



PERFORMANCE REPORT

February 2012

Non-Provider Price \$10,980

Ambulatory EMR Specialty 2012

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■ AUTHOR'S NOTES

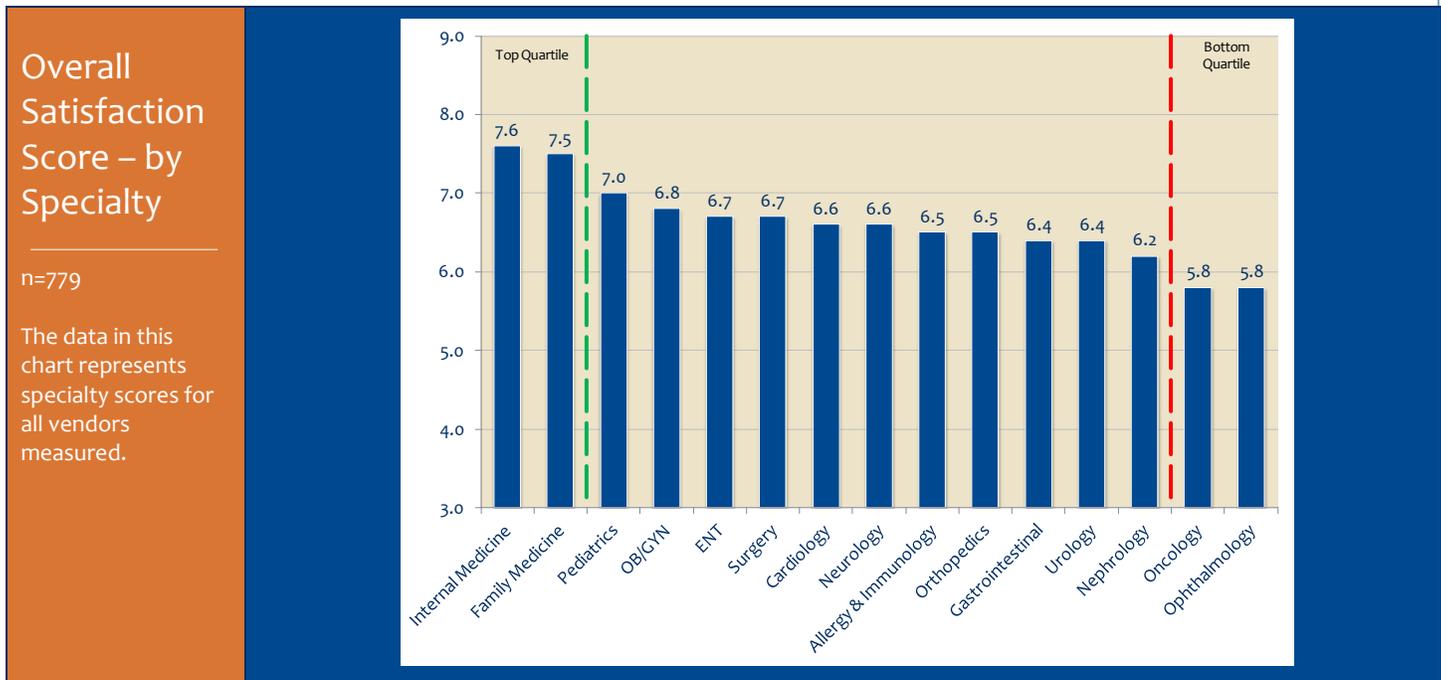
This report is organized into four key areas:

- 1) **Inpatient and Large Group Analysis**—An assessment of vendors that provide a broad coverage of specialties and are frequently scored by inpatient environments: Allscripts (Enterprise), Cerner (PowerChart), eClinicalWorks, Epic (EpicCare), GE Healthcare (Centricity EMR), and NextGen (EMR).
 - a. Notably missing: McKesson (Horizon Ambulatory Care) is being excluded from this report based on the size of its client base (insufficient data points) and because of McKesson's Better Health 2020 announcement that Paragon Horizon would be converged.
 - b. Notably missing: MEDITECH (LSS) - Insufficient data points to validate specialty experience.
- 2) **Individual Specialty Insights & Key Players**
 - a. Specialties selected for inclusion in this section represent high-volume and/or high-revenue specialties. Data for other measured specialties can be found in the Market Detail section of the report.
- 3) **Market Detail**
- 4) **Vendor Detail**

Explanation of presented data:

- 1) **Quartiles:** Charts in this report frequently present data according to performance quartiles that distinguish top performers, bottom performers, and average (midrange) performers. To determine quartile break points, the overall performance scores (on a one-to-nine scale) for all specialties were averaged and divided into quarters. Top quartile break point: >7.4; bottom quartile break point: <6.1
- 2) **Data with *:** The asterisk is used to demonstrate that the attached data point is based on a sample size that is too small to meet KLAS Konfidence levels. In this report, specialties with an asterisk are not included in market analysis.
- 3) **Missing vendors and/or missing specialties:** Any vendors or specialties not represented in charts had insufficient data to be represented.

The chart below shows the average score for all EMR vendors for each of the included specialties (100-point scale). It demonstrates the relative degree of difficulty for meeting the needs of each specialty.



