia	April Borbon - regionems@gmail.com
Southwest	Wahkiakum, Cowlitz, Clark, Skamania, Klickitat, South Pacific	April Borbon - regionems@gmail.com
West	Pierce, Thurston, Lewis, Grays Harbor, North Pacific	Greg Perry - director@wrems.com

Department Contact:

Matt Nelson, 360-236-2816

Matt.Nelson@doh.wa.gov

Department of Health

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