

## Tips and Tricks

This document identifies issues that other users within the EMS data collection environment have experienced and a description of some of the solutions the Stakeholders used to resolve the issue. This document does not represent all possible issues and possible solutions. The suggestions contained in this document are all a part of the larger process for data quality. There may be multiple solutions that could resolve an issue and the most appropriate is determined in conjunction with your EMS data collection practices. If at any time you need additional assistance, reach out to the [NEMESIS TAC helpdesk](#) or your support representative for assistance.

If you encounter an issue and/or resolution that is not contained in this document, please send in the information to get it added to this document. If you experience an issue, your EMS Stakeholder counterparts will probably encounter it as well and will benefit from the knowledge of how the issue has been resolved before.

Data Flow Timeline or Topic	Issue	Possible Solutions	Who Can Help
ePCR Transmission From Data Entry System to Data Repository	ePCR Transmission Failure	<b>Software Fields</b> <ul style="list-style-type: none"> <li>✓ Verify all mandatory elements are present.</li> <li>✓ Are you using the state ePCR?</li> <li>✓ Do your fields deviate from the state ePCR?</li> <li>✓ Did you check for custom elements in the state dataset?</li> <li>✓ Do field values match expected values?</li> <li>✓ Is the field code/description allowed?</li> </ul>	EMS Provider Agency  Software Vendor
		<b>Validation Errors</b> <ul style="list-style-type: none"> <li>✓ Verify validation errors are not present.</li> <li>✓ Check local, state, and national rules.</li> <li>✓ Are you using the state and national schematrons in the ePCR software?</li> </ul>	EMS Provider Agency  Software Vendor
		<b>Validation Error Not Resolved</b> <ul style="list-style-type: none"> <li>✓ Is the error an element that was not collected by EMS Clinician?</li> <li>✓ Does the rule need to be reconsidered by the state or local EMS agency?</li> <li>✓ The EMS Clinician should know the information but did not complete the field while in the field.</li> </ul>	EMS Provider Agency  Software Vendor  State EMS Office
		<b>State Dataset</b> <ul style="list-style-type: none"> <li>✓ Is the most recent local/state dataset being utilized in the ePCR software?</li> <li>✓ Is an update needed to the local/state dataset?</li> <li>✓ Are there schematron rules based on state dataset values?</li> <li>✓ Are all custom elements within the state dataset available in the ePCR software?</li> </ul>	EMS Provider Agency  Software Vendor  State EMS Office

ePCR Transmission From Data Repository to Data Repository	ePCR Failure or Delay	<p>ePCR Changes After EMS Clinician Transition</p> <ul style="list-style-type: none"> <li>✓ Did the software correctly apply “Not Recorded” values where necessary?</li> <li>✓ Did the Billing software update the ePCR record?</li> <li>✓ Did the CAD software update the ePCR record?</li> <li>✓ Did any elements get dropped from the XML?</li> <li>✓ Is the ePCR XML valid?</li> <li>✓ Do you have the validation results provided by the endpoint when ePCRs fail?</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p>
		<p>DEM File Submission</p> <ul style="list-style-type: none"> <li>✓ Has a DEM file been successfully submitted for this agency?</li> <li>✓ Do the elements (dAgency.01, dAgency.02, and dAgency.04) match between the DEM file and ePCR?</li> <li>✓ Are updated DEM files required by your state?</li> <li>✓ Is the dAgency.04 value the identifier for the state you are reporting to?</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p>
Data Quality	Missing Records	<p>Record Submissions</p> <ul style="list-style-type: none"> <li>✓ Compare created ePCRs to ePCR submission records.</li> <li>✓ Compare agency submission records to successfully received records.</li> <li>✓ Compare agency submission records to state record count.</li> <li>✓ Compare agency submission records to national successfully received records.</li> <li>✓ Utilize reporting tools found at the local, state, and national level.</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p> <p>NEMESIS TAC</p>
		<p>3<sup>rd</sup> Party Submitters</p> <ul style="list-style-type: none"> <li>✓ Look for a commonality between the failure messages.</li> <li>✓ Are all 3<sup>rd</sup> party submitters failing? <ul style="list-style-type: none"> <li>- is there an issue with a new rule?</li> </ul> </li> <li>✓ Is there only 1 3<sup>rd</sup> party submitter failing? <ul style="list-style-type: none"> <li>- is the most current schematron in place in the software?</li> <li>- is the most current statedataset (codes) in the software?</li> </ul> </li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p> <p>NEMESIS TAC</p>
Dashboards	Inaccurate Counts	<p>Duplicate Records</p> <ul style="list-style-type: none"> <li>✓ Re-submitted records should overwrite the previous record once it is received at the TAC</li> <li>✓ If you suspect possible duplicate values in reports, or more records than what was</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p>