Overall Satisfaction Score – by Specialty

n=779

The data in this chart represents specialty scores for all vendors measured.

Figure 1

HOW DO THE VENDORS STACK UP?

| EMR Vendors at a Glance | Allscripts Enterprise Cerner eClinicalWorks Epic GE Healthcare NextGen | | | | | | |
|--|---|--|------|--------|------|--------------------------------|--|
| | Inpatient/Amb. Data Exchange† | Medium | High | Low | High | Medium | Low |
| † Percent of hospital-owned/affiliated practices sharing a full clinical record. Categories=high: more than 50%, medium: 20%–50%, low: less than 20% | Top Quartile | 0 | 0 | 2 | 4 | 1 | 1 |
| | Middle | 10 | 10 | 6 | 11 | 9 | 6 |
| | Bottom Quartile | 5 | 1 | 1 | 0 | 3 | 7 |
| Quartiles represent the top or bottom quarter of all specialty scores. | Areas of Concern | GI Nephrol Ortho Oncology Ophthalm | GI | OB/GYN | -- | Pediatric Neuro Oncology | Ortho GI Ophthalm Urology ENT Oncology Nephrol |

Figure 2

WORTH KNOWING

MIDDLE OF ROAD: Despite broad coverage, neither Allscripts Enterprise nor Cerner has any specialties rated by providers in the top quartile. Each has the bulk of their rated specialties in the midrange.

LOW RISK AND MORE WORK: The coverage and customer satisfaction data make it clear that enterprise vendors fall into two categories: Low Risk (Cerner and Epic) and More Work (Allscripts, eClinicalWorks, GE Healthcare, and NextGen).

THE INTEGRATION EDGE: Cerner and Epic are the only two vendors that come to market with natively integrated inpatient and outpatient solutions. While both provide broad specialty coverage, Epic delivers four specialties rated in the top quartile and none in the bottom. Providers report that there is one specialty where Cerner comes up short (GI).

■ THE BOTTOM LINE ON VENDORS

ALLSCRIPTS: No proven integration with Allscripts SCM. Moderate data sharing in interfaced inpatient/ambulatory sites. Broad coverage for many specialties, with no standout performers. Scores in bottom quartile for GI, nephrology, oncology, ophthalmology, and orthopedics. Pervasive concerns about support and code quality.

CERNER: Proven native integration between practice and hospital EMR; second-deepest data sharing. Single-physician GUI for ambulatory and inpatient environments. Broad coverage for many specialties, with no standout performers. Oncology scores in bottom quartile of all specialties. Supports two deployment models (client/server and hosted) equally well.

ECLINICALWORKS: No owned inpatient system to integrate with. Moderate data sharing in interfaced inpatient and ambulatory sites. Fewer validated specialties than any of the six enterprise vendors. Family medicine and internal medicine in top quartile of all specialties. OB/GYN in bottom quartile of all specialties with second-lowest score for all vendors.

EPIC: Proven native integration between practice and hospital EMR; deepest data sharing of all vendors. Broad coverage for many specialties. Ratings for family medicine, internal medicine, OB/GYN, and pediatrics in top quartile of all specialties. No specialties rated in bottom quartile. Sense of rigidity (limited customization) a frequently mentioned frustration.

GE HEALTHCARE: Moderate data sharing at inpatient sites between GE Centricity EMR and inpatient solution (GE Centricity Enterprise or third-party CIS). Broad coverage for many specialties. Internal medicine in top quartile. Neurology, oncology, and pediatrics in bottom quartile of all vendors.

NEXTGEN: Limited data sharing at inpatient sites between inpatient CIS and NextGen ambulatory (including NextGen inpatient EMR and Siemens solutions). Broad coverage for many specialties. Internal medicine in top quartile of all specialties. Has most specialties (ENT, GI, nephrology, oncology, ophthalmology, orthopedics, urology) in bottom quartile of any enterprise vendor. Deep functionality and configuration assets for IT-savvy providers and stumbling blocks for less-savvy ones.

■ A QUESTION OF COVERAGE

Which enterprise vendors provide the most comprehensive specialty coverage? For the hospital or a large multidisciplinary practice, this common question has a complex answer. While a patchwork of best-of-breed systems might provide the best clinical solution for different specialists, a large organization has to balance physician demands with the realities of implementing, interfacing, and supporting each solution—and that just scratches the surface of the issue.

The best possible answer to the question would yield a single-vendor solution that provides:

- The fewest gaps and the best support for the broadest number of specialties
- A solid solution for the critical, high-revenue, and high-volume specialties
- Strong ambulatory/inpatient data exchange, whether through native EMR integration or HL7 interface.
- Clean code releases built on top of solid applications that work in tandem with reliable customer support.

This section of the report focuses on vendor performance across specialties deemed critical. This designation is based on the specialties that have high revenues, high patient volumes, and the likelihood that a CIO would worry about coverage. Such specialties include cardiology, family medicine, internal medicine, oncology, orthopedics, and surgery. Based solely on the data collected by KLAS, six vendors (Allscripts, Cerner, eClinicalWorks, Epic, GE, and NextGen) meet the requirements to be

included in the following CIO-focused section of this report.

