



**Santa Clara County  
EMS for Children  
Plan  
2022**

**This plan was prepared for the  
California Emergency Medical Services Authority  
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## Executive Summary

Children have unique psychosocial and physical needs that separate them from adults when needing emergency medical care. Most care provided to children when they are ill or injured is provided at the emergency department within the closest proximity to their home. Therefore, it is important all emergency departments (EDs) maintain a level of readiness to care of pediatric patients. This includes having appropriately trained staff, equipment, and policies focused on providing emergency care to children. Since 2013, this has been the focus of National Pediatric Readiness Project. This project, supported by the American Academy of Pediatrics, The American College of Emergency Physicians, the Emergency Nurses Association, and the Federal Emergency Medical Services for Children program, has been encouraging EDs across the nation to participate in assessment to better prepare for caring for children<sup>1</sup>. This initiative shows “EDs with higher readiness scores demonstrate a 4-fold lower rate of mortality for children with critical illness than those with lower scores”.<sup>2</sup> Our local emergency care system has participated in these assessments starting in 2018, when these guidelines were revised and as the state supported regulations to establish a local Emergency Medical Care for Children (EMSC) program. Of the 10 non-federal emergency ambulance receiving hospitals in Santa Clara County, 9 have agreed to serve as Pediatric Receiving Centers (PedRC) and participate in the EMS for Children Specialty Program with the Local Emergency Medical Services Agency. Santa Clara County Emergency Medical Services Agency (SCCEMSA) initiated the EMSC Program through development of pediatric specific treatment protocols, conducting hospital site visits to assign appropriate PedRC designation levels and lastly the establishment of this EMSC Plan. Santa Clara County Emergency Medical Services Agency’s EMS for Children Plan has been written in accordance with Title 22, Division 9, Chapter 14 of the California Code of Regulations.

### *California EMS Regulations*

California statute mandates the Emergency Medical Services Authority (EMSA) to adopt necessary regulations to carry out the coordination and integration of all state activities concerning Emergency Medical Services (EMS) (Health and Safety Code §1797.107).<sup>3</sup>

In addition, State statute allows the EMS Authority to establish guidelines for hospital facilities, in cooperation with affected medical organizations, according to critical care capabilities (Health and Safety Code §1798.150)<sup>4</sup>.

California legislation added Chapter 12, (statue of 1996, chapter 197) the California Emergency Medical Services for Children Act of 1996, commencing with Section 1799.202 od Division 2.5 to the Health and Safety Code, requiring EMS Authority to ensure that children receive adequate and appropriate EMS care necessary to prevent loss of life and human potential.<sup>5</sup>

California’s Emergency Medical Services for Children (EMSC) is described in the California Code of Regulations; Title 22, Division 9, Chapter 14. These regulations outline the requirements of all components of

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<sup>1</sup> National EMSC Data Analysis Resource Center, “Pediatric Readiness.” 18-Feb-2021, <https://www.nedarc.org/pedsReady/index.html>

<sup>2</sup> Ibid

<sup>3</sup> California Emergency Medical Services Authority, “EMS for Children.” 1 July 2022 Accessed, <https://emsa.ca.gov/ems-for-children/>

<sup>4</sup> Ibid

<sup>5</sup> Ibid

the EMSC Program including the Local Emergency Medical Services Agency (LEMSA), prehospital providers, and hospitals<sup>6</sup>.

As a requirement of the California Regulations, this document is to serve as a formal written plan for the SCCEMSA Emergency Medical Services for Children Program.

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<sup>6</sup> California Emergency Medical Services Authority, "EMS for Children." 1 July 2022 Accessed, <https://ems.ca.gov/ems-for-children/>

## Santa Clara County EMS Agency

Serving over 1.8 million people, the Santa Clara EMS Agency works diligently to ensure that the communities, which are spread over its 1,312 square-miles, have access to emergency medical services that provide quality care based off best practices and evidence-based research. With 22.5% of the population being under the age of 17, its imperative that care includes best practices established for the pediatric patient and a program that monitors Emergency Medical Services rendered.

SCCMSA's specialty care programs are further refined by the agency's commitment to excellence as defined in the Vision, Mission, and Values:

### Vision

Assuring an EMS system in Santa Clara County that provides safe, quality, and effective prehospital care.

### Mission Statement

The Santa Clara County Emergency Medical Services Agency is an essential service dedicated to ensuring the provision of quality patient care to the people of Santa Clara County through collaboration, facilitated regulation, and system management.

### Values

- **Dignity and Respect:** We treat people with dignity and respect.
- **Progressive Innovation:** We are dedicated to the continuous improvement of our processes and systems, based on science, data, and best practices.
- **Professionalism and Objectivity:** We treat all individuals and organizations professionally, fairly, and without prejudice.
- **Leadership:** We lead through collaboration and facilitation to ensure accountability, the provision of quality patient care, while ensuring fiscal and operational stability.
- **Participation:** We value the contributions of the public, other agencies, and organizations in the development, implementation, and evaluation of the Santa Clara County EMS System.

The Santa Clara County Emergency Medical Services Agency is comprised of an EMS Director, EMS Medical Director, Specialty Programs Nurse Coordinator, ten EMS Specialists, one Senior Epidemiologist, one Senior Management Analyst, one Executive Assistant, one Administrative Assistant, two Office Specialists III's and two Extra Help EMS Specialists. The Specialty Programs Nurse Coordinator is responsible for the management and coordination of the Emergency Medical Services for Children Program with support from an EMS Specialist, Senior Epidemiologist EMS Director, and the EMS Medical Director.

## The Pediatric Patient

Santa Clara County is the 6<sup>th</sup> most populous county in California, its largest city, San Jose is the 10<sup>th</sup> most populous city in the United States.<sup>7</sup> The largest ethnic groups include, 37% Asian, 30% White, and 25% Hispanic or Latino. The San Jose, Sunnyvale, Santa Clara metro area possess the largest population density with 21% being under the age of 17. The median per capita income is just over \$65,000, and an estimated 14.6% of children living at or below the poverty level. The rate of uninsured children is low at 1.8%. Children with special healthcare needs represent a fraction of the population but face greater risk of poverty, miss more school, require more frequent medical care, greater use of prescription medications and equipment and have less coordinated care (lack a medical home) making them higher utilizers of hospital emergency departments than children without special healthcare needs<sup>8</sup>. While children represent nearly 25% of the population, they account for only 10% of EMS encounters.

	Population less than 17 years old	Infant Mortality Rate (per 1,000)	Children in Poverty (California poverty level)	Children living with food insecurities	Children Uninsured	Children Special healthcare needs	Children receiving care in a medical home
Santa Clara County	424,995	2.7	14.6%	6.5%	1.8%	12.3%	44.6%
California	8,947,160	3.9	18.6%	13.6%	3.1%	14.1%	43.1%
Year reported	2021	2020	2018	2019	2018	2019	2019

Table 1: Santa Clara County Child demographics compared to state. data available from Dept. of Health Care Access and Information

Pediatric patients who are acutely injured or ill do not present to the emergency department in the same manner as adults. Adults present with identifiable injuries and illnesses, while children may present with symptoms of several different diseases or conditions. Being able to identify the most common reason for ED visits, assists in the development of pediatric specific pre-hospital and ED treatment protocols thus improving patient care and outcomes. The most common clinical presentations for children in the emergency department are respiratory illnesses, infections, traumatic injuries, and seizures. This data is represented similarly when comparing EMS transport patient care record, although children arriving via ambulance tend to have higher acuity.

<sup>7</sup> "2020 Population and Housing State Data". United States Census Bureau. Retrieved August 17, 2021.

<sup>8</sup> Abdi, Fadumo M., Deborah Seok, and David Murphey. "Children with special health care needs face challenges accessing information, support, and services." *Bethesda, Md: Child Trends* (2020).

### Emergency Department Visits by Primary Diagnosis, 2016-2020

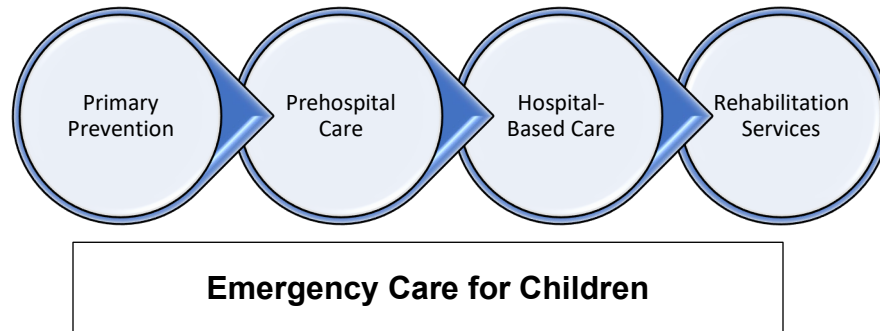
Santa Clara County Primary Diagnosis	Number				
	2016	2017	2018	2019	2020
Asthma/Bronchitis	4,179	4,259	3,544	3,522	1,504
Burns	456	374	356	419	272
Diabetes	90	86	95	88	88
Fractures	4,108	3,719	3,721	3,644	2,260
Mental Diseases and Disorders	1,662	1,685	1,905	1,906	1,367
Metabolic/Nutritional Disorders	341	359	391	356	203
Pneumonia/Pleurisy	2,137	2,112	2,438	2,843	1,486
Poisoning	518	508	515	480	413
Seizures/Headaches	2,560	2,490	2,352	2,340	1,348
Traumatic Injuries	11,999	11,884	10,941	10,771	7,520
Viral Illnesses or Fevers of Unknown Origin	9,334	8,930	9,042	9,330	4,701

Table 2: Number of emergency department visits among children ages 0-17 for the 11 most common primary diagnosis<sup>9</sup>.

