North Central Regional Trauma Advisory Council

Regional Trauma Plan

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Approved by the NCRTAC general membership at the May 19, 2022 Annual Meeting.

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Introduction

The North Central Trauma Advisory Council (NCRTAC) is an integral part of the Wisconsin Trauma Care System. Since NCRTAC commencement in 2001, members and key partners have collaborated to improve the care of trauma patients across the continuum of care, in the region and Wisconsin. NCRTAC primarily partners with hospitals and emergency medical services. Additionally, the NCRTAC partners with local public health departments, public safety entities, educational institution, emergency management, and the local Healthcare Emergency Readiness Coalition (HERC).

The NCRTAC also assists with carrying out the Wisconsin Statewide Trauma Advisory Council's mission of reducing death and disability resulting from traumatic injuries and mass casualty events by providing a comprehensive and integrated system of care. NCRTAC will continue to foster the development and improvement of local, regional, and statewide efforts of the Wisconsin Trauma Care System.

Mission

The North Central Regional Trauma Advisory Council is dedicated to reducing the death, disability and suffering that result from traumatic injuries and mass casualty events by providing a comprehensive and integrated system of regional prevention and trauma care resources throughout the continuum of care.

- adapted from Wisconsin Trauma Care System Mission Statement

Demographics

- The NCRTAC is made up of:
- 12 counties
- 12,069 square miles
- 466,477 citizens[#]
- 62 medical first responder (non-transport) agencies (Attachment 1)
- 57 transporting ambulance services (Attachment 1)
- 15 designated trauma care facilities (Attachment 2)
- 2 undesignated hospitals (Attachment 2)

[#] 2020 Population estimate US Census (American Community Survey)

According to Wisconsin Trauma Registry data*, trauma care in our region for the calendar year 2021 included:

- 5,603 trauma patients entered into the Registry
- 700 patients under age 19 (12.5%)
- 2,817 hospital admissions (50.3%)
- 469 intensive care unit admissions (16.6% of admissions)
- 816 transferred to another hospital (14.6%)
- Top injury mechanisms of injury (category)
    - Slipping, tripping, stumbling and falls - 53.52%
    - Car occupant injured in transport accident - 13.69%
    - Other land transport accidents - 12.05%

- Exposure to inanimate mechanical forces - 5.30%

* Some counts may include patients counted twice when referred to another facility

Executive Council

The Executive Council of the NCRTAC is responsible for setting the direction of the RTAC and monitoring the work of the committees.

The NCRTAC Bylaws – Article IV, Section I states:

The Executive Council shall consist of not less than nine (9) or more than seventeen (17) Directors including:

a) Not less than 2 prehospital affiliated members.
b) Not less than 2 hospital affiliated members.
c) At least one member representing education
d) At least one member representing injury prevention
e) Not less than 2 miscellaneous members (e.g. public health, law enforcement, education, elected officials, emergency management, concerned citizens, etc.)

Article IV, Sections V and VI require the Executive Council to meet at least four times per fiscal year.

Coordinating Facility and Resource Hospital

Aspirus Wausau Hospital, an American College of Surgeons verified level II trauma center, and Marshfield Medical Center, an American College of Surgeons verified level II adult and pediatric trauma center currently serve as the NCRTAC Co-Coordinating Facilities.

General Meetings

General membership meetings are held bi-monthly, generally on the third Thursday of odd months. Meeting locations rotate between Aspirus Wausau Hospital and Marshfield Medical Center. Teleconference attendance is available. Meetings run from 9:00 a.m. to Noon and consist of a general membership meeting and committee meetings. Executive Council meetings may be held during this time as needed. General meetings include updates from portions of the trauma system including State Trauma Advisory Council & committee meeting summaries, DHS trauma and EMS updates, NCW HERC highlights, member information sharing and group projects. Educational presentations or guest presentations also may be held during this time.

Agenda items may be requested through either the RTAC Coordinator or the Executive Council Chair.