■ A LOOK AT THE VENDORS

Allscripts

Even though providers indicated that Enterprise was designed with primary care environments (internal medicine, family medicine, pediatrics, and OB/GYN) in mind, it still scores below market averages due to frustrations around service and support and buggy releases. However, providers reported that Allscripts has been working toward interfacing Enterprise with Sunrise Clinical Manager, but this is not yet a verifiable reality.

Clinical notes, structured data fields, problem lists, and medications were mentioned as issues by family and internal medicine specialties. A handful of complaints in OB/GYN specialties (which scored a 6.3) centered on ACOG form design and perinatal records not being as comprehensive as they needed to be.

Outside of the primary care environment, Enterprise especially struggles in orthopedics and oncology, scoring 5.5 and

779

Number of providers participating in this study

Allscripts Enterprise

Specialty Performance Ratings - High to Low

(n=29)

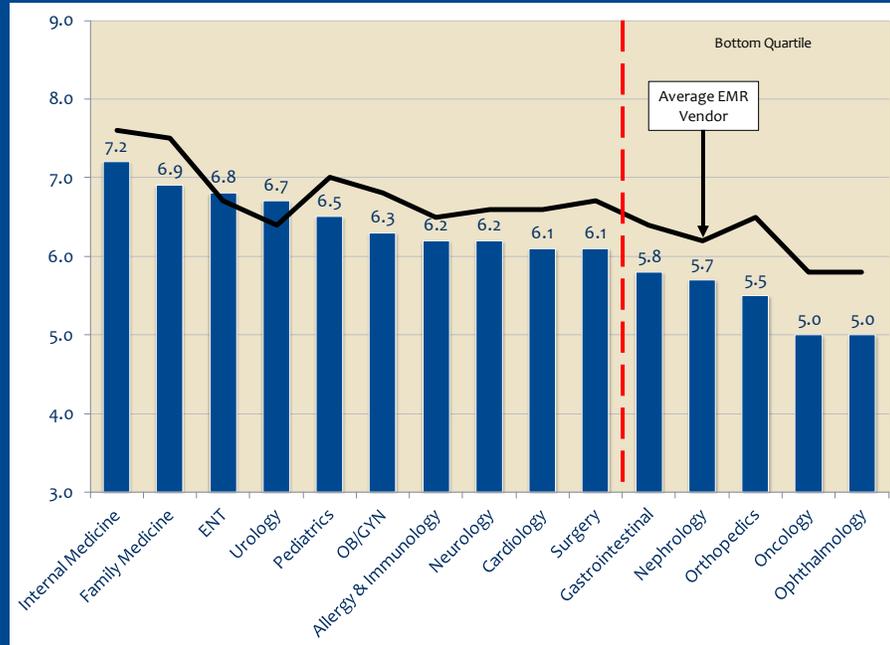


Figure 3

5.0, respectively. In oncology, providers indicated that chemotherapy order sets are not comprehensive and that interactions with devices are nonexistent. In orthopedics, providers complained that Enterprise does not support voice recognition and is not user friendly as well as the fact that the template design does not facilitate quick documentation for physicians.

Allscripts Enterprise is widely deployed in a large variety of specialties, but the depth of template design across any of the specialties is spotty at best. Providers expressed some optimism around v.11.2 and are hoping that Allscripts can deliver additional specialty-specific functionality. Until that happens, Enterprise clients will have to continue to make do with what they have and hope that Allscripts can deliver. One of the chief complaints across all specialties was a lack of attention from

Allscripts; service and support were reported as problematic.

Cerner

Cerner, like most other enterprise vendors, supports a wide range of specialties but falls below market averages across many specialties. Cerner is one of two vendors (the other being Epic) whose integrated platform is a key competitive advantage. Cerner Millennium PowerChart Office has been redesigned so the user interface is exactly the same in the practice and at the hospital. This gives Cerner a leg up and helps providers in thinking that they are using one single solution wherever they might see patients.

Orthopedics is one specialty where Cerner performs well, scoring a 7.0 with users. This puts them ahead of chief rival Epic, which scores a 6.8 for orthopedics.

For OB/GYN, Cerner is mediocre, scoring a 6.2 overall. (The market average is 6.8.) Providers indicated that the OB content is newer and still a work in progress, but they believe Cerner can deliver. One CIO said, *“We are implementing new maternity modules next year, and they have very promising functionality.”* Providers expressed some reservations about pricing concerning additional OB-specific content. *“Unless people purchase the maternity package for tons of money, there is no workflow for obstetrics. There should be some minimal functionality in the Millennium product without enhancements [that cost extra].”*

Cerner has yet to develop an oncology solution, which is a glaring absentee specialty.

One of the other major selling points for Cerner has been their wild success with

hosting. In a hosted environment, a physician can access patient charts from the clinic, the hospital, or even at home. The CIO never has to touch servers or workstations in the practices to keep the solution updated and current. This has held overall scores for Cerner steady, despite some content shortcomings for the specialties.

eClinicalWorks

Many hospitals reported deploying the eClinicalWorks system to their employed physicians, while others considered it a viable and attractive option for a quick EMR deployment into the community. This vendor holds two key advantages over most other vendors: Physicians really like the system, and eClinicalWorks generally comes in at a very attractive price point.

