



Monroe-Livingston Regional Emergency Medical Services Council

Monroe-Livingston Regional E-PCR Evaluation Subcommittee Summary Report on EPCR Products

July 27, 2007

Introduction:

The MLREMS EPCR Evaluation Subcommittee was created in the fall of 2006 to evaluate EPCR Vendors and to produce a report that could be used by agencies in the MLREMS region to help them determine which products might be best suited to their service. The hopeful outcome of this process is to keep the number of different EPCR vendors being utilized in the MLREMS region to a small number in order to standardize data collection and reporting capabilities. The purpose of this process should not be seen as an attempt to mandate any individual vendor(s), but rather to help agencies narrow the field to vendors that have been objectively evaluated and recommended.

After an initial search for vendors it was clear that there were too many to evaluate all in sufficient detail to be useful. To that end the committee members made a decision to only evaluate NEMSIS Silver or Gold certified vendors. NEMSIS is the national EMS dataset and vendors are evaluated by NEMSIS for compliance with data reporting requirements in order to be awarded Silver or Gold compliance. This compliance was one of the few objective criteria that were available to make a determination on what vendors to evaluate. The only vendor not NEMSIS Gold or Silver that was evaluated was EMFOTEC, due to its local connection in the Rochester area.

Methods:

A standardized tool was developed with a scoring rubric in order to make the committee members evaluations as objective as possible. This tool was applied to all vendors by all members present and was then compiled into a consensus evaluation for each vendor. Additional information was also sought from vendors on specific topics such as reporting capabilities and pricing structure. All of these items make up the final evaluation documents available in this report.

Committee Members:

Jim Cassin
Bill Evans
Josh Frankel
Andy Klein
Bill Sheahan
Heidi Stobie
Brian Wiedman

Discussion:

Early in the evaluation process it became clear to the committee members that each product had strengths and weaknesses that would appeal to different types of agencies. In the MLREMS system we have a diverse network of agencies ranging from small fire department BLS first response entities all the way to large proprietary ALS transport providers. This extreme variability in service types creates a huge differential in the potential needs of these agencies with regard to electronic medical record keeping. The committee's evaluation of the various products was done from the standpoint of applicability to diverse organizational structures. For fire department based transporting and first response organizations, several of the products may hold appeal due to additional functionality specific to the fire service. Barring that exception, the evaluations are intended to provide an overall assessment of how versatile and well designed each of the products are in relation to our regional needs. The recommendations made below should in no way limit any agency that wishes to further explore all the products contained herein, or any other products that may suit their needs.

Conclusions / Recommendations:

In drawing conclusions based on our evaluations, each vendor was rated using the standardized evaluation tool. The products are listed below in order of how highly they were scored by this tool. A brief summary of each vendor and associated pros and cons for their product are also listed. For detailed evaluation elements and specific comments on each element, please refer to the vendor specific evaluations provided separate from this summary document.

EMSCharts, Inc

Score: 307 / 330

Product Summary:

The EMSCharts product offers a wide range of functionality in a comparatively cost effective manner. The product includes a well-designed user interface both as a web-based application and as mobile computer resident software. This product includes a wide range of functionality as part of the base price and has several add on modules to accomplish tasks such as billing, archiving and mobile data entry. The company was established in 2003 and currently has numerous clients across the east coast entering thousands of charts each month. This product is being used by several agencies in the MLREMS region.

Pros

- Simple, intuitive user interface
- Potential discounts for billing services utilizing Medex Billing
- Many MLREMS agencies already using the system. This allows for system-wide data continuity and having all the “bugs” worked out.
- Many add on modules that are useful to agencies such as human resources, training, and quality assurance functions.
- Reasonably priced for agencies of all sizes, tailored to specific needs.
- Good back-end reporting with excellent responsiveness to modification and future needs by the vendor.
- Well-established product with large user base for multiple years.

Cons

- Lower volume agencies pay higher per call rates, making it potentially expensive for small first response or transport services.
- No frequent flyer database housed on local computers. Requires internet connectivity to pull up past patient information.
- Additional expense for faxing record to hospitals (Clickfax Pro Service)

ESO Solutions:

Score: 287 / 330

Product Summary:

Incorporated in 2004, ESO Solutions offers a well-designed and developed product that boasts an exceptional user interface and robust reporting capabilities. The product is in use in multiple states with thousands of charts being entered into the system each month. ESO Solutions is also a billing company and offers their product as part of a package with billing services. Bought separately from billing services, the product is comparably expensive and could be difficult to afford for smaller volume agencies and BLSFR services. The lack of a QA module, although in development, could be a significant downside for agencies looking for that functionality.

