

A Comprehensive System of Care for Time Sensitive Emergencies in Idaho

Getting the right patient to the right place at the right time.

Prepared on Behalf of the Idaho Time Sensitive Emergency Workgroup

February 2014

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Acknowledgement

I would like to recognize the members of the Idaho Time Sensitive Emergencies (TSE) Workgroup for their commitment and outstanding efforts in this important project. Perhaps most important was members' willingness to come to the table, represent their respective constituents, engage authentically and rigorously, and reconcile their varied interests to collaborate in improving the outcomes of Idahoans and Idaho visitors facing life-threatening emergency conditions.

I would also like to thank Janet Cortez, Trauma Program Manager at University of Utah Healthcare, for her participation on the TSE Workgroup, sharing valuable experience, ideas, and resources. Robert Jex, Specialty Care Program Manager at the Utah Bureau of Emergency Medical Services Preparedness, was instrumental to this effort. He delivered presentations to the TSE Workgroup and to multiple groups of hospital administrators across Idaho about the realities and impacts of TSE system implementation based on Utah's experience. Especially critical was the knowledge he shared about the viability of such a system for small, rural hospitals. I would also like to recognize Jim Beckstrand, CEO of the Delta Community Medical Center in Utah, for co-presenting to the TSE Workgroup with Robert Jex.

Finally, thanks goes to the various partner organizations that hosted the large TSE Workgroup meetings, including Ada County Paramedics, Saint Alphonsus Health System, St. Luke's Health System, and Qualis Health.

This was truly a team effort to design a system that improves the quality of care and the outcomes for critically ill and injured Idahoans and those who visit our great state.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard M. Armstrong". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

RICHARD M. ARMSTRONG, Director
Idaho Department of Health and Welfare

Executive Summary

During the 2013 Legislature, the Idaho Health Quality Planning Commission requested that the Legislature adopt *House Concurrent Resolution 10*. This resolution directed the Idaho Department of Health and Welfare to convene a workgroup to define the elements of, funding mechanisms for, and an implementation plan for a comprehensive system of care for time sensitive emergencies in Idaho. The resolution passed and the workgroup was formed in May 2013. This workgroup drafted legislative language for the 2014 Legislative Session that lays the groundwork for a comprehensive and coordinated emergency system that will support trauma, stroke, and heart attack patients in Idaho.

The TSE Workgroup is comprised of a variety of stakeholders from throughout the state. The group includes emergency medical service (EMS) providers, hospitals, healthcare providers, public health, health insurers, legislators, member organizations, community members, and others. This workgroup met monthly from May through November 2013 to develop the statewide, evidence-based system of care in which all Idahoans, and those who visit Idaho, can expect standardized protocols and consistent care within the limitations and parameters of local available resources. The workgroup carefully considered the needs of all local hospitals, physician groups, EMS, etc. and was sensitive to related financial implications.

In order to meet the timeline for the legislative session, several ad hoc subcommittees were identified: communications; funding; region definition; system framework; registry and data collection; legislation; and trauma, stroke, and heart attack rules. The subcommittees presented their work and findings during the monthly workgroup meetings.

The workgroup identified and adopted guiding principles that directed their work as they developed the TSE system for Idaho. The guidelines support the use of nationally accepted, evidence-based practices; standards that are adaptable to all providers; facilities instituting a practiced, systematic approach to TSE; data collection to analyze the effectiveness of the program; and voluntary participation in the system. The desired outcome of the TSE system is to reduce morbidity and mortality from trauma, stroke, and heart attack by getting the right patient to the right place at the right time.

The legislative package developed by the workgroup is expected to be presented during the 2014 Idaho Legislative Session. To learn more about the TSE System of Care, visit www.tse.idaho.gov.

Introduction and Methodology

Background

Critical injuries and illnesses may be time sensitive, requiring medical intervention in a narrow window of time. Time sensitive emergencies include trauma, stroke and heart attack: three of the top five causes of deaths in Idaho. Idaho remains one of only a few states without organized systems of care for trauma, stroke, and heart attack. Numerous studies throughout the U.S. have demonstrated that organized systems of care improve patient outcomes, thus reducing the frequency of preventable death and improving the functional status of the patient.

Time sensitive emergencies require the integration of healthcare delivery from field to community centers of excellence, and if necessary, to regional centers of expertise. Healthcare providers, both in the field and in the hospital setting, need to recognize these conditions and respond quickly and appropriately to get the right patient to the right place at the right time.

The Idaho Health Quality Planning Commission asked the 2013 Idaho Legislature to adopt a concurrent resolution to begin the work of developing a TSE system for Idaho. During the legislative session, the Idaho Legislature passed *House Concurrent Resolution 10*, directing the Department of Health and Welfare to convene a working group to define the elements of, funding mechanisms for, and an implementation plan for a comprehensive system of care for time sensitive emergencies in Idaho. The workgroup was also responsible for drafting legislative language for the 2014 Legislative Session.

A coordinated and comprehensive system of evidence-based care addresses the following components: public education and prevention, 911 access, response coordination, pre-hospital response, transport, hospital emergency/acute care, rehabilitation, and quality improvement. Creating a seamless transition between and among each level of care and integrating existing community and regional resources will support achieving improved patient outcomes and reduce costs. Also, quality data must be available to assess system performance and inform improvement opportunities. The Idaho Trauma Registry, established by Idaho Code in 2003, currently collects data needed to analyze the incidence, severity, causes, costs, and outcomes of trauma in Idaho and may become the foundation for further data collection and analysis activities essential to evaluate the impact of the proposed TSE system.

Purpose and Goals

“Getting the right patient to the right place at the right time.”

The overarching purpose of a time sensitive emergency system of care is to enhance community health by ensuring all patients have access to the appropriate level of care in a timely, well-coordinated, and cost-effective manner. The TSE Workgroup was tasked with

creating a model that will work equally well for trauma, stroke, and heart attack, phasing in the latter two once the system for trauma is successfully implemented.

Many of these critical illnesses and injuries may be treated locally, but others may require the expertise of regional centers. The goal of the TSE system is to develop processes to provide the best care for Idahoans and those who visit Idaho who experience a time sensitive emergency. Due to the expansive geography of Idaho and limited resources and long transport times, all members of the healthcare community are important resources to patients with TSE. The system relies on the healthcare community to develop processes to recognize, transport, treat, and potentially transfer patients with time sensitive emergencies to a facility with the level of care appropriate to the patients' illness or injury.

Furthermore, besides development of guidelines, protocols, algorithms, and communications to improve the delivery and the care of patients, the system must monitor the performance and safety of patient care throughout the continuum of care from the field to rehabilitation. This provides an infrastructure of continuing improvement of patient care, outcomes, and prevention.

Project Plan and Process

Per *House Concurrent Resolution 10*, the Idaho Department of Health and Welfare convened the TSE Workgroup in May of 2013 with the goal of having legislation ready to be taken forward in the 2014 Legislative Session. The TSE Workgroup project plan follows:

MEETING/TOPIC/MILESTONE	SCHEDULE
Kickoff Meeting	May 14, 2013 8:00 a.m. – 5:00 p.m.
System Design: Part I	Tuesday, June 11, 2013 10:00 a.m. – 3:00 p.m.
System Design: Part II	Tuesday, July 9, 2013 10:00 a.m. – 3:00 p.m.
Statewide Registry and Performance Measures	Tuesday, August 6, 2013 10:00 a.m. – 3:00 p.m.
System Supports	Wednesday, September 4, 2013 10:00 a.m. – 3:00 p.m.
Recommendations/Legislation and Implementation Plan	Monday, September 30 10:00 a.m. – 3:00 p.m.

MEETING/TOPIC/MILESTONE	SCHEDULE
Recommendations Finalization and Presentation Preparation	Wednesday, October 30 10:00 a.m. – 3:00 p.m.
Report Review and Project Wrap Up	Tuesday, November 19 10:00 a.m. – 3:00 p.m.
Report Preparation and Presentations	Throughout December

The TSE Workgroup engaged rigorously and actively in this process, and demonstrated the willingness and ability to resolve challenging issues in a respectful and meaningful manner, galvanizing support for this important endeavor.

The TSE Workgroup gathered abundant “intelligence” to inform its decision-making around Idaho hospital transfer patterns, the legislation, and the system structure. “Intelligence” included, but was not limited to, trauma systems of other states, Idaho hospital survey results, and peer-reviewed research on best practices. In addition, select professionals involved in Utah’s time sensitive emergency system were consulted by the TSE Workgroup and provided presentations to numerous stakeholder groups across the state. Interestingly, TSE Workgroup members are now being contacted by other states yet to develop their own systems to discover how Idaho stakeholders were able to come to consensus on such a comprehensive system of care in such a short period of time.

Several TSE Workgroup subcommittees were convened and assigned to examining specific issues and developing related recommendations, as needed. (See Appendix B for details.) Subcommittee recommendations were discussed at relevant workgroup meetings and incorporated when finalized. The following TSE Workgroup Subcommittees were formed:

- 1) Communications
- 2) System Framework and Legislation
- 3) Stroke and Heart Attack Rules Development
- 4) Funding
- 5) Region Determination
- 6) Legislative Action

Toward the end of this effort, workgroup members formed teams to deliver presentations to various key stakeholder groups for final vetting of the recommendations, again underscoring the fact that this was a team effort embraced by all participants.

TSE Workgroup Members

The TSE Workgroup had broad representation across the various stakeholders and aspects of the system, and from across the state, including:

- Physicians/ Healthcare Providers

- Hospitals
- Emergency Medical Systems (EMS)
- Payers
- Rehabilitation and Community Health
- Advocacy and Legislative

The TSE Workgroup was continually mindful of gaps in representation and added additional members, as needed. (See Appendix A for a list of TSE Workgroup Members.) Other stakeholders were involved, as needed (see Stakeholder Involvement section for details).

Idaho TSE System Guiding Principles

The TSE Workgroup adopted the following Guiding Principles to direct and align its work:

- Provide nationally accepted, evidence-based practices to time sensitive emergencies
- Ensure that standards are adaptable to all providers wishing to participate
- Ensure that designated facilities institute a practiced, systematic approach to time sensitive emergencies
- Reduce morbidity and mortality from time sensitive emergencies
- Design inclusive systems for time sensitive emergencies
- Participation in the designation process is voluntary
- Data are collected and analyzed to measure the effectiveness of the system

Stakeholder Involvement

Timely and meaningful stakeholder involvement is key to any improvement initiative. Without it, the likelihood of successful implementation is significantly reduced. At its first meeting, the TSE Workgroup identified a comprehensive list of TSE system stakeholders, from the community at large, to medical professionals, to the legislature. The group then developed an action plan to communicate with and gather input from stakeholders at appropriate points throughout the process.

From the outset, a continually evolving Frequently Asked Questions (FAQ) document was developed to serve as a real-time communication piece for all interested stakeholders. (Please see Appendix C for details.) At each workgroup meeting, members identified new information to add to the FAQs based on that meeting's developments. Once updated, workgroup members actively distributed the FAQs to their respective member, constituents, and colleagues.

Examples of stakeholder involvement activities include:

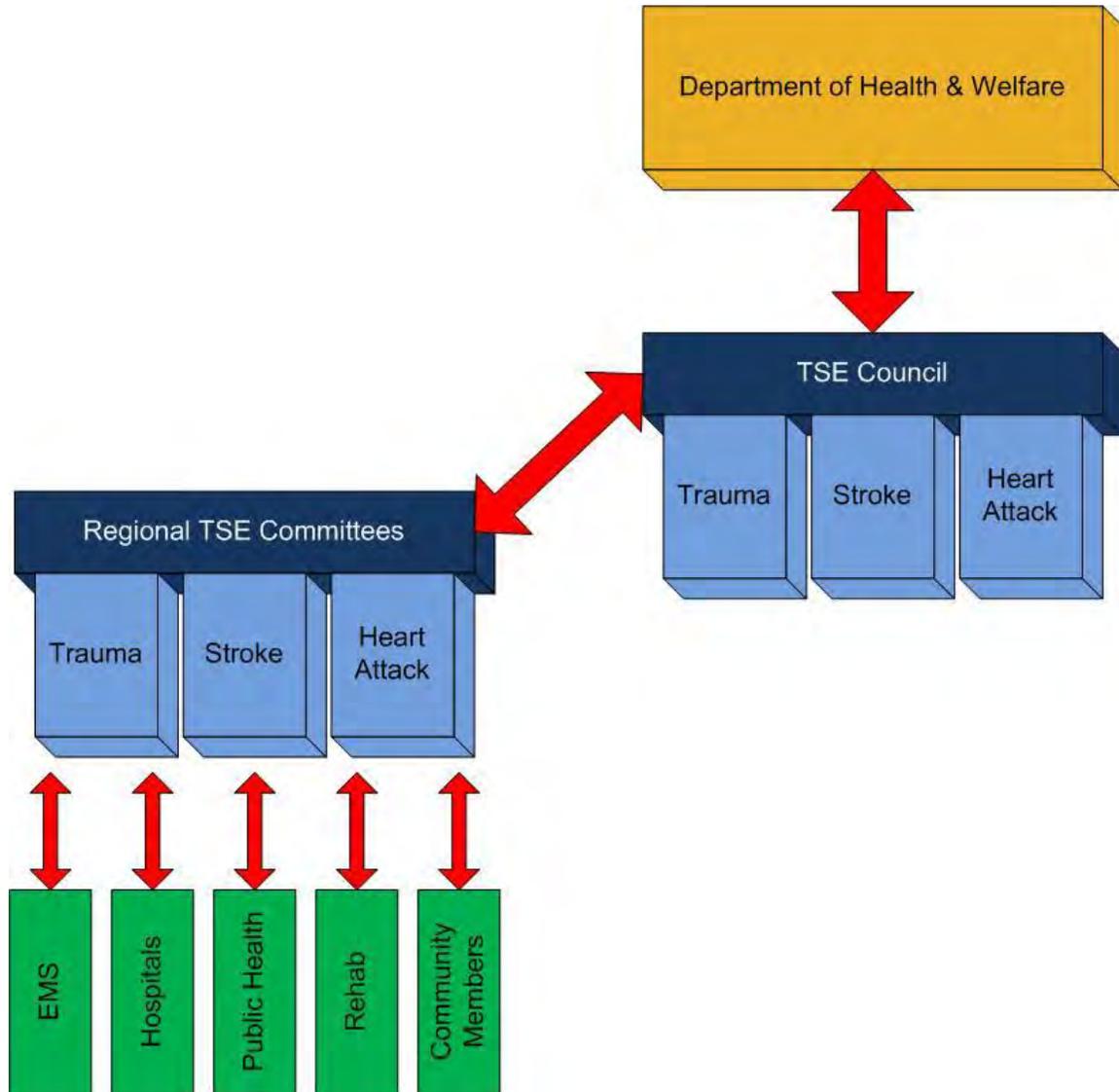
- Information disseminated about, and public access to, the Idaho TSE website (www.tse.idaho.gov)
- TSE Workgroup members communicating monthly workgroup FAQs to respective colleagues/constituents/members

- Final TSE Workgroup products communicated to Workgroup members' respective colleagues/constituents/members
- Emergency, heart attack, and stroke specialty "physician champions" identified at the outset, informed throughout the project process, and engaged to provide input on workgroup deliverables
- A survey to all Idaho hospitals to gather input on resources, needs, and concerns and better understand the unique circumstances of rural/critical access hospitals
- Multiple presentations delivered to hospital administrators around the state during which input was gathered, including:
 - IHA Regional Leadership Council meetings (multiple)
 - The Hospital Cooperative, August 1, 2013
 - IHA Convention, October 6, 2013
 - IHA Board Meeting, November 15, 2013
- Communication to and input gathering from various Emergency Medical Services (EMS) groups, including:
 - Outreach to EMS Leadership by the Chief of the Bureau of Emergency Medical Services and Preparedness
 - EMS Advisory Committee presentation
 - EMS Physician Commission presentation
 - Information published in the EMS newsletter
- Regular updates by the Administrator of the DHW Division of Public Health to the following state leaders/leadership groups:
 - Governor's Office
 - Idaho Department of Health and Welfare Director
 - Chairmen of Health and Welfare Legislative Committees
 - Health Quality Planning Commission
 - Healthcare Task Force
- Communication with the Idaho Association of Cities and local Public Health District Directors
- Outreach to the Association of Counties and a request for representation on the TSE Workgroup

Key Recommendations

System Development and Legislation

The workgroup arrived at consensus on the following structure for the Idaho TSE System:



To support the implementation of this structure, the TSE Workgroup developed a legislative package to put forward in the 2014 Legislative Session. This package includes legislation to establish the Idaho TSE System and describes the state council and regional advisory committees to be represented by all three emergency conditions. The legislation recommends the state council have eighteen members appointed by the Governor, and represent hospitals, EMS, and the public. It gives the state council the authority to establish

standards and designate/certify hospitals according to their capabilities to serve trauma, stroke, and heart attack patients. It recommends that standards for trauma, stroke, and heart attack align with national standards and best practices wherever possible and feasible. It also states that regional advisory committees are responsible for the coordination, education, quality improvement, and technical assistance needed to support the TSE System. The entire system will be overseen by the Idaho Department of Health and Welfare. The Department would provide the process and standards for the system. The legislative package also includes an amendment to the existing trauma registry legislation to create a time sensitive emergency registry by incorporating stroke and heart attack data. This will enable system quality measurement. (Please see Appendix D for draft legislation.)

Rules Development

The TSE Workgroup recommends that trauma rules supporting the TSE System be developed by the state council in the first year following adoption of the system enabling legislation and the rules for stroke and heart attack the second year. The rules will define the components or guidelines for trauma, stroke, and heart attack. They will also describe the various facility levels and related capabilities.

It is expected that trauma rules will be presented during the 2015 Legislative Session and stroke and heart attack rules in the 2016 session.

Data Registry and Quality Measures

As mentioned in the trauma registry discussion above, a data registry for all three time sensitive conditions is essential for monitoring the impact of the TSE system and facilitating quality improvement. The TSE Workgroup consulted with hospitals across the state to cultivate support for this important aspect of the system. Hospital administrators affirmed their support, asking that data sets be reasonable and align with current data submission requirements to the degree possible, and that funding and technical assistance resources be provided to alleviate the burden.

Funding

The TSE Workgroup and Funding Subcommittee examined numerous funding options to enable the initial development and ongoing sustainability of the Idaho TSE System. The Workgroup estimates the initial cost to create the TSE System in the first year at approximately \$400,000. This figure includes the Idaho Department of Health and Welfare

staff required to support the State Council, rule promulgation, trauma registry expansion, and other necessary operations support to build and implement the system. Ongoing funding will come from a variety of sources including, but not limited to, enhanced reimbursement for existing trauma activation revenue codes, Medicare/Medicaid funding through cost-based reimbursement, initial hospital designation/certification and annual reassessment fees, grants for specified needs (e.g., training, equipment), and cost savings resulting from better care.

Implementation Plan

As described in the Rules section (above) and in alignment with *House Concurrent Resolution 10*, the TSE Workgroup recommends that the trauma aspect of the system be implemented first in April 2014, beginning with the appointment of the TSE Council, and followed closely by the development of the trauma system rules in preparation for the 2015 Legislative Session. It is expected that facility applications for trauma certification/verification would commence in March 2015. Shortly thereafter, stroke and heart attack rule development would occur in preparation for presentation during the 2016 Legislative Session. Facilities are expected to begin the stroke and heart attack system application and certification process in the spring of 2016. (Please see Appendix E for detailed timeline.)

Potential Partnerships to Optimize Implementation

It will be imperative to cultivate key partnerships to support the ongoing effectiveness of the Idaho TSE System. Collaboration with Idaho's neighboring states – Washington, Oregon, Montana, and Utah – will be essential to success. Third party payors will also play an important role. Finally, the recommendations of Idaho's State Healthcare Innovation Plan (SHIP) will need to be carefully examined and incorporated into the TSE System as appropriate and feasible.

Future Directions

In the future, it is recommended that the Idaho Legislature consider the integration of other time sensitive emergencies into the Idaho TSE System. These may include accidents with mass casualties, infectious disease, and disaster preparedness.