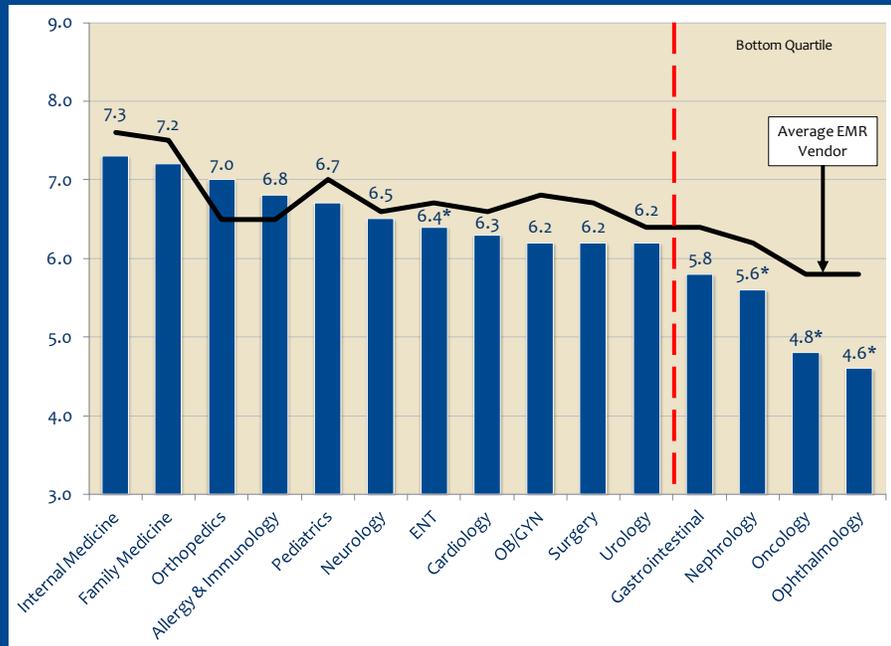
Flexible deployment options are also offered by eClinicalWorks. The system can

Figure 4

Cerner

Specialty Performance Ratings - High to Low

(n=19)



be hosted or arranged in a more traditional client/server setup. In addition, eClinicalWorks has traditionally done well in the primary care specialties of internal medicine and family medicine (scoring 7.6 and 7.5, respectively) and offers increasingly broader coverage across diverse specialties. This study's sample revealed that eClinicalWorks has fewer fully rated specialties than any other vendor.

Users reported high levels of satisfaction for internal medicine and family medicine. The navigation is intuitive. The screen build is flexible and customizable to the end user, and content is readily available for a wide range of encounter types within those specialties. One provider said, *"The vendor seems to be an internal medicine vendor. They really do cater to us as internists. The order history and the entire flow of the EMR are very intuitive for an internal medicine physician. The data appearance and how the*

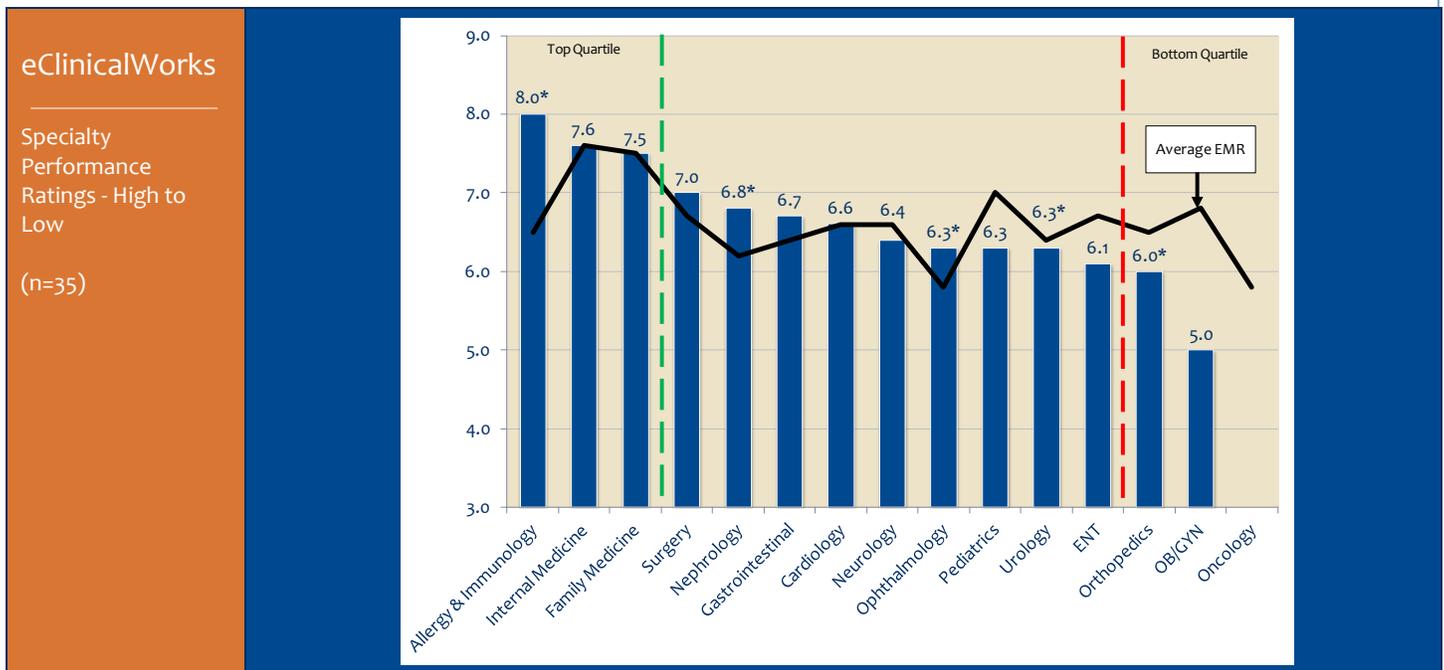
entire system is laid out are appropriate and easy. The appearance of the internal medicine note is nice, and the patients love the notes they get from the eClinicalWorks record."