EMS for Children is an integrated system that provides a continuum of care to children and their families. This system includes prevention, prehospital care, hospital-based care, and rehabilitative services. Prevention is the first line of defense in the continuum, and it aims to promote healthy living, reduce environmental hazards, and prevent injuries. Prehospital care provides the first medical contact with EMTs and paramedics triaging the child for delivery to an ED for continued medical care. The ED provides advanced emergency care to a child before they are admitted to a hospital or before they die from their injuries. Hospital based care focuses on treating injured children in hospitals by providing them with access to specialists and advanced life support equipment. Rehabilitative services are provided by different providers depending on the severity of injury, but they all aim at restoring function lost due to injury or illness, such as physical therapy or speech therapy. Together, this system ensures children receive high quality care that is centered around their needs and produces the best outcome. For children with chronic conditions, the providers in hospital-based care and rehab services make up the patient's medical home. Hospitals have agreements with outpatient and long-term rehab providers to ensure the full spectrum of care is provided.

<sup>9</sup> California Dept. of Health Care Access and Information. custom tabulation. 2021. <https://www.kidsdata.org/region/59/santa-clara-county/results#cat=44>





As the manager of the EMSC program, SCCEMSA can leverage its existing partnerships to promote primary prevention strategies. This includes working with public health and primary care providers on immunization campaigns, join law enforcement and other first responders in promoting bike and traffic safety, or collaborating with the hospitals to teach parents how to safely store and administer medications to children. Additionally, the EMSC program will ensure continued coordination of pediatric emergency care between prehospital and hospital while collaborating with pediatric specialists for EMS system quality improvement.

## Santa Clara County Prehospital Providers

The County of Santa Clara currently has EMS Advanced Life Support (ALS) First Response and ALS Emergency Ambulance Services. The county has a contract with Rural/Metro of California providing 911 transport services. A combination of ground, air, and specialty CCT transport are all offered within the county. The community can access emergency services through the 9-1-1 system.

Once on scene, the first responder and ambulance transport crews coordinate their efforts to rapidly triage treat and transport patients to a nearby emergency department. Prehospital providers have a [series of policies and treatment protocols](#) to aid in treatment decisions and direct care. This includes pediatric specific protocols and [equipment](#). The SCCEMSA is responsible for creating EMS policies, protocols, and equipment requirements for emergency medical care and services. Prehospital care providers can access these policies and protocols via an phone based application or on the [SCCEMS Agency website](#). SCCEMSA policies are reviewed every three years and protocols are reviewed every two years following the steps identified in [Policy 109](#). SCCEMSA staff provide education and training to system providers regarding any policies or protocol changes. Prehospital care providers are required to maintain competency through continuing education, department training, and skills verification. [Policy 213](#) mandates high risk/low frequency skills training for EMS providers which may include pediatric specific protocols. All paramedics working for 911 transport services have Pediatric Advanced Life Support (PALS) training.

## Communication

Santa Clara County prehospital providers have two ways to make pre-hospital notification. In addition to the 800 MHz radio system available to transporting units in Santa Clara, providers have a phone number that is assigned to each receiving hospital for the purposes of receiving radio reports. Either method of communication is reliable or is utilized frequently amongst field crews. Emergency Medical Service personnel

should provide pre-hospital notification to pediatric trauma centers when a pediatric patient meeting Trauma Alert Criteria is enroute, so that the appropriate hospital resources may be mobilized before patient arrival.

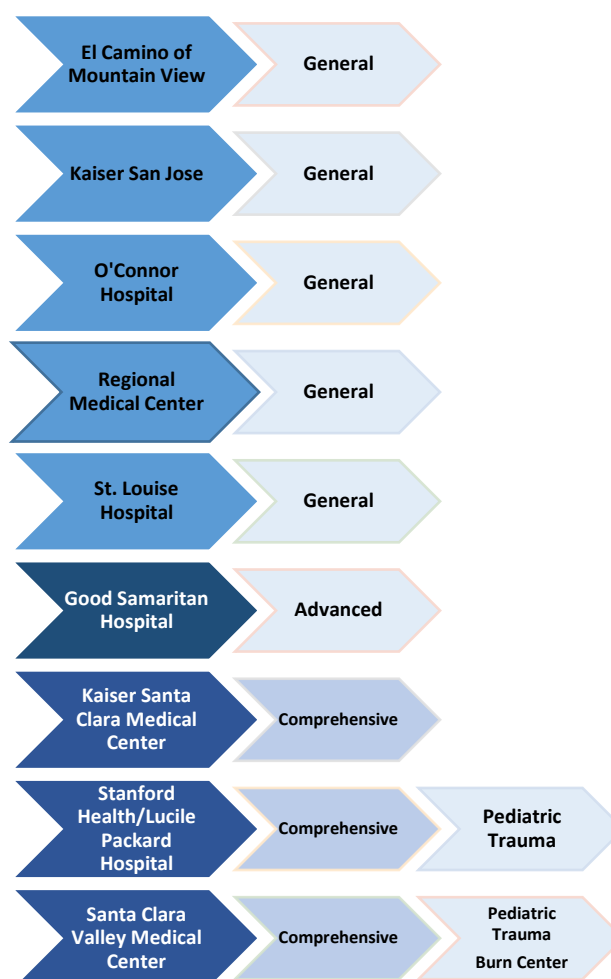
Santa Clara County Emergency Medical Services Agency has a policy in place to give direction on providing a notification report to receiving hospitals. [Policy document #501; Hospital Radio Reports](#); addresses the minimum acceptable information to be communicated and provides a standardized and consistent approach to prehospital notifications. Certain patient care interactions might require online medical control or guidance. This guidance is provided by a base hospital. Santa Clara County prehospital providers can contact the base hospital via radio or phone. Their call will first be handled by a Mobile Intensive Care Nurse (MICN). If necessary, the MICN can escalate the call to a base hospital physician for additional advice or orders.

## Santa Clara County Pediatric Receiving Centers

The focal point to the EMS for Children Plan, was the development of SCCEMSA [Policy 401](#), Pediatric Receiving Center Designation. The purpose of this policy is to define the requirements for designation as a Pediatric Receiving Center (PedRC) in Santa Clara County to ensure that pediatric patients are transported to the most appropriate facility, which is staffed, equipped, and prepared to administer care appropriate to the needs of pediatric patients. The hope is by assigning levels of designation based on criteria of advancing capabilities a pediatric patient that need the highest level of care are transported to an advanced care facility the first time.

After reviewing the California designation standards, and reviewing hospital applications, SCCEMSA determined that the basic level of designation was not necessary for our operational area and so it was removed.

Santa Clara County has ten (10) non-federal prehospital receiving centers, nine of which have been designated by Santa Clara County EMS to receive pediatric patients. Six hospitals are designated as General Pediatric



Receiving Centers, one is designated as an Advanced Receiving Center, and three have received the designation as a Comprehensive Receiving Center.

Each of these centers has been verified through an application process and on-site visit to ensure they meet the specifics of the Santa Clara County EMS Policy 401, Pediatric Receiving Center Designation. Each PedRC was also asked to identify a physician and nurse Pediatric Emergency Care Coordinator (PECC). The role of the PECC is to serve as a unit resource promoting education and training for the EMSC program, being a pediatric patient care advocate and serving as a liaison with SCCEMSA.

## Pediatric Patient Destination

Santa Clara County 911 ambulances transport an average of 2,100 pediatric patients per year. Prior to the implementation of EMSC, Santa Clara Valley Medical Center consistently received the largest number of pediatric transports followed by Regional Medical Center and Kaiser San Jose. Below is a graph representing pediatric patient destinations for 2020 and 2021.

