

# Wisconsin | RECIPIENT PROFILE (2019-2020)

The Wisconsin Department of Health Services (WDHS) is a state recipient of the Centers for Disease Control and Prevention (CDC)'s Paul Coverdell National Acute Stroke Program, which aims to improve the quality of stroke care and stroke outcomes. This profile summarizes program activities and outcomes in Program Year 5 (June 30, 2019 - June 29, 2020).



## Select Implementation Partners

- American Heart Association (AHA)
- American Stroke Association (ASA)
- Million Hearts®
- Genentech
- MetaStar
- Wisconsin Office of Rural Health
- Rural Wisconsin Health Cooperative
- Wisconsin EMS Association
- Wisconsin Hospital Association

## State Prevalence of Stroke

2.6% of adults aged 18 and older report having had a stroke  
(Source: Behavioral Risk Factor Surveillance System, 2019)

## Award Amount

\$750,000 (Program Year 5 Award Amount)

## Complementary CDC-Funded Cardiovascular Disease Programs

DP18-1815 - Improving the health of Americans through prevention and management of diabetes and heart disease and stroke

DP18-1816 - WISEWOMAN

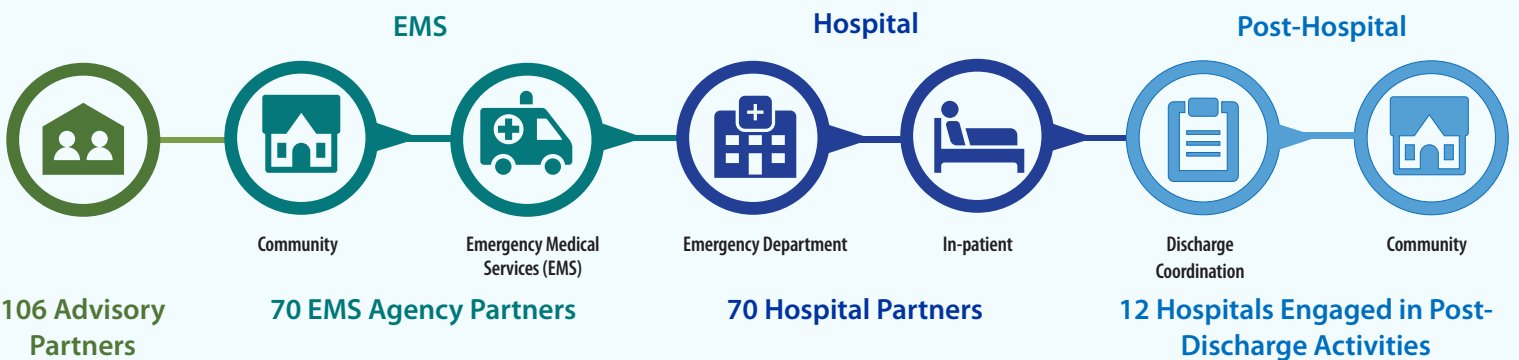
DP18-1817 - Innovative State and Local Public Health Strategies to Prevent and Manage Diabetes, Heart Disease, and Stroke

## Background of the Wisconsin Coverdell Stroke Program (WCSP)

WDHS first received CDC funding in 2012 to implement the Wisconsin Coverdell Stroke Program (WCSP). WCSP is a data-driven quality improvement (QI) project to monitor the quality of acute stroke care across clinical settings, including emergency medical services (EMS) care, hospital care, and care after hospital discharge. Prior to 2012, WDHS participated in the 2005–2009 Great Lakes Regional Stroke Network and developed the Wisconsin Stroke Coalition and a statewide stroke system of care plan. In 2015, CDC funded WDHS through the Paul Coverdell National Acute Stroke Program (DP15-1514) to improve the quality of care for patients across the continuum of care. Program activities address stroke care from the time a patient has a stroke at home or in the community until after they are discharged and follow up with their doctor.