OB/GYN was eClinicalWorks' one conspicuous gap, scoring a 5.0. Providers were frustrated with the amount of work involved to calculate the BMI, a lack of progress-note development, mottled OB-specific content, and the lack of intuitive workflow design. One provider commented, *"It is frustrating that we have to switch back and forth between the progress note and the flow sheet. We have no ability to order labs from the care-graph."*

Epic

Epic has a long history in the ambulatory setting, and the development of specialty content shows this dedication. Epic is one of two vendors (the other being Cerner)

Figure 5



eClinicalWorks

Specialty Performance Ratings - High to Low

(n=35)

Epic

Specialty Performance Ratings - High to Low

(n=30)

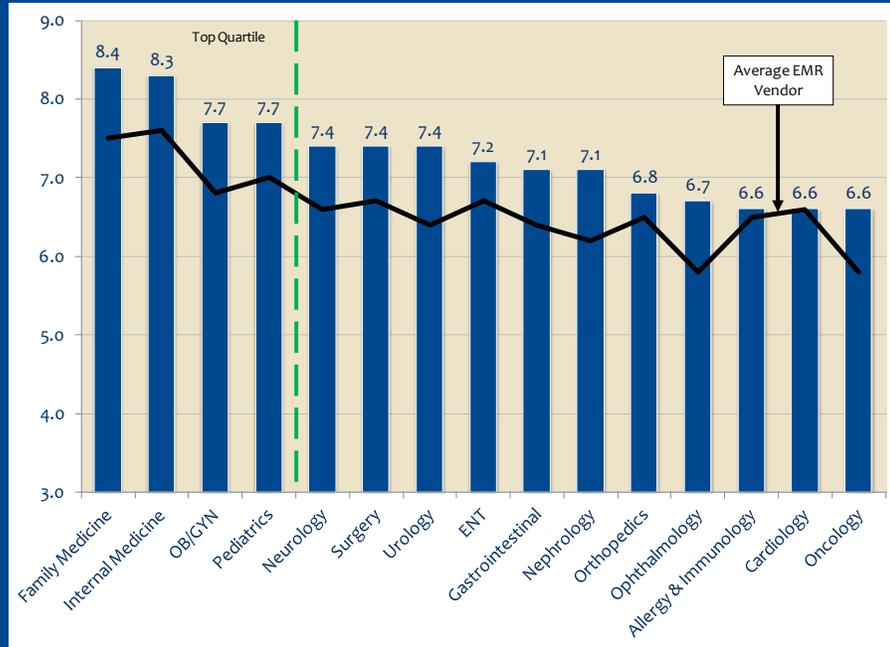


Figure 6

whose integrated platform is a key competitive advantage. Not only is Epic widely deployed across a broad range of specialties, they also are a top performer in five specialties and are in the top three for the rest.

Among enterprise vendors (Allscripts, Cerner, eClinicalWorks, Epic, GE, and NextGen), Epic gets the highest marks for ENT, family medicine, GI, internal medicine, nephrology, neurology, OB/GYN, oncology, ophthalmology, pediatrics, urology, and surgery.

Across all specialties, providers indicated that Epic was dedicated to further enhancing the product in care settings through ongoing development and with additional specialty-specific modules such as Stork (OB/L&D), Cardiant (cardiology), Beacon (oncology), and Kaleidoscope (ophthalmology).

In oncology, Epic has developed Beacon to handle chemotherapy order entry, but providers insisted that it is not a full-featured oncology system. In cardiology, Epic Cardiant is meeting providers' basic needs but still needs to develop in the area of complex scheduling. Even though its ability to capture discrete data and integrate to a third-party PACS are benefits, providers reported that it takes a fair amount of work to take advantage of those benefits.

Over 80% of respondents indicated that they were currently sharing the clinical record between the two care settings through native, single-source integration.

The universal challenge that providers face by choosing Epic, regardless of specialty, is the ability to customize the application to a high level at the client site. Providers

reported that Epic does not initially allow the flexibility that other EMR vendors allow their clients, which has been a frustration for Epic users. Another often-mentioned CIO consideration is Epic’s historically high cost.

