



WISCONSIN COVERDELL STROKE PROGRAM

November 26, 2014

Dear Colleague:

We are writing on behalf of the Wisconsin Stroke Coalition (WSC) and Wisconsin Coverdell Stroke Program* to share progress on establishing regional stroke systems of care. *As you may know, every 15 minute delay in delivering tissue plasminogen activator (tPA) following ischemic stroke robs survivors of on average a month of healthy life. Eliminating even one minute off the time from symptom onset to tPA treatment can mean one more day of healthy living for a stroke survivor.*ⁱ We are working to ensure that all patients in Wisconsin receive timely, high-quality acute stroke care, regardless of age or where they live. To that end, the WSC is committed to improving stroke care coordination between EMS and hospitals, and promoting resources for hospitals and EMS to enhance their stroke care performance.

Because a well-functioning stroke system requires seamless coordination among EMS, hospitals and certified stroke centers, the WSC recently surveyed hospitals to gain a better understanding of the state's stroke care infrastructure. National recommendations from the Brain Attack Coalition suggest that EMS should transport suspected stroke patients to the nearest stroke-certified facility.ⁱⁱ Currently, only 39 (30%) of Wisconsin's 127 non-specialty hospitals have advanced stroke certification. However, a new basic level of stroke care, "Acute Stroke-Ready Hospital" (ASRH) certification, is expected to become available through The Joint Commission in 2015. We were pleased to learn through self-reported data that 51 (40%) non-stroke certified hospitals are in the process of putting ASRH criteria in place and 5 (4%) appear well-positioned to apply for the new ASRH certification right now. In addition, nearly half the hospitals that responded to the survey reported having telemedicine (via phone and/or video) in place for emergent neurologic consultation. We hope you will review and share the enclosed survey results, "Assessing Wisconsin Hospital's Stroke Capabilities," with your staff.

Whether your hospital is already stroke-certified or is considering ASRH certification, we all can find opportunities to improve stroke care. Here are a few ideas for how your organization can enhance delivery of standard acute stroke treatment and strengthen regional stroke systems:

- 1. If your hospital is not stroke certified, review the ASRH criteria.**² Assess which elements your hospital has in place and which might be addressed. Commit to further developing your facility's stroke care capabilities. (If you completed the voluntary ASRH Survey, a summary and comparison of your results has been included).
- 2. Identify processes that can be improved.** Even the most experienced stroke centers seek to improve their programs. For example, aiming for door-to-needle (i.e., tPA bolus) times < 45 minutes (instead of < 60 minutes) is the emerging standard.
- 3. Schedule a regular time to discuss stroke performance metrics.** Things that we measure, track and discuss tend to improve.

The Wisconsin Coverdell Stroke Program is a collaboration between the Wisconsin Department of Health Services, Metastar and the American Stroke Association/American Heart Association Midwest Affiliate. Funding for the program is made possible (in part) by the Centers for Disease Control and Prevention.

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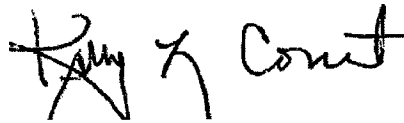
4. **Consider participating in the Wisconsin Coverdell Stroke Registry** (see coverdellwi.org). This will help focus your efforts to collect and analyze data, and provide benchmarks for comparing your data to other Wisconsin hospitals.
5. **Participate in local, regional or national professional stroke education.** The Wisconsin Coverdell Stroke Program sponsors regional conferences and hospital-EMS outreach events throughout the state. For information on upcoming events, visit coverdellwi.org or contact Dot Bluma, Stroke QI Specialist, at dbluma@metastar.org or 800-362-2320.
6. Have a stroke coordinator/nurse representative **participate in the Stroke Coordinators of Wisconsin (SCOW) learning collaborative.** The group meets quarterly in Madison to hear clinical presentations, discuss best practices and learn from other organizations' experience. For more information, contact the group's Chair, Jeannie Pittenger, Stroke Coordinator at Sacred Heart Hospital in Eau Claire at Jeannie.Pittenger@hshs.org.