Pros

- One of two best user interfaces evaluated by committee.
- Excellent back end reporting with drill down capabilities in pre-made reports.
- Ability to keep frequent flyer information on local PC's and not requiring Internet connectivity.

Cons

- Questionable data security on laptops due to information being housed indefinitely from calls.
- Expensive to implement, and significant recurring costs compared to other products.
- No QA/QI as part of the product. Vendor states this is a future functionality

Med-Media

Score: 271 / 330

Product Summary:

This product is in wide use across the United States, including several statewide implementations. The user interface on this product was not among the best that were reviewed, with too many check boxes rather than drop down menus and lacking flow in data entry. The product has a solid back-end reporting module and has an update coming out later this year that should improve the user interface. A lack of customization ability may make this product less attractive than others to some agencies.

Pros

- Potential discounts for billing services utilizing Medex Billing
- NYS Export built
- Good back end reporting system
- Company has a large number of clients with many records in the system

Cons

- User interface has too many check boxes and not enough drop-down menus. Next version showed by vendor improved upon this. New version is due out by end of the year.
- Questionable hospital interface for medical records
- Little experience with interfacing to medical equipment (monitors)
- Reporting system for service outages was weak
- Not as customizable as other products
- No New York clients

Imagetrends

Score: 267 / 330

Product Summary:

Aside from cost, this product is well developed with an excellent user interface and incredible reporting capabilities. The cost however will be prohibitive for all but the largest of corporations. The product, and its features, seem to be designed for larger statewide or regional implementations.

Pros

- Well-developed product with the best user interface and back end reporting evaluated by the committee.

Cons

- Extremely expensive and cost prohibitive for any but the largest agencies or collaborative ventures. (>\$50,000 base fee)
- Questionable ability to interface with hospitals

RAM Software Solutions

Score: 251 / 330

Product Summary:

RAM Software has been in business for over 20 years, supplying technology solutions to fire and EMS organizations. This product has a wide range of functionality in addition to just EPCR software, and may be a good option for fire-based EMS organizations, or those that manage their own billing and/or subscription programs. The product is modular with additional cost for each module, making it relatively expensive for complete functionality. The reporting structure within the base EPCR product is mediocre, however the business intelligence module expands this capability greatly.

Pros

- Well designed user interface and intuitive administrative tools
- Long track record of success in the industry

Cons

- Modular sales design makes this product expensive to achieve full functionality included in the base price of other products.
- EPCR module by itself has limited reporting ability.
- No audit log for tracking changes and user activity.
- No ability yet to interface with medical devices such as LifPak 12
- No NYS export yet

Emergency Reporting

Score: 220 / 330

Product Summary:

This product offers a reasonably priced alternative for fire department based organizations that need an EPCR solution as well as fire reporting and administrative capabilities. The product is entirely web-based with no user-installed software, making it difficult to use in the field and more applicable to first response organizations rather than transporting services.

Pros

- Product most valuable to fire based services looking for a one-stop product in addition to EPCR. This product has many fire functionalities including alarm response, pre-plans, inspections etc.
- Reasonably priced

Cons

- Only a web based product, no locally resident software. No ability to access data without Internet connection.
- Limited back end reporting
- No NYS export capability, but will add with 1st client

ACS Firehouse

Score: 196 / 330

Product Summary:

The Firehouse software package is well established in the industry as a fire incident reporting and administrative management tool. The EMS component of the software is not in service anywhere in New York currently, however it is used in other areas of the country. The product is server based rather than web based, making it less attractive to those that want anywhere, anytime access to data through the Internet. Coupled with a lack of interfaces with equipment, hospitals or other agencies, makes this product applicable to first response fire based first response organizations that are looking for fire department management software in addition to EMS reporting.

Pros

- This product has functionality for fire department first response agencies that do not have to submit data to the hospital.
- Many additional applications for fire service based agencies, could be valuable for non-EMS applications.

Cons

- Not able to export to NYS due to no NY EMS customers
- No hospital interface design
- No interface with outside agencies
- No medical equipment interfaces
- Not web based, no access to data in the field

Emfotec

Score: 146 / 330

Product Summary:

EMFOTEC has been in business for over 10 years and is a Rochester based company. The product is simple in design, based on a Microsoft Access Database that can be customized for many additional items and reports. This system would be difficult to use for field data capture, but is useful as a tool to enter data back at the base to then be used for reporting and transmission. For BLS/FR agencies that do low EMS call volume, this product offers an inexpensive avenue for electronic transmission to OPC for submission to New York State. The software does not need a lot of IT support, for agencies with limited IT equipment, this product runs well on a single PC. The lack of a robust security backbone could be cause of concern for some agencies.

