

North Coast EMS EMS for Children Critical Care System Plan –12/23/2019

An EMS for Children Critical Care System Plan submitted to the EMS Authority shall include, at a minimum, all of the following components:

(1) EMSC program goals and objectives: see last section below.

(2) The names and titles of the local EMS agency personnel who have a role in the planning, implementation, and management of an EMSC program.

Employees –

Larry Karsteadt, Executive Director: Administrative Oversight

Louis Bruhnke, Associate Director: Policy, Protocol, Quality Improvement, Disaster, Data

Wendy Chapman, Programs Manager: Prevention, Training Program Approval, Certification

Maris Hawkins, Fiscal Manager: Contracts, STEMI Fees, Fiscal Accounting

Nicole Mobley, Administrative Assistant: Office Management

Independent Contractors -

Matthew Karp, M.D., Regional Medical Director: Medical Oversight

Rita Henderson, RN: Emergency Department Approved for Pediatrics (EDAP) Nurse Contractor

Kayce Hurd: Protocols, Policies, Procedures

Stayce Curry, RN: Behavioral Health Nurse Contractor

Dennis Louy, Del Norte County EMS Disaster Liaison

Patrick Lynch, Humboldt County EMS Disaster Liaison

Kimberly Baldwin, Lake County EMS Disaster Liaison

Jay Myhre: e-PCR Program, Data

Ezequiel Sandoval: IT support

(3) Injury and illness prevention planning that includes coordination, education, and data collection.

North Coast EMS has had a robust EMS for Children program for over 25 years. We received several special project grants from the EMSA to help establish a rural version of the Los

Angeles County Emergency Department Approved for Pediatrics (EDAP) program. The originators of this important and innovative program, including: James Seidel, M.D., Marianne Gausche-Hill, M.D. and Debbie Henderson, R.N., assisted with this process. Special project funding also included at least one more recent grant to establish a complete EMS for Children Critical Care System following national and state guidelines. This System was instrumental in shaping the more rural components of the EMS for Children state regulations. The North Coast EMS EMSC program involves regional injury and illness planning and coordination primarily conducted by Wendy Chapman in-conjunction with designated EDAPs, counties and others. We currently are in our eighth and last year of a federally funded (HRSA) EMS for Children grant via subcontract with UCD-MC that has helped continue the EDAP program, prevention and pediatric educational programs and data collection. We conducted several EMSC continuing educational efforts within the region and training sessions at the UCD-MC SIM Center for MDs, RNs and field personnel, including for North Coast EMS and the S-SV EMS personnel. Also, Wendy has been and continues to be a main coordinator of the annual EMSC state conference. We have reported for decades on the EMSC System each year in the annual EMSA approved EMS Plan update (EMSC Section) and in the EMSA required quarterly Regional Progress Reports. Finally, all EDAPs are eligible to receive, from North Coast EMS upon request and review, a portion of the Supplemental Maddy Fund (Richie's) approved by each county, to support the EDAP and EMSC programs. At this time, we've distributed or have available to distribute over \$300,000 to North Coast EMS designated EDAPs.

(4)(A) Policies for care and services rendered to pre-hospital EMS pediatric patients:

1. First Response Non-transport and Transport: The above grants brought the first PALS instructor training program into the region many years ago by the LA EMSC team and local trainings continue through North Coast EMS approved CEU programs. EMT and paramedic training programs include any pediatric components required in state regulation and providers are encouraged to take PALS and other pediatric related training opportunities. Also, Paramedic Base Hospitals are encouraged to offer pediatric CEUs on occasion. North Coast EMS protocols and policies include pediatric components as well. The UCD-MC grant also helped purchase pediatric training equipment now located in all three counties. Please see EMS Plan for details on the number of authorized non-transport and transport providers located within the region.
2. Critical Care and Interfacility Transfer: All seven hospitals located within the North Coast EMS region are North Coast EMS designated EDAPs, with periodic site surveys that evaluate pediatric equipment, ED staff training, the hospitals' pediatric QI and disaster preparedness programs, etc. Also, all EDAPs have participated in and are encouraged to participate in future Pediatric Readiness Surveys. Specific to transport and transfer, pediatric patients are occasionally bypassed or redirected to a higher center (e.g., Trauma Center or hospital with more specialists) by policy. In Lake County, and rarely in eastern Humboldt, this may include use of rotor air ALS units that fly out of the county. Pediatric patients that require a higher level of definitive care are transferred to accepting higher level centers. These patients are either flown by an aero med RN/paramedic crew or transported by ground. North Coast EMS has reciprocity agreements with surrounding LEMSAs to help ensure that there are no jurisdictional barriers to timely definitive care. Also, EDAPs utilize on-call or telemedicine pediatricians, UCD-MC provider and other higher centers provide 24/7 pediatric and neo-natal telemedicine services for the North Coast EDAPs.