We also invite you to sign up to receive e-news from the Wisconsin Stroke Coalition, including updates on stroke systems of care and notices for our quarterly meetings. Contact: Julie Baumann, Coverdell Stroke Program Director, julie.baumann@wisconsin.gov. We greatly appreciate your support toward improving stroke care in Wisconsin!

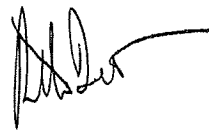
Kind Regards,



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ⁱ Save a Minute - Save a Day, AHA Stroke Journal – Meretoja, March 2014.
<http://stroke.ahajournals.org/content/early/2014/03/13/STROKEAHA.113.002910.abstract>

ⁱⁱ Alberts MJ, Wechsler LR, Jensen MEL, et al. Formation and function of acute stroke-ready hospitals within a stroke system of care: recommendations from the Brain Attack Coalition. *Stroke*. 2013;44(12):3382-93.

* The Wisconsin Stroke Coalition includes physicians, nurses and EMS engaged in stroke care as well as representatives from stakeholder organizations such as the Wisconsin Hospital Association, the Wisconsin Rural Health Cooperative, the American Heart Association, MetaStar, Inc., the Wisconsin Department of Health and others. Administrative support for the group is provided through the Wisconsin Coverdell Stroke Program, a federally funded grant from the Centers for Disease Control and Prevention.

Assessing Wisconsin Hospitals' Capacity to Treat Stroke

A Report from the Wisconsin Stroke Coalition

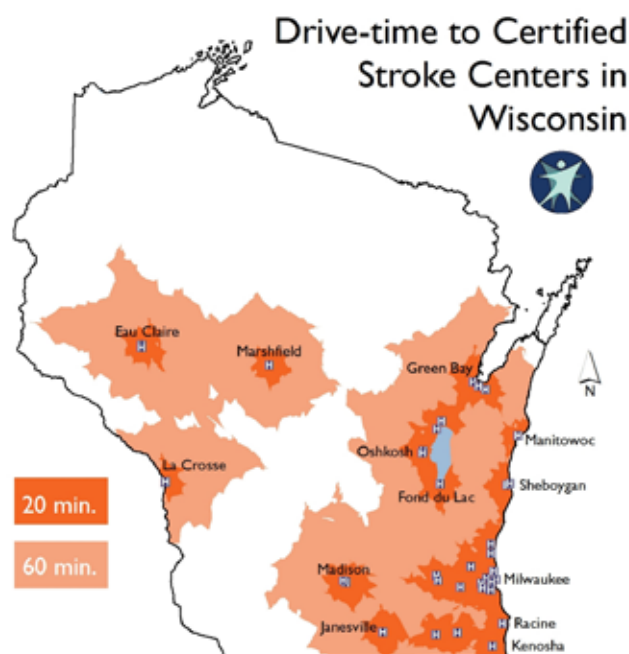
Certified stroke centers have been shown to improve outcomes for patients with acute stroke treatment. However, not all hospitals have the resources or volume of stroke patients to pursue advanced certification. In 2015, The Joint Commission has announced that it will introduce a new certification—Acute Stroke Ready Hospitals (ASRH)—to identify hospitals that provide a basic level of stroke care. The vision for ASRH is to provide timely, evidence-based care to diagnose, stabilize, and treat acute stroke patients before transporting appropriate patients to Primary Stroke Centers or Comprehensive Stroke Centers. This report summarizes the “readiness” of non-stroke certified hospitals in Wisconsin to provide basic acute stroke treatment according to national recommendations.

Stroke systems of care improve timely treatment and survival

Well-functioning stroke systems of care – seamless coordination between Emergency Medical Services (EMS), hospitals and certified stroke centers – can make a world of difference in survival and reduced disability for patients experiencing acute stroke. Every 15-minute delay in delivering tissue plasminogen activator (tPA) following ischemic stroke robs survivors of an average month of healthy life. Eliminating even one minute off the time from symptom onset to tPA treatment can mean one more day of healthy living for a stroke survivor. And, while everyone benefits from faster treatment, younger patients seem to gain the most benefit¹.