Appendix

Appendix A: Workgroup Members

TSE Workgroup Member	Organization Representing
Mark Zandhuisen	Bonner County EMS
Harry Eccard	Ada County Paramedics
Bill Spencer	Grangeville EMS/Syringa Hospital
Dr. Brian O'Byrne	Eastern Idaho Regional Medical Center
Karla Bryan	Eastern Idaho Regional Medical Center
Jami Thomas, RN	Eastern Idaho Regional Medical Center
Dennis Carlson	Portneuf Medical Center
Greg Vickers	Portneuf Medical Center
Dr. Drew McRoberts	Portneuf Medical Center
Dr. Curtis Sandy	Portneuf Medical Center & Idaho EMS Physician Commission (Chair)
Jay Blacksher	North Canyon Medical Center
Casey Meza	Kootenai Health
Rod Barton	Cassia Regional Medical Center
Dallas Clinger	Power County Hospital District
Dr. Robert Polk	St. Alphonsus Health System; Chair Health Quality Planning Commission
Dr. Bill Morgan	St. Alphonsus Health System
Dr. Steven Writer	Saint Alphonsus Health System
Christine Shirazi	Saint Alphonsus Health System
Nichole Whitener, RN, CNRN	Saint Alphonsus Health System
Jana Perry, RN, MSN	Saint Alphonsus Health System
Dr. Bart Hill	St. Luke's Health System
Dr. Marshall F. Priest	St. Luke's Health System
Jane Miller, RN	St. Luke's Health System
Mike McGrane	St. Luke's Health System
Dr. Tres Scherer	Pediatric Trauma Surgeon Consultant Reviewer, Committee on Trauma, American College of Surgeons
Melissa Honsinger	Elks Rehab Hospital
Toni Lawson	Idaho Hospital Association
Stacey Carson	Idaho Hospital Association
Cheryl Hansen	Idaho Trauma Registry
Molly Steckel	Idaho Medical Association
Neva Santos	Idaho Academy of Family Physicians
Platt Thompson	Idaho Health Data Exchange
Jeff Crouch	Blue Cross of Idaho
Shad Priest	Regence BlueShield of Idaho
Linda Rowe	Qualis Health
Janet Cortez	University of Utah Healthcare
Adrean Cavener	American Heart Association, American Stroke Association
Heidi Otto	American Heart Association American Stroke Association

TSE Workgroup Member	Organization Representing
Mark Dunham	Risch Pisca, PLLC
Rep. John Rusche	Legislator, Primary Care Physician, Health Quality Planning Commission
Russ Duke	Local Public Health Districts
Sonja Schriever	Idaho Department of Health & Welfare, Division of Public Health
Wayne Denny	Idaho Department of Health & Welfare, Division of Public Health
John Cramer	Idaho Department of Health & Welfare, Division of Public Health
Elke Shaw-Tulloch	Idaho Department of Health and Welfare, Division of Public Health
Mary Sheridan	Idaho Department of Health and Welfare, Division of Public Health
Debby Ransom	Idaho Department of Health & Welfare, Division of Licensure & Certification
Matt Wimmer	Idaho Department of Health and Welfare, Division of Medicaid

Appendix B: Workgroup Subcommittees

Communication

Elke Shaw-Tulloch
Linda Rowe
Jana Perry
Nichole Whitener
Christine Shirazi
Molly Steckel
Stacy Carson
Dennis Carlson

System Framework/Legislation

Jana Perry
Dr. Tres Scherer
Dr. Brian O'Byrne
Wayne Denny
Harry Eccard
Dr. Mike McGrane
Rep. John Rusche
Adrean Cavener

Stroke and Heart Attack

Sonja Schriever
Christine Shirazi
Adrean Cavener
Dennis Carlson
Nichole Whitener
Mark Zandhuisen

Region Determination

Stacy Carson
Wayne Denny
Adrean Cavener
Christine Shirazi
Russ Duke
Greg Vickers

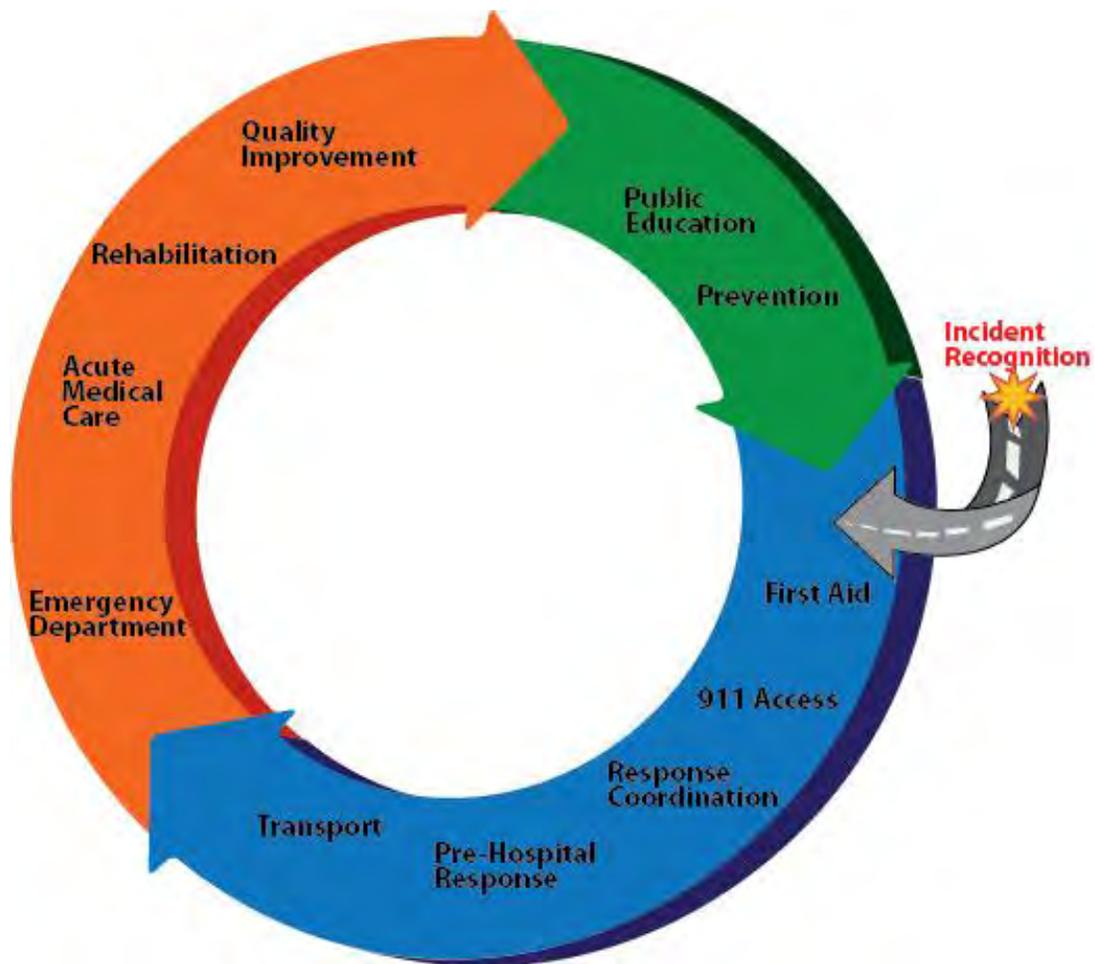
Funding

Mary Sheridan
Elke Shaw-Tulloch
Mark Zandhuisen
Yvonne Ketchum
Matt Wimmer
Casey Meza
Shad Priest

Legislative Action

Adrean Cavener
Molly Steckel
John Rusche
Neva Santos
Mark Dunham
Toni Lawson

TIME SENSITIVE EMERGENCY SYSTEM OF CARE FOR IDAHO



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BACKGROUND

The Health Quality Planning Commission asked the 2013 Legislature to adopt a concurrent resolution and during the legislative session. The Idaho Legislature passed *House Concurrent Resolution 10* directing the Department of Health and Welfare to convene a working group to define the elements of, funding mechanisms for, and an implementation plan for a comprehensive system of care for time-sensitive emergencies in Idaho. The workgroup will also be responsible for drafting legislative language for the 2014 legislative session.

Time-sensitive emergencies include trauma, stroke and heart attack; three of the top five causes of deaths in Idaho in 2011. Idaho remains one of only a few states without organized systems of care for trauma, stroke and heart attack. Numerous studies throughout the U.S. have demonstrated that organized systems of care improve patient outcomes, thus reducing the frequency of preventable death and improving the functional status of the patient.

A coordinated and comprehensive system of evidence-based care addresses: public education and prevention, 911 access, response coordination, pre-hospital response, transport, hospital emergency/acute care, rehabilitation and quality improvement. By creating a seamless transition between and among each level of care and integrating existing community and regional resources will support achieving improved patient outcomes and reduce costs. It will get the right patient to the right place in the right time.

The Time Sensitive Emergency (TSE) Workgroup is comprised of a variety of stakeholders, including emergency medical service providers, hospitals, healthcare providers, public health, health insurers, rehabilitation, legislators, community members and others, moving toward the development of a statewide, evidence-based system of care in which all Idahoans and people visiting Idaho can expect standardized protocols and consistent care within the limitations and parameters of local available resources. Consideration will be given to the needs of all local hospitals, physician groups, emergency medical service providers, etc. and the sensitivity of the financial implications.

The following guiding principles have been adopted to help support the development of the comprehensive system of care for Idaho:

- Provide nationally accepted evidence based practices to time sensitive emergencies
- Ensure that standards are adaptable to all providers wishing to participate
- Ensure that designated facilities institute a practiced, systematic approach to time sensitive emergencies
- Reduce morbidity and mortality from time sensitive emergencies
- Design inclusive systems for time sensitive emergencies
- Participation in the designation process is voluntary

- Data are collected and analyzed to measure the effectiveness of the system

TIME SENSITIVE EMERGENCY WORKGROUP

What is the process the workgroup is taking to do their work?

The TSE Workgroup has met eight times, to date. At each of the meetings, a topic or milestone is addressed. The table below shows the meeting topics and the schedule and location. Subcommittees have been formed, as needed, to tackle specific issues in between meeting dates. TSE Workgroup members who reside out of Boise are traveled in for the meetings. All meetings are professionally facilitated.

Meeting Topic/Milestone	Schedule	Locations
Kickoff Meeting	May 14, 2013 8:00 -5:00	Oxford Suites Overland Road, Boise
System Design: Part I	June 11, 2013 10:00 – 3:00	Saint Alphonsus Regional Medical Center, Boise
System Design: Part II	July 9, 2013 10:00 – 3:00	St. Luke’s Regional Medical Center, Boise
Statewide Registry and Performance Measures	August 6, 2013 10:00 – 3:00	Qualis Health, Boise
System Funding and Other Supports	September 4, 2013 10:00 – 3:00	Qualis Health, Boise
Recommendations, Legislation and Implementation Plan	September 30, 2013 10:00 – 3:00	Saint Alphonsus Regional Medical Center, Boise
Report and Presentation Development	October 30, 2014 10:00 – 3:00	Saint Alphonsus Regional Medical Center, Boise
Report Finalization	November 19, 2013 10:00 – 3:00	Ada County Paramedics Boise
Presentation of Recommendations	TBD	TBD

How does the TSE Workgroup get its work accomplished with only meeting monthly?

Because the TSE Workgroup is only able to meet on a monthly basis to accomplish a large amount of work, it is utilizing ad hoc subcommittees to accomplish tasks in between meetings. Eight subcommittees have been formed. Participation is voluntary and active participation is expected. Upon occasion, the subcommittees will merge to complete their assigned tasks. The subcommittees are:

Communications
Framework
Region Definition
Registry & Data

Funding
Legislation
Stroke & Heart Attack Rules
Trauma Rules

Is there a website about Idaho’s time sensitive emergency system of care?

The website is www.tse.idaho.gov. This site will continue to be updated with the latest information about the TSE Workgroup, FAQs, resources, etc.

How can I submit questions and comments to the TSE Workgroup?

A mailbox has been established that will be regularly monitored for the public’s use. Questions and comments can be submitted to: tse@dhw.idaho.gov.

Who do I contact if I want to have a conversation about TSE in Idaho?

While there are many dedicated professionals working on the development of a TSE System of Care for Idaho, the following people may be contacted to discuss the work that is being conducted.

Name	Organization	E-mail	Phone
Wayne Denny	Idaho Dept. of Health & Welfare Public Health Division EMS & Preparedness Bureau	dennyw@dhw.idaho.gov	208-334-4000
Elke Shaw-Tulloch	Idaho Dept. of Health & Welfare Public Health Division Public Health Administration	shawe@dhw.idaho.gov	208-334-5950
Representative John Rusche, MD	Idaho Legislature	jruschhe@house.idaho.gov	208-750-6048
Curtis Sandy, MD	EMS Physician Commission Portneuf Medical Center	ccsandynd@gmail.com	208-705-7752

Bill Morgan, MD	Medical Director Trauma Services Saint Alphonsus Health System	billmorg@sarmc.org	208-367-3674
Nichole Whitener, RN	Neurosciences Service Director Research Administrator Saint Alphonsus Health System	nichwhit@sarmc.org	208-367-2233
Bart Hill, MD	VP & Chief Quality Officer Stroke Information St. Luke's Health System	hillb@slhs.org	208-381-1957
Marshall Priest, MD	Executive Director St. Luke's Heart St. Luke's Health System	mpriest@slhs.org	208-381-4818 208-861-0142

STAKEHOLDER INVOLVEMENT

How are the interests of ALL stakeholders identified and addressed?

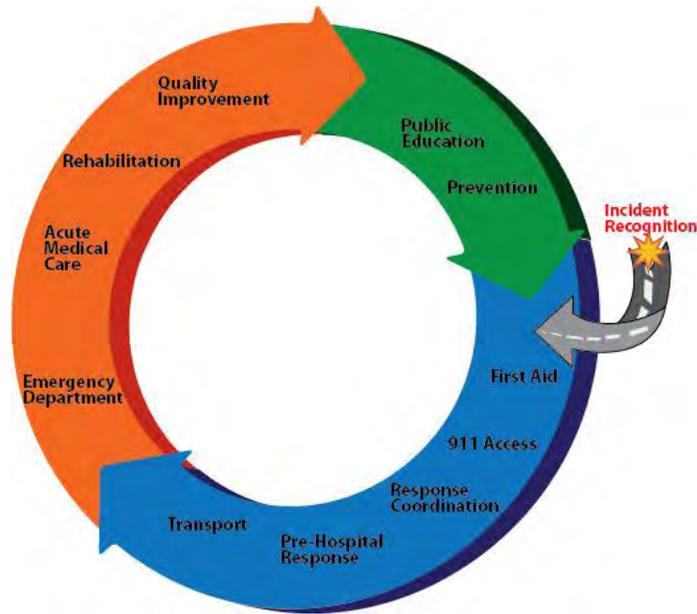
Every effort has been made to ensure that a diversity of stakeholders are involved in the creation of the framework, legislation, and process. However, the TSE Workgroup members are conscientious about ensuring that a variety of opportunities for input must be provided. Currently, Workgroup members utilize a SharePoint site to distribute and comment on materials. The *Communication Subcommittee* is creating talking points for Workgroup members to be able to share with their constituents. The website (www.tse.idaho.gov) contains information about the Workgroup's progress and to post documents for public comment. A mailbox has been established for comments and questions to be submitted (tse@dhw.idaho.gov).

TSE Workgroup members are also sharing the products of their work with their colleagues, constituents and members to ensure they are being provided ample opportunities to be involved. New TSE Workgroup members continue to be identified and recruited to ensure representation. An example of an opportunity to provide input was in the form of a survey the Idaho Hospital Association recently routed to its' member hospitals. The survey informed the hospitals of the TSE Workgroup activities as well as solicited their input on specific topics around protocols, capacity and capabilities, barriers, and coverage. There were multiple open-ended questions to allow for additional feedback.

TSE SYSTEM OVERVIEW

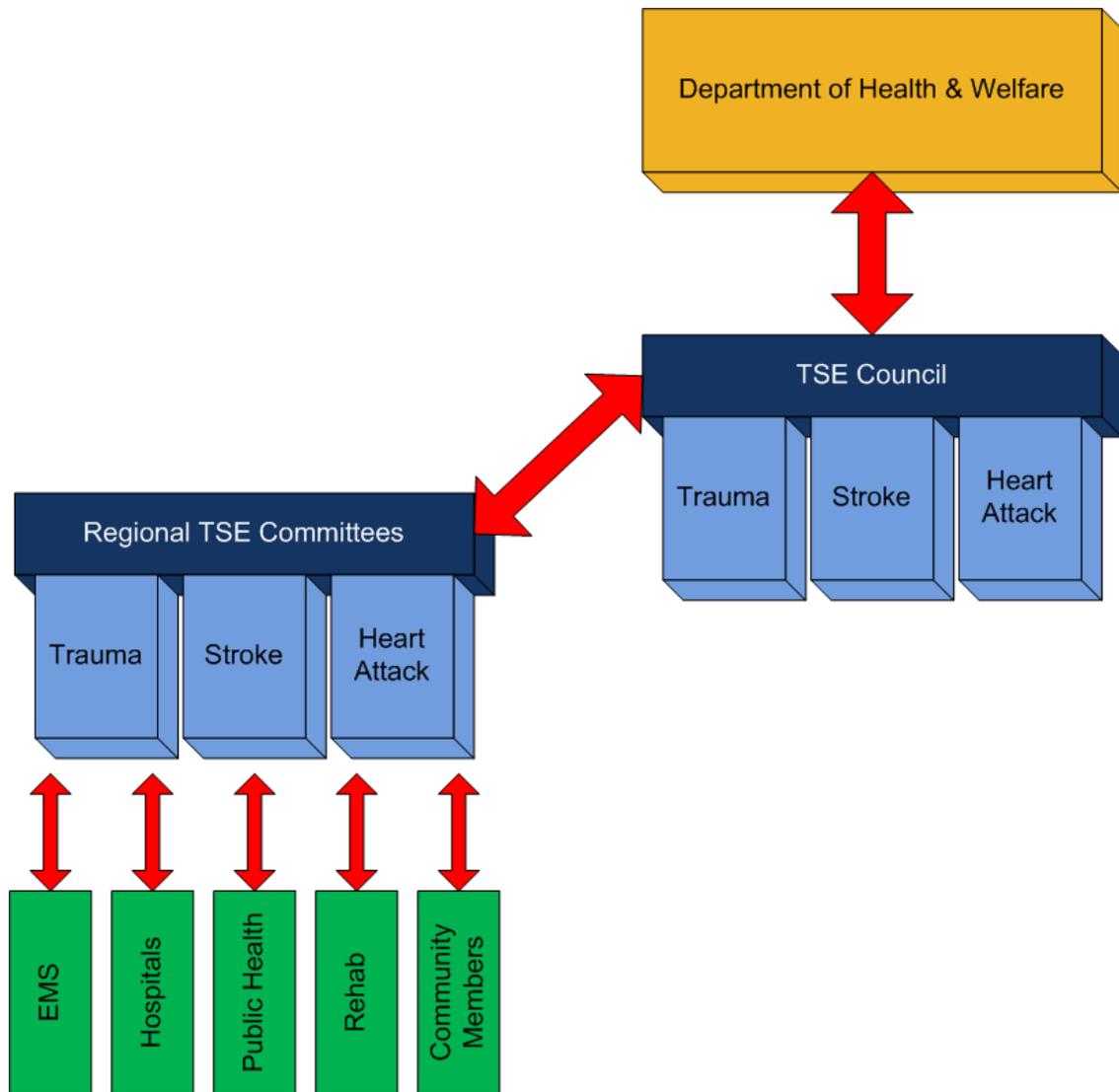
What does a comprehensive, time sensitive emergency system of care “look” like?

The following graphic represents the components of a time sensitive emergency system of care. It denotes that it is a system that is a continuous process deploying such aspects as prevention of an emergency to emergency response to medical care to rehabilitation to quality improvement.



How will the system be governed and where will it be housed? Who/what will be the designating body or authority?

Through the *Framework Subcommittee*, a comprehensive system of care is being proposed back to the TSE Workgroup for consideration. Elements of the system will include an administrative state agency, such as the Idaho Department of Health and Welfare; a system of care state council appointed by the Governor that consists of experts in trauma, stroke and heart attack response direction-setting and policy; and regional committees comprised of representatives from local emergency medical services, hospitals, public health and others. The regional committees will be the venue in which a wide variety of work is conducted such as education, technical assistance, coordination, and quality improvement. The system may look something like the following graphical representation. However, until the system is thoroughly designed and vetted this is only a representation.



The framework, as discussed at the July 9 TSE Workgroup meeting, would build off existing models for a trauma system of care to address trauma first and later incorporate stroke and heart attack.

- The state agency, Idaho Department of Health and Welfare, would provide oversight of the state system of care for time sensitive emergencies and the Department would provide the process and standards for the system, including the promulgation of rules.
- The state council would be composed of voting members appointed by the Governor and equitably represent stakeholders (geographic, rural, urban, medical disciplines, etc.). The council would establish the various designation and certification levels for the time sensitive emergencies, standards, procedures and duration of designation and certification. It would provide criteria for designation/certification as well as revocation. The state

council would establish quality improvement standards as well as criteria for the operation of the regional committees.

- The regional committees would be established based on health care delivery patterns. The specific number of regional committees has not been determined. A *Region Definition Subcommittee* was created to address this issue. Each regional committee will have one representative that sits on the state council. The regional committees will be educational in nature and provide technical support as needed. The regional committees could potentially prioritize health resource allocations, conduct training, conduct regional quality improvement initiatives, conduct quality improvement activities, make recommendations to facilities within their respective regions, and advise the state council about the overall system in an effort to meet the criteria established by the state council.