## Program Implementation



By the end of Program Year 5, WCSP recruited 106 advisory organizations, 70 EMS agencies, and 70 hospitals. EMS agencies participated in WCSP-led data collection and quality improvement activities and expanded statewide reach of the Coverdell program to transport and treat stroke patients. Hospital partners entered data in the state stroke registry and participated in WCSP-led quality improvement activities. Of those hospitals, 12 engaged in post-hospital activities which included the continued collection of Coverdell Discharge, Mortality and Readmission data elements in the Get With the Guidelines® - Stroke (GWTG-S).

## Program Reach



EMS

Patients with acute stroke in Wisconsin who were transported by Wisconsin Coverdell-participating EMS (4,378 patients transported)



Hospitals

Acute stroke patients in Wisconsin admitted to Wisconsin Coverdell-participating hospitals (9,027 patients admitted)

## EMS to Hospital Transitions of Care

### Key Activities

WCSP identified barriers to EMS agencies utilizing pre-alert notifications for stroke patients and worked with hospitals to help EMS agencies overcome these barriers. Actions included educating EMS agencies about the need for pre-alert notifications, determining where to document EMS pre-alert notifications in the EHR, and training abstractors on where pre-alert notification documentation exists in the EHR. WCSP also sent a survey to assess the needs of EMS and hospital partners during COVID-19.

### Performance Measures

EMS agencies called in **2,356** pre-alert notifications for suspected stroke patients in Program Year 5.\*



**69%** of EMS-hospital teams reported use of feedback from hospital to EMS in Program Year 5, allowing EMS to improve identification and treatment of acute stroke patients



## Quality Improvement (QI)

### Key Activities

WCSP facilitated the Coverdell Learning Collaborative (CLC) to support hospital QI efforts to reduce time to treatment with the clot busting drug, IV alteplase, and improve dysphagia screening. WI provided hospitals with a quarterly report card on key stroke quality of care measures for the individual hospital and in comparison with other hospitals in the state. Hospitals with the most performance improvement had the opportunity to present their best practices to the CLC. Additionally, WCSP rewarded the most improved hospitals with a framed award certificate and a press release.

### Performance Measures

QI initiatives include workshops and trainings implemented by Coverdell recipients and their partners to improve implementation and focus of stroke care. These initiatives are implemented for EMS, hospital, and discharge hospital staff. WCSP implemented **5** initiatives for EMS staff, **34** initiatives for hospital staff, and **27** initiatives for discharge hospital staff in Program Year 5.

## Data Linkages

### Key Activities

WCSP collected EMS, hospital, and post-hospital data through Get with the Guidelines®-Stroke (GWTG-S) which are automatically linked using a unique patient identifier. WCSP also expanded post-discharge data collection and formed a collaborative to discuss the post-discharge data elements and the importance of data entry for linkage of data across the system of care.

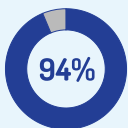
### Performance Measures

**94%** of EMS agencies (n=7) had data linked to in-hospital data in Program Year 5.

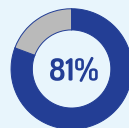


## Stroke Quality of Care Outcomes Among WCSP-Participating Hospitals

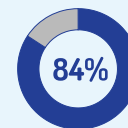
Activities contributed to performance in stroke quality of care as reflected in the following stroke outcomes:



of patient/caregivers received stroke education materials during their hospital stay



of acute ischemic stroke patients who were eligible for treatment received IV Alteplase, a clot busting drug, within 60 minutes of hospital arrival



of ischemic stroke patients received all available care for which they were eligible\*\*

For more information, please visit [https://www.cdc.gov/dhdsp/programs/stroke\\_registry.htm](https://www.cdc.gov/dhdsp/programs/stroke_registry.htm)

Data sources: Year 5 recipient-reported performance measure data, hospital and patient level data, evaluation reports, and annual performance reports

\*Advanced notification by EMS is under the condition of arrival by EMS. Percentage represents those stroke patients that were called in out of the total number that arrived via EMS.

\*\*Please see Overwyk, et. al., Defect-free care trends in the Paul Coverdell National Acute Stroke Program, 2008-2018, American Heart Journal for included measures.