Epic continues to win over supporters because of their unique implementation approach, which includes delivering preconfigured, specialty-focused content to the provider upon the initial install. Since providers are able to hit the ground running on day one, they are much more likely to have continued success down the road.

GE Healthcare

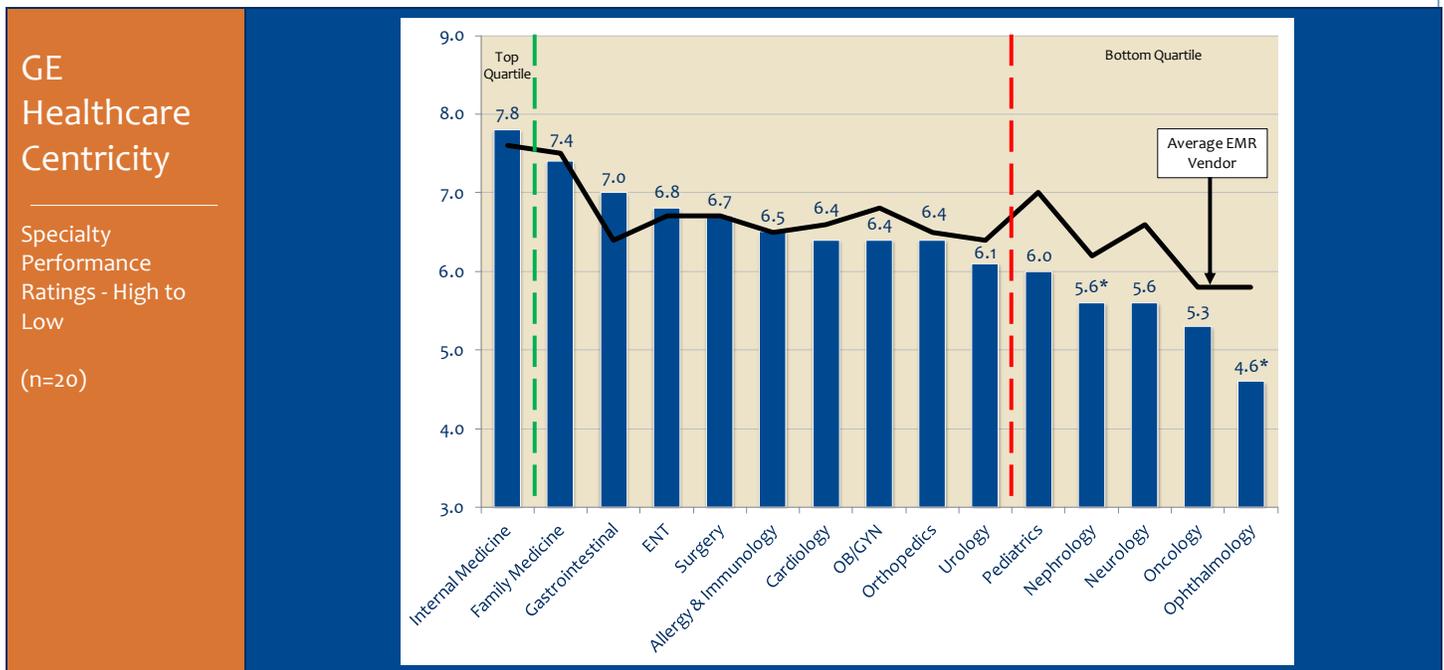
Historically, GE Centricity EMR has been considered because of the scalability of the Centricity suite. GE also brings broad name recognition to the table, but most importantly, GE brings a comprehensive

billing solution for large and complex environments. For organizations that are currently running the billing platform, a close look at what their vendor currently offers on the EMR front just makes sense. GE Healthcare scores much like other enterprise vendors; they support many specialties but really excel in few.

GE Healthcare scores in the top quartile for internal medicine with a score of 7.8. Internists and family doctors alike indicated that the product was built specifically with them in mind. One provider commented, *“Dealing with adults in Centricity is pretty easy because the forms for standard things like diabetes, hypertension, and hyperemia are really good. We have the flexibility to chart items that do not have a template. We also have the ability to chart two things at once, which is nice.”*

In pediatrics, Centricity EMR scores nearly

Figure 7



NextGen

Specialty Performance Ratings - High to Low

(n=37)