Between the July 9 TSE Workgroup meeting and the August 6 TSE Workgroup meeting, the *Framework Subcommittee*, *Region Definition Subcommittee*, and the *Legislative Subcommittee* continued to work on elements of the system design focusing heavily on the structure of the regional committees. It was determined that instead of defining the make-up/structure of the regional committees in statute or code, it would be best to leave the structure and region definition to the state council, once operational, because there are currently many variables not well defined without the state council in place. The state council will have the authority over the regional committees.

During the September 3 TSE Workgroup meeting the *Region Definition Subcommittee* presented a framework for what the regions might look like. The purpose of continuing to address the structure was to leave a legacy for the state council, when operational, to use as a foundation for making decisions about the regional committees. The following is the final draft region map created by the *Region Definition Subcommittee*.

~DRAFT~
 Idaho TSE Regions
 and
 Resource Facility Locations



Will facilities be able to participate in one or more component of the system but not all, i.e. stroke and trauma? If so, how will the system address non-participating facilities?

Participation in the TSE system of care is voluntary, but the goal is for every facility to want to participate up to their abilities and resources. It is not necessary for hospitals to participate at the highest designation level for any of the components: stroke, heart attack or trauma. Discussion about what this would look like will continue after the legislation has passes and rules are developed.

What is the role of telemedicine in the system? If it is supported, will it be a reimbursed activity?

The use of telemedicine in the TSE system has been discussed in several subcommittees, as well as by the TSE Workgroup, and its use is supported. Exploration into how telemedicine and other technologies can best be used within the TSE will continue as the state council is established and the TSE system develops.

STATE COUNCIL, DESIGNATION AND CERTIFICATION

What will criteria for designation look like for the state of Idaho and what about leveraging national standards?

Whenever possible, national standards will be considered for adoption to create Idaho-specific best practices.

During the August 6 TSE Workgroup meeting, there was further discussion about, and support for, utilizing national standards and best practices for trauma, stroke and heart attack. This was further reinforced by a presentation given by the State of Utah's manager of time sensitive emergencies system of care and a CEO of a Utah critical access hospital. The representatives from Utah presented the group with their guiding principles that articulate the importance of national standards and best practices as well as the designation and certification criteria for the components of time sensitive emergencies.

REGIONAL COMMITTEES

What is the purpose of defining regions for the TSE system? Are they aligned with referral patterns? Will they change existing referral patterns?

The proposed regions are intended to establish administrative structure for the TSE system of care and do not dictate referral patterns or existing transport/transfer patterns.

What is the role of the existing EMS regional councils in relation to the TSE committees?

The role of the regional committees is to provide a venue for communication between EMS providers and hospitals to address performance improvement. It is

the hope of the TSE Workgroup that existing regional councils, such as the Ada and Canyon County Regional Interagency Committee for EMS (RICE), will participate in, partner with, or could even become the TSE regional committees in order to address best practices and optimal patient outcomes.

RURAL ISSUES

If my hospital chooses not to participate in this voluntary system, does that mean my hospital will be bypassed?

This system is not only looking at time sensitive emergencies but also patient centeredness to ensure appropriate care during an emergency as well as for after-crisis-care in the patient's community. Idaho hospitals are likely already being bypassed in some instances. A coordinated and comprehensive system will help ensure that patients can receive care in their community when the hospital is capable of providing the level of care needed, and when that is not possible, are returned to their community for post-care. For trauma, the TSE Workgroup has recommended a Level V designation so that small hospitals have further opportunities to participate. If a hospital chooses not to participate, the system is being designed to provide them with appropriate support to participate to the extent they are able.

Can my hospital participate if I am not Joint Commission certified?

There are some rural hospitals that might not be accredited or certified by national organizations, but through this system of state designation and certification the hospitals will be deemed to meet appropriate standards by the state if they don't already meet the national standards.

I am concerned that the proposed TSE system of care will result in fewer patients coming to rural critical access hospitals. Will patients who are transported to a local critical access hospital today be taken to a larger hospital once the TSE system of care is implemented?

The proposed TSE system of care will provide a venue wherein all of the healthcare professionals who are involved in the treatment of trauma, stroke and heart attack patients can collaborate to make sure that the decisions made about the destination of trauma, stroke and heart attack patients are the best for the patient and the system. The community hospitals and clinics that serve rural Idaho communities are critical to the stability of the overall healthcare system in Idaho. A goal of the proposed TSE system of care is to develop and share practices that will enable community healthcare facilities to remain viable so that they can continue to provide the best possible patient care.

Getting the right patient to the right place in the right time is a widely accepted goal in the treatment of time sensitive emergencies and is a foundational tenet of the proposed Idaho TSE system of care. While there are many confounding issues that can prevent a patient from getting to the right facility in a timely fashion, under-

triage and over-triage are two issues that similar systems of care have proven to mitigate.

Under-triage is when a seriously ill or injured patient is taken to a facility that is not appropriate to the seriousness of the illness or injury. Under-triage can lead to negative patient outcomes due to the increased time until critical patients can receive the needed care in a facility that is prepared to treat their specific illness or injury.

Over-triage refers to situations when patients with less severe illness or injuries are taken to a larger medical center instead of a smaller local facility. Over-triage is problematic because treating patients with less severe illness and injures ties up available resources that could otherwise be available for the more critical patient.

Under-triage and over-triage are both issues that, if left unaddressed, represent inefficient use of resources that may ultimately affect patient outcomes. The proposed TSE system of care will help to avoid unnecessary costs, provide a venue where decisions can be made on how best to use all of the available resources in a community with positive patient outcomes as the overarching goal. The member organizations of the TSE regions will collaboratively develop protocols that will help assure that the right patients are treated in the right place at the right time.

For more information on the issue of under and over triage, see the 2007 fact sheet from the Utah Department of Health: *Over/Under Triage in Utah* and the June 2013 Journal of the American Medical Association article: *Secondary Over-triage, The Burden of Unnecessary Interfacility Transfers in a Rural Trauma System*.

What are the potential implementation costs for rural facilities?

Until the system design is complete, it is unclear what the implementation costs to rural facilities may be. The goal is to assure that funding sources are available to lessen the financial impact on rural facilities wherever possible.

How do we ensure adequate coverage, training and education in rural areas?

This activity will be conducted through the regional committees.

OTHER STATE SYSTEMS AND SUPPORTING STUDIES

The Utah Time Sensitive Emergency System of Care was mentioned. What does it look like?

The Utah system was described during the August 6 TSE Workgroup meeting in a presentation by Robert Jex, Utah Bureau of EMS and Preparedness, and Jim Beckstrand, CEO of the Delta Community Medical Center and Fillmore Community Medical Center, both critical access hospitals in Utah. The presenters described the foundation of their work – the Guiding Principles – that are the underpinnings of the work they do and help create the foundation from which all participants work. They

described the three components of their time sensitive emergency system of care: heart attack or STEMI, stroke and trauma. In Utah, their comprehensive system began with trauma and subsequently added heart attack and stroke; however, the presenters praised Idaho for beginning the discussion with all three components of the system up front.

The Utah heart attack system requires the following: ninety minute door-to-balloon time; 12 lead ECG capability in the field; thrombolytic therapy if appropriate; the development of treatment guidelines for heart attack in critical access hospitals and rural hospitals; and requires performance improvement with hospitals and EMS. The heart attack system has the ability to review the performance of hospitals by patient. Responding agency, dispatch times, EMS run times, patient arrival and treatment times and case details are able to be extracted for review. The Utah Hospital Association Foundation provided funding for 12 lead capabilities for EMS in every county in Utah. Additionally, the Utah heart attack system covers an estimated 80% of the population, mostly along the Wasatch front.

The Utah stroke system is an inclusive system that addresses the fact that all primary stroke centers are located in the urban areas of Utah, creating a need in the rural parts of Utah. It is impossible to transport all stroke patients to urban centers, so the goal of their system is to improve the level of stroke care at all community emergency departments. Utah is the first state to adopt an inclusive approach compared to other states that are based on by-passing smaller hospitals. The Utah stroke system uses a hub and spoke system. The hubs are the primary stroke centers that offer referral and consultation to the stroke receiving facilities and are accredited by a national body (JCAHO/DNV, etc.). The spokes are the stroke receiving facilities that utilize the primary stroke centers for consultation, they utilize phone and telestroke to support their capabilities, they may transfer their patients, if they desire, and they are verified by the Utah Department of Health. There are a total of 28 of the 43 Utah hospitals voluntarily participating so far. Of the 28 participating hospitals, eight are primary stroke centers and 20 are stroke receiving facilities, three of which are also critical access hospitals. Utah developed a stroke receiving facility toolkit that each participating facility is required to utilize (<https://health.utah.gov/ems/stroke/toolkit.pdf>). The standards the stroke receiving facilities are required to meet, if they choose to participate, are: stroke team available 24/7; phone or telestroke consultation with the primary stroke centers available; 24 hour MD and RN in the emergency department authorized to begin the stroke protocol using standard forms and protocol; CT and lab available 24/7 and results in 45 minutes; thrombolytics (rt-PA) available in/to the emergency department; stroke coordinator and administrative support; site visit by the Utah Department of Health team to verify stroke protocols, etc., and if verified, the local EMS agencies are notified that the hospital is “stroke ready” to receive patients via EMS. With the Utah stroke system and subsequent data collection and verification, they are able to show that 85% of patients taken by EMS are going to a stroke receiving facility or primary stroke center within the national guideline of sixty minutes or less.

The Utah trauma system is an inclusive system that includes approximately 95% of minor and moderate traumas. The 5% of traumas classified as severe are part of an exclusive system because they require specialized care. There are five levels of trauma designation in the Utah system: Level I through Level V. Of particular note is the Level V created by the Utah Department of Health. There are currently a small number of Level V-designated hospitals in Utah. Designation requirements for a Level V trauma center in Utah are:

- Hospital must have the ability to provide initial evaluation, stabilization and transfer to a higher level of care;
- Hospital must be a generally licensed, small rural facility with a commitment to the resuscitation of the trauma patient;
- Hospital may be staffed with a physician's assistant or nurse practitioner rather than a trauma-trained physician; and
- Hospital's major trauma patients are resuscitated and transferred.

The supporting evidence behind Utah's trauma system is that 85% of traumas involve motor vehicle crashes. The outcomes are strongly influenced by the initial care delivered in the "golden hour" – the period of time when 60% of trauma deaths occur. Twenty-five percent of all motor vehicle accidents occur in rural areas accounting for 66% of motor vehicle deaths. Thirty-five percent of trauma deaths are preventable by proper assessment and resuscitation.

A notable point from the Utah presentation was about the potential/projected rural hospital revenue. The system of care allows designated hospitals to offset the costs associated with activating a trauma team to appropriately respond to an incoming trauma case.

Per the Utah presentation, the Utah trauma system is funded through a percentage of fines and forfeitures (8%), not including the trauma registry. They do not use grant funding. They also charge \$3,000 per hospital initial designation for three years of designation and \$2,500 for redesignation. The designation and redesignation fees provide the funding necessary for site and compliance visits and support to the hospitals to provide data for performance management and quality assurance. Funding for the education and resource component was not mentioned during the presentation. Their stroke and heart attack system is free for participation. In Utah, there are currently three separate state level committees overseeing the systems, respectively but are all managed out of the same Department of Health office. Only the trauma committee is designated in statute. However, during the presentation made by Utah, it was recommended that Idaho consider only one state level committee. Utah has only one registry – trauma - and none for stroke or heart attack due to lack of support. Utah had a fully operating trauma system (including a trauma registry) in place before it established the stroke and heart attack components. The presenters recommended that Idaho consider

building the stroke and heart attack registries into this work from the outset to avoid the possibility of the registries never being created.

Are there data on trauma designation in rural states that shows trauma systems make a difference?

Esposito, TJ, et al. in the Journal of Trauma, 39:955-62, 1995 reviewed trauma in the state of Montana and then later evaluated trauma in the same state (Esposito, TJ, et al., American Association of Surgical Trauma, September 2002). The table below shows key highlights from the Esposito studies that demonstrate significant improvements in outcomes after the establishment of the trauma system in Montana.

Esposito 1995 Findings Publication	Esposito 2002 Findings Publication
Retrospective panel review of 324 deaths attributable to mechanical trauma in the state of Montana	Retrospective panel review of 347 blunt trauma deaths in Montana; comparison to pre-system study
Preventable deaths – 13%	Preventable deaths – 15% to 8% (p<0.02)
Preventable hospital deaths – 27%	Preventable hospital deaths – 27% to 16%
Pre-hospital deaths – extended response time 40%; on-scene time greater than 20 minutes – 23%	Inappropriate pre-hospital care – 37% to 22%
Inappropriate care in ER – 68% (Inappropriate airway management, failure to diagnose and treat chest injuries, inadequate volume resuscitation, delays to operating room)	Inappropriate care in ER – 68% to 40% (Inappropriate airway management, failure to diagnose and treat chest injuries, inadequate volume resuscitation, delays to operating room)
Inappropriate care post-ER – 49%	Inappropriate care post-ER – 49% to 29%

DATA AND QUALITY MEASURES

**What data will be collected, how will it be collected and how will it be shared?
How will trust be created to share data?**

The data to be collected is being discussed during the development of the system. In addition, a *Registry & Data Subcommittee* was formed to take deliberate action on what data are needed for collection and how that data will be collected.

Currently data are already collected through the trauma registry. However, how data will be collected for stroke and heart attack is still to be determined. There will be a delicate balance to ensure participation and collection of adequate information to ensure performance measures are effectively being evaluated so that Idaho can be compared to the national efforts. As of the August 6 TSE Workgroup meeting, it was determined that the collection and analysis of data to measure the effectiveness of the system is imperative and is a guiding principle of the group. However, the TSE Workgroup is very cognizant of the potential burden of data collection and reporting and will continue to keep this in mind moving forward.

What will the data be used for?

The data collected will be used to further improve quality healthcare within individual communities. The data will establish a baseline of the delivery of the time sensitive emergency system of care and help monitor how the system of care is operating. The data can help determine health resource allocations that are needed in individual communities and regions when resources are scarce. For example, in county X, there might be only three staffed ambulances. During a high casualty trauma incident, there might be patients waiting for medical care in the hospital emergency rooms because there are not enough local resources to handle the situation. However, in county Y, there might be more ambulances than they need. Data may help determine where the high volume of time sensitive emergencies exist and have the resources deployed to that area.

The regional TSE committees will review de-identified data and determine what can be done at the community level to improve outcomes. It is important for all hospitals and TSE system providers to report data to see the whole picture of the broader regional community. If one hospital in a TSE region does not participate in the data collection and sharing, it could create a hole in the map of Idaho's needs and will not accurately account for the much needed resources and education in the local areas. Data will support areas where tool kits and training efforts are needed for improved care and will help measure challenges and successes as comprehensive coordinated systems of care are implemented regionally and statewide.

FINANCING

How will this system be funded and how will funding be sustained?

This is a fundamental question for the system of care development and deployment. The funding source needs to provide for both immediate and long-term solutions. To this end, a *Funding Subcommittee* was established to determine not only how much the system would cost, but also identify potential funding sources. This

subcommittee has begun to work on identifying options for funding and will continue to provide options back to the TSE Workgroup. It is important to know what the system design will be in order to estimate the cost of the system.

LEGISLATION AND RULEMAKING

What is the process for developing the TSE system of care authorizing legislation, as well as rulemaking?

The TSE Workgroup had many decisions to make about the framework for the system of care, the budget, the creation of the state council membership, etc. before the enabling legislation or draft rules could be created. The draft legislation was created based on the work of the TSE Workgroup. The draft legislation describes what the system will look like. The fundamental concepts for the rules that describe how the system will work (the nuts and bolts) were created tangentially to the legislation so that the TSE Council will have a foundation on which to draft rules.

During the September 4 TSE Workgroup meeting, the decision was made to create talking points about the trauma, stroke and heart attack components. The talking points can then be the basis for the development of rules in subsequent legislative sessions. The talking points will provide enough detail so that decision-makers can “see” better what the system of care will look like beyond the detail provided in the legislation.

What are the components or guidelines needed to develop rules for the trauma element of the system?

The framework used to create rules for trauma may include but is not limited to the following types of considerations:

- Does the hospital meet the American College of Surgeons criteria for a Designated Trauma Center?
- Does the hospital meet the criteria for the level of care required for their specific designation level (i.e. Level I, Level II, Level III, Level IV etc.)?
- Is the hospital applying for Level I, Level II or Level III trauma center designation in compliance with national standards published in the American College of Surgeons document: Resources for Optimal Care of the Injured Patient 2006?
- Is the hospital applying for Level IV and Level V trauma center designation in compliance with the American College of Surgeons document: Resources for Optimal Care of the Injured Patient 1999 (exception: a Level V trauma center will not need to have a general surgeon on the medical staff and may be staffed by nurse practitioners or certified physician assistants)?
- Does the hospital follow appropriate designation requirements and state guidelines for triage of trauma patients?

- Does the hospital follow appropriate designation requirements and state guidelines for treatment of trauma patients?
- Does the hospital follow appropriate state guidelines for the transport and transfer of trauma patients to the most appropriate health care facility?
- Does the hospital assist physicians in selecting the most appropriate physician and facility based upon the nature of the patient's critical care problem and the capabilities of the facility?
- Does the hospital have the ability to collect and submit data to the Idaho Trauma Registry?
- What is the application process for designation and how long will it take? How long will is the designated period? When will hospitals have to re-apply?

What are the components or guidelines needed to develop the rules for the stroke and heart attack elements of the system?

The framework used to create rules for stroke and heart attack may include the following types of considerations:

- Is the hospital accredited by existing nationally recognized accrediting body, such as the Joint Commission on Accreditation of Healthcare Organizations, or the Society of Cardiovascular Patient Care?
- Is the hospital a receiving and/or treatment center for stroke and/or heart attack?
- What are the staffing requirements needed for the Emergency Department for stroke and heart attack treatment?
- What are the on-site and/or response time requirements for physicians?
- Does the hospital use a standardized assessment tool for ischemic stroke and heart attack patients?
- Does the hospital maintain and utilize thrombolytic medications?
- Does the hospital have the ability to receive 12 lead EKG from EMS agencies?
- Does the hospital have Percutaneous Coronary Intervention (PCI) capability? If so, is there a protocol in place to treat patients within the nationally recommended time limits?
- Does the hospital have national standardized acute stroke and heart attack protocol and have staff to implement the protocol?
- Does the hospital maintain ancillary equipment and personnel to diagnose and treat stroke and heart attack patients?
- Are there transfer transport protocols in place?
- Does the hospital have a functioning performance improvement program for acute strokes and heart attacks?

Is the development of a time sensitive emergency system of care part of the Affordable Care Act?

No, this is not part of or mandated by the Affordable Care Act, sometimes referred to as health care reform. This work is being done in response to the direction of the 2013 Legislature's passage of the joint resolution, HCR10, directing that this work be done.

The development of this system of care stems from a need for better health outcomes for conditions that require a timely and emergency response; in this case trauma, heart attack and stroke particularly for Idahoans. All three of these conditions require treatment within a narrow window of time and creating a coordinated system within the state will provide better results for these patients by creating a statewide, evidence-based system of care in which all Idahoans and people visiting Idaho can expect standardized protocols and consistent care with the limitations and parameters of locale available resources. It is about getting the right patient to the right place at the right time.

TRAUMA, STROKE, HEART ATTACK

Where can I find more resources on trauma systems of care?