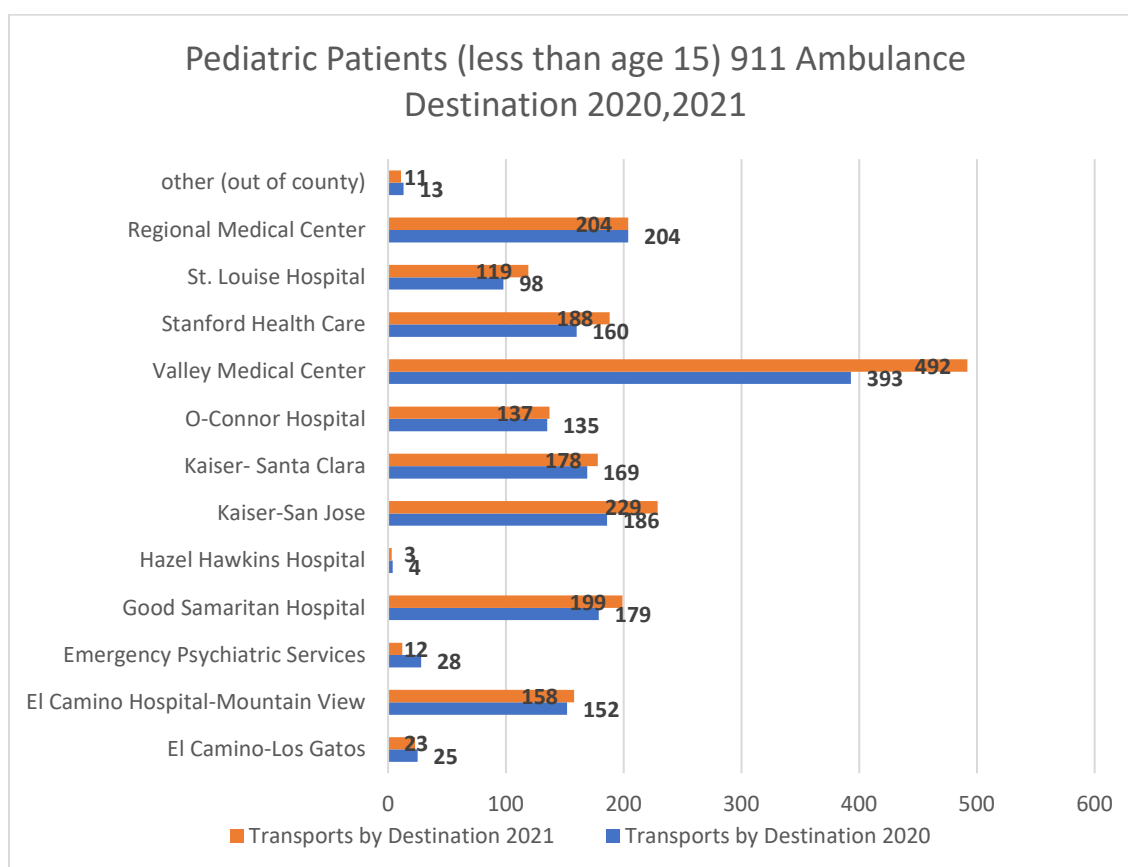


Figure 1: Pediatric EMS Transports by year. Data queried from Image Trend on 10/1/2022

EMS destination is determined based on the patient's emergency medical condition and availability of services. Prehospital providers are to transport the patient to facility of choice or the closest hospital to the incident location based on patient condition and ambulance transport time. Some circumstances allow for EMS providers to transport to facilities further away which offer "specialty services" for example trauma, or stroke services. Santa Clara County has two Pediatric Trauma Receiving Centers, Valley Medical Center, and Stanford Health.

In July 2022, SCCEMSA [Policy 602](#) was updated to include Pediatric Receiving Center Designation. Details of this policy include:

- Pediatric patients meeting trauma triage criteria are to be transported to the closest Pediatric Trauma Center
- Pediatric patients who are in extremis are to be transported to the nearest ED that is accepting emergency ambulances
- A pediatric patient who meets critically ill criteria shall be transported to the closest Advanced or Comprehensive Pediatric Receiving Center accepting emergency ambulances.
- Pediatric patients who do not meet trauma, in-extremis or critically ill criteria shall be transported to any PedRC (listed in table) that is accepting emergency ambulance patients.

The SCCEMSA decided to integrate concepts from the Pediatric Assessment Triangle (PAT) when determining the critically ill criteria listed in this policy. “The PAT is a rapid and simple observational tool suitable for emergency pediatric assessment regardless of presenting complaint or underlying diagnosis.”<sup>10</sup> The PAT has been validated as a reliable tool to identify high-acuity patients and is taught in resuscitation curriculum for both prehospital and emergency nursing<sup>11</sup>. By including this assessment tool, Pre-hospital care providers should be able to quickly assess which pediatric patients shall be transported to Advanced or Comprehensive PedRC without requiring additional training. The PAT was reviewed as part of the most recent EMS Update training offered by SCCEMSA.

Since the implementation of EMSC (Policy 602), the volume of patients has shifted slightly. The top three destinations for pediatric 911 transports are now Santa Clara Valley Medical Center, Good Samaritan, and Kaiser Santa Clara. Pediatric transports to El Camino Los Gatos Hospital, the one hospital which chose not to participate, were easily absorbed by neighboring hospitals.

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<sup>10</sup> Dieckmann RA, Brownstein D, Gausche-Hill M. The pediatric assessment triangle: a novel approach for the rapid evaluation of children. *Pediatr Emerg Care*. 2010 Apr;26(4):312-5. doi: 10.1097/PEC.0b013e3181d6db37. PMID: 20386420.

<sup>11</sup> Horeczko T, Enriquez B, McGrath NE, Gausche-Hill M, Lewis RJ. The Pediatric Assessment Triangle: accuracy of its application by nurses in the triage of children. *J Emerg Nurs*. 2013 Mar;39(2):182-9. doi: 10.1016/j.jen.2011.12.020. Epub 2012 Jul 24. PMID: 22831826; PMCID: PMC4318552.

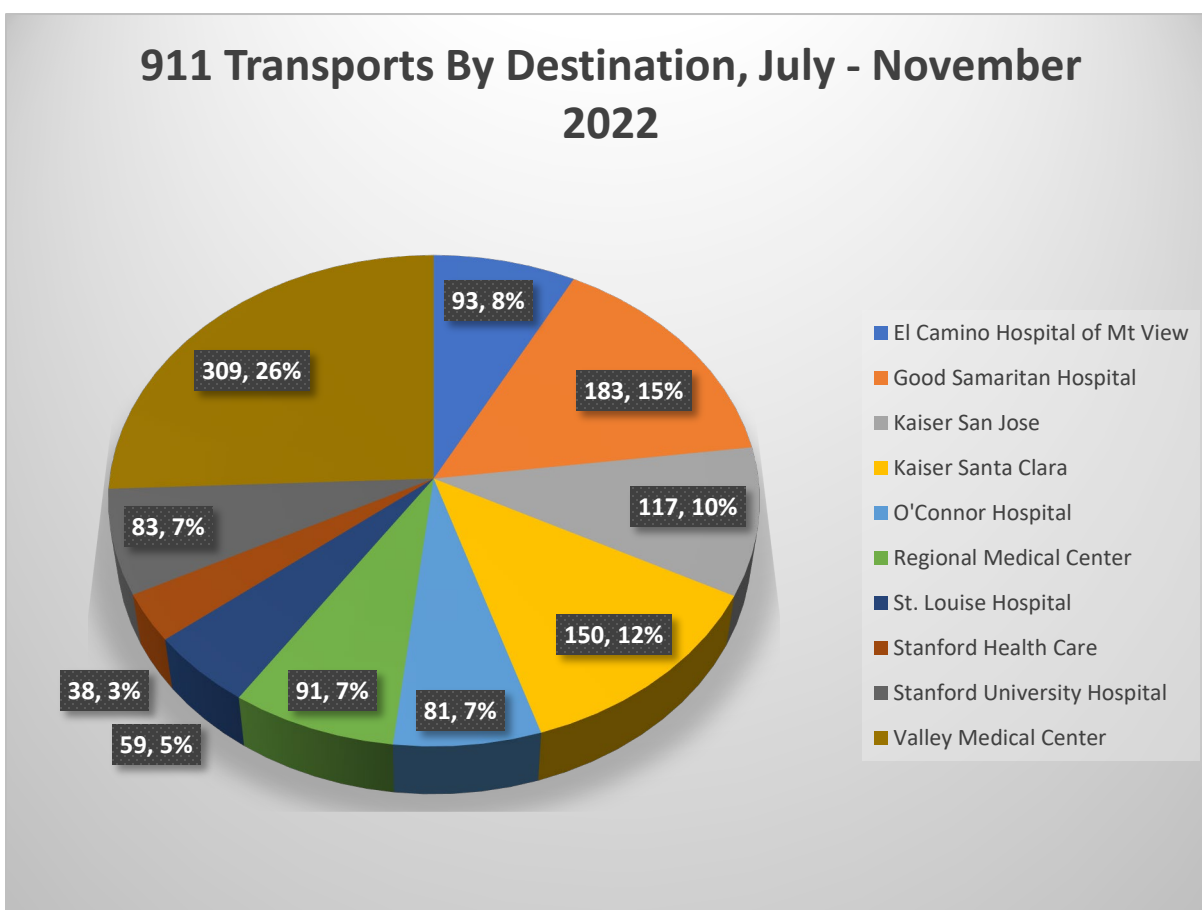


Figure 2: Pediatric EMS Transports since implementation of PedRC. Data queried from Image Trend on December 1, 2022

## Inter-Facility Transfers

Santa Clara County Emergency Medical Services Agency has a policy in place to provide guidelines for ambulance transport of patients between acute care hospitals. [Policy document #808; Prehospital Care Interfacility Transportation](#); outlines transfer agreements, medical control, and levels of care to ensure that patient needs are being met while providing quality rapid transport to definitive treatment.