(B) This shall include, but not be limited to:

1. Pediatric-specific Personnel Training: see above but we have PALS, UCD-MC SIM Center, annual local and state EMSC pediatric conferences and first responder, EMT, and Paramedic programs include pediatric training. ED RNs and MDs at EDAPs are also required to have periodic pediatric focused CEUs.
2. Pediatric ambulance equipment: BLS and ALS supply and equipment policies include pediatric considerations.

(5) A quality improvement plan containing process-outcome measures as referenced in section 100450.224 of this Chapter.

North Coast EMS has an EMSA approved QI Plan that is updated when required. As part of the EMSC program with UCD-MC we have collected and complied hospital outcome data, and we have participated in three peer-reviewed published medical studies that included North Coast EMS pediatric patients, two with Harbor-UCLA Medical Center and UCD-MC. We also plan to participate in the EMCS pediatric data collection or registry process when it is available.

(6) A list of facilities providing pediatric critical care and pediatric trauma services.

In-addition to the following designations, each hospital is a North Coast EMS designated Paramedic Base and Receiving Hospital. From north to south:

Sutter-Coast Hospital, Crescent City = EDAP and Level IV trauma center.

Mad River Community Hospital, Arcata = EDAP and Level IV with Level III surgery trauma center.

Saint Joseph Hospital, Eureka = EDAP, Level III trauma center (with 24/7 neurosurgery) and STEMI Receiving Center.

Redwood Memorial Hospital, Fortuna = EDAP

Jerold Phelps Community Hospital, Garberville = EDAP

Sutter-Lakeside Hospital, Lakeport = EDAP and Level IV trauma center

Adventist Health Clearlake Hospital = EDAP

Sempervirens, Eureka = 24-hour Psychiatric Facility.

(7) List of designated hospitals with agreements to participate in the EMSC system of care.

All of the above (less Sempervirens) are designated by North Coast EMS as EDAPs with agreements. As designated EDAPs, each facility is eligible to receive Supplemental Maddy Funding (Richie's) to purchase pediatric useful supplies and equipment, pediatric staff training, EMS for Children community related programs, including prevention, etc. Also, Sempervirens is required to keep several beds available for children.

(8) A list of facilities providing pediatric physical rehabilitation resources.

Humboldt County – 0

Del Norte County – 0

Lake County – Innovative Physical Therapy, Quail Run Physical Therapy

(9) Copies of the local EMS agency's EMSC pediatric patient destination policies.

<http://www.northcoastems.com/wp-content/uploads/Policy-7000FINAL-1.pdf>

(10) A description of the method of field communication to the receiving hospital specific to the EMSC patient.

All ambulances are required or encouraged to alert the hospital of a pending patient arrival by med-net radio and/or cell phone. Critical patients such as trauma or severely ill children mobilize trauma teams and/or other appropriate available specialty resources, including on-call or telemedicine pediatricians and other specialists.

(11) A description of the method of data collection from the EMS providers and designated EMSC hospitals to the local EMS agency and the EMS Authority.

All transportation providers utilize EMSA compliant e-PCRs that are transmitted to the state repository at ICEMA. North Coast EMS has access to this data and utilizes the services of a trained e-PCR contractor (Jay Myhre) to generate reports, etc. We have collected outcome data at each EDAP as part of the UCD-MC grant and published findings, and we plan to participate in the EMSA data collection effort when available.

(12) A policy or description of how the local EMS agency integrates a PedRC in a neighboring jurisdiction.

See above but North Coast EMS has reciprocity agreements with neighboring LEMSAs that help ensure prompt transfer of all critical patients including children. The North Coast EMS Executive Director has encouraged all LEMSA colleagues to support jurisdictional hospitals in the PedRC program. As part of the UCD-MC grant, several S-SV EMS are now more pediatric ready.

(13) Pediatric surge planning.

The North Coast EMS Regional Disaster Coordinator oversees the county specific North Coast EMS Disaster Liaison contractor in each of the agency's 3 constituent counties. Each county specific EMS Disaster Liaison coordinates pediatric surge planning with their respective Public Health HPP Coordinator and other members of the respective county disaster preparedness coalitions.

(14) Goals and Objectives:

- a. Implement the new EMSC regulations to ensure compliance of the existing EMS for Children Critical Care System.
- b. Update pediatric related policies, contracts etc. as needed.
- c. Conduct site surveys to five of the seven EDAPs (scheduled for March 2020) and for the additional two EDAPs the following year.
- d. Conduct trauma center site surveys to Sutter-Lakeside, St Joseph and Mad River between May and December 2020.
- e. Continue distribution of the Richie's Fund to designated EDAPs after approval by North Coast EMS. At this time available funding is under-utilized.

- f. Seek funding alternatives to the UCD-MC grant which ends in May 2020 to continue the EMSC related services of several staff members (Larry Karsteadt, Wendy Chapman, and Maris Hawkins) and contractors (Dr. Karp and Rita Henderson). This may include consideration of North Coast EMS receipt of a portion of future accruing Richie's funds.
- g. Seek alternative opportunities to continue to conduct periodic EMS for Children training programs if possible.