Resources for a trauma system development through the American College of Surgeons can be found at:

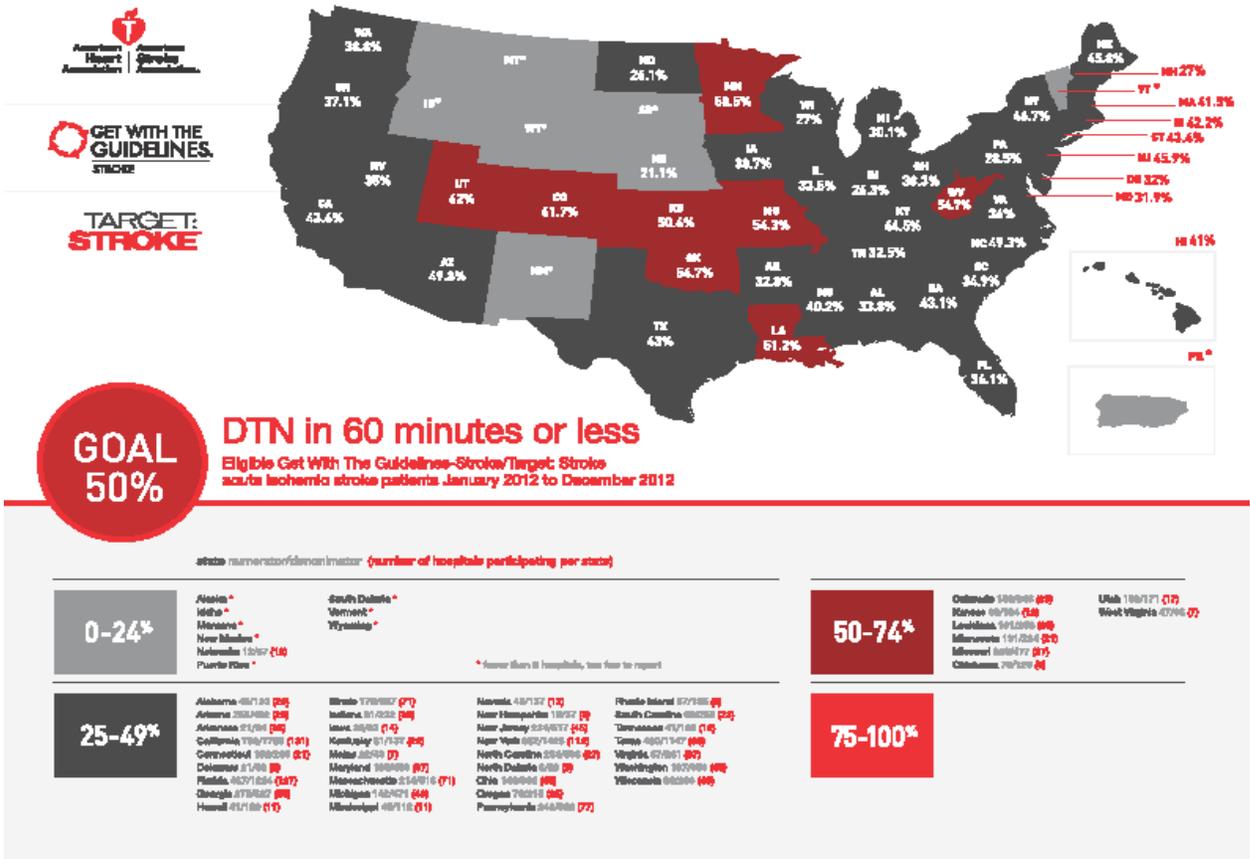
<http://www.facs.org/trauma/tsepc/pdfs/regionaltraumasystems.pdf>.

I understand the concept of a trauma system but am unclear what a heart attack system of care looks like. Where can I get more information?

The American Heart Association has Mission: Lifeline to help promote heart attack or STEMI systems of care. STEMI stands for ST-Segment Elevation Myocardial Infarction, a type of heart attack that is particularly life-threatening and in need of more urgent treatment. The goal of Mission: Lifeline is to provide guidance for developing systems between EMS, referring and receiving hospitals, allowing for seamless and effective treatment to all STEMI patients. More information can be found at:

[http://www.heart.org/HEARTORG/HealthcareResearch/MissionLifelineHomePage/LearnAboutMissionLifeline/STEMI-Systems-of-Care UCM 439065 SubHomePage.jsp](http://www.heart.org/HEARTORG/HealthcareResearch/MissionLifelineHomePage/LearnAboutMissionLifeline/STEMI-Systems-of-Care_UCM_439065_SubHomePage.jsp).

How is Idaho currently performing with regard to stroke compared to other states?



COMMUNICATION AND OUTREACH

Where and how has this work been communicated?

A wide variety of communication and outreach activities have occurred by TSE Workgroup members since this work began in May 2013. Communication and outreach is on-going on both a peer to peer level, in addition to formal presentations in addition to the development of the website. Physician champions have been identified, informed through the process and engaged to provide input on TSE Workgroup deliverables. Presentations have been made at the Idaho Medical Association and Idaho Hospital Association board and regional constituent meetings. EMS personnel and directors have received communication through peer publications, in-person regional meetings and through email. TSE Workgroup members have provided updates to the Idaho Association of Cities and Idaho Association of Counties. The Governor's office, legislators, the Health Quality Planning Commission and the Health Care Task Force have all received or are scheduled to receive updates. Communication and outreach will continuously be provided throughout the process.

Appendix D: Legislation

LEGISLATURE OF THE STATE OF IDAHO
Sixty-second Legislature Second Regular Session - 2014

IN THE SENATE

SENATE BILL NO. 1329

BY HEALTH AND WELFARE COMMITTEE

AN ACT

1 RELATING TO TIME SENSITIVE EMERGENCIES; AMENDING CHAPTER 10, TITLE 56,
2 IDAHO CODE, BY THE ADDITION OF A NEW SECTION 56-1024, IDAHO CODE, TO
3 STATE LEGISLATIVE INTENT; AMENDING CHAPTER 10, TITLE 56, IDAHO CODE,
4 BY THE ADDITION OF A NEW SECTION 56-1025, IDAHO CODE, TO DEFINE TERMS;
5 AMENDING CHAPTER 10, TITLE 56, IDAHO CODE, BY THE ADDITION OF A NEW SEC-
6 TION 56-1026, IDAHO CODE, TO CREATE THE IDAHO TIME SENSITIVE EMERGENCY
7 SYSTEM; AMENDING CHAPTER 10, TITLE 56, IDAHO CODE, BY THE ADDITION OF
8 A NEW SECTION 56-1027, IDAHO CODE, TO CREATE THE IDAHO TIME SENSITIVE
9 EMERGENCY SYSTEM COUNCIL AND TO PROVIDE FOR MEMBERSHIP OF THE COUNCIL;
10 AMENDING CHAPTER 10, TITLE 56, IDAHO CODE, BY THE ADDITION OF A NEW
11 SECTION 56-1028, IDAHO CODE, TO PROVIDE FOR DUTIES OF THE COUNCIL AND
12 TO PROVIDE RULEMAKING AUTHORITY; AMENDING CHAPTER 10, TITLE 56, IDAHO
13 CODE, BY THE ADDITION OF A NEW SECTION 56-1029, IDAHO CODE, TO PROVIDE
14 FOR THE DESIGNATION OF TRAUMA, STROKE AND HEART ATTACK CENTERS AND TO
15 PROVIDE CRITERIA FOR DESIGNATION; AMENDING CHAPTER 10, TITLE 56, IDAHO
16 CODE, BY THE ADDITION OF A NEW SECTION 56-1030, IDAHO CODE, TO CREATE
17 REGIONAL TIME SENSITIVE EMERGENCY COMMITTEES AND TO PROVIDE FOR MEMBER-
18 SHIP AND DUTIES OF THE COMMITTEES; AMENDING THE HEADING FOR CHAPTER 20,
19 TITLE 57, IDAHO CODE, TO REVISE TERMINOLOGY; AMENDING SECTION 57-2001,
20 IDAHO CODE, TO REVISE TERMINOLOGY AND TO REVISE PROVISIONS RELATING TO
21 PURPOSES OF THE TIME SENSITIVE EMERGENCY REGISTRY; AMENDING SECTION
22 57-2002, IDAHO CODE, TO ADD AND REVISE DEFINITIONS AND TO MAKE TECHNICAL
23 CORRECTIONS; AMENDING SECTION 57-2003, IDAHO CODE, TO REVISE TERMI-
24 NOLOGY; AMENDING SECTION 57-2004, IDAHO CODE, TO REVISE TERMINOLOGY;
25 AMENDING SECTION 57-2005, IDAHO CODE, TO REVISE TERMINOLOGY AND TO MAKE
26 A TECHNICAL CORRECTION; AMENDING SECTION 57-2006, IDAHO CODE, TO REVISE
27 TERMINOLOGY AND TO MAKE TECHNICAL CORRECTIONS; AND AMENDING SECTION
28 57-2007, IDAHO CODE, TO REVISE TERMINOLOGY.
29

30 Be It Enacted by the Legislature of the State of Idaho:

31 SECTION 1. That Chapter 10, Title 56, Idaho Code, be, and the same is
32 hereby amended by the addition thereto of a NEW SECTION, to be known and des-
33 ignated as Section 56-1024, Idaho Code, and to read as follows:

34 56-1024. IDAHO TIME SENSITIVE EMERGENCY SYSTEM OF CARE -- STATEMENT
35 OF INTENT. Time sensitive emergencies, specifically blunt trauma injuries,
36 strokes and heart attacks, were three (3) of the top five (5) causes of deaths
37 in Idaho in 2011. Numerous studies throughout the United States have demon-
38 strated that organized systems of care improve patient outcomes, thus reduc-
39 ing the frequency of preventable death and improving the functional status
40 of the patient. The institute of medicine's report "Hospital-Based Emer-
41 gency Care: At the Breaking Point" recommended improving the care of criti-
42 cal illness through regionalization by transporting critically ill patients

1 to designated specialized care centers when appropriate. Early treatment
 2 and transfer when necessary will save the lives of Idahoans stricken with
 3 these emergency conditions. Trauma systems of care are well understood as
 4 they have existed in many other states for decades. It is the intent of this
 5 legislation to create an integrated and responsive system of care for Idaho
 6 citizens. The trauma component will serve as the initial framework in a de-
 7 liberate, incremental implementation approach for a comprehensive system of
 8 care for time sensitive emergencies in Idaho. The time sensitive emergency
 9 system in Idaho is intended to be voluntary and inclusive. The system will be
 10 designed such that all facilities, and in particular critical access hospi-
 11 tals, have the opportunity to participate.

12 SECTION 2. That Chapter 10, Title 56, Idaho Code, be, and the same is
 13 hereby amended by the addition thereto of a NEW SECTION, to be known and des-
 14 ignated as Section 56-1025, Idaho Code, and to read as follows:

15 56-1025. DEFINITIONS. As used in sections 56-1024 through 56-1030,
 16 Idaho Code:

- 17 (1) "EMS agency" means any organization licensed by the EMS bureau that
 18 operates an air medical service, ambulance service or nontransport service.
 19 (2) "EMS bureau" means the bureau of emergency medical services of the
 20 department of health and welfare.
 21 (3) "Council" means the Idaho time sensitive emergency system council.
 22 (4) "TSE" means time sensitive emergency, specifically trauma, stroke
 23 and heart attack.

24 SECTION 3. That Chapter 10, Title 56, Idaho Code, be, and the same is
 25 hereby amended by the addition thereto of a NEW SECTION, to be known and des-
 26 ignated as Section 56-1026, Idaho Code, and to read as follows:

27 56-1026. IDAHO TIME SENSITIVE EMERGENCY SYSTEM -- CREATION. There is
 28 hereby created a time sensitive emergency system within the department of
 29 health and welfare.

30 SECTION 4. That Chapter 10, Title 56, Idaho Code, be, and the same is
 31 hereby amended by the addition thereto of a NEW SECTION, to be known and des-
 32 ignated as Section 56-1027, Idaho Code, and to read as follows:

33 56-1027. IDAHO TIME SENSITIVE EMERGENCY SYSTEM COUNCIL -- CREATION --
 34 COMPOSITION. (1) There is hereby created the Idaho time sensitive emergency
 35 system council hereinafter known as the "council." Council members shall be
 36 appointed by the governor with the approval of the board of health and wel-
 37 fare. Council members shall be selected to assure equitable geographic, rural
 38 and clinical specialty representation.

39 (2) The membership of the council shall include the following:

- 40 (a) One (1) representative from a facility that either holds or is seek-
 41 ing designation as an Idaho trauma center. The representative may be
 42 the medical director, the coordinator or the program manager responsi-
 43 ble for the respective facility's trauma program;
 44 (b) One (1) representative from a facility that either holds or is seek-
 45 ing designation as an Idaho stroke facility. The representative may be

1 the medical director, the coordinator or the program manager responsible for the respective facility's stroke program;

2 (c) One (1) representative from a facility that either holds or is seeking designation as an Idaho heart attack center. The representative may

3 be the medical director, the coordinator or the program manager responsible for the respective facility's heart attack program;

4 (d) One (1) representative from an EMS agency licensed by the department that serves a primarily urban response area;

5 (e) One (1) representative from an EMS agency licensed by the department that serves a primarily rural response area;

6 (f) One (1) representative from an air medical EMS agency licensed by the department;

7 (g) One (1) administrator of an Idaho hospital that either holds or is seeking Idaho trauma, stroke or heart attack designation;

8 (h) One (1) chief executive officer or administrator of an Idaho critical access hospital that either holds or is seeking Idaho trauma, stroke or heart attack designation;

9 (i) One (1) licensed health care provider who routinely works in the emergency department of a hospital that serves a primarily urban area that either holds or is seeking trauma, stroke or heart attack designation;

10 (j) One (1) licensed health care provider who routinely works in the emergency department of a hospital that serves a primarily rural area that either holds or is seeking trauma, stroke or heart attack designation; and

11 (k) One (1) Idaho citizen with an interest in furthering the quality of trauma, stroke and heart attack care in Idaho.

12 (3) The chair of each regional TSE committee shall be added as a voting member of the council when the regional TSE committee is implemented and the chair is selected.

13 (4) Members of the council shall serve four (4) year terms with half of the members initially appointed, as determined by lot, serving two (2) year terms. If a vacancy occurs, the governor shall appoint a replacement to fill the unexpired term. Members may be reappointed and may be removed for cause by the governor.

14 (5) The governor shall appoint a chair who shall serve a term of two (2) years. The council may elect other officers as it may deem necessary and appropriate. The council shall meet at least semiannually and at the call of the chair.

15 SECTION 5. That Chapter 10, Title 56, Idaho Code, be, and the same is hereby amended by the addition thereto of a NEW SECTION, to be known and designated as Section 56-1028, Idaho Code, and to read as follows:

16 56-1028. IDAHO TIME SENSITIVE EMERGENCY SYSTEM COUNCIL -- DUTIES -- RULEMAKING. The duties of the council shall be as follows:

17 (1) Develop, implement and monitor a statewide system that includes trauma, stroke and heart attack facilities;

18 (2) Provide oversight of the system, assuring adherence to standards established by the council;

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- 1 (3) Establish substate system regions that provide more effective ac-
 2 cess to the system. In the designation of these regions, specific considera-
 3 tion shall be given to geography and patient referral patterns for the facil-
 4 ities and agencies included therein;
- 5 (4) Establish a regional TSE committee in each substate region;
- 6 (5) Develop the standards and criteria each facility is required to
 7 meet concerning personnel, equipment, resources, data collection and orga-
 8 nizational capabilities;
- 9 (6) Develop procedures for and the duration of the designation of a
 10 trauma, stroke or heart attack facility, including application procedures,
 11 verification procedures, complaint investigation and emergency suspension
 12 or revocation of designation;
- 13 (7) Develop operational procedures for the regional TSE committees;
- 14 (8) Facilitate the implementation of nationally accepted standards
 15 throughout the system;
- 16 (9) Set procedures for the acquisition of data needed to successfully
 17 manage the system;
- 18 (10) Promulgate rules to fulfill the purpose of this act; and
- 19 (11) Collaborate and cooperate with the EMS bureau, the EMS physician
 20 commission, local governments, local EMS agencies and associations to ad-
 21 dress recruitment and retention concerns of local EMS providers.

22 SECTION 6. That Chapter 10, Title 56, Idaho Code, be, and the same is
 23 hereby amended by the addition thereto of a NEW SECTION, to be known and des-
 24 ignated as Section 56-1029, Idaho Code, and to read as follows:

- 25 56-1029. IDAHO TRAUMA, STROKE AND HEART ATTACK CENTERS -- DESIGNA-
 26 TION. (1) The council shall designate a hospital as a trauma, stroke or heart
 27 attack center when such hospital, upon proper application and verification,
 28 has been found by the council to meet the applicable level of trauma, stroke
 29 or heart attack center criteria as established by the council.
- 30 (2) In developing trauma, stroke and heart attack center designation
 31 criteria, the council shall use, as is practicable, appropriate peer-re-
 32 viewed or evidence-based research including, but not limited to, the most
 33 recent guidelines of the American college of surgeons committee on trauma,
 34 American college of cardiology and American heart association for heart at-
 35 tack centers, or the joint commission's primary stroke center certification
 36 program criteria for stroke centers, or primary and comprehensive stroke
 37 center recommendations as published by the American stroke association or
 38 other nationally recognized authoritative standards.
- 39 (3) Participation criteria shall be published in rules promulgated by
 40 the council.
- 41 (4) The council shall conduct a periodic verification review of every
 42 trauma, heart attack and stroke facility. Verification reviews shall be co-
 43 ordinated for the different types of centers to the extent practicable with
 44 hospital resources. No person who has a substantial conflict of interest
 45 in the operation of any trauma, stroke and heart attack center under review
 46 shall participate in the verification review of the facility.
- 47 (5) The council shall coordinate an on-site review as necessary to as-
 48 sure that a hospital meets the criteria for the desired designation. The
 49 council may waive an on-site review when a hospital has been verified by a

1 nationally recognized accrediting body to meet or exceed standards estab-
2 lished by the council.

3 (6) The council may deny, place on probation, suspend or revoke any des-
4 igation when it has reasonable cause to believe that there has been mis-
5 representation or falsification of information or a substantial failure to
6 comply with the criteria for designation promulgated by the council. If the
7 council has reasonable cause to believe that a hospital is not in compliance
8 with such provisions, it may require the facility to submit additional docu-
9 mentation or undergo additional site reviews to verify compliance.

10 (7) No hospital may hold itself out to the public as an Idaho trauma cen-
11 ter, stroke or heart attack facility unless it is designated as such by the
12 council.

13 (8) A hospital aggrieved because of the council's decision shall be en-
14 titled to appeal to the council in the manner prescribed by the council and
15 shall be afforded reasonable notice and opportunity for a fair hearing.

16 SECTION 7. That Chapter 10, Title 56, Idaho Code, be, and the same is
17 hereby amended by the addition thereto of a NEW SECTION, to be known and des-
18 ignated as Section 56-1030, Idaho Code, and to read as follows:

19 56-1030. REGIONAL TIME SENSITIVE EMERGENCY COMMITTEES -- MEMBERSHIP
20 -- DUTIES. (1) Pursuant to section 56-1028(4), Idaho Code, each substate re-
21 gion designated by the council shall have a time sensitive emergency commit-
22 tee.

23 (2) Membership of each regional TSE committee shall be based on the
24 needs of the region and can be modified as the regional TSE committee deter-
25 mines, but each regional committee shall be initially comprised as follows:

26 (a) Each facility that is designated or is seeking designation by the
27 council as a trauma center, stroke facility or heart attack facility may
28 appoint one (1) representative for each of the designations that the fa-
29 cility holds or is seeking to hold to the regional committee for the re-
30 gion in which the facility is located;

31 (b) Each air medical EMS agency that provides patient transport within
32 the region may appoint one (1) representative;

33 (c) Each hospital that either holds or is seeking Idaho trauma, stroke
34 or heart attack designation may appoint the hospital administrator;

35 (d) Each EMS agency with a response area in the region may appoint one
36 (1) representative; and

37 (e) The regional committee shall include a pediatrician or an expert in
38 children's trauma.

39 (3) Members of a regional committee shall elect a chair to serve a term
40 of two (2) years.

41 (4) The duties of each regional committee shall be as follows:

42 (a) Implement care guidelines, policies, procedures and protocols for
43 the regional TSE system;

44 (b) Conduct regional quality improvement, including receipt of reports
45 prepared by the council containing trauma, stroke and heart attack data
46 and making recommendations to facilities within the region based upon
47 those reports;

48 (c) Advise the council concerning the statewide system;

- 1 (d) Establish trauma, stroke and heart attack education and prevention
- 2 programs;
- 3 (e) Provide advice concerning trauma, stroke and heart attack care to
- 4 health care facilities and other providers of health care;
- 5 (f) Perform other duties required by Idaho code and council rules; and
- 6 (g) Conduct other activities needed to ensure optimal delivery of
- 7 trauma, stroke and heart attack care services within the region.

8 SECTION 8. That the Heading for Chapter 20, Title 57, Idaho Code, be,
9 and the same is hereby amended to read as follows:

10 CHAPTER 20
11 TRAUMA TIME SENSITIVE EMERGENCY (TSE) REGISTRY

12 SECTION 9. That Section 57-2001, Idaho Code, be, and the same is hereby
13 amended to read as follows:

14 57-2001. PURPOSE OF THE REGISTRY. (1) The specific issues to be iden-
15 tified and evaluated through the ~~trauma~~ TSE registry are:

- 16 (a) ~~Injury~~ Trauma, stroke and heart attack TSE surveillance;
- 17 (b) Geographic patterns of trauma incidence;
- 18 (c) Types of ~~injuries~~ TSEs treated in hospitals in Idaho;
- 19 (d) Areas or regions of the state where improvements in the emergency
- 20 medical system may be needed;
- 21 (e) Public education and prevention needs and efforts; and
- 22 (f) Other factors to consider in recommending, designing or implement-
- 23 ing a statewide ~~trauma~~ TSE system.