As part of the designation process, the LEMSA confirmed all PedRC hospitals have inter-facility transfer agreements in place. Although the intention of Policy 401 is to assure pediatric patients are triaged to the most appropriate ED the first time, we anticipate times when pediatric patients need to be transferred from one acute care facility to another, likely for surgical consult and admission to the NICU, PICU or pediatric care unit. For this reason, the designation process included ensuring each PedRC has:

- Pre-arranged agreements with advanced or comprehensive pediatric receiving hospitals for transfer of patients
- Pre-arranged agreements with EMS providers for rapid transport of patients who are eligible for time-sensitive treatments
- Existing transport teams/agreements for neonatal ICU patients

In either case, emergency transfer protocols are pre-arranged, and it is understood that transport should be provided with the urgency of a 911 response.

## Neighboring EMS Agencies

Like other specialty programs in the EMS system of care, the EMSC program functions through collaboration with countywide and regional care providers in the pre-hospital, hospital, and rehabilitation phases of care. Currently, there is a lack of pediatric receiving center designation with neighboring LEMSAs but that did not have much impact on Santa Clara County's designation process and the development of this plan. If and when our neighboring counties designate their pediatric receiving centers, we will update our destination policy. SCCEMSA considered its own PedRC criteria when reviewing inter-facility transfer agreements and the ability for the Advanced and Comprehensive PedRC to transfer patients to regional facilities when services are not available within Santa Clara County. Lucile Packard Children's Hospital (Stanford Health) is a regional transfer center and receives patients from all over the state and country. The Trauma system of care has not changed and both Santa Clara Valley Medical Center and Stanford Health receive pediatric trauma patients from neighboring counties.

## Disaster Preparedness & Medical Surge

All hospitals in Santa Clara County participate in the Emergency Preparedness Healthcare Coalition as part of the Hospital Preparedness Program. The coalition membership includes healthcare assets that provide medical care and services within Santa Clara County and is not limited to just hospitals. They meet regularly to prepare and plan for disasters, offering the opportunity to network and strategize how to come together to provide all levels of health care to the population during a disaster. The coalition completed a Pediatric Surge Annex in 2021. This document details an expansion of surge planning geared towards the special needs of children in disasters. The plan provides guidance on the healthcare system resources and processes to expand their capabilities to adequately triage, treat and/or transfer pediatric patients during disasters. The focal point of the surge annex is to operationalize facility level plans, expand locally using coalition support and if needed request resources and support that expands outward using the Medical Health Operational Area Coordinator (MHOAC) and Regional Disaster Medical Health Specialist (RDMHS).

The MHOAC and RDMHS are state designated roles to assist with disaster communication and coordination ensuring medical assets are mobilized quickly and can cross county or regional boundaries. The MHOAC maintains situational awareness and coordination with healthcare assets in their jurisdiction. They can request or provide resources and support regionally from the RDMHS. If regionally the resource or support is not available, the RDMHS can request it from the state. This process is bi-directional. Santa Clara County has significant capability when it comes to pediatric healthcare resources and thus the county anticipates the need to support incidents that occur outside of the operational area especially incidents with a large volume of pediatric traumas, burns or neonatal intensive care unit decompression. Hospitals are required to submit surge plans to SCCEMSA annually and pediatric surge planning was discussed as part of the pediatric receiving center designation process. The three comprehensive pediatrics receiving centers hold transfer agreements with out-of-county hospitals having equivalent capabilities. This confirms the ability to surge into other operational areas if one of these hospitals becomes overwhelmed or no longer operational.

Lastly, Santa Clara Valley Medical Center's burn unit participates in the Western Regional Disaster Burn Consortium (WRBDC)<sup>12</sup>. It consists of 27 burn units located in the 13 states of the western United States. They have developed a Burn Mass Casualty Operations Plan, that allows for the coordination of burn resources regionally and state to state. If a burn mass casualty event occurs, the WRBDC would activate the Western Region Burn Coordination Center. The coordination center would offer clinical consultation for hospital to

<sup>12</sup> <https://ameriburn.org/wp-content/uploads/2021/03/final10.2020-wrbdc-bmci-operations-plan.pdf>

provide care and stabilization, identify available burn beds, coordinate patient transfers, provide patient tracking between facilities, and if needed assist with resource requests and coordination. The WRDBC greatly expands the capabilities of burn centers to provide care to pediatric patients during disasters.

## Data Collection

SCCEMSA [Policy 500](#) establishes the minimum standard criteria for the completion and submission of prehospital patient care information on the electronic patient care record (ePCR). The submission of ePCRs must be compliant with the most recent CEMIS and NEMIS standards and additional data elements may be requested to support specialty care systems. The SCCEMSA collects and abstracts the following data elements from pediatric ambulance transport ePCRs:

- Response type of service (eResponse.05)
- Scene Incident location (eScene.09)
- Response incident number (eReponse.03)
- Response unit call sign (eResponse.14)
- Agency name (dAgency.03)
- Patient age/units (ePatient.15/ePatient.16)
- Emergency department arrival date/time (eTimes.11)
- Disposition destination name (eDisposition.01)
- Date of birth (ePatient.17)
- Gender (ePatient.13)
- Primary impression (eSituation.11)
- Disposition transport mode from scene (eDisposition.17)
- External cause of injury(eInjury.01)-if applicable
- Patient initial pulse ox (eVitals.12)
- Patient initial respiratory rate (eVitals.14)
- Patient home postal code (ePatient.09)

Patient care is streamlined by the sharing of prehospital care information with the hospital emergency department. SCCEMSA utilizes a data exchange system that allows hospitals to view ePCRs prior to or at the time of arrival. This same platform allows SCCEMSA to collect outcome data from the hospital. The EMSC program is the first attempt at bi-directional exchange of data for system performance monitoring and benchmarking. The outcome data elements being collected include:

- Disposition from the Emergency Department
- Date/time of discharge or transfer from the Emergency Department
- Discharge or transfer diagnosis

Complete data sets will be cleared of PHI and shared with the EMS Authority as requested or on a quarterly basis pursuant of the California Health and Safety Code. Sections 1797.107 and 1799.204.

## Quality Improvement

Reaching for excellence in any system requires a functional decision-making process among the team of workers and users within that system. Inherent to this process is the need to know how the system is functioning and what to do to fix or improve it. The concept of continuous quality improvement (CQI) particularly in the field of health care relies mainly upon the following fundamental components:

- The availability of reliable and trusted information
- The ability to effectively communicate that information in easy-to-understand ways

- A standardized approach to reaching decisions and acting on those decisions

It is through SCCEMSA's Continuous Quality Improvement that the gap between performance and expectations narrows. It pushes the standards upward which results in better outcomes. Quality Improvement stresses understanding complex processes, measuring performance using reliable statistical methods, and using that information to build quality into the process.<sup>13</sup>

SCCEMSA has a policy in place to ensure continued high quality of patient care in emergency medical services provided within the community. [Policy document #111](#); *EMS Quality Assurance and Improvement Program*; establishes a system-wide Quality Improvement Program to continuously monitor, review, evaluate and improve the delivery of Prehospital, In-Hospital and Post-Hospital care of the pediatric patient. The program has active members from all system partners and includes prospective / concurrent / retrospective reviews as well as a feedback system.

The EMSC Program originally started as a quality improvement project to improve pediatric readiness of emergency departments across the nation<sup>14</sup>. Referred to as the Pediatric Readiness Project, its goal was to reduce pediatric patient mortality and improving outcomes by increasing emergency department readiness through participation in an assessment and then implementation of a quality improvement process with established benchmarks and performance measures. The assessment was initiated in 2015, by asking emergency departments across the country to complete a survey focused on equipment and resources available for pediatric patients, pediatric specific training and education of staff and the existence of pediatric specific policies and protocols. Hospitals completed this assessment and received a readiness score. The score was to demonstrate how prepared the emergency department was to provide emergency care for children. Initially, the survey found that only 55% of emergency departments across the country met the benchmarks to be considered ready to care for children.<sup>15</sup> Hospitals were encouraged to use the survey to identify gaps and then provide resources to make improvements. In 2017, the EMS for Children Performance Measures Implementation Manual was published. This manual provided a systemic process of measuring program activities and progress in implementing permanent EMS for Children programs. The manual included nine performance measures that were vital to the development and maintenance of an EMSC Program. SCCEMSA utilized this manual and adopted each of the performance measures into its QI process to develop the EMSC policies and program. These performance measures and the method of validation used to achieve the measure are listed in the [Appendix](#). Continued quality improvement initiatives will be carried out by the PECC at each hospital and SCCEMSA. Together they will ensure continued monitoring of the performance measures listed above and the development of new performance measures driven by population-based data. The PECCs will be able to identify prehospital or facility-based gaps to drive training, education, and policy development. SCCEMSA PECC's will participate in regional and state technical advisory groups, bringing QI and research initiatives back to the local level.

