



Iowa Stroke Registry

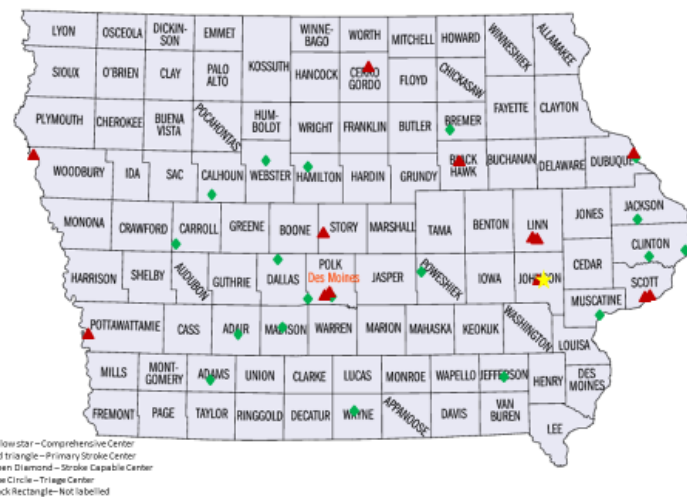
Stroke is a time critical illness much like trauma and heart disease where time to care is associated with death and disability. Stroke in Iowa is the 4th leading cause of death in Iowa with approximately 1,400 deaths per year. In 2014 there were 8,580 patients admitted for acute stroke with 16,238 overall admissions for acute and prevalent stroke.

There are substantial differences in stroke mortality across the state of Iowa. In 2009 there were 9 Primary Stroke Centers. At present, there is 1 Comprehensive Stroke Center and 18 Primary Stroke Centers. The majority of hospitals are capable of stroke diagnosis, treating with thrombolytic therapy and transfer to the Primary and Comprehensive Stroke Center. Hence, a comprehensive stroke system is necessary to decrease death and disability and to promote recovery.

Iowa Stroke Registry Hospitals

In 2009, the Iowa Department of Public Health with funding from CDC contracted with the University of Iowa the design and implementation of the Iowa Stroke Registry. The goals of the Registry have been

- To implement standard definitions and protocols for inclusion in the stroke registry
- To provide data at the point of care
- To gather data in a systematic manner
- To maintain quality data for retrieval
- To analyze data to meet public health, stroke system quality improvement and research needs
- To disseminate information to the public, state officials, committees and health care providers

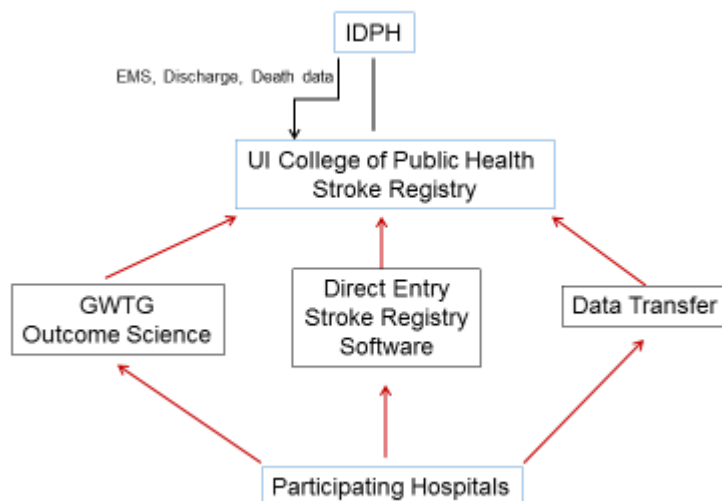


The Iowa Stroke Registry serves as a central system to collect, compile, and analyze state stroke data. It would promote quality improvement of stroke systems of care in Iowa by linking the voluntary (EMS) records with the records of stroke care at Iowa's hospitals and eventually stroke rehabilitation records and death records. The overall intent of such a registry is to shorten the time between the onset of symptoms and receipt of the best possible care available. This in turn, will reduce overall stroke mortality and increase the survival of stroke patients so they can return to once again productive lives.

Accomplishments to date include:

- Developed hospital level data requirements for reporting
- Established guidelines for Registry and QI Committees at the state level
- Updated online training module for stroke hospital coordinators
- Data collection across system in period of July, 2011- July, 2017 (over 24,000 admissions) from 33 hospitals
- Developed comprehensive database for descriptive, system analysis and quality improvement assessment of Stroke Registry, EMS data, hospital discharge and death data

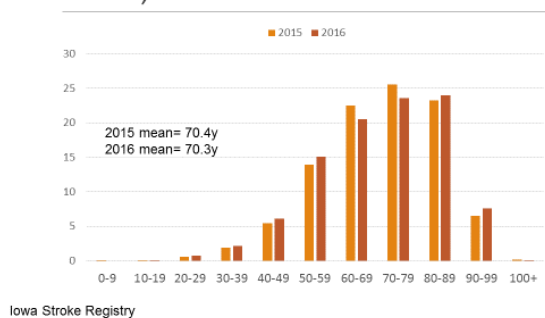
Organization and Data Flow



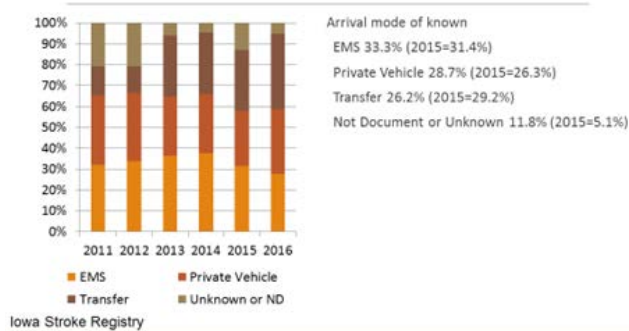
Progress Report

- 24,354 patient records: 22,099 CSC/PSC, 2,255 Acute Stroke Capable
- Major symptoms at onset: weakness (43%), aphasia (20%), altered consciousness (17%), speech (6%) difficulties
- Major risk factors: hypertension, elevated cholesterol, diabetes, smoking
- In 2016, 47% transferred, 23% direct-EMS, 29% direct-private vehicle

Age at Stroke (%) 2015, 2016



Arrival



Quality Indicators - 2016

VTE Prophylaxis	97.4%
Discharge on Antithrombotic	99.5%
Anticoagulation therapy for Afib	87.6%
Thrombolytic Therapy	22.4%
Antithrombotic Therapy by End of Hospital Day 2	97.3%
Discharged on Statin	98.4%
Stroke Education	95.3%
Assessed for Rehabilitation	99.6%