24 (2) The data collected by the ~~trauma~~ TSE registry shall be of such a na-
25 ture as to allow the department to identify at least the following:

- 26 (a) Lack of aAccess to care and improvement of the availability and de-
- 27 livery of prehospital, hospital and post-acute TSE care;
- 28 (b) Performance of the out-of-hospital and hospital emergency medical
- 29 systems;
- 30 (c) Costs of ~~trauma~~ TSE care; and
- 31 (d) Outcomes of persons who are victims of ~~trauma~~ TSEs.

32 (3) The department shall evaluate the data collected, as well as data
33 collected from other relevant sources, and, beginning one (1) year after the
34 effective date of this chapter, shall prepare an annual report. The data
35 shall be used to regularly produce and disseminate aggregated and de-iden-
36 tified analytical reports and for recommending benchmark quality measures
37 and outcomes and needed educational resources to the TSE system of care state
38 board.

39 SECTION 10. That Section 57-2002, Idaho Code, be, and the same is hereby
40 amended to read as follows:

41 57-2002. TRAUMA TSE REGISTRY -- DEFINITIONS. When used in this chap-
42 ter:

- 43 (1) "Confidential information" means information which may identify a
- 44 patient, health care facility or health care practitioner.

1 (2) "Contractor" means that individual, partnership, corporation or
2 other entity performing ~~trauma TSE~~ registry services under a contractual
3 agreement with the department.

4 (3) "~~De-~~identified information" means records and information con-
5 tained in the ~~trauma TSE~~ registry, including compilations and analyses
6 thereof, ~~which does that~~ do not contain information which might identify a
7 patient, health care facility or health care practitioner.

8 (4) "Department" means the bureau of emergency medical services and
9 preparedness of the Idaho department of health and welfare.

10 (5) "Heart attack" means STEMI, which is a common name for ST-elevation
11 myocardial infarction, a more precise definition for a type of heart attack
12 that is caused by a prolonged period of blocked blood supply that affects a
13 large area of the heart and has a substantial risk of death and disability
14 calling for a quick response.

15 (6) "Stroke" means an interruption of blood flow to the brain causing
16 paralysis, slurred speech and/or altered brain function usually caused by a
17 blockage in a blood vessel that carries blood to the brain (ischemic stroke)
18 or by a blood vessel bursting (hemorrhagic).

19 (7) "Trauma" is the result of an act or event that damages, harms or
20 hurts a human being resulting in intentional or unintentional damage to the
21 body resulting from acute exposure to mechanical, thermal, electrical, or
22 chemical energy or from the absence of such essentials as heat or oxygen.

23 (8) "TSE" means a time sensitive emergency, specifically trauma, heart
24 attack or stroke.

25 (69) "~~Trauma TSE~~ registry" means the population-based data system that
26 provides ongoing and systematic collection, analysis, interpretation, and
27 dissemination of information related to ~~injury trauma, stroke and heart at-~~
28 ~~tack~~ for system improvement, prevention and research activities. Elements
29 in the registry shall describe the nature and scope of the injury ~~problem,~~
30 illness or health condition, identify the incidence and prevalence of trau-
31 matic injury, illness or health condition, severity of injury, performance
32 of out-of-hospital and hospital emergency medical systems, patient outcome,
33 and the impact of trauma, stroke and heart attack on the health care system.

34 (710) "~~Trauma TSE~~ system" means the organized approach to treat-
35 ing injured patients that establishes and promotes standards for patient
36 transportation, equipment, and information analysis for effective and co-
37 ordinated ~~trauma TSE~~ care. ~~Trauma TSE~~ systems represent a continuum of care
38 that is fully integrated into the emergency medical services system and is a
39 coordinated effort between out-of-hospital and hospital providers with the
40 close cooperation of medical specialists in each phase of care. The focus is
41 on prevention, coordination of acute care, and aggressive rehabilitation.
42 ~~Ideally, s~~Systems are designed to be inclusive of all ~~injured~~ patients with
43 a TSE requiring acute care facilities, striving to meet the needs of the
44 patient, regardless of the severity of injury, geographic location or popu-
45 lation density. ~~Ultimately, a trauma A TSE~~ system seeks to prevent injuries
46 from happening and the reduction of death and disability when it does happen.

47 SECTION 11. That Section 57-2003, Idaho Code, be, and the same is hereby
48 amended to read as follows:

1 57-2003. ESTABLISHMENT OF TRAUMA TSE REGISTRY. The department, or an
2 authorized contractor of the department, shall:

3 (1) Establish a ~~trauma~~ TSE registry to collect and analyze information
4 on the incidence, severity, causes and outcomes of ~~trauma~~ TSEs, and other
5 such data necessary to evaluate trauma, strokes and heart attacks and the
6 health system's response to it;

7 (2) Establish the data elements and data dictionary, including child
8 specific data elements that hospitals must report, and the time frame and
9 format for reporting by adoption of rules in the manner provided in chapter
10 52, title 67, Idaho Code;

11 (3) Support, where necessary, data collection and abstraction by pro-
12 viding:

13 (a) A data collection system and technical assistance to each hospital;
14 and

15 (b) Funding or, at the discretion of the department, personnel for col-
16 lection and abstraction for each hospital.

17 SECTION 12. That Section 57-2004, Idaho Code, be, and the same is hereby
18 amended to read as follows:

19 57-2004. PARTICIPATION IN PROGRAM. (1) Each licensed hospital shall
20 report each case of ~~trauma~~ TSE which meets the inclusion criteria to the de-
21 partment or the authorized contractor of the department within one hundred
22 eighty (180) days of treatment.

23 (2) Each report of ~~trauma~~ TSE shall include information as defined by
24 the department.

25 (3) The department or authorized contractor of the department shall
26 have physical access to all records which would identify reportable cases
27 and/or establish characteristics, treatment or medical status of reportable
28 cases in the event that there has been a failure to report as delineated in
29 subsections (1) and (2) of this section.

30 (4) Nothing in this chapter shall prevent the department or authorized
31 contractor from identifying and reporting cases using data linkages with
32 death records, other ~~trauma~~ registries, and other potential sources.

33 SECTION 13. That Section 57-2005, Idaho Code, be, and the same is hereby
34 amended to read as follows:

35 57-2005. CREATION OF TRAUMA TSE REGISTRY FUND -- PURPOSE. There is
36 hereby created and established in the state treasury a fund to be known as
37 the "Trauma Time Sensitive Emergencies (TSE) Registry Fund" to which shall
38 be deposited the revenues derived from grants, appropriations or other
39 sources of funds. All moneys now or hereafter in the ~~trauma~~ TSE registry fund
40 are hereby dedicated for the purpose of contracting for and obtaining the
41 services of a continuous registry of all ~~trauma~~ time sensitive emergency in-
42 cident patients in the state of Idaho and maintaining a cooperative exchange
43 of information with other states providing a similar ~~trauma~~ TSE incident
44 registry. The department of health and welfare, bureau of emergency medical
45 services and preparedness, is charged with the administration of this fund
46 for the purposes specified herein. All claims against the fund shall be

1 examined, audited and allowed in the manner now or hereafter provided by law
2 for claims against the state of Idaho.

3 SECTION 14. That Section 57-2006, Idaho Code, be, and the same is hereby
4 amended to read as follows:

5 57-2006. CONFIDENTIALITY. (1) Information and records contained in
6 the ~~trauma TSE~~ registry shall be kept confidential and may be released only
7 as provided by this chapter and the rules of the department.

8 (2) The department and an authorized contractor may enter into agree-
9 ments to exchange confidential information with other ~~trauma TSE~~ registries
10 in order to obtain complete reports of Idaho residents treated in other
11 states and to provide information to other states regarding their residents
12 treated in Idaho. Agreements sharing information from the ~~trauma TSE~~ reg-
13 istry shall include a provision requiring the receiving agency to keep such
14 information confidential.

15 (3) The department and an authorized contractor may, in their discre-
16 tion, publish or furnish to health researchers and the public, ~~de~~-identified
17 information including compilations and analyses thereof.

18 (4) The department and an authorized contractor may furnish confi-
19 dential information to other ~~trauma TSE~~ registries, federal ~~trauma TSE~~
20 programs, or health researchers in order to perform and collaborate with
21 research studies. Persons and entities receiving confidential information
22 for research purposes must comply with rules of the department relating to
23 the confidentiality of ~~trauma TSE~~ registry records and information.

24 (5) The department and an authorized contractor may furnish confiden-
25 tial information relating to a specific licensed hospital, including compi-
26 lations and analyses of such confidential information, to the specific li-
27 censed hospital to which it relates.

28 (6) ~~Trauma TSE~~ registry records and information shall not be available
29 for purposes of litigation except by order of the court. Any such order
30 shall contain such protective provisions as are reasonable and necessary
31 to prevent the public or further disclosure of the records and information
32 and shall contain a provision requiring the destruction of the records and
33 information when no longer needed for the litigation.

34 SECTION 15. That Section 57-2007, Idaho Code, be, and the same is hereby
35 amended to read as follows:

36 57-2007. LIABILITY. (1) No action for damages arising from the disclo-
37 sure of confidential information may be maintained against any reporting en-
38 tities or employees of such entities that participate in good faith in the
39 reporting of ~~trauma TSE~~ registry data in accordance with this chapter.

40 (2) No license of a health care facility or health care practitioner may
41 be denied, suspended or revoked for the good faith disclosure of confiden-
42 tial information in accordance with this chapter.

43 (3) The immunity granted in subsections (1) and (2) of this section
44 shall not be construed to apply to the unauthorized disclosure of confiden-
45 tial information when such disclosure is due to gross negligence or willful
46 misconduct of the reporting entities.

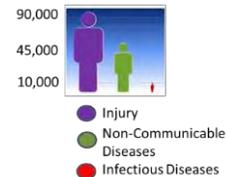
Appendix F: Facts about Trauma, Stroke, and Heart Attack¹

Facts about Trauma, Stroke and Health Attack

Idaho currently does not have a comprehensive, coordinated, statewide system for gathering the relevant data on trauma, stroke and health attack. However, here is some of what we do know.

Current Facts about Trauma

1. Each year, trauma accounts for 37 million emergency department visits and 2.6 million hospital admissions and kills three times the number of Americans killed during the Vietnam conflict. (Centers for Disease Control and Prevention, April 2012, found at: www.nationaltraumainstitute.org)
2. Rural Residents are 50% more likely to die from trauma than their urban peers. (Gonzalez, R.P., Cummings, G., Mulekar, M., Roding, C.B. 2006, Increased Mortality in Rural Vehicular Trauma: Identifying Contributing Factors Through Data Linkage. *Journal of Trauma Injury, Infection, and Critical Care*, 61(2), 404-409.)
3. In 2010, 647 Idahoans lost their lives to unintentional injury. (Vital Statistics Summary for Idaho – 2010. Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare, September 2011.)
4. Trauma is the leading cause of death of children in the United States. (National Trauma Institute, *The Case for Trauma Funding*, www.nationaltraumainstitute.org)
5. Idaho has a higher death rate from trauma than the national average, 43% versus 41%. (Idaho Vital Statistics 2009, Idaho Department of Health and Welfare, Division of Health, Bureau of Vital Records and Health Statistics, January 2011.)
6. Trauma is the number cause of death for age group 1-44, or 47% of all deaths in this age range. (Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. Accessed April 11, 2012.)



Current Facts about Stroke

1. Stroke was the 5th leading cause of death in Idaho in 2006-2010 and was responsible for the deaths of 641 Idahoans in 2010. (CDC WISQARS (www.cdc.gov/nccipc/wisqars) Accessed 12/5/2012)
2. Stroke was the 10th leading cause of disability reported in the U.S. in 2005. (Centers for Disease Control and Prevention. Prevalence and Most Common Causes of Disability Among Adults ---- United States, 2005. Available at <http://www.cdc.gov/mmwrhtml/mm5816a2.htm>)

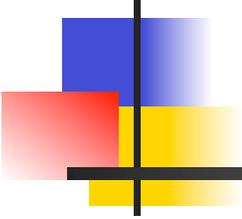
¹ Excerpted from Dr. Robert J. Polk's Memo to the 2013 Idaho Legislative Committees Re: Recommendation on time sensitive health conditions.

3. Idaho's death rate due to stroke for adults aged 35+ is 81.4 per 100,000 compared to the national rate of 78.6 per 100,000, 3.6% higher than the national rate.
(<http://apps.nccd.cdc.gov/DHDSPAtlas/reports.aspx>)
4. Idaho has two hospitals that have completed their Joint Commission Primary Stroke center Certification, with another two hospitals in process. (Personal Communication. April Dunham, DHW Heart Disease and Stroke Prevention Program. 12/5/2012)
5. It is estimated that stroke costs the nation \$54 billion annually, including the cost of health services, medications, and lost productivity. (Personal Communication. April Dunham, DHW Heart Disease and Stroke Prevention Program. 12/5/2012)

Current Facts about Heart Attack

1. Heart disease, including STEMI, was the 2nd leading cause of death in Idaho in 2006-2010 lead only by cancer. (CDC WISQARS (www.cdc.gov/ncipc/wisqars) Accessed 12/5/2012)
2. Idaho's death rate due to heart attack for adults aged 35+ is 93.3 per 100,000 compared to the national rate of 77.5 per 100,000, an alarming 20% higher than the national rate.
(<http://apps.nccd.cdc.gov/DHDSPAtlas/reports.aspx>)
3. Heart disease was the 3rd leading cause of disability reported in the U.S. in 2005 (Centers for Disease Control and Prevention. Prevalence and Most Common Causes of Disability Among Adults ---- United States, 2005. Available at
<http://www.cdc.gov/mmwr/html/mm5816a2.htm>)

Appendix G: Presentation - State of Utah Time Sensitive Emergency System



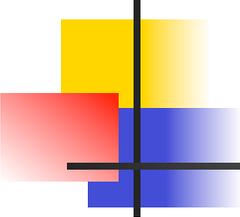
State of Utah—Status Update

Time Sensitive Emergencies

Robert F. Jex, RN, MHA, FACHE
Bureau of EMS and Preparedness

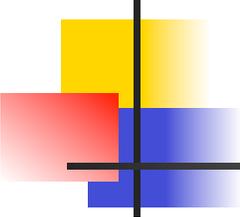
Jim Beckstrand, FACHE
Delta Community Medical Center
Fillmore Community Medical Center





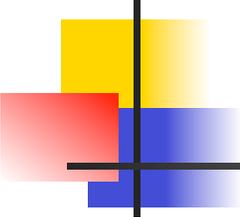
Guiding Principles

- Provide nationally accepted evidence based best practices to time sensitive emergencies.
- Insure that standards are adaptable to all providers wishing to participate
- Require that all facilities institute a practiced, systematic approach to time sensitive emergencies.
- Reduce morbidity and mortality from time sensitive emergencies.
- Design inclusive systems for time sensitive emergencies.
- Participation is Voluntary/Data submission is mandatory



Guiding Principles

Any organism (or institution, person, group) that thinks solely in terms of its own survival will eventually destroy its environment.



Guiding Principles

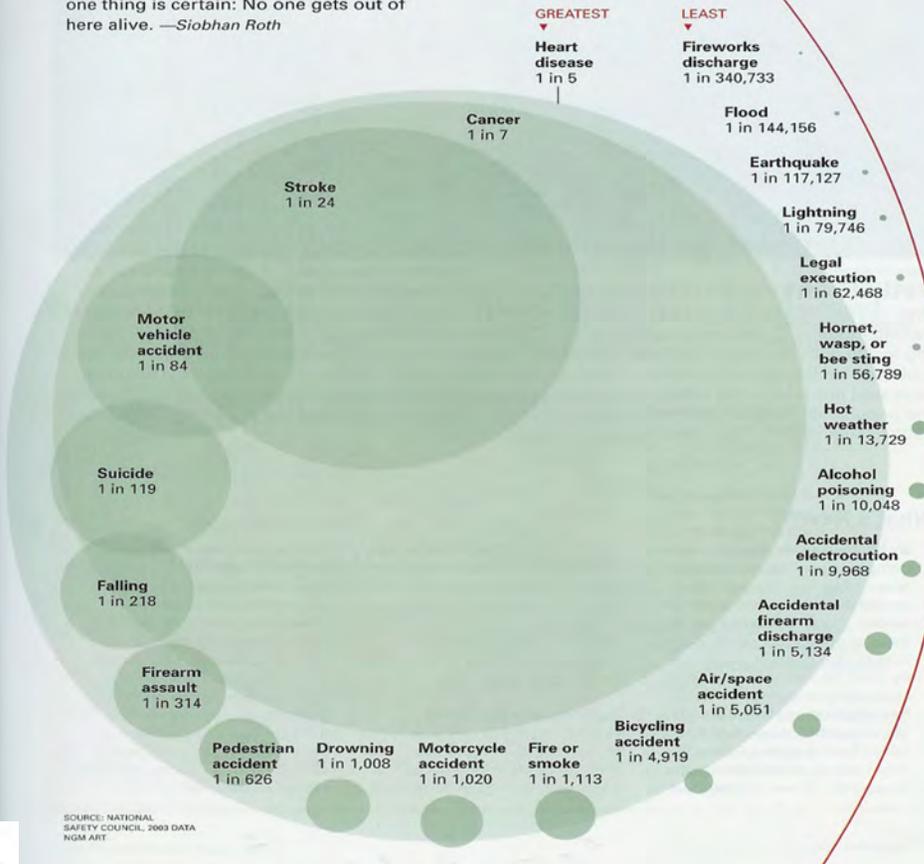
To be self taught is no disgrace,
but to be self-certified is
another matter entirely.

HEALTH

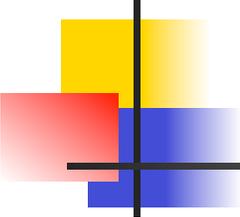
Ways to Go

When and how death will arrive can rarely be predicted, but statistics reveal what holds the greatest chance of ending a life. Riding a motorcycle, for example, is far riskier than playing with fireworks, statistically speaking. This chart shows what the lifetime probabilities are of a U.S. resident dying in a relatively common event, such as a pedestrian accident, or a less common but larger scale catastrophe, such as an earthquake. No matter what the cause, one thing is certain: No one gets out of here alive. —*Siobhan Roth*

Total odds of dying, any cause
1 in 1
(100%)



SOURCE: NATIONAL SAFETY COUNCIL, 2003 DATA
NGM ART



Utah STEMI SYSTEM

- STEMI
 - 90 Minute door to balloon time.
 - 12 lead ECG capability from the field
 - Thrombolytic therapy if appropriate
 - Develop treatment guidelines for STEMI in CAH/Rural hospitals
 - Require Performance Improvement with hospital/EMS

Utah STEMI SYSTEM

Jordan Valley
MEDICAL CENTER

EMERGENCY PATIENT UPDATE

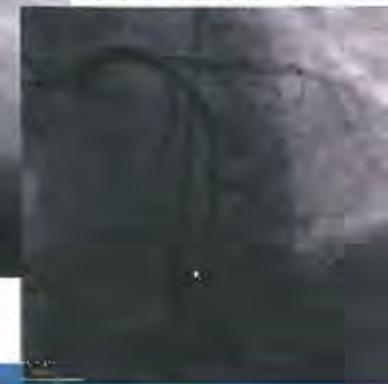
- ▶ Patient Name: **A., M.** Age/Sex: **40 y M** Date: **3/21/11**
- ▶ Responding Agency: **SJFD #61 (B shift)**
- ▶ Crew: **Chad Jensen, Andrew James, Mike Richards, Weston Walker**
- ▶ Dispatch/at scene/transport times: **2012/2016/2025**
- ▶ P12L obtained/received times: **2022/2023**
- ▶ EMS arrival to hospital: **2038**
- ▶ Code STEMI initiated: **2024**
- ▶ Patient arrived in cath lab: **2114**
- ▶ Reperfusion Time: **2131**
- ▶ Door to Balloon Time: 53 minutes
- ▶ 911 call to Balloon Time: 79 minutes
- ▶ **Case details and outcome:** Mr. A had sudden onset of CP while exercising, with weakness, SOB, diaphoresis and called EMS. Upon arrival, EMS acquired 12 lead EKG, transmitted to JVMC and Code Stemi initiated from patient's home. O2, IV, NITG and morphine given en route to ED. Meds given in ED.
- ▶ Angiography showed 100% LAD occlusion. Angioplasty and a stent were placed with good results. Patient was d/c to home on 3/23/11 with instructions to f/u with cardiology in 1 week
- ▶ **Great Job SJFD!!!!**