## EMSC Quality Improvement Committee

As with other specialty care programs, coordinating care between prehospital providers, nurses, physicians, and other disciplines is paramount. Interprofessional collaboration provides the opportunity to learn and

<sup>13</sup> Stroup, Craig, *Fundamentals of Emergency Medical Services System Evaluation and Quality Improvement* (Pinecrest Publishing House, 2015), 5.

<sup>14</sup> <https://emscimprovement.center/domains/pediatric-readiness-project/about/>

<sup>15</sup> Gausche-Hill, Marianne, et al. "A national assessment of pediatric readiness of emergency departments." *JAMA pediatrics* 169.6 (2015): 527-534.



work more effectively as a team to help improve patient outcomes. In addition, it improves the coordination and communication between healthcare professionals and thus in turn, improves the quality and safety of patient care.

SCCEMSA has quality improvement committees to represent the Stroke, Trauma and STEMI Programs and would like to extend this to include EMS for Children. Currently, there is a quarterly workgroup composed of nurse and physician Pediatric Emergency Care Coordinators (PECCs) from each of the PedRCs. The workgroup meetings have addressed PedRC implementation, data collection, case presentation and EMSC program development. It has been a forum for PedRC facilities to have input in the structure of the EMSC Committee moving forward. Based on survey responses committee meetings will include quarterly data/metrics, incident case review, EMS Medical Director report, facility-based QI project best practices, clinician and community education and a rotation of topics to include clinical best practices, disaster preparedness and trauma.

Starting in 2023, the workgroup will meet triannually transitioning into the EMSC QI Committee. The Committee membership will be formalized through policy development but at a minimum will include each PedRC physician and nurse PECCs, EMS Agency Medical Director, EMS Agency Specialist - Quality Improvement Coordinator, and EMS Agency Specialty Programs Nurse Coordinator. Committee goals for the initial two years are listed below.

## EMSC Committee Goals and Objectives

Goal #1	Objective	Timeline	Status
Receive Hospital Outcome Measures via data collection/exchange	Hospitals are responsible for sharing pediatric patient outcome measures with the EMS Agency for prehospital Quality Improvement. Goal is to collect 75% of all outcome data for 2023 and 90% for 2024.	12/31/2024	Currently Monitoring
Goal #2	Objective	Timeline	Status
Establish formal EMSC QI Committee	Establishment of a formal EMSC QI Committee will allow for continued collaboration, system monitoring, education, training, and policy development for emergency pediatric patient care. The EMS Agency will be responsible for establishing an EMSC QI Committee Policy and electing a chair and co-chair.	07/31/2023	In Development
Goal #3	Objective	Timeline	Status

Identify at least one QI initiative to improve Emergency Care for Children	Once established, the EMSC Committee will utilize the DMAIC method to identify a QI project. By the end of 2023, at least one project will be brought forward and the PDSA process will be applied to implement the QI project for improved pediatric patient care.	12/31/2023	Yet to start
Goal #4	Objective	Timeline	Status
LEMSA conducts prehospital readiness assessment for system providers	The LEMSA will utilize the EIIC prehospital readiness toolkit to prepare for the national prehospital readiness assessment to improve emergency medical services pediatric care.	12/31/2024	Yet to start

## Child Injury Prevention Outreach and Provider Education

Unintentional injury remains the leading cause of death among children in the United States with motor vehicle accidents causing more deaths than other injury causes<sup>16</sup>. Prevention strategies that include targeted education for specific populations especially the most vulnerable, can reduce the number of accidents and deaths in the community. As part of the Pediatric Trauma Program, both Stanford Health and Santa Clara Valley Medical Center participate in the Injury Prevention Program. Hospitals, schools, public health, EMS, and public safety agencies offer a collaborative approach to providing parent education, training, and outreach to target the key mechanisms of injury facing children in Santa Clara County.

Ongoing campaigns include:

- Safe Sleep
- Child passenger and car seat education with seat installation checks
- Bike and pedestrian safety with bike helmet give aways
- Poison safety
- Concussion training
- Choking safety
- Water safety
- Fall Prevention
- Perinatal classes
- CPR classes
- Adolescent classes

While the trauma program has established a long-standing injury prevention campaign, the establishment of an EMSC program provides opportunity for each of the PedRC to support and promote these efforts. The

<sup>16</sup> <https://www.cdc.gov/injury/features/child-injury/index.html#Child-Injury-Deaths-Data>

formation of the EMSC QI Committee will also provide the opportunity to conduct education and outreach to the community based on data driven metrics.

Collaboration between professions starts with interdisciplinary education. To break down those walls, health professionals must begin training together before they start working together. Interdisciplinary education will lead to more effective communication across disciplines and, ultimately, safer, more affordable, and higher quality care.<sup>17</sup> The Comprehensive PedRC have committed to providing annual educational opportunities to prehospital and hospital providers. They will offer web-based training, seminars, case reviews, conferences and more. The *Revive Initiative* is a great example of interdisciplinary education offered in the community. This team-based simulation training teaches community CPR, AHA Basic Life Support, Advanced Life Support and Pediatric Life Support courses, prehospital Pediatric Advanced Workshop with Simulation (PAWWS), Advanced Resuscitation training for Pharmacists (ARTPharm), and mobile simulation events to allow first responders to practice skills and utilize equipment in the actual environment they work in<sup>18</sup>.

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<sup>17</sup> <https://www.rwjf.org/en/library/articles-and-news/2010/11/interdisciplinary-collaboration-improves-safety-quality-of-care-.html>

<sup>18</sup> <https://www.stanfordchildrens.org/en/about/revive/vision-mission>

## Appendix

### EMS Policies & Procedures for Pediatric Patients

#### Section 400: Facilities

401: [Pediatric Receiving Center Designation](#)

#### Section 500: Communications/Data

500: [Electronic Patient Care Record \(ePCR\)](#)

501: [Hospital Radio Report](#)

506: [Internet Based EMS Communication System](#)

510: [Mandatory Reporting](#)

#### Section 600: Operations

602: [911 EMS Patient Destination](#)

605: [Prehospital Trauma Triage](#)

611: [EMS Air Utilization](#)

615: [Operational Area Medical-Health Mutual Aid](#)

620: [Interfacility Transfer-Ground Ambulance](#)

620-B: [Interfacility Transfer-Trauma System Transfer Guidelines](#)

#### Section 700: Clinical Care Pediatric Protocols

700-P01 [Pediatric Abdominal Emergencies](#)

700-P02 [Pediatric Seizures](#)

700-P03 [Pediatric Altered Mental Status](#)

700-P05 [Pediatric Bradycardia](#)

700-P06 [Pediatric Burns](#)

700-P07 [Pediatric Cardiac Arrest](#)

700-P09 [Pediatric Environmental Emergency](#)

700-P10 [Pediatric Shock](#)

700-P11 [Pediatric Respiratory Distress](#)

700-P12 [Pediatric Allergic Reaction/Anaphylaxis](#)

700-P14 [Pediatric Tachycardia with Pulses](#)

700-P15 [Pediatric Poisoning and Overdose](#)

700-P16 [Pediatric Trauma Care](#)

700-P18 [Neonatal Resuscitation](#)

700-S05 [Routine Medical Care Pediatric](#)

#### Section 800: Reference Material

808: [Interfacility Transport by Ground or Air Ambulance](#)