Wisconsin hospitals are building their capacity to treat acute stroke

Because not all hospitals offer the same level of stroke care, it is important for EMS to be aware of hospitals' stroke care capabilities to deliver patients to the nearest appropriate facility. As of August 2014, 30% (39) of Wisconsin hospitals were designated as providing advanced stroke care. To better understand stroke care at remaining hospitals, the Wisconsin Stroke Coalition (WSC)² invited 88 hospitals to



Created by the DES Bureau of Information Technology Services, August 2014.
 Source: Certified stroke centers in Wisconsin as listed by The Joint Commission
 (www.qualitycheck.org/consumer/searchQCR.aspx) and DNV-GL (<http://dnvglhealthcare.com/hospitals>).

Wisconsin Hospitals' Self-Reported Stroke Care Capabilities, 2014*

Percentage of Wisconsin Hospitals Reporting Status of Brain Attack Coalition Recommendations

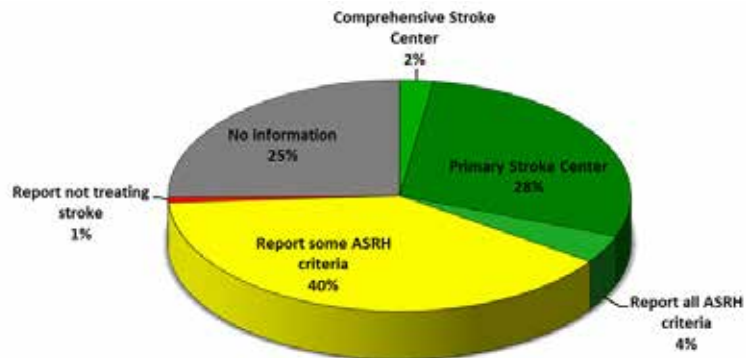
Elements of Basic Stroke Care	In place now or within six months	Could develop with assistance	No plans to develop
Most frequently implemented criteria			
Neurological services within three hours	98%	0%	2%
Standard Labs	98%	0%	2%
CT Imaging 24/7	98%	0%	2%
Therapies: IV tPA	96%	2%	2%
Therapies: reversal of anticoagulation	96%	2%	2%
Therapies: anticonvulsants	94%	4%	2%
Therapies: intubation/mannitol	93%	5%	2%
Protocol: to assess and treat stroke	84%	14%	2%
Some implementation of criteria			
Trained stroke team	76%	9%	15%
Protocol: ground ambulance transfer	69%	31%	0%
Protocol: air ambulance transfer	65%	31%	4%
Protocol: transfer to PSC or CSC	64%	31%	5%
Telestroke: via phone	64%	27%	9%
Monitor performance metrics	61%	24%	15%
Least implemented criteria			
Use of stroke registry or database	46%	35%	19%
Regular meetings to review stroke performance	46%	36%	18%
Telestroke: via video	38%	28%	34%
At least 4 hours annual stroke education	31%	62%	7%
Designated Stroke Medical Director	25%	47%	28%

* Aggregate hospital data represents 55 of 88 non-stroke certified hospitals that responded to the survey. This project was sponsored by the Wisconsin Stroke Coalition (WSC), an independent coalition of professionals committed to improving stroke systems of care. For more information on the WSC, visit www.coverdellwi.org. Stroke program criteria are based on "Formation and Function of Acute Stroke-Ready Hospitals Within a Stroke System of Care: Recommendations from the Brain Attack Coalition." *Stroke*, 2013;44(12):3382-93.

self-report their status on implementing recommendations for Acute Stroke-Ready Hospitals (ASRH) – a basic level of stroke care with access to expert consultation through telemedicine. Hospitals completed a checklist that captured the status of each recommendation: in place currently or within six months; could be developed with assistance; or no plan to develop.