		<p>anticipated, reach out to vendors to confirm why they are coming in twice from the state field level.</p>	NEMESIS TAC
		<p>Data Errors</p> <ul style="list-style-type: none"> <li>✓ Numbers too low or too high when looking at state level NEMESIS dashboards, reach out to NEMESIS TAC, create a help desk ticket.</li> <li>✓ If no data is showing up on dashboards or you are unable to log in, create a help desk ticket with the NEMESIS TAC.</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p> <p>NEMESIS TAC</p>
		<p>Missing Agencies</p> <ul style="list-style-type: none"> <li>✓ Make sure there is a DEM file submitted from that agency.</li> <li>✓ If agencies are not submitting or records are failing from them, work with them to educate.</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p> <p>NEMESIS TAC</p>
		<p>Delay in Data Submissions</p> <ul style="list-style-type: none"> <li>✓ A delay in data submissions will create inaccuracy in dashboards until all records have been received.</li> <li>✓ Strive to send records as soon as they are received, or within 24-48 hrs.</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p> <p>NEMESIS TAC</p>
		<p>Viewing v3.4 or v3.5 Data</p> <ul style="list-style-type: none"> <li>✓ Keep in mind most dashboards will only display v3.4 data until they are switched over to v3.5 data nationally</li> <li>✓ One exception is the State Data Submission Dashboard, which displays v3.4 and v3.5 data simultaneously</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p> <p>NEMESIS TAC</p>
Warnings		<p>High Warning Counts- Specific Element</p> <ul style="list-style-type: none"> <li>✓ State Data Submission dashboard could help you look at what is signaling high warnings.</li> <li>✓ Consider if the rule needs to be changed at a state level or recommended to change at a national level.</li> </ul>	<p>EMS Provider Agency</p> <p>Software Vendor</p> <p>State EMS Office</p> <p>NEMESIS TAC</p>
Good Things to Know		Records with warnings will still be received by the national database. Only records with Fatal Errors will be rejected.	
		<p>Take Warnings Seriously</p> <ul style="list-style-type: none"> <li>✓ States may implement warnings initially and then turn those rules into errors.</li> </ul>	