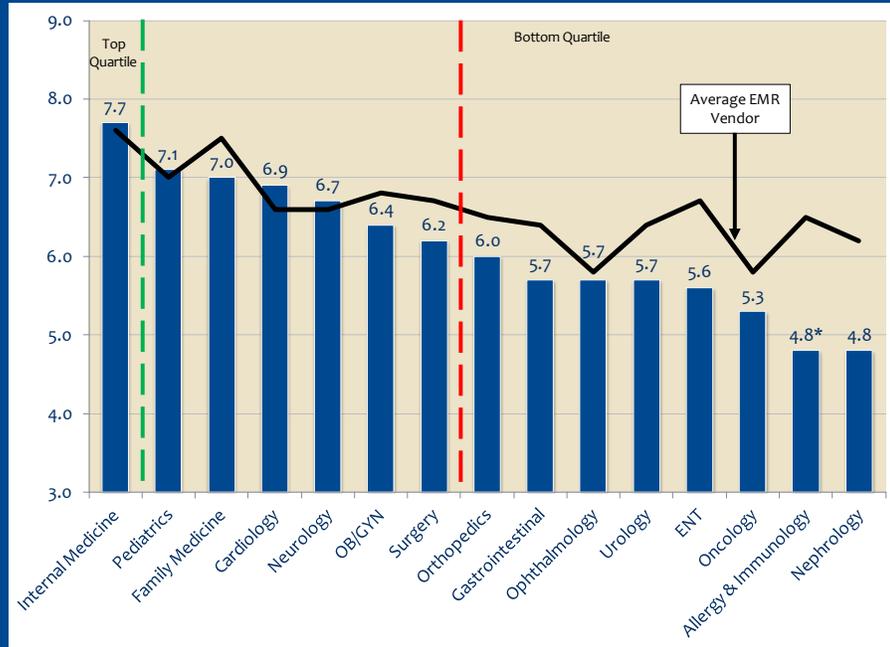


Figure 8

one full point below the market average. Providers indicated that there have been communication glitches when making enhancement requests and that they are looking for more robust immunization records and immunization reporting to state registries.

NextGen

Historically, the CIO’s view of NextGen EMR has been one of a functionally rich tool that can be configured in a nearly unlimited fashion to meet the needs of a very wide variety of care providers. While this remains true today, CIOs are now faced with ever-increasing pressures to cut costs while still providing a comprehensive EMR to their physicians, and providers reported that NextGen is starting to feel overpriced and overly complex.

In the specialties, NextGen EMR is praised for its high level of configuration and

flexibility. However, this can be a double-edged sword because while the configuration options are virtually limitless, it does take skilled on-site IT resources to make many of the enhancements that care providers are looking for. Additionally, highly configured systems impede smooth version upgrades.

NextGen does not excel in the generally complicated area of orthopedic care, but the flexibility of the EMR can be a great benefit if time and resources are used to optimize it. *“Our orthopedic specialty is very specific, so none of NextGen’s templates were even close to what we needed, but they offered us the flexibility to go in and create our own. We did that, and they are working great.”*

In 6 of 14 measured specialties, NextGen is an average-performing vendor. NextGen has 7 of 14 specialties that score in the

bottom quartile. Scores for internal medicine and pediatrics (at 7.7 and 7.1, respectively) are slightly above the market averages. Cardiology respondents scored NextGen EMR at 6.9; providers reported detailed specialty content. In family medicine and OB/GYN, NextGen's scores of 7.0 and 6.4, respectively, are slightly below the market averages. Generally, providers are successful in these areas but indicated that it takes time to become proficient on the EMR. Providers remarked that *"the EMR is fine for family medicine [but] sometimes . . . may be a bit too much for our group."*

▪ CONCLUSION

The best bet of hospitals or large practices is to choose solutions that map to organizational needs and present the fewest functionality gaps. Of the fully rated vendors, Cerner and Epic offer the most comprehensive and highly rated EMR solutions across multiple disciplines. Each system has its strengths and weaknesses that need to be taken into account. Most enterprise vendors can provide coverage for the core specialties and have varying degrees of success for the more complex applications. That makes the decision difficult. The dilemma of finding a solution for multiple specialties is a complex problem. Satisfying the needs of the various physician specialties is indeed a work in process for everyone in this space.