Standing Committees

Performance Improvement Committee

Recent accomplishments/ projects

- Requested and reviewed regional trauma data sourced both from the state trauma registry data manager and the RTAC Coordinator access to regional reports
- Compared activation criteria across multiple hospitals to analyze if they meet current standards
- Conducted regional case reviews at the General Membership meetings

Future goals

- Increase committee participation in PI
- Facilitate additional trauma registry or PI training
- Continue to review and analyze registry data
- Facilitate hospital staff training opportunities
- Create an action plan to decrease the ED LOS >3 hrs with ISS >15

Injury Prevention Committee

Recent accomplishments/ projects

- Development of ATV and farm safety displays for use by RTAC members
- Monitoring of a fall prevention referral "app" for use by EMS providers
- Placement of eight Life-vest loaner stations around the region
- Distribution of personal first aid kits, distracted driver awareness items and ATV safety child activity booklets

Future goals

- Strengthen committee participation
- Review of injury data to identify additional areas of need
- Develop partnerships with other agencies performing injury prevention in the region

Out of Hospital Committee

Recent accomplishments/ projects

- Support of the Stop the Bleed lay person training and hemorrhage control kit supply campaign
- Radio report and hand-off report template (MIST) distribution and education (Attachment 12)
- Tourniquet distribution and training
- SALT Triage product distribution and training
- Support of PHTLS program through the purchase of textbooks, payment of instructor update fees and offering PHTLS course host payments
- Helicopter EMS position statement
- Attendance of the RTAC Coordinator at county EMS/Fire leadership meetings

Future goals

- Increase EMS participation

- Service-based education
- Develop regional MCI, patient tracking and special event planning procedures. This may be an extension of programs offered at the state level
- Review and re-promote MIST method of patient care reporting
- Education providers on updated trauma field triage guidelines

Definitive Care Committee

The Definitive Care Committee is charged with developing protocols, guidelines, and position statements to facilitate the assessment, treatment, and transport of all trauma patients throughout the trauma care continuum.

Position statements

- Administration of Antibiotics in Open Fracture
- Administration of Tranexamic Acid
- Spinal Motion Restriction
- Multiple Injured Family Members
- Radiology Studies
- Prehospital use of Helicopter EMS

Future goals

- Review and update existing position statements

Regional Needs Assessment

The NCRTAC conducted a regional needs assessment through several mechanisms:

- 2022 survey tool coordinated by DHS
- Discussion at Executive Council meeting 03/09/2022
- Discussion at General Membership meeting 03/17/2022
- Discussion at General Membership meeting 05/19/2022

Results of the survey and discussions were extrapolated and summarized into the following goals for 2022-2024.

<u>Conflict resolution</u>

- Develop a system to resolve conflicts concerning trauma care and injury prevention within the region.
- Increase physician involvement in NCRTAC General Membership meetings.

<u>Performance improvement</u>

- Re-new the NCRTAC PI committee as recommended in the Regional Performance Improvement Process Guidelines (approved by STAC 3/2021).
- Develop a system to review PI indicators recommended in the Guidelines.

Injury Prevention

- Strengthen participation in the committee.
- Initiate at least one regional injury prevention program. This program may be in cooperation with other regional partners involved in injury prevention.

Emergency Medical Services

- Implement the revised Field Triage Guideline. Incorporate hospital undertriage data.
- Re-establish EMS provider educational offerings.
- Develop regional MCI, patient tracking and special event planning procedures. This may be an extension of programs offered at the state level.

Hospital Classification

- Improve educational and networking resources related to hospital classification.

Trauma Registry

- Improve educational and networking resources related to trauma registry including data entry and reporting.
- Increase the use of trauma registry data in NCRTAC projects and initiatives.

NCRTAC Trauma Conference

Beginning in 2016, the NCRTAC has held an annual regional trauma continuing education conference targeting all levels of EMS providers and hospital trauma nursing staff. We have also had pharmacy, trauma registry, physician, and advanced level provider attendees.

The conference is a one-day event with general and break-out tracks and trauma product and service vendors. The conference is sponsored by both hospital organizations in the regional as well at the NCW HERC. The fee for the conference in 2022 was $35 which included the program, lunch, a give-away item, and continuing education credits.