	<ul style="list-style-type: none"> <li>✓ Warnings are used to ask the EMS Clinician to consider satisfying the warning.</li> <li>✓ Are the EMS Clinicians seeing the warnings in the ePCR software?</li> </ul> <p>State Custom Elements Should be Implemented in ePCR Software</p> <ul style="list-style-type: none"> <li>✓ States may implement schematron rules around custom elements</li> </ul> <p>Not Values and How They Are Used</p> <ul style="list-style-type: none"> <li>✓ When an element is required, a Not Value may satisfy the requirement</li> <li>✓ A state does have the ability to restrict the use of Not Values where the use is allowed at the National Level</li> <li>✓ Not Recorded should not be available to select; this should be populated when an element is left blank by the EMS Clinicians by the ePCR software</li> <li>✓ Not Available should be available to select by the EMS Clinicians</li> </ul> <p>Get the Most Out of the StateDataSet</p> <ul style="list-style-type: none"> <li>✓ Keep it up-to-date</li> <li>✓ Up-to-date facility codes</li> <li>✓ Up-to-date agency codes</li> <li>✓ Custom element utilized by the state</li> </ul> <p>Get the Most Out of the Schematron</p> <ul style="list-style-type: none"> <li>✓ Be proactive</li> </ul> <p>Communicate schematron rule changes to both the EMS Provider Agencies and the ePCR Vendors</p> <p>Get the Most Out of the DEM Files</p> <ul style="list-style-type: none"> <li>✓ Keep the DEM files sent to the states up-to-date</li> </ul> <p>Maintain Communications Between all EMS Stakeholders</p> <ul style="list-style-type: none"> <li>✓ Consider regular meetings with ePCR vendors, ePCR users, and State Data Managers</li> <li>✓ Communicate schematron rule changes to both the EMS Provider Agencies and the ePCR Vendors</li> </ul> <p>Communicate questions and concerns with State Data Managers</p> <p>Strive for Timely Submissions</p> <ul style="list-style-type: none"> <li>✓ Know your state reporting requirements, some are within 24 hours</li> </ul> <p>If you don't have a reporting requirement, consider establishing one</p>
	<p>UUID</p> <ul style="list-style-type: none"> <li>✓ There is only one UUID in the EMS ePCR (XML) file which is a patient record identifier.</li> <li>✓ There CAN be many UUIDs within a DEM (XML) file that identifies resources within the DEM file such as agencies, contacts, configuration groups, locations, vehicles, personnel, devices, and facilities.</li> </ul> <p>The UUID should stay the same when updates are made to an EMS or DEM record. For example, when a change is made to a patient name, and the record is updated, the UUID in the EMS file would be the same as on the original.</p> <p>The DEM file updates would stay the same as updates are made to each resource. For example, if Jane Doe got married and became Jane Smith, the UUID for Jane would not change. Your system would recognize Jane Doe and Jane Smith are the same person.</p>

<p>Best Practice Ideas Suggested by EMS Stakeholders</p>	<p>When Contacting Your Vendor Include the Following Information</p> <ul style="list-style-type: none"> <li>✓ Explanation of the issue</li> <li>✓ XML example or recent (within the last 30 days) request handle</li> <li>✓ Schematron warning/error message</li> <li>✓ Incident Number</li> <li>✓ Agency Number</li> <li>✓ Agency Name</li> <li>✓ Unit Notified by Dispatch Date/Time (eTimes.03)</li> <li>Import/Export Date/Time</li> </ul>
	<p>DEM File Submissions – EMS Provider Agencies to States, States to National Data Repository</p> <ul style="list-style-type: none"> <li>✓ Regular updates to the DEM file when resources such as facilities, vehicles, and personnel are updated</li> <li>✓ Updating at least quarterly is a good practice, keeping records up to date</li> <li>✓ After submission of the first DEM file to the National Data Repository, wait at least 48 hours before submitting the first EMS files. This allows time to process the DEM file and load the Agency ID into the recognized agency table</li> </ul>
	<p>StateDataSet Workflow v3.5.0 and later – The statedataset is the guide the state provides to EMS Provider Agencies and their Collect &amp; Send (C&amp;S) vendors direction on the expectations of data collection within the state</p> <ul style="list-style-type: none"> <li>✓ StateDataSets are maintained by the state via the state’s Receive and Process (R&amp;P) vendor</li> <li>✓ As updates are made to the state system for custom elements, state-collected elements, licensure levels, procedures, medications, protocols, agencies, or facilities the statedataset should be updated and made available to all software vendors that reflect those changes</li> <li>✓ It is a best practice to set up a quarterly review at a minimum of the values within the statedataset</li> <li>✓ Through the state’s (R&amp;P) vendor, the update should be submitted to the NEMESIS website via webservice</li> </ul>