According to self-reported data, 4% of Wisconsin hospitals have all ASRH criteria in place and 40% are implementing some of the criteria. This suggests that many Wisconsin hospitals may be well-positioned to apply for ASRH certification when it becomes available in 2015. Building all hospitals' capacity to provide standard stroke treatment is an important milestone to improve stroke survival and reduce stroke-related disability throughout the state.

Wisconsin Hospitals' Self-Reported or Certified Stroke Care, 2014



Based on national stroke certification or self-reported data on implementation of Acute Stroke-Ready Hospitals (ASRH) recommendations. N= 127 non-specialty hospitals.

Enhance your hospital's stroke care performance

While hospitals are making important strides to improve standard stroke treatment, we still have a ways to go to ensure optimal stroke treatment for every suspected stroke patient in Wisconsin, every time.

- For non-stroke certified hospitals:
 - Review ASRH criteria and commit to implementing more elements over the next year.
 - Monitor stroke care performance and look for resources at www.coverdellwi.org to improve processes.
 - Communicate regularly with EMS partners to ensure they are aware of your hospital's stroke services and appropriate pre-hospital stroke alert and transfer protocols are in place.
- For stroke-certified hospitals, consider joining the Coverdell Stroke Registry to share best practices, attend free stroke education programs, participate in performance improvement challenges, and receive technical support. For more information, see www.coverdellwi.org and contact Dot Bluma, Stroke QI Specialist at dbluma@metastar.com.
- Join the Wisconsin Stroke Coalition in establishing regional stroke systems of care in your area. Attend quarterly meetings to shape regional initiatives, contribute your professional expertise and learn from others' experience creating fast, seamless care transitions from EMS to hospital. For more information, visit www.coverdellwi.org and contact Julie Baumann at julie.baumann@dhs.wisconsin.gov.

¹Save a Minute - Save a Day, AHA Stroke Journal – Meretoja, March 2014. <http://stroke.ahajournals.org/content/early/2014/03/13/STROKEAHA.113.002910.abstract>

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Resources

Check out these resources to learn more about how your organization can improve stroke systems of care:

Wisconsin Stroke Coalition (WSC)

The mission of the WSC is to reduce the burden of stroke in Wisconsin through establishing stroke systems of care, improving patient outcomes and supporting a healthy population through stroke prevention. For more information about upcoming meetings and committees, see www.coverdellwi.org or contact Julie.Baumann@dhs.wisconsin.gov.

Wisconsin Coverdell Stroke Program

The Wisconsin Coverdell Stroke Program coordinates participation and technical support for the Paul Coverdell National Acute Stroke Registry and provides dedicated QI support, outreach events, conferences, and resources to improve coordinated stroke care. For more information, see www.coverdellwi.org or contact Dot Bluma at dbluma@metastar.com.

Coverdell Coordinators Group

The Coverdell Coordinators Group is a peer learning group for stroke coordinators from hospitals that participate in the Coverdell stroke registry. Participants review stroke performance measures, focus on quarterly QI challenges, and share promising practices to improve patient care. For more information, see www.coverdellwi.org or contact Dot Bluma at dbluma@metastar.com.

Stroke Coordinators of Wisconsin

The Stroke Coordinators of Wisconsin (SCOW) is open to all hospitals focused on improving stroke care. The group meets quarterly in Madison (with online/video access) to hear clinical presentations, review journal articles, and discuss promising practices. For more information, contact Jeannie.Pittenger@hshs.org.

Upcoming Events

January

- 23 Wisconsin Stroke Coalition (Madison)
- 28-31 WI EMS Association Conference (Milwaukee)

February

- 11-14 International Stroke Conference (Nashville)

March

- 9 Stroke Coordinators of Wisconsin (Madison)
- 9 Coverdell Coordinators Group (Madison)
- 13 EMS event (Rice Lake)
- 26 Rural Hospital Stroke Conference (Wisconsin Dells)
- 27 Wisconsin Stroke Coalition (Wisconsin Dells)

May

National Stroke Month

June

- 8 Stroke Coordinators of Wisconsin (Madison)
- 8 Coverdell Coordinators Group (Madison)
- 18 Wisconsin Stroke Coalition (Oconomowoc)