The 2020 conference was canceled due to the COVID-19 pandemic. In 2021 the conference was held on-line only with the assistance of Northcentral Technical College (NTC). The 2022 conference was offered on Thursday, April 7 as in-person at NTC in Wausau and online via live streaming (Zoom). The 2022 conference had 120 attendees on-site and 87 viewing on-line. Many of the presentations are recorded and offered on-demand (without CEUs) via the NCRTAC website.

Statewide Trauma Advisory Council

The Statewide Trauma Advisory Council's vision is to ensure that all trauma patients in the state of Wisconsin receive comprehensive trauma care. Members of the Statewide Trauma Advisory Council (STAC) are dedicated to reducing the death and disability resulting from traumatic injuries and mass casualty events by providing a comprehensive and integrated system of care. The purpose of STAC is to advise and provide leadership to the Department of Health Services (DHS) on issues related to the development, operation and evaluation of the statewide trauma care system.

Per Wisconsin State Statute Chapter 15 (25), STAC consists of 13 advisory board members who are appointed by the secretary of health services, as follows.

1. Four physicians who represent urban and rural areas.
2. Two registered nurses, as defined in s. 146.40(1)(f).
3. Two prehospital emergency medical services providers, including one representative of a municipality.
4. Two representatives of a rural hospital,
5. Two representatives of an urban hospital.
6. One member of the emergency medical services board.

With all geographical areas of the state represented.

The Statewide Trauma Advisory Council meets quarterly on the first Wednesday in March, June, September, and December from 1:00pm-2:30pm. Please visit the DHS STAC webpage for more information.

Healthcare Emergency Readiness Coalition

A healthcare emergency readiness coalition (HERC) is comprised of a core group of hospitals and healthcare organizations, local and tribal public health agencies, state, regional, and local and tribal emergency management, and emergency medical services, as well as additional members. These partners collaborate for the common goal of making their communities safer, healthier, and more resilient. Wisconsin has seven regional HERCs that support communities before, during, and after disasters and other health-related crises.

The U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) funds Wisconsin's HERCs. ASPR leads the country in preparing for, responding to, and recovering from the adverse health effects of emergencies and disasters. ASPR's HPP enables the health care delivery system to save lives during emergencies and disaster events that exceed the day-to-day capacity and capability of existing health and emergency response systems.

HPP is the only source of federal funding for health care delivery system readiness, intended to improve patient outcomes, minimize the need for federal and supplemental state resources during emergencies, and enable rapid recovery. HPP prepares the health care delivery system to save lives through the development of health care coalitions (HCCs). In Wisconsin, these are known as HERCs.

The overall goal of the HERC is to help Wisconsin communities prepare for, respond to, and recover from a disaster as quickly as possible. Through coordinated preparation, response, and recovery efforts, HERC members work to create a more resilient Wisconsin.

To learn more about the North Central Wisconsin HERC (NCW HERC), visit the NCW HERC website.

Website

Visit NCRTAC-WI.org for bylaws, budget, position statements, meeting agendas, meeting minutes, calendar of events, news, etc.