Before - 100% LAD occlusion

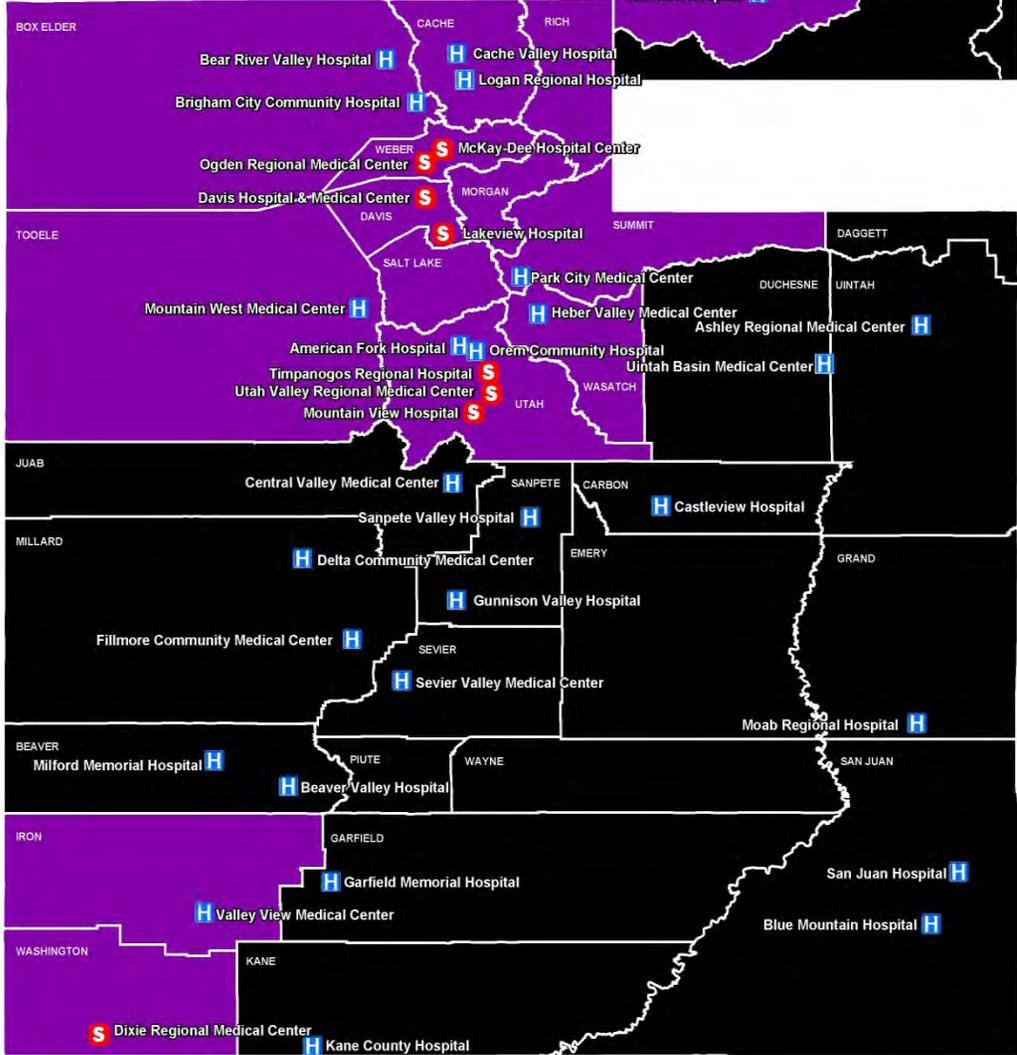
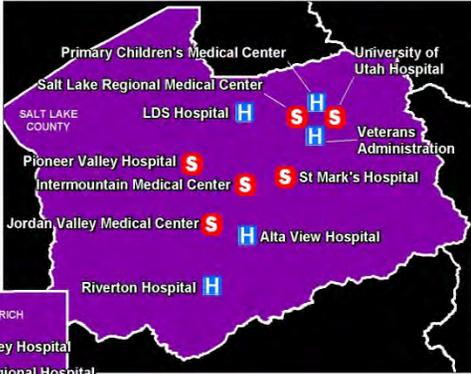


After - LAD Stent Plac



Utah HOSPITALS

- County with 12-lead ECG Service
- S STEMI / PCI Hospital
- H Hospital

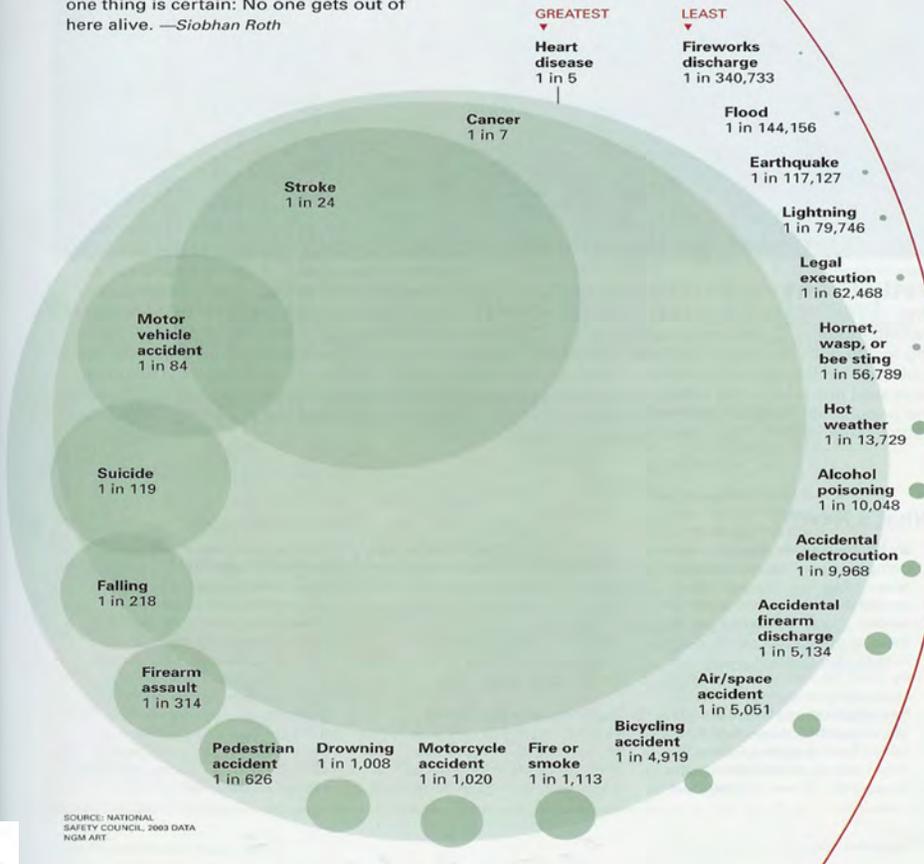


HEALTH

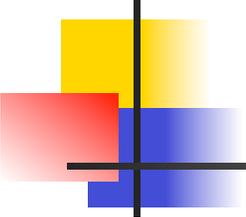
Ways to Go

When and how death will arrive can rarely be predicted, but statistics reveal what holds the greatest chance of ending a life. Riding a motorcycle, for example, is far riskier than playing with fireworks, statistically speaking. This chart shows what the lifetime probabilities are of a U.S. resident dying in a relatively common event, such as a pedestrian accident, or a less common but larger scale catastrophe, such as an earthquake. No matter what the cause, one thing is certain: No one gets out of here alive. —*Siobhan Roth*

Total odds of dying, any cause
1 in 1
(100%)

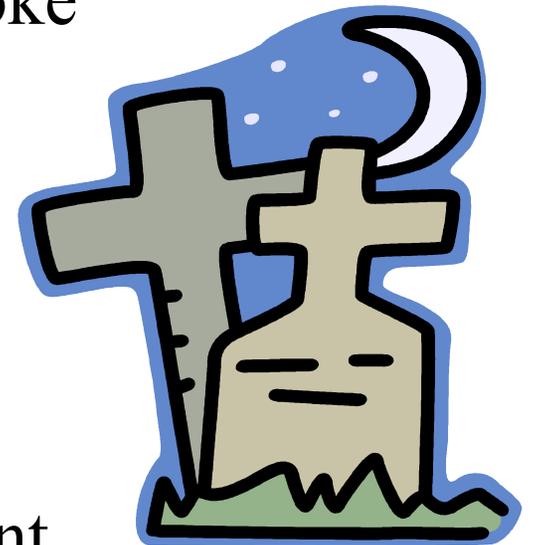


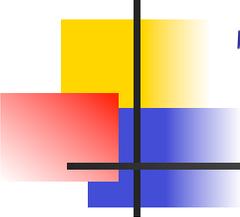
SOURCE: NATIONAL SAFETY COUNCIL, 2003 DATA
NGM ART



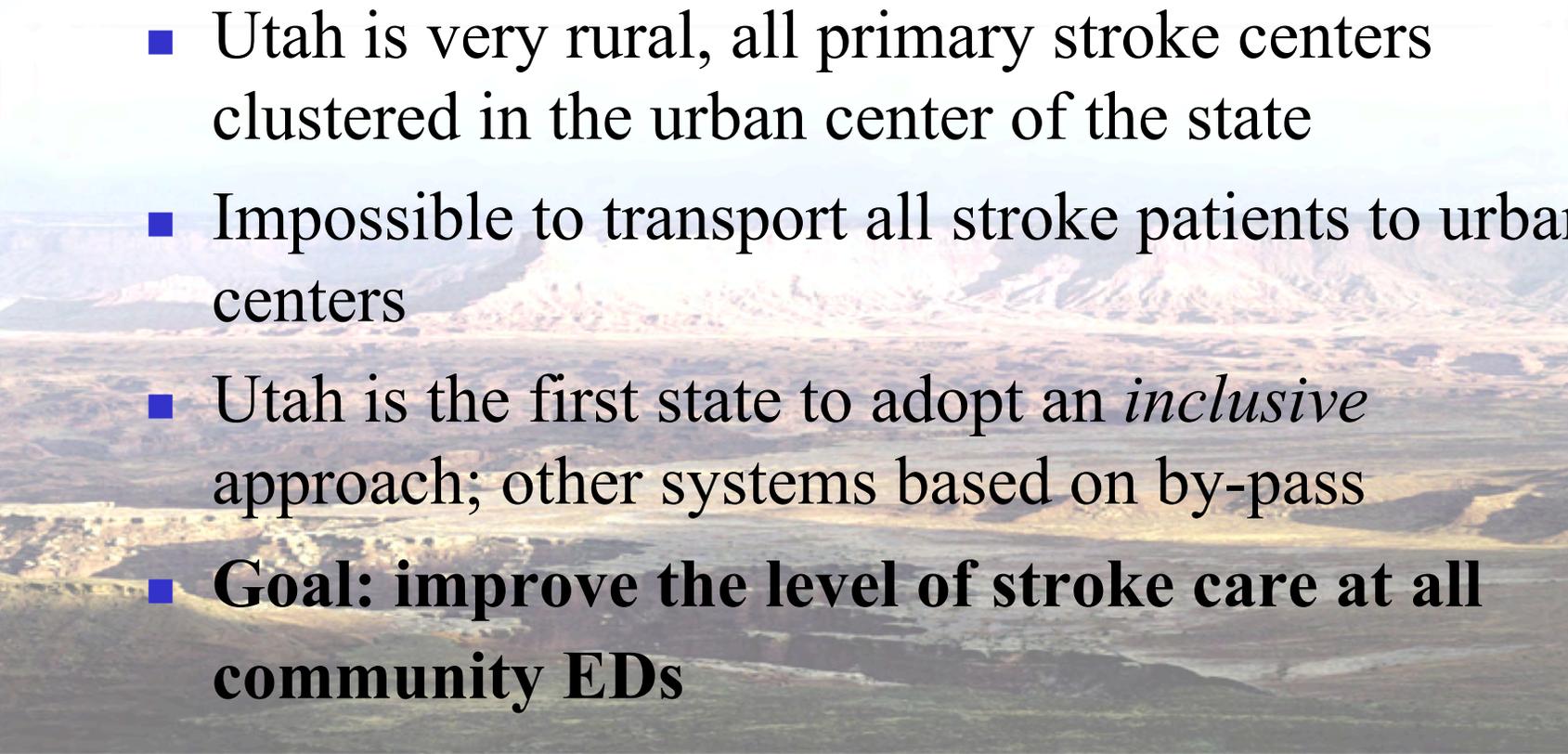
The Utah Stroke System--Need

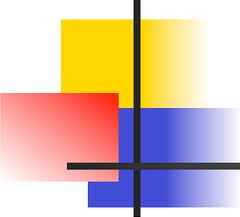
- 45.7 Stroke Deaths per 100,000 population
- Third leading cause of death in Utah
- 3,256 visits/yr to hospitals with Dx Stroke
- Stroke care is time sensitive
- 70% of Strokes are ischemic
- There is a golden 3 – 4.5 hour window for Rx
- Potential benefits if eligible for treatment





The Utah Stroke System--Need

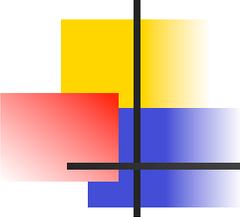
- 
- Utah is very rural, all primary stroke centers clustered in the urban center of the state
 - Impossible to transport all stroke patients to urban centers
 - Utah is the first state to adopt an *inclusive* approach; other systems based on by-pass
 - **Goal: improve the level of stroke care at all community EDs**



The Hub and Spoke System

- Hubs: Primary Stroke Centers
 - Act as referral and consultation centers to the SRFs
 - Accredited by national body (JCAHO/DNV etc.)
- Spokes: Stroke Receiving Facilities
 - Utilize PSCs for consultation
 - Phone / Telestroke
 - May transfer patient, if desired
 - UDOH Verified

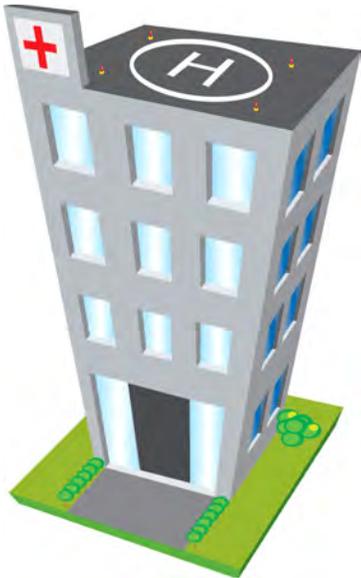




Spoke and Hub

■ Hub Hospitals (Primary Stroke Centers)

- U of U
- IMC
- McKay-Dee
- Utah Valley Regional
- Ogden Regional
- Jordan Valley
- Pioneer Valley
- St. Marks

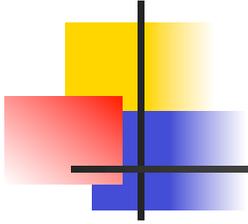


■ Spoke Hospitals (State Verified SRFs)

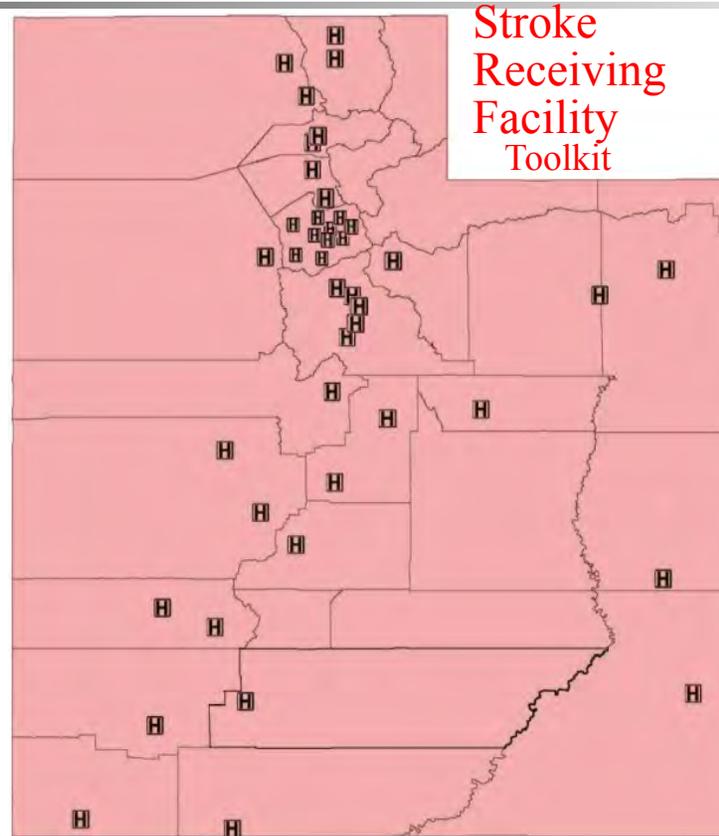
- South Jordan Medical Center
- Uintah Basin Medical Center
- Park City
- Lakeview
- Timpanogos
- San Juan
- Dixie Regional
- Alta View
- American Fork
- Cache Valley
- Mountain View
- Central Valley (Nephi)
- Gunnison Valley
- Bear River Valley
- Davis North
- Brigham City Community
- Riverton
- Logan Regional
- Mt West (Tooele)
- Davis Hospital and Medical Center



Total: 28 of 43 Utah Hospitals voluntarily participating so far



Stroke Tool Kit



Utah State Stroke System

Stroke Receiving Facility Standards

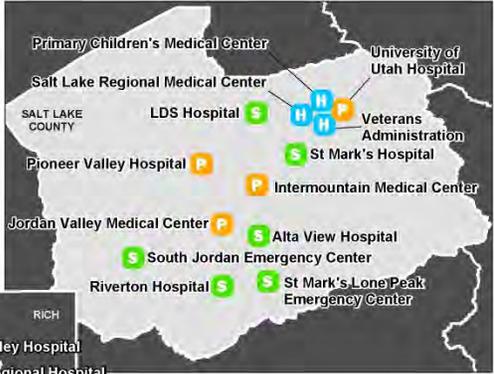
- Stroke Team available 24/7
- Phone or Telestroke consultation with Primary Stroke Center available
- 24 hr MD and RN in ED authorized to begin stroke protocol using standard forms and protocol
- CT and Lab available 24/7: results in 45 minutes
- Thrombolytic (rt-PA) available in/to ED
- Stroke Coordinator and administrative support

Stroke Receiving Facility Standards

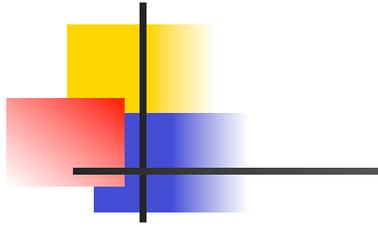
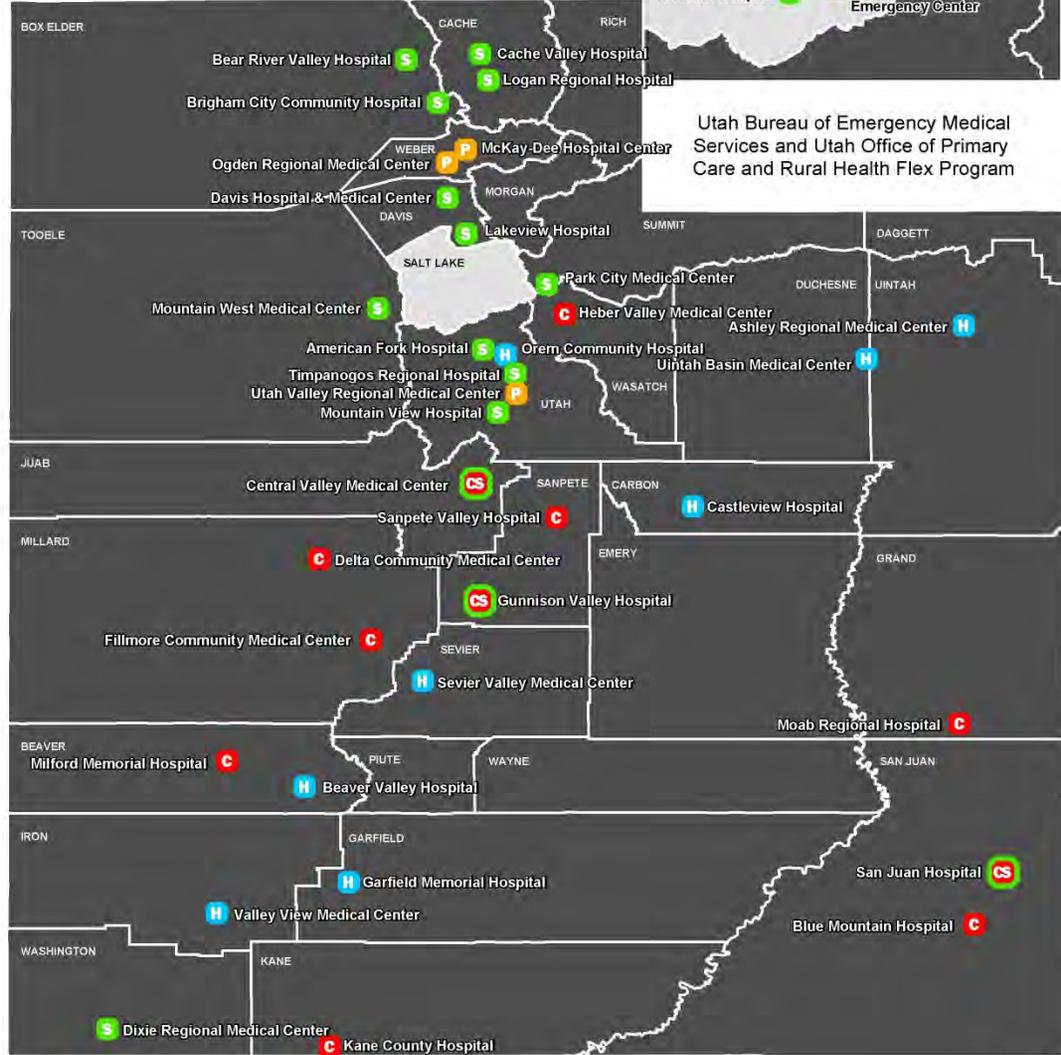
- Site visit by UDOH team
- Verifies:
 - Stroke protocols, resources, equipment
 - Stroke Team organization
 - Physician and administration support
 - Process improvement, data collection, stroke education (including EMS education)
- If verified, local EMS agencies notified that the hospital is “stroke ready” to receive stroke patients via EMS

