Strengthening Washington’s Emergency Cardiac and Stroke System
Let’s Get Ahead of the Boom – and the Costs.

**Systems of care reduce time to treatment, improve quality of care, patient safety, overall effectiveness, and efficiently streamline coordination.** This is evident from our state’s successful Trauma System. As with trauma, heart attack, stroke, and cardiac arrest are time-critical conditions, whereby outcomes are significantly better the faster a patient is treated. When treatment is delayed, more brain or heart tissue dies, increasing the likelihood of death or significant disability. Disability is associated with lost productivity, poor quality of life, caregiver burden, and higher healthcare utilization and resource. A sustainable, robust, and coordinated Emergency Cardiac and Stroke System represents a comparatively inexpensive solution that would save lives, decrease disability and ultimately decrease cost.

**Why We Need Action**
- Heart disease and stroke combined are the #1 cause of preventable, premature death and disability in WA.
- Newer options for interventional treatment exist and require a coordinated system to treat the right person, at the right time in the right place.
- Rural, racial, ethnic, and income disparities in access, care and outcomes exist in our state.
- Rural residents are 30% less likely to get Alteplase (t-PA) for stroke than their urban counterparts.
- Survival rates for cardiac arrest vary across the state, from a high of 25% to 0%. The use of therapeutic hypothermia (cooling the patient), proven to improve neurologic recovery for cardiac arrest patients, is used 80% of the time in some areas of the state but as little as 0% in others.
- It’s a growing problem. While deaths are down, hospitalizations are up. Increasing numbers of people with chronic diseases that lead to heart attack and stroke and an aging population put many more people at risk for heart attack and stroke.
- It’s expensive and costs for care will increase. 2016 hospital charges for heart attack, stroke, and cardiac arrest: $2.2 billion (ref. trauma was $1.85 billion); Estimated nursing home costs $850 million annually.
- “Cost of strokes in the U.S. will soar to more than $2.2 trillion over the next 45 years …”

**Where We Stand**
- In 2011, Washington established a system where hospitals voluntarily participate as cardiac and stroke centers and self-certify they meet care standards. No on-site verification is required. Emergency Medical Services developed procedures to improve assessment and triage of patients and take them to participating centers.
- Washington is one of a few states with statewide destination and triage requirements for heart attack and stroke.
- No funding was allocated to administer the system.
- 28 other states require on-site verification through certification that standards of care are met for stroke centers.
- WA does not uniformly meet American Heart Association recommendations for verification or data registries to monitor care and outcomes. At least 12 other states do.
- Patients in unverified hospitals have lower odds of receiving life-saving interventions compared to those in verified hospitals.

**Heart attack, cardiac arrest, and stroke in 2016:**
Deaths 4,667 [Trauma 3,362]
Hospitalizations: 30,235 [Trauma 26,500]

**What We Need To Do:** Obtain funding and resource to fully implement the 2008 Department of Health recommendations for the System and align Washington state with national standards.

- **Develop a regional and state cardiac and stroke quality improvement program and/or registry** to monitor outcomes and evaluate system performance (implemented by the DOH using existing data sources where possible.)
- **Educate citizens in Washington state about cardiac and stroke** disease interventions. Increase early recognition and response to heart attack, stroke, and cardiac arrest.
- **Infrastructure support for EMS and rural communities** - supporting under-resourced EMS and/or under-served areas.