Appendix

Attachment 1: Regional Needs Assessment Summary

Regional Trauma Advisory Council Assessment Tool

NCRTAC Self-Assessment Winter 2022

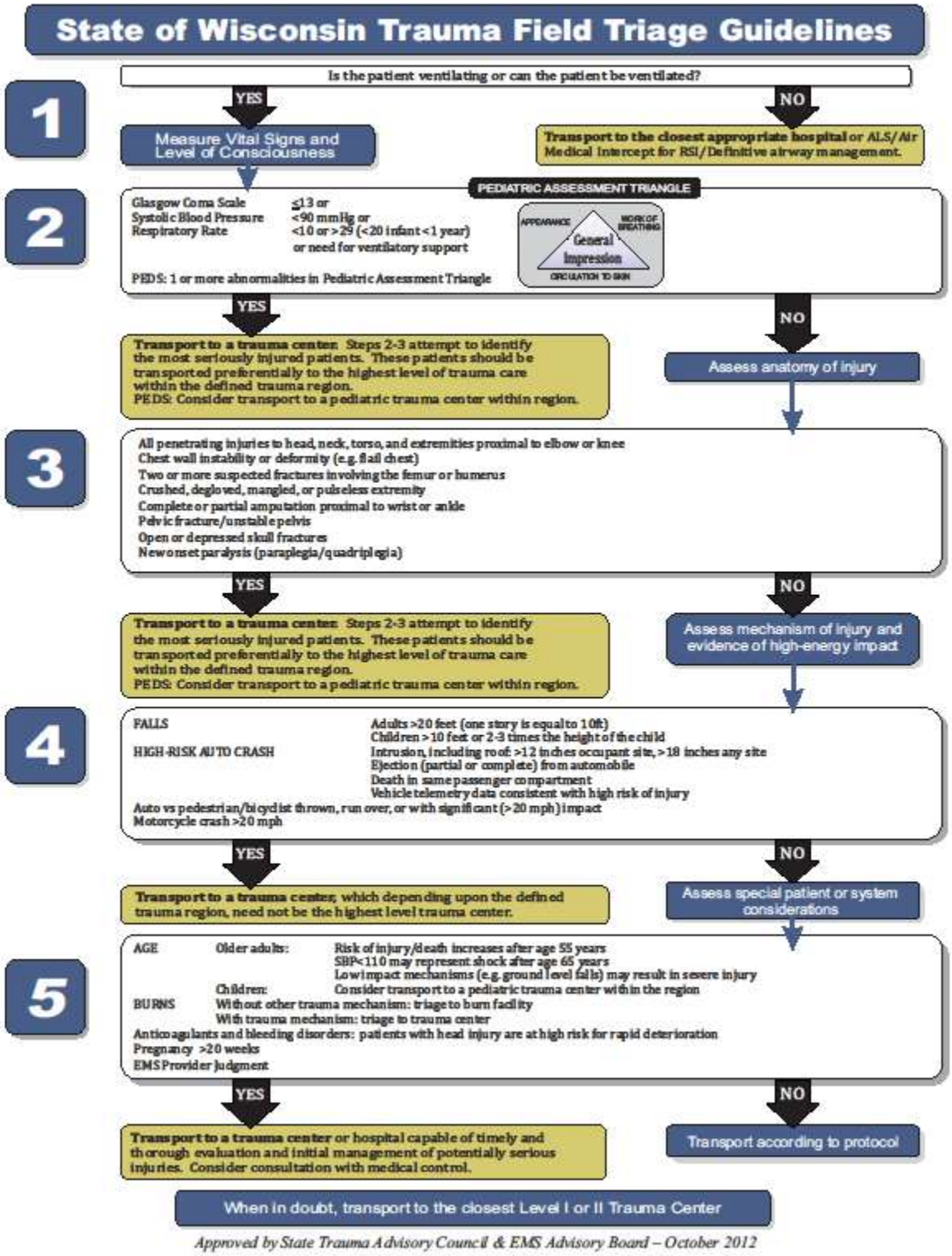
Score = Tally of surveys received from general membership. 11 surveys were initiated, of which, 8 had all questions answered.

Assessment Tool Item #	**DHS Rule Reference**	**Indicator**	**2022 Score** (Range 0 – 5 with 5 being best)	**2019 Score** (Range 0 – 5 with 5 being best)
1a.		There is well-defined regional trauma system medical oversight integrating the needs of the trauma system with the medical oversight of the overall EMS system.	2.09	3.5
1b.	118.06 (3)(f) and 118.06 (3)(g)	The RTAC will facilitate two-way communication methods between the RTAC, its members and the State Trauma Care System. This will include regular meetings.	3.91	4.57
1c.	118.06 (3)(b)	The RTAC has a functional executive council.	3.73	4.71
1d.		There is a clearly defined, cooperative, and ongoing relationship between regional trauma physician leaders and the EMS system medical directors in the region.	1.73	2.60
1e.	118.06 (3)(L)	The regional trauma plan should ensure that the number, levels, and distribution of trauma facilities are communicated to all partakers and stakeholders. The RTAC should develop procedures to ensure that trauma patients are transported to an appropriate facility that is prepared to provide care.	3.18	3.86
1f.	118.06 (3)(L)	The regional trauma plan has clearly defined the roles, resources and responsibilities of all acute care facilities treating trauma, and of facilities that provide care to specialty populations (burns, pediatrics, other).	2.36	4.00