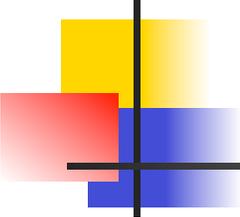
UTAH STROKE SYSTEM

- P Primary Stroke Center
- S Stroke Receiving Facility
- C Critical Access Hospital
- CS Critical Access Hospital and Stroke Receiving Facility
- H Hospital



Utah Bureau of Emergency Medical Services and Utah Office of Primary Care and Rural Health Flex Program





Continuity of Stroke Care Team Approach

■ **Detection**

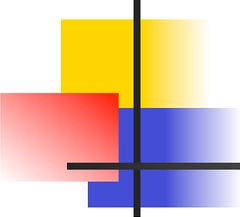
- Importance of early recognition by lay public

■ **Dispatch (9-1-1)**

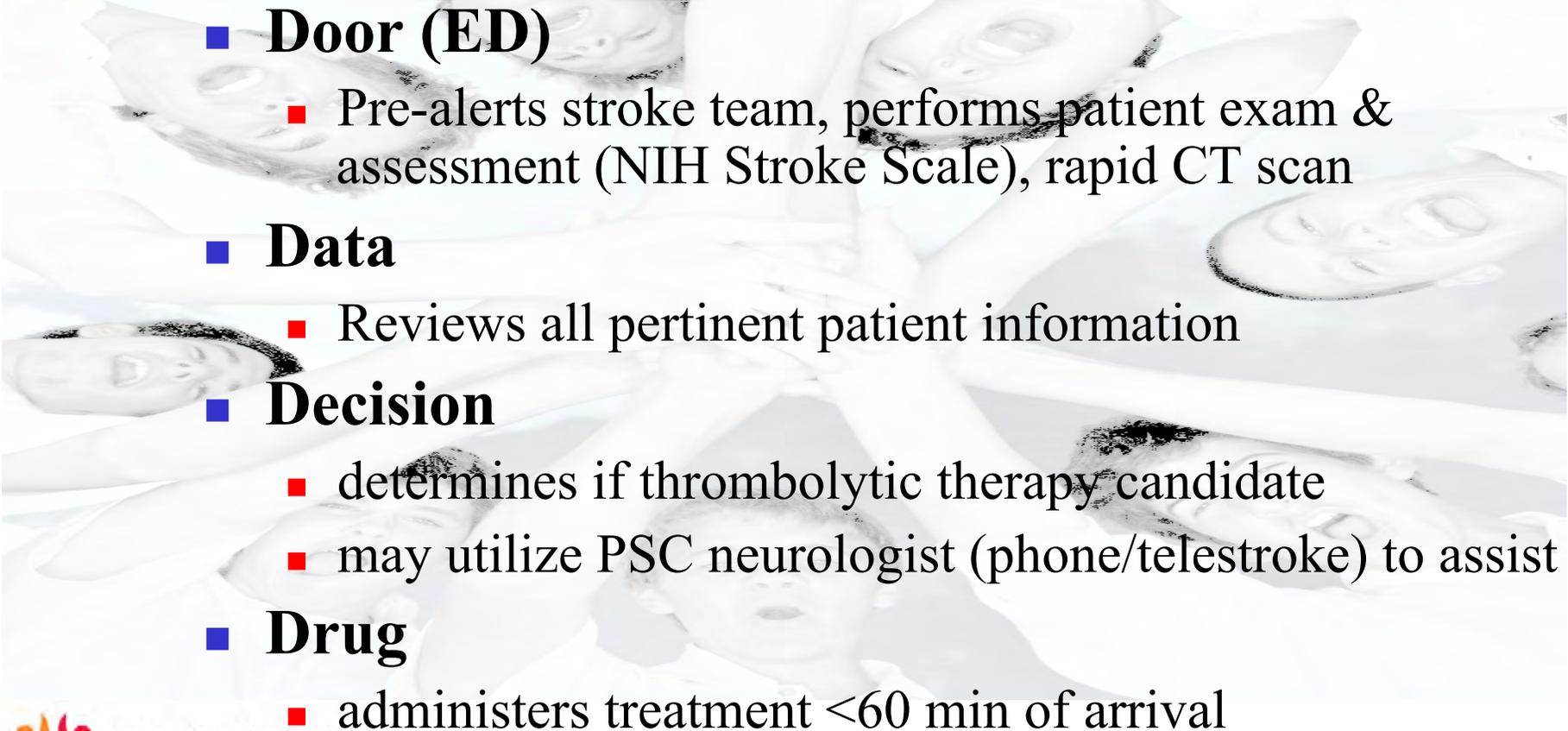
- Obtains pertinent info; identifies urgency

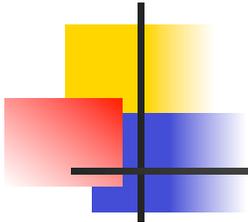
■ **Delivery (EMS)**

- Evaluates, obtains symptom onset, minimizes on scene time; immediate transport and **pre-notification** to PSS or SRF as soon as possible!



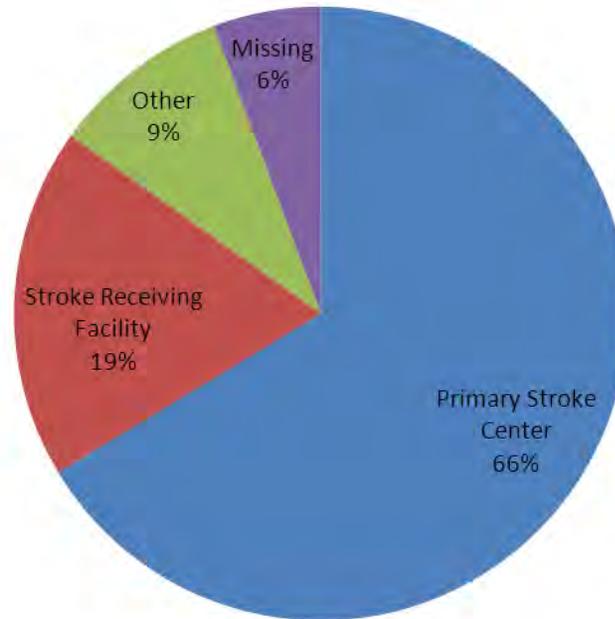
Continuity of Stroke Care Team Approach

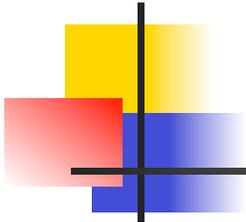
- 
- **Door (ED)**
 - Pre-alerts stroke team, performs patient exam & assessment (NIH Stroke Scale), rapid CT scan
 - **Data**
 - Reviews all pertinent patient information
 - **Decision**
 - determines if thrombolytic therapy candidate
 - may utilize PSC neurologist (phone/telestroke) to assist
 - **Drug**
 - administers treatment <60 min of arrival



EMS Transport Destinations for Strokes

Utah, 2012

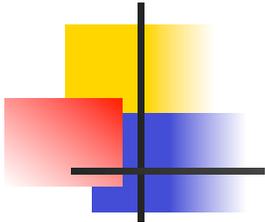




IV TPA

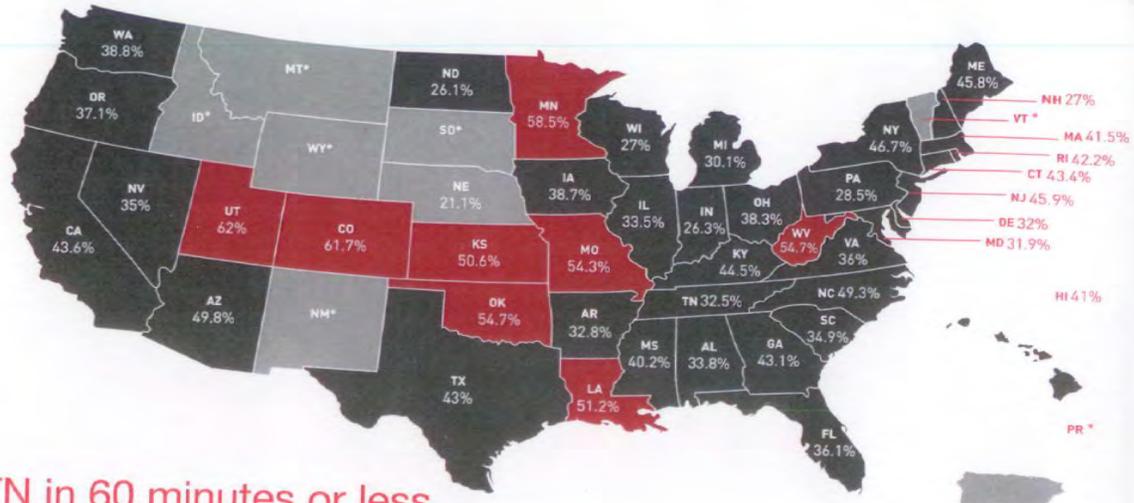
- Ischemic Stroke
- 0-3 Hours after onset
- Some Contraindications

				
2012 Stroke Data Summary				
	Q1	Q2	Q3	Q4
Total Patients	209	206	228	216
Total Ischemic Pts Presenting in 3 Hr	54	49	45	59
Average Door to Physician Time	8.7	8.2	8.0	10.0
Average Door to CT Time	36.0	28.6	32.0	31.4
Total Qualifying for rT-PA	28	27	27	25
Total Receiving rT-PA	13	21	18	16
Average Door to Needle Time	73.2	89.8	85.8	73.6
Number of Patients Transferred	23	13	16	15
% Ischemic Stroke Qualifying for rT-PA	52%	55.1%	60.0%	42.5%
% Qualifying Pts Receiving rT-PA	46.4%	77.80.0%	66.7%	64.0%



GET WITH THE GUIDELINES.
STROKE

TARGET:
STROKE



GOAL 50% DTN in 60 minutes or less
Eligible Get With The Guidelines-Stroke/Target: Stroke acute ischemic stroke patients January 2012 to December 2012

state numerator/denominator (number of hospitals participating per state)

0-24%	25-49%	50-74%	75-100%
Alaska* Idaho* Montana* New Mexico* Nebraska 12/52 (12) Puerto Rico* South Dakota* Vermont* Wyoming*	Alabama 45/133 (28) Arizona 255/452 (25) Arkansas 21/84 (36) California 766/1755 (131) Connecticut 109/235 (21) Delaware 21/66 (6) Florida 467/1294 (127) Georgia 270/407 (55) Hawaii 41/100 (11) Illinois 170/507 (71) Indiana 61/232 (30) Iowa 36/93 (14) Kentucky 61/137 (22) Maine 22/49 (7) Maryland 130/406 (37) Massachusetts 214/516 (71) Michigan 142/471 (48) Mississippi 45/112 (11)	Colorado 159/243 (29) Kansas 83/164 (12) Louisiana 131/258 (20) Minnesota 131/224 (21) Missouri 250/477 (27) Oklahoma 70/126 (8) Nevada 48/137 (12) New Hampshire 10/37 (6) New Jersey 234/257 (45) New York 697/1428 (112) North Carolina 264/526 (27) North Dakota 6/23 (6) Ohio 149/339 (45) Oregon 78/210 (26) Pennsylvania 246/950 (77)	Rhode Island 32/125 (6) South Carolina 90/258 (23) Tennessee 41/26 (12) Texas 390/1147 (96) Virginia 67/241 (37) Washington 137/333 (45) Wisconsin 63/233 (45) Utah 106/171 (17) West Virginia 47/66 (7)

* fewer than 6 hospitals, too few to report

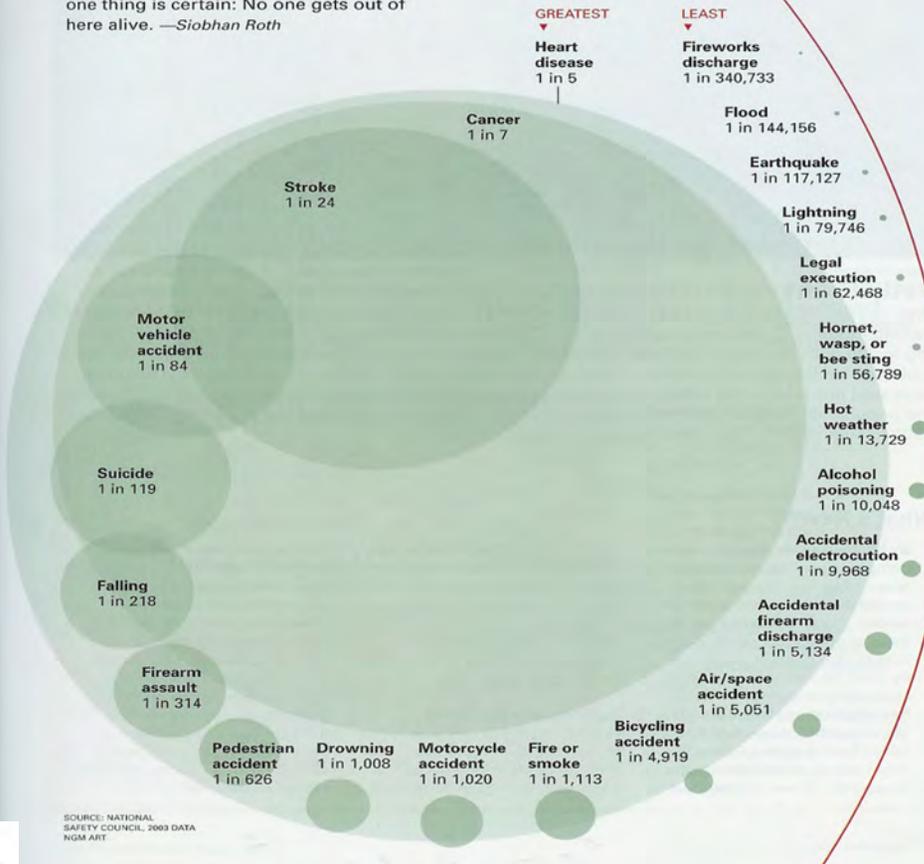


HEALTH

Ways to Go

When and how death will arrive can rarely be predicted, but statistics reveal what holds the greatest chance of ending a life. Riding a motorcycle, for example, is far riskier than playing with fireworks, statistically speaking. This chart shows what the lifetime probabilities are of a U.S. resident dying in a relatively common event, such as a pedestrian accident, or a less common but larger scale catastrophe, such as an earthquake. No matter what the cause, one thing is certain: No one gets out of here alive. —*Siobhan Roth*

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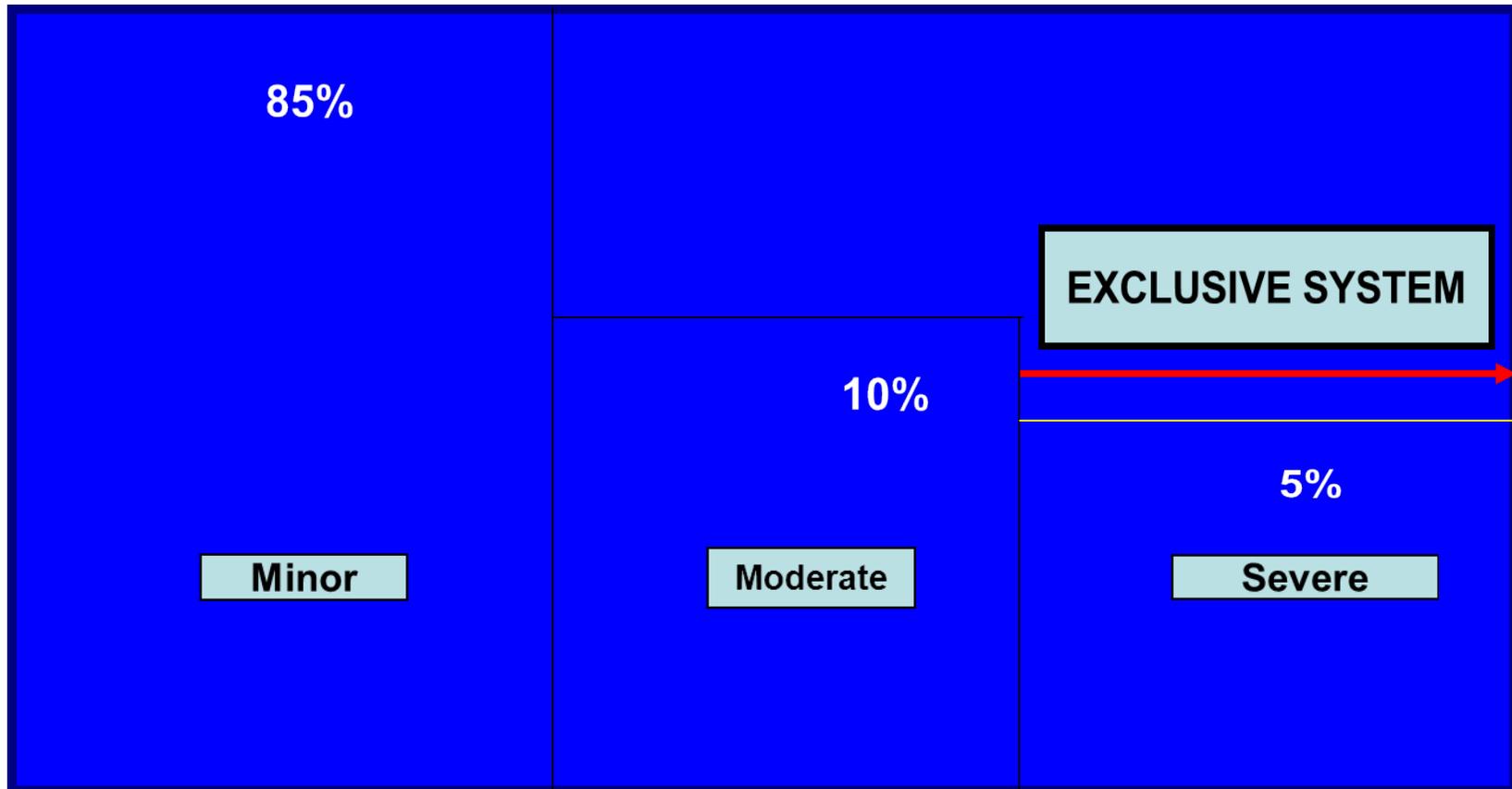


SOURCE: NATIONAL SAFETY COUNCIL, 2003 DATA
NGM ART

Scope of the Trauma System



INCLUSIVE SYSTEM



UTAH TRAUMA FACILITY STANDARDS

LEVEL I

- Acts as a regional tertiary care facility in the trauma system.
- Provides definitive, and comprehensive care for the injured adult and/or pediatric patient with complex, multi-system trauma.
- Provides leadership in professional and community education, trauma prevention, research, rehabilitation and system planning.
- Board certified surgeons, neurosurgeons and anesthesiologists are on-call and promptly available.
 - A broad range of sub-specialists (cardiac surgery, hand surgery, microvascular (replantation), infectious disease) are on-call and promptly available to provide consultation or care to the patient.
- ICU physician coverage 24 hours/day, full time Trauma Coordinator, OR suites staffed in-house 24 hours/day, cardiopulmonary bypass.

• *Level I Regional Pediatric Trauma Centers have separate standards specific to the care of pediatric Trauma patients.*

LEVEL II

- Provides definitive care for complex and severely injured pediatric and adult trauma patients.
- Physicians are ATLS trained and experienced in caring for trauma patients. Nurses and ancillary staff are in-house and immediately available to initiate resuscitative measures and stabilization for the trauma patient.
- Board certified surgeons, neurosurgeons and anesthesiologists are on-call and promptly available.
- A broad range of sub-specialists (critical care, cardiology, orthopedic surgery) are on-call and promptly available to provide consultation or care to the patient.
- Serves as a regional resource center for definitive care, quality assurance, community education, outreach and injury prevention.