## Pediatric Assessment Triangle

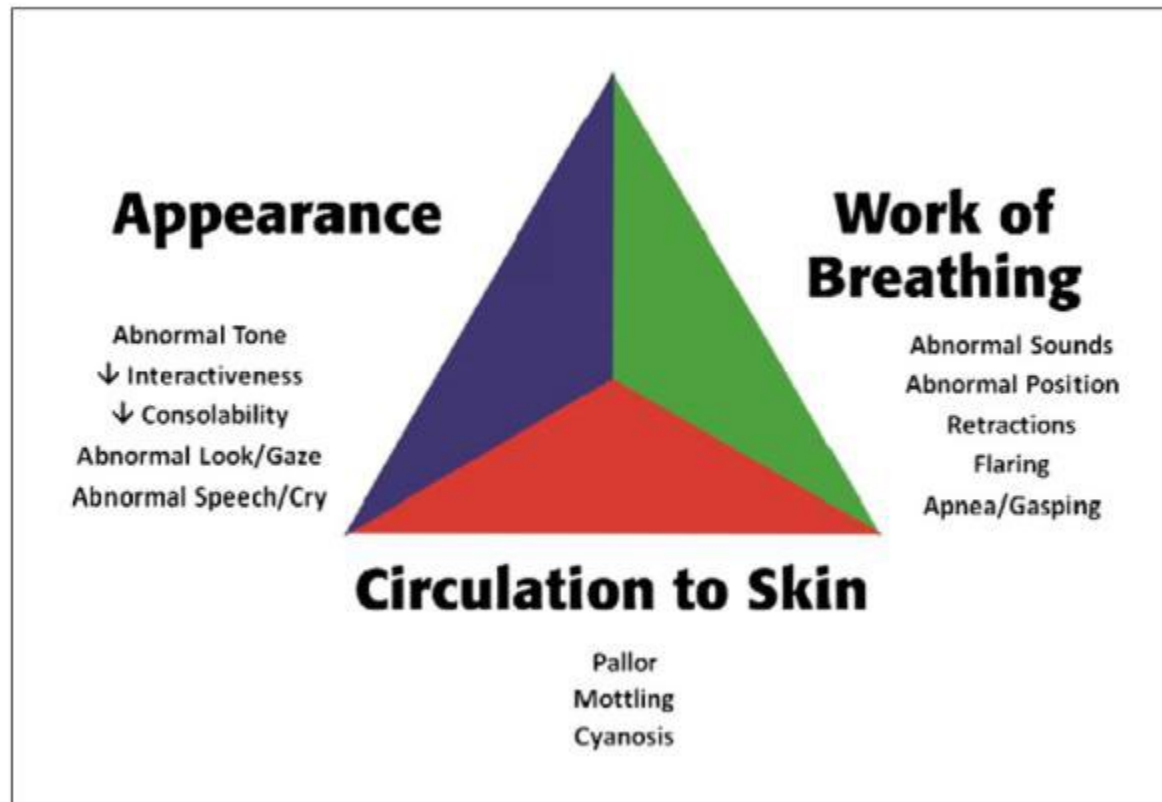


Figure 3: Horeczko T, Enriquez B, McGrath NE, Gausche-Hill M, Lewis RJ. The Pediatric Assessment Triangle: accuracy of its application by nurses in the triage of children. *J Emerg Nurs.* 2013 Mar;39(2):182-9. doi: 10.1016/j.jen.2011.12.020. Epub 2012 Jul 24. PMID:

## ALS Ambulance Equipment List

ALS Medications	Minimum Quantities Required		
	ALS Transport	ALS Non-Transport	
Acetaminophen (Ofirmev)	1 gm	1 gm	<input type="checkbox"/>
Activated Charcoal in Aqueous Solution	50 gm	50 gm	<input type="checkbox"/>
Adenosine	30 mg	30 mg	<input type="checkbox"/>
Albuterol 2.5 mg in 3 ml NS (bullet)	6 bullets	4 bullets	<input type="checkbox"/>
Amiodarone	450 mg	450 mg	<input type="checkbox"/>
Atropine Sulfate	10 mg	10 mg	<input type="checkbox"/>
Calcium Chloride	3 g	3 g	<input type="checkbox"/>
Chewable Aspirin	648 mg	648 mg	<input type="checkbox"/>
Dextrose 10% 25 g in 250 ml bag	50 g	50 g	<input type="checkbox"/>
Diphenhydramine	100 mg	50 mg	<input type="checkbox"/>
Dopamine 400 mg vial or premix bag in D5W or NS	400 mg	400 mg	<input type="checkbox"/>
Epinephrine 1:1,000	3 mg	2 mg	<input type="checkbox"/>
Epinephrine 1:10,000	6 mg	6 mg	<input type="checkbox"/>
Glucagon	2 mg	1 mg	<input type="checkbox"/>
Lidocaine	100 mg	100 mg	<input type="checkbox"/>
Antidote Treatment-Nerve Agent Auto-Injector	6 devices	6 devices	<input type="checkbox"/>
Midazolam	20 mg	15 mg	<input type="checkbox"/>
Morphine Sulfate	20 mg	20 mg	<input type="checkbox"/>
Naloxone	8 mg	4 mg	<input type="checkbox"/>
Nitroglycerine: Oral Spray or Oral Dissolving Tablets	2 bottles	2 bottles	<input type="checkbox"/>
Nitroglycerine Paste: Tube or Individual Packets	1 tube or 4 packets	1 tube or 4 packets	<input type="checkbox"/>
Normal Saline 0.9%	4000 ml	2000 ml	<input type="checkbox"/>
Ondansetron	16 mg	16 mg	<input type="checkbox"/>
Oral Glucose	48 gm	48 gm	<input type="checkbox"/>
Sodium Bicarbonate 8.4%	100 mEq	50 mEq	<input type="checkbox"/>
Tranexamic Acid (TXA)	1 gm	1 gm	<input type="checkbox"/>
Alcohol Preparation Pads	10	10	<input type="checkbox"/>
ALS Patient Assessment Supplies and Equipment	Minimum Quantities Required		
	ALS Transport	ALS Non-Transport	
Arm board (adult size, may be cut for smaller needs)	1	1	<input type="checkbox"/>
Blood glucose meter and test strips	1	1	<input type="checkbox"/>
Injection Needles (size 21 G and 25 G)	2	2	<input type="checkbox"/>
Intraosseous (IO) Needle Insertion Device (FDA Approved)	1	1	<input type="checkbox"/>
Intraosseous (IO) Needles Large Adult, Adult, and Child	1 ea	1 ea	<input type="checkbox"/>
IV Catheters (sizes 14, 16, 18, 20, 22, 24 G)	3 ea	2 ea	<input type="checkbox"/>
IV Tubing Sets (each of micro and macro with vent valve)	2 ea	1 ea	<input type="checkbox"/>
IV extension tubing or saline lock (hep lock)	2	1	<input type="checkbox"/>
Lancets (must auto secure lancet after use)	5	2	<input type="checkbox"/>
Sharps Container	1	1	<input type="checkbox"/>
3-way Stop Cock	1	1	<input type="checkbox"/>
Syringes with Luer-Lock (1cc, 3cc, 10cc, and 30cc)	2 ea	2 ea	<input type="checkbox"/>

Tourniquets Band Elastic (for use with IV insertion)	1	1	<input type="checkbox"/>
Adult Nasal Cannula	2	2	<input type="checkbox"/>
Bag Valve Mask Resuscitator (suitable for pediatrics, children, and adults with connection tubing)	2 ea	1 ea	<input type="checkbox"/>
County approved Continuous Positive Airway Pressure (CPAP) Device (multiple adult sizes)	1 ea	1 ea	<input type="checkbox"/>
Capnography Device (colorimetric or waveform)	2	1	<input type="checkbox"/>
Cuffed Endotracheal Tubes with Stylet (Each size: 6.0, 7.0, 8.0)	2 ea	1 ea	<input type="checkbox"/>
Endotracheal Tube Introducer (County approved)	2	1	<input type="checkbox"/>
Handheld Nebulizer (Inspiratory-activation style recommended)	3	1	<input type="checkbox"/>
French Suction Catheters (Qty 1 of any Size 6-10 and 12-18)	2 ea	2 ea	<input type="checkbox"/>
Laryngoscope (assorted straight/curved blades for infants, children, and adults with a spare set of batteries/bulb)	1	1	<input type="checkbox"/>
King Vision Video Laryngoscope	1	1	<input type="checkbox"/>
King Vision Video Laryngoscope size 3 channeled blade	3	2	<input type="checkbox"/>
LMA Supreme (sizes 1-5)	2 ea	1 ea	<input type="checkbox"/>
Magill Forceps (adult & pediatric)	1 ea	1 ea	<input type="checkbox"/>
Nasopharyngeal Airways (Assorted sizes Pediatric & Adult)	2 ea	1 ea	<input type="checkbox"/>
Non-Rebreather Oxygen Masks – Adult	3	1	<input type="checkbox"/>
Non-Rebreather Oxygen Masks – Pediatric	1	1	<input type="checkbox"/>
Oropharyngeal Airways (Assorted sizes Pediatric and Adult)	1 ea	1 ea	<input type="checkbox"/>
Oxygen Regulator (capable of delivering oxygen at flow rates from 2-25 LPM to support use of the CPAP device)	1	1	<input type="checkbox"/>
Portable Oxygen Cylinder (D or E size with at least 500 PSI of Oxygen)	1	1	<input type="checkbox"/>
Portable Suction Device (a bulb syringe is not sufficient for this requirement)	1	1	<input type="checkbox"/>
Suction Wands	2	1	<input type="checkbox"/>
Vehicle mounted oxygen delivery system, including regulators capable of dispensing oxygen at a flow rate of 2 to 25 liters per minute in support of the CPAP device. Must carry at least 500 PSI of Oxygen in an M or H size oxygen cylinder or an onboard liquid oxygen system (LOX)	1	0	<input type="checkbox"/>