2a.	118.06 (3)(c)	The region has one or more coordinating facilities that work in collaboration with the department and the RTAC to meet the needs required for the development, implementation, maintenance and evaluation of the trauma system.	1.89	4.50
2b.		The region has a system in place to support member hospitals in the classification review process.	1.56	3.67
3.	118.06 (3)(L)	The RTAC has an up-to-date regional trauma plan based on a needs assessment and with the structure specified by the department. The plan is submitted to the department.	3.78	4.29
4a.	118.06 (3)(o)	The region has adopted the State of Wisconsin Trauma Field Triage Guidelines to ensure that trauma patients are transported to an appropriate trauma care facility. Regional over-triage and under-triage data is reviewed.	2.88	3.71
4b.		When injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure that the patients are expeditiously transferred to the appropriate, system-defined trauma facility.	2.75	3.57
4c.		There is a regional trauma bypass protocol that provides EMS guidance for bypassing a trauma care facility for another more appropriate trauma care facility.	2.13	3.80
4d.	118.10	Collected data from a variety of sources are used to review the appropriateness of all-inclusive regional trauma performance standards, from injury prevention through rehabilitation.	2.75	3.60
4e.	118.06 (3)(i)	The RTAC analyzes local and regional trauma registry data to identify and evaluate regional trauma care and improve the use of resources.	4.00	4.29
5a.	118.06 (3)(k)	Injury Prevention: The RTAC, in cooperation with other agencies and organizations, uses analytical tools to monitor the performance of population-based (regional) injury prevention programs.	3.50	4.29

5b.	118.06 (3)(k)	The RTAC has developed a written injury prevention plan. The injury prevention plan is data driven and targeted programs are developed based upon high injury risk areas. Specific goals with measurable objectives are incorporated into the injury prevention plan.	2.25	3.67
6a.	118.06 (3)(k)	The RTAC supports trauma training courses for all levels of healthcare providers.	4.00	4.57
6b.	118.06 (3)(k)	As new protocols and treatment approaches are instituted within the regional trauma system, structured processes are in place to inform or educate all personnel of those changes in a timely manner.	2.63	4.17
7.		There are established procedures and mechanisms for communications among trauma system members during all levels of healthcare emergencies including multiple jurisdiction incidents. The procedures and systems are effectively coordinated within the overall regional response plans.	2.50	3.60
8.		The regional trauma plan addresses the integration and participation of rehabilitation services within the continuum of care for trauma patients.	0.38	3.00
9.	118.06 (3)(k)	The RTAC has a process in place to resolve conflicts concerning trauma care and injury prevention.	0.75	2.83
10.		The RTAC is integrated into the regional healthcare coalition (HCC).	3.00	4.43