• *Level II Pediatric Trauma Centers have separate standards specific to the care of pediatric Trauma patients.*



Trauma Activation Criteria

TRAUMA ONE ACTIVATION CRITERIA

Physiologic:

- Glasgow Coma score < 12,
- Systolic Blood Pressure < 90 mmHg at any time,
- Respiratory Rate < 8 or > 30,
- Revised Trauma Score < 11,
- Intubated or question of airway security,
- Transferred from outside facility receiving blood products.

Anatomic:

- All penetrating injuries to the head, chest, abdomen (including back), or extremities proximal to the elbow or knee,
- Amputation or de-gloving injury proximal to the ankle or wrist,
- Flail chest,
- Suspected spinal cord injury with paralysis,
- Open or depressed skull fracture,
- Combination of trauma with burns,
- Significant burns (i.e. significant 3rd degree burns, >10% 2nd degree burns TBSA for any age, inhalation burns, etc.)

Clinical:

- Discretion of ED physician and/or RN.

TRAUMA TWO ACTIVATION CRITERIA

Physiologic:

- Patient age < 5 or > 65 with significant physical impact,
- - Pregnancy of 3 months or greater.

Anatomic:

- Two or more long bone fractures,
- Significant maxillofacial trauma without evidence of airway compromise,
- Crush injury proximal to ankle or wrist,
- Trauma with burns,
- Pelvic fracture (excluding isolated unilateral pubic rami fracture),
- Cervical, thoracic or lumbo-sacral spine fracture without CNS involvement,
- Major laceration of torso involving fascia,
- Subcutaneous emphysema,
- Significant burns not meeting Trauma 1 criteria

Mechanism of Injury:

- Fall > 20 feet
- Pedestrian struck by a vehicle moving > 20mph
- MVA with rollover/ejection
- Extrication time > 20 minutes
- Death in same passenger compartment

UTAH TRAUMA FACILITY STANDARDS

LEVEL III

- Provides initial resuscitation and immediate operative intervention to control hemorrhage and to assure maximal stabilization prior to referral to a higher level of care.
- Comprehensive medical and surgical inpatient services are available to those patients who can be maintained in a stable or improving condition without specialized care.
- Works collaboratively with other trauma centers to develop transfer protocols and a well defined transfer sequence.
- An in-house multi-disciplinary trauma resuscitation team is available to assess, resuscitate, stabilize and initiate transfer if necessary upon arrival of the patient to the emergency department.
- A board certified general surgeon trained in ATLS is on-call and available to the patient.
- Level III trauma centers work with Level I and II facilities to develop and implement outreach programs for Level IV and V facilities in their region.
- Provides community education, outreach and injury prevention

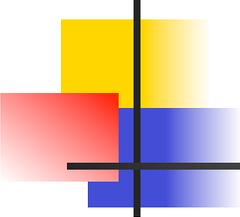
LEVEL IV

- Generally licensed, small rural facility with a commitment to the resuscitation of the trauma patient.
- Provides initial resuscitation, evaluation, stabilization, diagnostic capabilities and written transfer protocols in place for major trauma patients to be transferred to a higher level of care.
- Staffed with a physician on call from outside the hospital and also requires a general surgeon to be on call outside of the hospital.
- May provide immediate operative surgical intervention to control hemorrhage to assure maximum stabilization prior to transfer.
- Trauma trained nursing personnel are immediately available to initiate life-saving maneuvers and critical care services as defined in the service's scope of trauma care.

LEVEL V

- Provides initial evaluation, stabilization and transfer to a higher level of care.
- Generally licensed, small rural facilities with a commitment to the resuscitation of the trauma patient.
- May or may not be staffed with a trauma-trained physicians but rather a physicians assistant, or nurse practitioner.
- Major trauma patients are resuscitated and transferred.

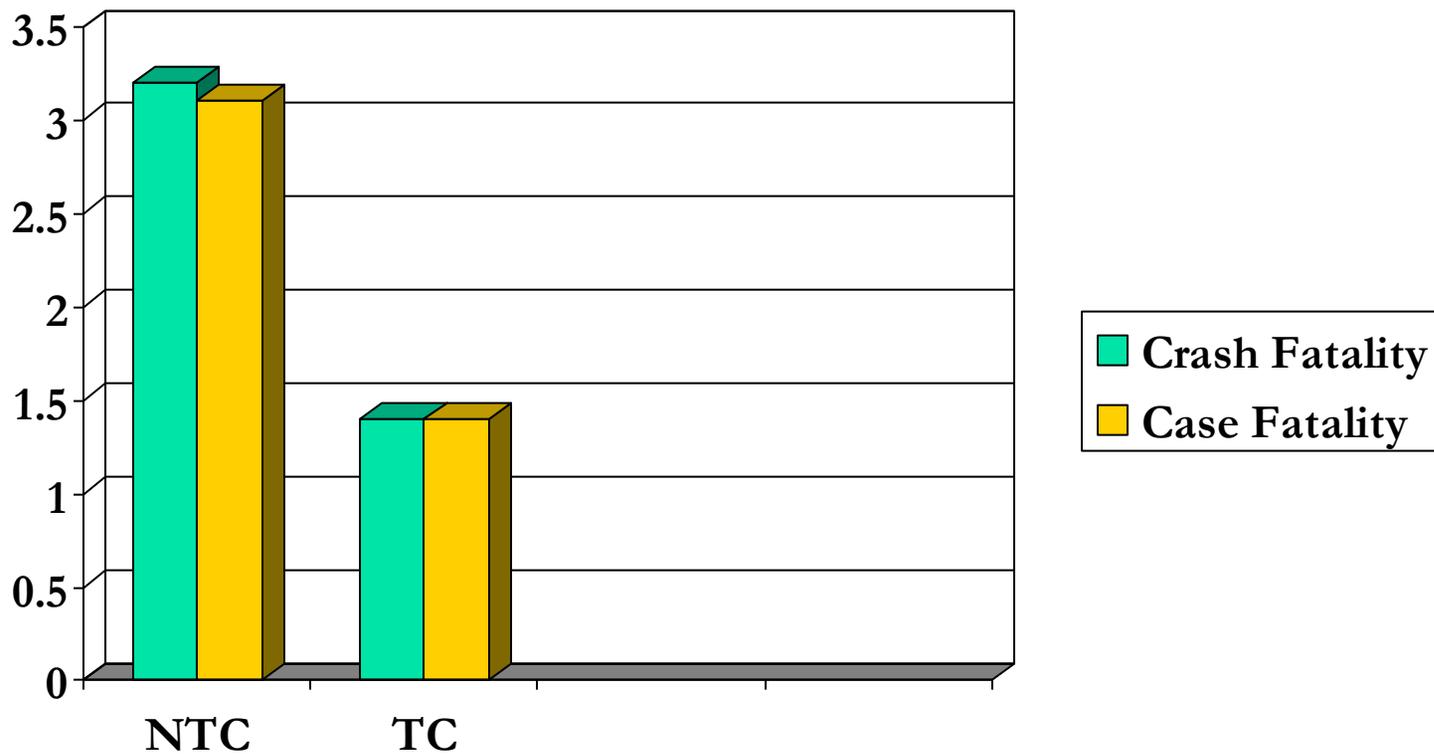




The Golden Hour

- **85% of Trauma involve Motor Vehicle Crashes**
- **Outcomes are strongly influenced by the initial care delivered in the “golden hour”**
- **60% of trauma deaths occur in this period of time.**
- **25% of all MVA's occur in rural areas—they account for 66% of all MVA deaths.**
- **35% of trauma deaths are preventable by proper assessment and resuscitation.**

MVC Fatality Rate of Counties with Trauma Centers (TC) VS. Counties without Trauma Centers (NTC) Florida



Designation in a Rural State

Esposito, TJ, et al. J Trauma 39:955-62, 1995

- Retrospective panel review of 324 deaths attributable to mechanical trauma in the state of Montana
- Preventable deaths - 13%
- Preventable hospital deaths - 27%
- Pre-hospital deaths - extended response time 40%; scene time greater than 20 minutes 23%
- Inappropriate care in ER - 68%
- (Inappropriate airway management, failure to diagnose and treat chest injuries, inadequate volume resuscitation, delays to OR)
- In appropriate care post-ER 49%

Esposito TJ, et al. Am Assoc Surg Trauma, Sept 2002

- Retrospective panel review of 347 blunt trauma deaths in Montana; comparison to pre-system study
- Preventable deaths - 13% to 8% ($p < 0.02$)
- Preventable hospital deaths - 27% to 16%
- Inappropriate pre-hospital care - 37% to 22%
- Inappropriate care in ER - 68% to 40%
- (Inappropriate airway management, failure to diagnose and treat chest injuries, inadequate volume resuscitation, delays to OR)
- Inappropriate care post-ER 49% to 29%

Designation in a Rural State

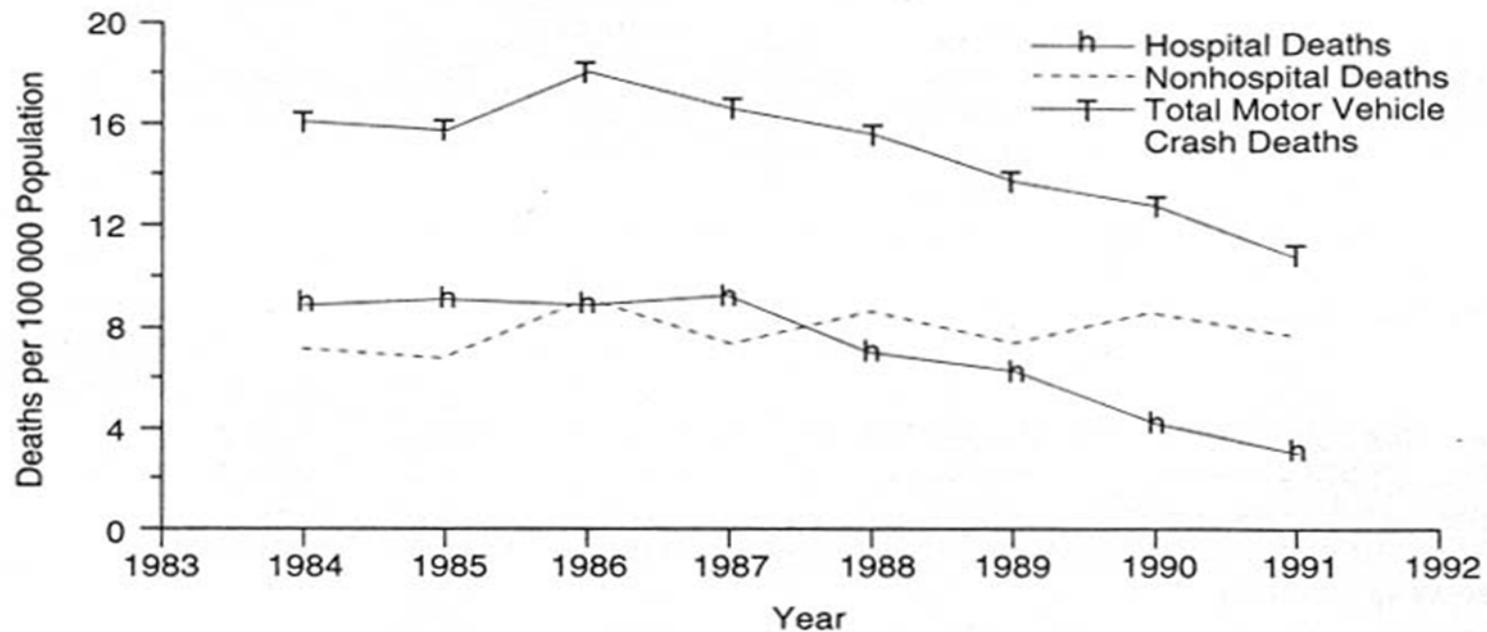
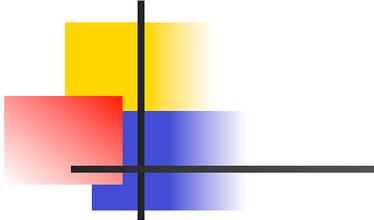
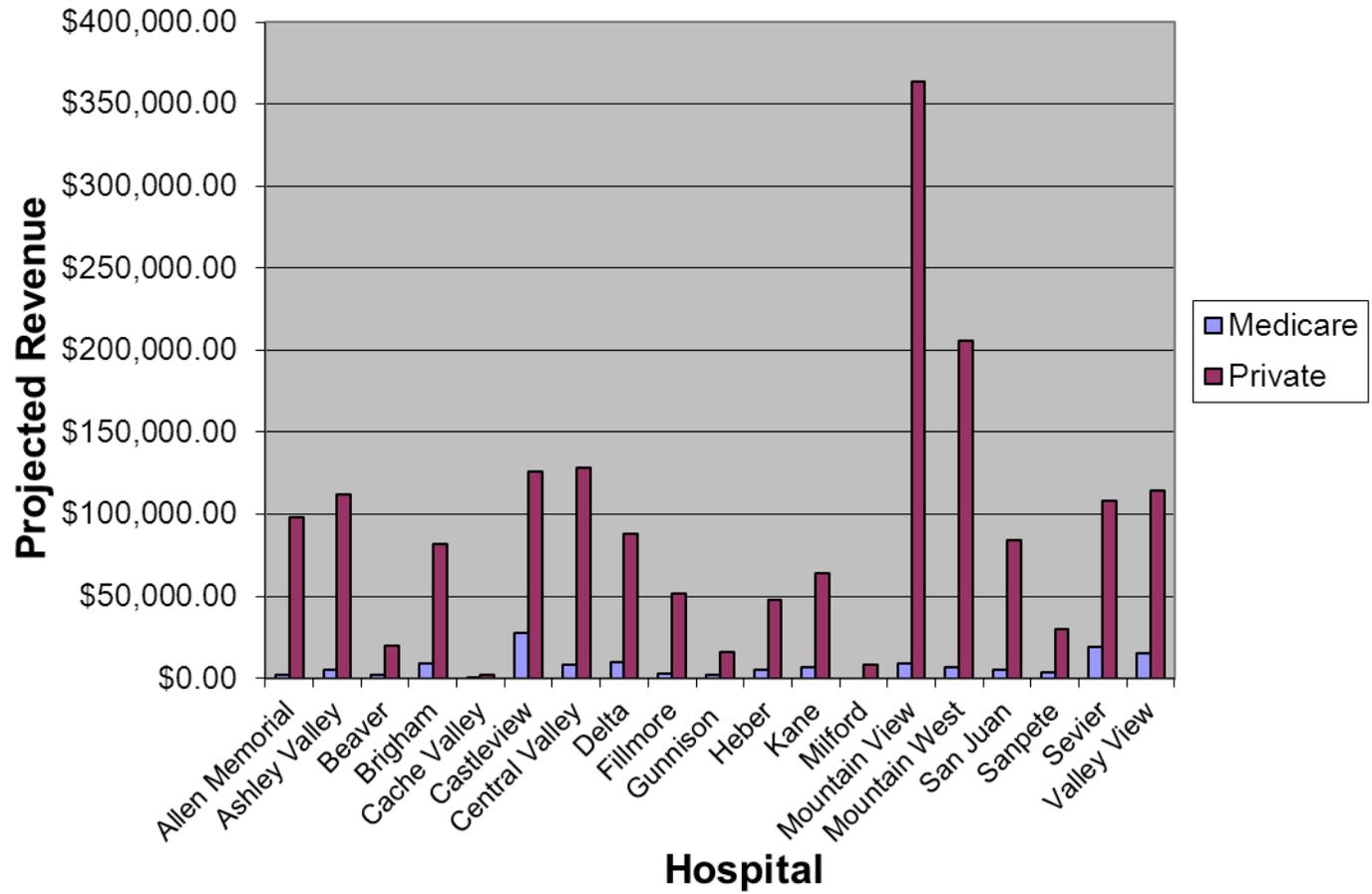
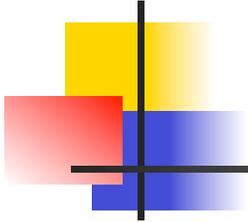


Fig 3.—Traffic fatality rates in the North Willamette (Ore) District reported by the Fatal Accident Reporting System; total deaths are divided into deaths at the scene and those declared dead at a hospital.



Rural Hospital Revenue

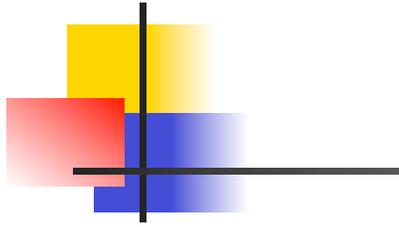
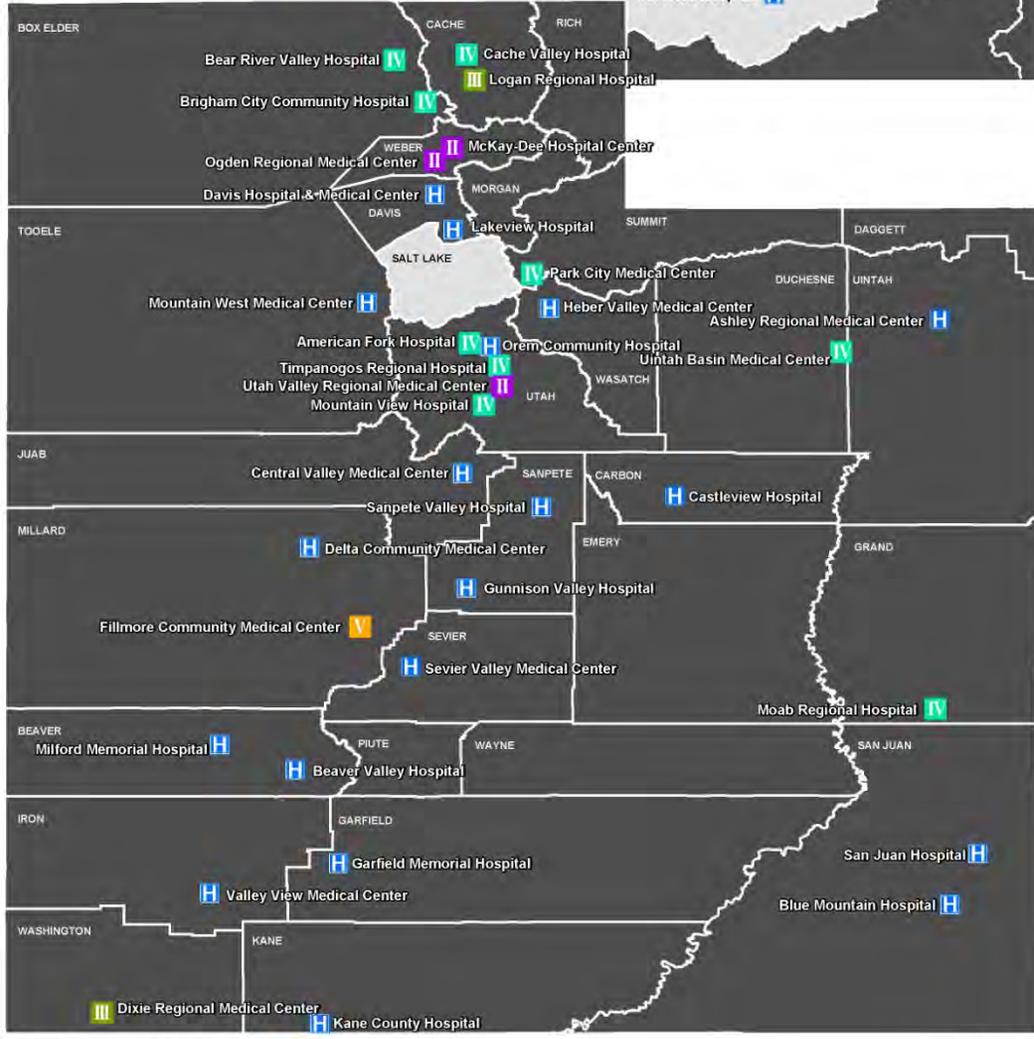
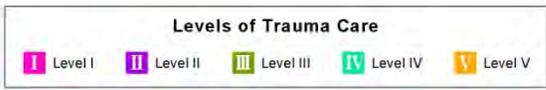




Payor Mix-Trauma

Trauma Mix	1	2	3	4	5	Average
Commercial	11	37	22	70	33	34.6
Medicare	14	13	32	0	16	15
Medicaid	18	6	5	26	6	12.2
HMO/PPO	35	10	22	0	19	17.2
Uncompensated	15	11	13	4	13	11.2
Other	7	23	6	0	13	9.8
All Payor						
Commercial	5	32	11	67	25	28
Medicare	17	19	34	0	21	18.2
Medicaid	22	12	11	27	12	16.8
HMO/PPO	36	24	28	0	18	21.2
Uncompensated	16	6	12	6	9	9.8
Other	4	7	4	0	5	4
	Com	Medicare	Medicaid	HMO/PPO	Uncomp	Other
Trauma	34.6	15	12.2	17.2	11.2	9.8
All Payor	28	18.2	16.8	21.2	9.8	4

Trauma Care Levels in *Utah's* HOSPITALS



Questions?