ALS Patient Assessment Supplies and Equipment	Minimum Quantities Required		
	ALS Transport	ALS Non-Transport	
Blankets (Disposable Acceptable)	2	1	<input type="checkbox"/>
Blood Pressure Cuff: Thigh, Adult, Child, and Infant	1 ea	1 ea	<input type="checkbox"/>
Chemical Activated Cold Packs	3	2	<input type="checkbox"/>
Chemical Activated Heat Packs	2	0	<input type="checkbox"/>
Conductive Gel or Pads (moist 4" X 4" pads not acceptable, not required if using multifunction pads)	2	2	<input type="checkbox"/>
Disposable Sheets	4	0	<input type="checkbox"/>
ECG Electrodes – Adult	15	10	<input type="checkbox"/>
ECG Electrodes - Pediatrics	15	10	<input type="checkbox"/>
Length Based Resuscitation Tape	1	1	<input type="checkbox"/>
OB Kit	1	1	<input type="checkbox"/>

Portable Cardiac Monitor/Defibrillator with one spare battery & paper	1	1	<input type="checkbox"/>
Pulse Oximeter (ALS assets may use a device that is included in the cardiac monitor) 1 - Adult 1 - Pediatric	1	1	<input type="checkbox"/>
Stethoscope (Latex Free)	1	1	<input type="checkbox"/>
Thermometer – Digital Oral or Tympanic	1	1	<input type="checkbox"/>
Set of Ankle and Wrist Restraints (leather or velcro)	1	0	<input type="checkbox"/>
<b>ALS Trauma Supplies &amp; Equipment</b>	<b>Minimum Quantities Required</b>		
	<b>ALS Transport</b>	<b>ALS Non-Transport</b>	
Adhesive Tape Rolls (1 inch and 2 inch)	3 ea	1 ea	<input type="checkbox"/>
Lateral Head Support Devices	2	1	<input type="checkbox"/>
Long Plastic Radio Translucent Spine Board	2	1	<input type="checkbox"/>
Windlass Tourniquet Device (County Approved Commercial Vendor)	2	2	<input type="checkbox"/>
Compression bandage	2	2	<input type="checkbox"/>
Occlusive Dressings or Chest Seals	2	2	<input type="checkbox"/>
Rigid Cervical Collars (Infant, child and adult or if unisize a total of 4 are required)	2 ea	2 ea	<input type="checkbox"/>
Splints (Pneumatic or rigid extremity)	4	2	<input type="checkbox"/>
Sterile 4 Inch Gauze Rolls	6	2	<input type="checkbox"/>
Sterile 4 X 4 Inch Gauze Pads	12	6	<input type="checkbox"/>
Traction Splint (Adult & Pedi required – may be one device)	1	0	<input type="checkbox"/>
Trauma Dressings (10"x30" or larger)	2	2	<input type="checkbox"/>
Trauma Shears	2	2	<input type="checkbox"/>
Triage Tags (DMS version) (County Approved)	20	20	<input type="checkbox"/>
Triangular Bandages	4	2	<input type="checkbox"/>
Webbed Belt or Strapping Device	2	2	<input type="checkbox"/>
Foam, anti-skid spine board pad for pediatric patients	1	1	
<b>ALS General Equipment</b>	<b>Minimum Quantities Required</b>		
	<b>ALS Transport</b>	<b>ALS Non-Transport</b>	
2A:10B:C Fire Extinguisher (Fire service apparatus exempt)	1	1	<input type="checkbox"/>
Bed Pan	1	0	<input type="checkbox"/>
Blue Helmets (Fire/Public Safety exempt) Applies to all personnel (crew, interns, observers, etc.)	1 per person	1 per person	<input type="checkbox"/>
Collapsible gurney with straps to secure the patient to the gurney and fastening device to secure to the ambulance	1	0	<input type="checkbox"/>
County Approved 700 MHz Portable Radio (private ambulance services only - includes a spare battery per portable)	1	1	<input type="checkbox"/>
County Approved 700 MHz Portable Radio (County Emergency Ambulance Provider ambulances must be equipped with 2 spare batteries)	2	2	<input type="checkbox"/>
County Approved UHF Mobile Radio (County Emergency Ambulance Provider Requirement Only)	1	0	<input type="checkbox"/>
County Approved VHF Mobile Radio (County Emergency Ambulance Provider Requirement Only)	1	0	<input type="checkbox"/>
Disposable Sheets	4	0	<input type="checkbox"/>
“DOT” Approved Child Safety Restraint (May or may not be a child seat)	1	0	<input type="checkbox"/>



“DOT” Emergency Response Guidebook (Must be current edition, may be electronic)	1	1	<input type="checkbox"/>
Drinking Water in 8-12oz Individual Containers or equivalent (for patient use and secondary rehab functions)	5	2	<input type="checkbox"/>
Fire Scope Field Operations Guide (FOG) (Must be hardcopy of current edition)	1	1	<input type="checkbox"/>
Flat Stretcher (includes scoops)	1	0	<input type="checkbox"/>
ICS 219 Resources Status Cards (T-Cards)	2	2	<input type="checkbox"/>
Map covering all of Santa Clara County that utilizes the same grid coordinate system used by County Communications (air unit exempt)	1	1	<input type="checkbox"/>
Mobile Cellular Phone	1	1	<input type="checkbox"/>
MCI Plan (Reference # 811) (hardcopy is required)	1	1	<input type="checkbox"/>
Pillows (must be disposable or have disposable covers)	2	0	<input type="checkbox"/>
Portable Battery-Operated Light or Rechargeable Light (includes at least one set of spare batteries)	2	2	<input type="checkbox"/>
Santa Clara County Approved Patient Care Report (PCR) (Hardcopy for disaster/MCI response)	20	5	<input type="checkbox"/>
Policy 610 Schedule A Forms (hardcopy required)	5	5	<input type="checkbox"/>
Santa Clara County Prehospital Care Manual (May be electronic or kept in quarters)	1	1	<input type="checkbox"/>
State of California Map (Hardcopy required)	1	0	<input type="checkbox"/>
Towels	2	0	<input type="checkbox"/>
Urinal	1	0	<input type="checkbox"/>
0.5% bleach solution (enough for equipment disinfection)	1	1	<input type="checkbox"/>
<b>ALS Personal Protective Equipment (PPE)</b>	<b>Minimum Quantities Required</b>		
	<b>ALS Transport</b>	<b>ALS Non-Transport</b>	
Bactericidal / Virucidal Hand Wipes or equivalent (Box of 25 or equivalent)	1	1	<input type="checkbox"/>
Eye protection (glasses or goggles)	1 per crewmember	1 per crewmember	<input type="checkbox"/>
Face shield	2 per crewmember	2 per crewmember	<input type="checkbox"/>
Impermeable gown or coveralls or suits (With surgical hood extending to shoulders)	2 per crewmember	2 per crewmember	<input type="checkbox"/>
Impermeable leg and shoe covers (Exempt if provided by coveralls or suits)	2 per crewmember	2 per crewmember	<input type="checkbox"/>
Infectious Waste Bags	5	2	<input type="checkbox"/>
Pair of Leather Work Gloves (recommend one pair provided to each employee to ensure sizing)	1	0	<input type="checkbox"/>
Nitrile Gloves (assorted sizes to fit all crew members)	1 box ea size	1 box ea size	<input type="checkbox"/>
Respirators (P100, R100, or N100)	2 per crewmember	2 per crewmember	<input type="checkbox"/>

**Special Event Paramedic Supply (Motorized Response):**

<b>Trauma Care</b>	
<b>Supply Name</b>	<b>Minimum Quantity</b>
Bandage, Sterile 4x4	6

Cervical Collar - Adjustable Adult and Pediatric	1
Dressing, Multi-Trauma	4
Cold Pack	3
Eye Wash (bottle)	1
Elastic Bandages (each)	2
4.5" Kling Bandage- Sterile	2
Triangular Dressing with Pin	2
Sheet, Burn or Equivalent	2
Splint Moldable	1
1 Inch Cloth Tape (roll)	2
Occlusive Dressing or Chest Seal	2
Triage Tags	6
Space Blanket	2
Small Adhesive Bandages	12
Traction Splint	1
Long Spine Board	1
Backboard Straps (spider or webbed belt set)	1 set
Foam, anti-skid spine board pad	1
Head Immobilizer	2
Windlass Tourniquet	1
Quick Clot or Celox Hemostatic Gauze	Optional
<b>Airway</b>	
Cuffed ET Tubes (sizes 6, 7, 8 with stylet)	1 each size
ET Tube Introducer (Bougie)	1
LMA Supreme (sizes 3, 4, 5)	1 each size
Mac Blade (sizes 0-4)	1
Miller Blade (sizes 0-4)	1
Intubation handle	1
ETT Restraint	1
ETCO2 Detector	1
ETT Verification Device	1
Needle Thoracotomy Kit	1
Oral Pharyngeal Airways (Sizes 90, 100, 110)	1 each size