Attachment 2: Regional Trauma Field Triage Guidelines



Attachment 3: EMS Agencies

County	Service Name	Level
Clark County	Chili-Freemont Fire & Rescue	Emergency Medical Responder
	Central Fire & EMS District	EMT
	Granton Area First Responders	Emergency Medical Responder
	Greenwood Area Ambulance Service	EMT
	Loyal Ambulance Service	EMT
	Neillsville Municipal Ambulance Service	EMT
	Owen-Withee Community Ambulance Service	Advanced EMT
	Thorp Area Ambulance District	EMT
Forest County	Alvin (town of) Fire and Rescue	Emergency Medical Responder
	Argonne Fire Department	Emergency Medical Responder
	Crandon Area Rescue Squad	Advanced EMT
	Hiles FD First Responders – Station A	Emergency Medical Responder
	Laona Rescue Unit	Advanced EMT w/ flexible staffing
Iron County	Beacon Ambulance Service**	Paramedic
	Mercer Area Ambulance & Rescue	EMT
	Saxon-Gurney First Responders	Emergency Medical Responder
	Sherman (Town of) First Responders	Emergency Medical Responder
Langlade County	City of Antigo Fire Department	Paramedic** & TEMS
	Antigo (Town of) Fire Department	Emergency Medical Responder
	Langlade County Rural Fire Control	Emergency Medical Responder
	Pickerel Volunteer Fire and Rescue Squad	Advanced EMT
	Troutland Rescue Squad	EMT (non-transport)
Lincoln County	Corning First Responders	Emergency Medical Responder
	Lincoln County EMS – Merrill	Paramedic
	Lincoln County EMS – Tomahawk	Paramedic
	Pine River First Responders	Emergency Medical Responder
	Russell (Town of) First Responders	Emergency Medical Responder
	Aspirus Med-Evac	Paramedic**

County	Service Name	Level
	Athens Area Ambulance Service	EMT
	Bevent First Responders	Emergency Medical Responder
	Greenheck Fan Corp	Emergency Medical Responder
	Easton First Responders	Emergency Medical Responder
	Edgar Volunteer Fire Department	EMT
	Emmet First Responders	Emergency Medical Responder
	Hamburg Fire Department First Responders	Emergency Medical Responder
	Hatley Area Ambulance Service	EMT
	Hewitt (Town of) Fire Department	Emergency Medical Responder
	Kolbe and Kolbe Millwork Company	Emergency Medical Responder
	Kronenwetter Fire Department First Responders	Emergency Medical Responder
	Maine (Town of) First Responders	Emergency Medical Responder
	Marathon City First Responders	Emergency Medical Responder
	McMillan (Town of) Fire Department First Responders	EMT (Non-transport)
	Mosinee Fire District - Ambulance Service	Advanced EMT
	Ringle Fire Department	Emergency Medical Responder
	Riverside Fire District	Advanced EMT
	South Area Fire & Emergency Response District	Paramedic**
	Spencer Community Ambulance Service	Advanced EMT
	Stratford Area Fire Department and Ambulance	EMT
	Texas (Town of) Fire Department	Emergency Medical Responder
	Wausau Fire Department	Paramedic** & TEMS
	Wausau (Town Of) First Responders	Emergency Medical Responder
Oneida County	Crescent First Responders	Emergency Medical Responder
	Hiles FD First Responders – Station B	Emergency Medical Responder
	Oneida County Ambulance – HYMC	Paramedic
	Little Rice First Responders	Emergency Medical Responder
	Marshfield Clinic Health System – Minocqua Interfacility	Paramedic**

County	Service Name	Level
	Newbold Fire Department	Emergency Medical Responder
	Nokomis Fire Department First Responders	Emergency Medical Responder
	Oneida County Ambulance - Rhinelander	Paramedic
	Oneida County Ambulance - Three Lakes	Paramedic
	Pelican Fire Rescue	Emergency Medical Responder
	Pine Lake First Responders	Emergency Medical Responder
	Rhinelander Fire Department	Paramedic & TEMS
	Stella Volunteer Fire Department & Rescue	Emergency Medical Responder
	Three Lakes Fire Department	Emergency Medical Responder
	Woodboro First Responders	Emergency Medical Responder
Portage County	Portage County EMS	Emergency Medical Responder
	Amherst Fire District	Paramedic
	Portage County/ Stevens Point Fire Department	Paramedic
	Village of Plover Fire Department	Paramedic
Price County	Central Price County Ambulance Service	Advanced EMT
	Fifield EMS First Responders	Emergency Medical Responder
	Flambeau Hospital Ambulance	Advanced EMT
	Pike Lake EMS	Emergency Medical Responder
	Prentice Volunteer Fire Department Ambulance Service	EMT
Shawano County	Birnamwood Area Ambulance*	Advanced EMT
	Wittenberg Area Ambulance*	Advanced EMT
Taylor County	Jump River First Responders	Emergency Medical Responder
	North East Taylor County First Responders	Emergency Medical Responder
	Stetsonville Fire Department First Responders	Emergency Medical Responder
	Taylor County Ambulance Service - Gilman	EMT
	Taylor County Ambulance Service - Medford	Advanced EMT
	Taylor County Ambulance Service - Rib Lake	Advanced EMT
Vilas	Arbor Vitae First Responders	Emergency Medical Responder