Pros

- Small agencies with limited budgets and limited reporting needs may consider this as an economical solution to electronic data submission.
- Local vendor with track record for service and support
- NYS Export

Cons

- Not NEMESIS compliant
- Limited data security
- Simplistic development platform and user interface leads to limited advanced functionality.
- No hospital interface
- No medical device interface

Summary of Vendor evaluations:

The following pages contain the summary scores achieved by each of the products based on the evaluations criteria and tool developed by the committee. The complete evaluation of each vendor, including comments can be seen in the master vendor evaluation document separate from this summary.

Review Item	EMS Charts	ESO Solutions	Med Media	Image Trends	RAM Software	Emergency Reporting	ACS Firehouse	EmfoTec
System								
Installed Windows Application	5	5	5	5	5	0	5	5
Web-Based Application (Locally Installed vs. vendor server based)	5	5	5	5	5	5	0	0
Hardware								
Compatibility and system requirements								
Desktop PC	5	5	5	5	5	5	5	5
Tablet PC	5	5	5	5	5	0	5	0
Pocket PC / Palm device compatible	5	0	0	2	0	0	0	0
Internet connection required at all times or only during data sync?	5	5	5	5	5	2	0	5
Scanner compatibility	5	5	5	5	5	3	5	0
Printer compatibility	5	5	5	5	5	5	5	5
Is wireless access supported (ie verizon/sprint WWAN)	5	5	5	5	5	5	0	0
Cost Structure								
In-house hosting vs. company hosting	5	5	5	5	5	5	5	5
Infrastructure Set-up Costs and On-going Costs	4	3	4	0	3	2	1	5
Initial Set-up Costs and On-going Costs	4	3	4	0	2	2	1	5
Upgrades	5	5	5	5	5	5	5	5
Costs to interface with other EMS equipment. (cardiac monitors, etc)	3	3	2	3	2	3	3	5

Review Item	EMS Charts	ESO Solutions	Med Media	Image Trends	RAM Software	Emergency Reporting	ACS Firehouse	EmfoTec
Customer Support Costs	5	5	5	5	5	5	2	5
Security								
Data Encryption	5	5	5	5	5	5	0	2
Multiple access levels within software governed by secure logins (e.g. Admin, QAI, User, read-Only, Hospitals, Billing etc.)	5	5	5	5	5	5	4	0
Ability to lock PCRs once completed	5	5	5	5	5	5	5	2
Automatic Log Out for unattended computers	5	5	5	5	5	5	0	0
Maintains audit trail of who has logged on, from where and when.	5	5	5	5	0	5	5	2
Allow Administrative changes only with log of user making changes.	5	5	5	5	5	5	5	0
Allow Read Only access which prevents users from making any changes to the data.	5	5	5	5	5	5	5	0
System administrator will have the ability to assign security levels by individual login/account	5	5	5	5	5	5	5	0
Unlimited number of accounts available	5	5	5	5	0	5	5	0
Inactive accounts become unusable after a specified time period	5	5	5	5	5	5	5	0
Ability to change user and security access on the fly, with no need to restart program.	5	5	5	5	5	5	5	0
Tracks changes to module databases, including date, time, computer and user who make change.	5	5	5	5	0	5	5	0
Time-Tolerance Editing - Setup a time interval for which records can be modified.	5	5	5	5	0	5	5	0
Software has to be compliant with:								
HIPAA	5	5	5	5	5	5	5	0
NEMESIS (Gold/Silver)	5	3	5	5	5	3	5	0

Review Item	EMS Charts	ESO Solutions	Med Media	Image Trends	RAM Software	Emergency Reporting	ACS Firehouse	EmfoTec
If contract is ended, what data is provided to the customer and in what format?	5	5	5	5	5	5	5	5
Reporting Capabilities								
General Canned Reporting Capabilities - # of reports, layout, ease of use.	4	4	3	5	4	3	3	3
Custom reporting capabilities – Ad Hoc reporting system – Ease of use, available data, layout.	3	4	3	5	2	3	3	3
Can reports be run automatically and emailed/posted to users?	5	5	5	5	2	0	0	0
Can reports be drilled into? (e.g. can you click on data that is interesting and drill into it, eventually ending up at individual charts if desired?)	3	3	0	5	2	0	0	0
Total Score (Out of 330 Possible)	307	287	271	267	251	220	196	146