Nasal Pharyngeal Airways (Sizes 30, 32, 34, 36)	1 each size
Bag Valve Mask (adult and pediatric)	1 each size
Manual Suction Device	1
Nasal Cannula (adult and pediatric)	1 each size
Non-Rebreather Mask (adult and pediatric)	1 each size
County approved CPAP (S, M, L)	1 each size
Handheld Nebulizer	1
Needle Thoracostomy Kit	1
<b>Biomedical Equipment</b>	
<b>Supply Name</b>	<b>Minimum Quantity</b>
Cardiac Monitor/Defibrillator with Pacing, ETCO <sub>2</sub> , and 12 lead EKG Capabilities	1
Defib Patches (adult and pediatric)	2
Pulse Oximeter	1
Glucometer, lancets, and test strips	1
EKG Gel Electrodes (latex-free)	20
<b>Special Event Paramedic (Motorized Response)</b>	
<b>IV/Medication Admin Supplies</b>	
IV Administration Set-Macro-Drip	2
Adhesive Tape Roll	1
Alcohol Preps	6
Betadine Swabs	4
Tourniquet (elastic band)	2
Razor	1
Adhesive Tape	1
14 Gauge IV Catheter	2
16 Gauge IV Catheter	2
18 Gauge IV Catheter	2
20 Gauge IV Catheter	2
10 cc Syringe	2
5 cc Syringe	2
1cc TB Syringe	2
18 Gauge Needle	4
21 Gauge Needle	2

25 Gauge Needle	2
<b>Special Event Paramedic (Motorized Response)</b>	
<b>Medications</b>	
<b>Supply Name</b>	<b>Minimum Quantity</b>
Albuterol	20 mg
Amiodarone	450 mg
Lidocaine	100 mg
Chewable Aspirin	648 mg
Atropine Sulfate	2 mg
Dextrose 10% 25g in 250 ml bag	25 g
Diphenhydramine	100 mg
Epinephrine 1:10,000	3 mg
Epinephrine 1:1000	4 mg
Glucagon 1mg/unit	1 mg
Midazolam	20 mg
Morphine Sulfate	40 mg
Naloxone	2 mg
Nitroglycerine 1/150 gr (pills or spray)	1 bottle
Saline 0.9% IV (may be 250/500 cc Bags)	1000 cc
Oral Glucose	24 gm
Oxygen D Tank (minimum at 500 PSI)	1
<b>Miscellaneous</b>	
<b>Supply Name</b>	<b>Minimum Quantity</b>
Sharps Container	1
Lockable Narcotic Storage Container	1
Pack Inventory Sheet	1
PCR	6
Biohazard Bag	2
Nitrile Gloves (S, M, L, XL)	10 each size
Pad for Writing	1
Trauma Shears	1
<b>Special Event Paramedic (Motorized Response)</b>	
<b>Patient Assessment</b>	
Stethoscope	1

Adult Blood Pressure Cuff	1
Digital Thermometer	1

## Pediatric Readiness Key Performance Measures

Performance Measure	National Goal	Method of Validation	Achieved
EMSC-01, Submission of NEMSIS Compliant Data	By 2021, 80 percent of EMS agencies in the state or territory submit NEMSIS version 3.x-compliant patient-care data to the State EMS Office for all 911-initiated EMS activations	The EMS Agency is currently using NEMSIS v3.4, all EMS pediatric data elements are submitted to the state	Yes
EMSC-02, Pediatric Emergency Care Coordinator (PECC)	By 2023, 60 percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care	Each of the nine hospitals established a Physician and a Nurse PECC as part of the PedRC designation process as required in SCC EMS Policy 401. Verified through site visit and continued workgroup participation.	Yes
EMSC-03, Use of Pediatric Specific Equipment	By 2023, 60 percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric specific equipment	All EMTs & Paramedics for Santa Clara County Ambulance are required to have PALS and maintain annual skills competencies. Each ambulance has a minimum equipment list (see appendix) and are inspected annually per SCC EMS Policy 302	Yes
EMSC-04, Hospital Recognition for Pediatric Medical Emergencies	By 2022, 25 percent of hospitals are recognized as part of a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies	From March 2022-June 2022, nine Santa Clara County hospital submitted EMSC applications and underwent site visits meeting the requirements of SCC EMS Policy 401 to receive Pediatric Receiving Center designation. One hospital opted not to participate	Yes
EMSC-05-Hospital Recognition for Pediatric Trauma	By 2022, 50 percent of hospitals are recognized as part of a statewide, territorial, or regional standardized system that recognizes hospitals that can stabilize and/or	Two of the three Trauma Centers in Santa Clara County are ACS certified to receive Pediatric Trauma Patients. SCC EMS Policy 605 details patient destination to specialty care centers including Trauma	Yes

	manage pediatric trauma		
EMSC-06, Interfacility Transfer Guidelines	By 2021, 90 percent of hospitals in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer	As part of the SCC EMS site verification process, Interfacility transfer policies/guidelines were reviewed with each hospital seeking designation	Yes
EMSC-07, Interfacility Transfer Agreements	By 2021, 90 percent of hospitals in the state or territory have written interfacility transfer agreements that cover pediatric patients	As part of the SCC EMS site verification process, Interfacility transfer agreements were reviewed with each hospital seeking designation	Yes
EMSC-08, Permanence of EMSC	Goal: To increase the number of states and territories that have established permanence of EMSC in the state or territory EMS system	Defined by California regulations Title 22, Division 9, Chapter 14	Pending EMSC Plan Approval
EMSC-09, Integration of EMSC Priorities into Statute or Regulations	By 2027, EMSC priorities will have been integrated into existing EMS, hospital, or healthcare facility statutes or regulations	SCC EMS has submitted an Emergency Medical Services for Children Plan to the state for review	Pending EMSC Plan Approval

### Regional Hospitals with Pediatric Services

Facility Name	Location	Services
<b>UCSF Benioff Children's Hospital San Francisco</b>	<b>San Francisco, CA</b>	<b>NICU, PICU, General Acute, Rehab</b>
<b>San Francisco General</b>	<b>San Francisco, CA</b>	<b>Trauma, NICU, PICU</b>
<b>UCSF Benioff Children's Hospital Oakland</b>	<b>Oakland, CA</b>	<b>NICU, PICU, General Acute, EPS, Rehab</b>
<b>Eden Medical Center</b>	<b>Castro Valley, CA</b>	<b>Trauma, NICU, General Acute</b>
<b>John Muir Walnut Creek</b>	<b>Walnut Creek, CA</b>	<b>Trauma, NICU, PICU</b>
<b>Kaiser Walnut Creek</b>	<b>Walnut Creek, CA</b>	<b>NICU, PICU, General Acute</b>
<b>Marin General</b>	<b>Marin, CA</b>	<b>NICU, PICU</b>
<b>Natividad Medical Center</b>	<b>Salinas, CA</b>	<b>NICU, General Acute</b>
<b>Salinas Valley Memorial Hospital</b>	<b>Salinas, CA</b>	<b>NICU, General Acute</b>

## Pediatric Outpatient and Rehab Services

<b>Medical Therapy Units</b>		
<b>Facility Name</b>	<b>Location</b>	<b>Contact</b>
<b>Chandler Tripp MTU</b>	<b>780 Thornton Way San Jose, CA 95128</b>	<b>408-793-5900</b>
<b>Juana Briones MTU</b>	<b>638 Maybell Ave. Palo Alto, CA 94306</b>	<b>650-845-3000</b>
<b>South Valley MTU</b>	<b>6315 Woosley Drive San Jose, CA 95123</b>	<b>408-885-3160</b>
<b>Pediatric Day Health Center</b>		
<b>Scribbles &amp; Giggles (Main)</b>	<b>13411 Sousa Lane Saratoga, CA 95070</b>	<b>408-340-1590</b>
<b>Scribbles &amp; Giggles</b>	<b>1550 Marburg Way San Jose, CA 95133</b>	<b>408-392-3948</b>
<b>Subacute &amp; Rehab Centers</b>		
<b>Saratoga Pediatric Subacute</b>	<b>13425 Sousa Lane Saratoga, CA</b>	<b>408-340-1540</b>
<b>Acute Rehab Services</b>		
<b>CHoNC</b>	<b>3777 S. Bascom Ave. Campbell, CA 95008</b>	<b>408-558-3640</b>
<b>Valley Medical Center, Pediatric Rehab</b>	<b>751 S. Bascom Ave. San Jose, 95128</b>	<b>408-885-5000</b>



## References

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