County	Service Name	Level
County	Boulder Junction Fire Department	EMT
	Conover Ambulance Service	EMT
	Eagle River Fire Department First Responders	Emergency Medical Responder
	Eagle River Memorial Hospital Ambulance Service	Paramedic
	Lac Du Flambeau Ambulance Service	EMT
	Land O' Lakes Ambulance Service	EMT
	Manitowish Waters Fire Company	EMT
	Phelps Area Emergency Medical Service	Advanced EMT
	Plum Lake Ambulance Service	EMT
	Presque Isle Volunteer Fire Department	EMT
	St. Germain Fire Department	EMT w/ flexible staffing
	Winchester Volunteer Ambulance Service	EMT
Wood County	Armenia First Responders	Emergency Medical Responder
	Arpin Fire Department First Responders	Emergency Medical Responder
	Auburndale Fire Department First Responders	Emergency Medical Responder
	Biron Volunteer Fire Department First Responders	Emergency Medical Responder
	Grand Rapids Volunteer Fire Department	Emergency Medical Responder
	Hewitt Area Fire Department	Emergency Medical Responder
	Life Link III	Paramedic**
	Lincoln (Town of) Fire Department	Emergency Medical Responder
	Marshfield Fire and Rescue Department	Paramedic**
	Nekoosa Volunteer Fire Department First Responders	Emergency Medical Responder
	Pittsville Fire Department	Advanced EMT
	Port Edwards (Town of) Emergency Medical Responders	Emergency Medical Responder
	Port Edwards Fire Department First Responders	Emergency Medical Responder
	Richfield Rural Fire Department	Emergency Medical Responder
	Rock (Town of) Fire & Rescue	Emergency Medical Responder
	Rome Fire Department First Responders	Emergency Medical Responder

County	Service Name	Level
	Rudolph Fire Department	Emergency Medical Responder
	Saratoga (Town of) EMS First Responders	Emergency Medical Responder
	Sherry Volunteer Fire Department	Emergency Medical Responder
	United Emergency Medical Response	Paramedic**
	Vesper Volunteer Fire Department First Responders	Emergency Medical Responder
	Wisconsin Rapids Fire Department	Paramedic** & TEMS

* Base located outside of the region but primarily transports into the region.

** Critical care paramedic

Attachment 4: Hospitals

Hospital	City	Designation Level
Aspirus Langlade Hospital	Antigo	Level IV
Aspirus Eagle River Hospital	Eagle River	Level IV
Aspirus Merrill Hospital	Merrill	Level IV
Marshfield Medical Center – Park Falls	Park Falls	Level IV
Aspirus Stanley Hospital	Stanley	Level IV
Aspirus Tomahawk Hospital	Tomahawk	Level IV
Aspirus Medford Hospital	Medford	Level IV
Marshfield Medical Center – Neillsville	Neillsville	Level III
Howard Young Medical Center – Aspirus	Woodruff	Level III
Marshfield Medical Center – Minocqua	Minocqua	Level III
Aspirus Stevens Point Hospital	Stevens Point	Level III
Marshfield Medical Center – Weston	Weston	Level III
Aspirus Riverview Hospital	Wisconsin Rapids	Level III
Aspirus Wausau Hospital	Wausau	ACS Level II (Adult)
Marshfield Medical Center	Marshfield	ACS Level II (Adult & Pediatric)
Aspirus Plover Hospital	Stevens Point	Undesignated

Aspirus Rhinelander Hospital	Rhinelander	Undesignated (designation pending)