SPECIALTY INSIGHTS

| | Allergy & Immunology | Cardiology | ENT | Family Medicine | Gastrointestinal | Internal Medicine | Nephrology | Neurology | OB/GYN | Oncology | Ophthalmology | Pediatrics | Orthopedics | Urology | Surgery |
|---------------------------|----------------------|------------|------------|-----------------|------------------|-------------------|------------|------------|------------|------------|---------------|------------|-------------|------------|------------|
| Allscripts Enterprise | 6.2 | 6.1 | 6.8 | 6.9 | 5.8 | 7.2 | 5.7 | 6.2 | 6.3 | 5.0 | 5.0 | 6.5 | 5.5 | 6.7 | 6.1 |
| Allscripts Professional | | | | 7.3 | | 7.9 | | | 6.3 | | | 7.0 | | 6.0* | 7.0* |
| Amazing Charts | | | | 8.1 | | 8.8* | | | | | | | | | |
| Aprima | 7.5* | | | 7.3 | | 5.5 | | | 4.8* | | | 7.5* | 6.5* | | |
| athenahealth | | | 7.0* | 7.3* | | 7.8* | | | 7.6 | | | 8.4 | 7.3* | | |
| Cerner | 6.8 | 6.3 | 6.4* | 7.2 | 5.8 | 7.3 | 5.6* | 6.5 | 6.2 | 4.8* | 4.6* | 6.7 | 7.0 | 6.2 | 6.2 |
| eClinicalWorks | 8.0* | 6.6 | 6.1 | 7.5 | 6.7 | 7.6 | 6.8* | 6.4 | 5.0 | | 6.3* | 6.3 | 6.0* | 6.3* | 7.0 |
| e-MDs | | | | 8.0 | | 8.7 | | 7.0* | 6.8* | | | 7.0* | 8.3* | | 7.7* |
| Epic | 6.6 | 6.6 | 7.2 | 8.4 | 7.1 | 8.3 | 7.1 | 7.4 | 7.7 | 6.6 | 6.7 | 7.7 | 6.8 | 7.4 | 7.4 |
| GE Healthcare Centricity | 6.5 | 6.4 | 6.8 | 7.4 | 7.0 | 7.8 | 5.6* | 5.6 | 6.4 | 5.3 | 4.6* | 6.0 | 6.4 | 6.1 | 6.7 |
| Greenway | | 6.3* | 7.1 | 8.2 | | 8.0 | | | 8.1 | | | 7.4* | | | 8.3* |
| McKesson HAC | 5.2* | 5.4* | 6.3 | 6.8 | 5.4 | 6.8 | 5.0* | 5.7 | 4.6 | 3.7* | 4.6* | 6.5 | 5.8 | 5.5 | 4.0 |
| McKesson Practice Partner | | | | 7.2 | | 6.3 | | 7.5* | 6.6 | | | 4.0* | | | 6.3* |
| NextGen | 4.8* | 6.9 | 5.6 | 7.0 | 5.7 | 7.7 | 4.8 | 6.7 | 6.4 | 5.3 | 5.7 | 7.1 | 6.0 | 5.7 | 6.2 |
| PCC | | | | | | | | | | | | 8.5 | | | |
| Praxis | | | | 8.5 | | 8.8 | | | | | | | | | |
| SRSsoft | | 8.0* | | 7.7* | | 7.7* | | | | | | | 8.8 | | |
| Vitera (Sage) | | 7.3 | | 7.5 | 8.3* | 8.4 | | | 8.1 | | 6.3* | 7.0 | 6.3* | 8.5* | 8.3* |
| Overall | 6.5 | 6.6 | 6.7 | 7.5 | 6.4 | 7.6 | 6.2 | 6.6 | 6.8 | 5.8 | 5.8 | 7.0 | 6.5 | 6.4 | 6.7 |

Red indicates specialty scored in bottom quartile; green in top quartile. Quartiles based on all specialties.

Cardiology Performance Ratings

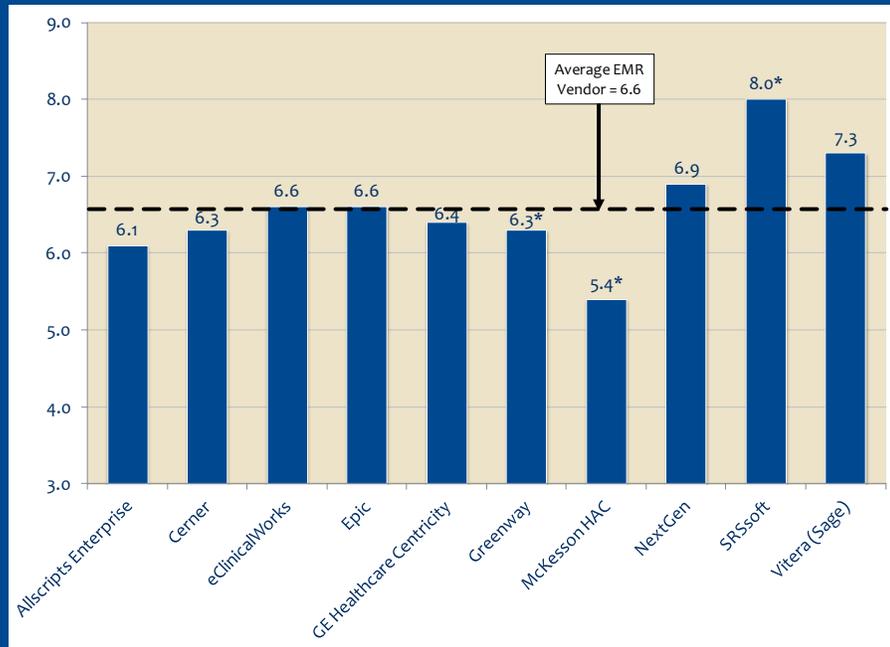


Figure 9

CARDIOLOGY

In order to excel in this space, vendors need to provide an EMR that is flexible and robust. The EMR must be able to interface with ECG equipment, and the vendor needs to either develop or partner in order to build in CPACS functionality and radiology ECG viewing capability. Providers reported that the current offering of templates, while specialized, is still not easy to use and costs the clinician time in clicks.

Vendors who score highly in cardiology have provided easily customizable templates and pertinent out-of-the-box cardiology content. The top three vendors for cardiology are NextGen, Vitera, and SRSsoft.

NextGen stands out, as providers said that the clinicians have been given a “beautiful set of templates to work with” and “great cardiology content.” However, providers

also said that there is too much time between releases and new, appropriate criteria is not quickly added to the EMR.

Vitera stands out for their templates and reporting strength. A cardiology specialty client said, “We have been able to modify the templates to work perfectly for us and the reporting strength of this system is here.”

SRSsoft customers have been pleased with the change in workflow and the ability to modify their custom templates. SRSsoft does not provide a separate cardiology module, but providers can customize the processes found in other specialties or departments to satisfy their needs. Providers also mentioned that the filing structure SRSsoft employs is unique and easy to use.

Family and Internal Medicine Performance Ratings

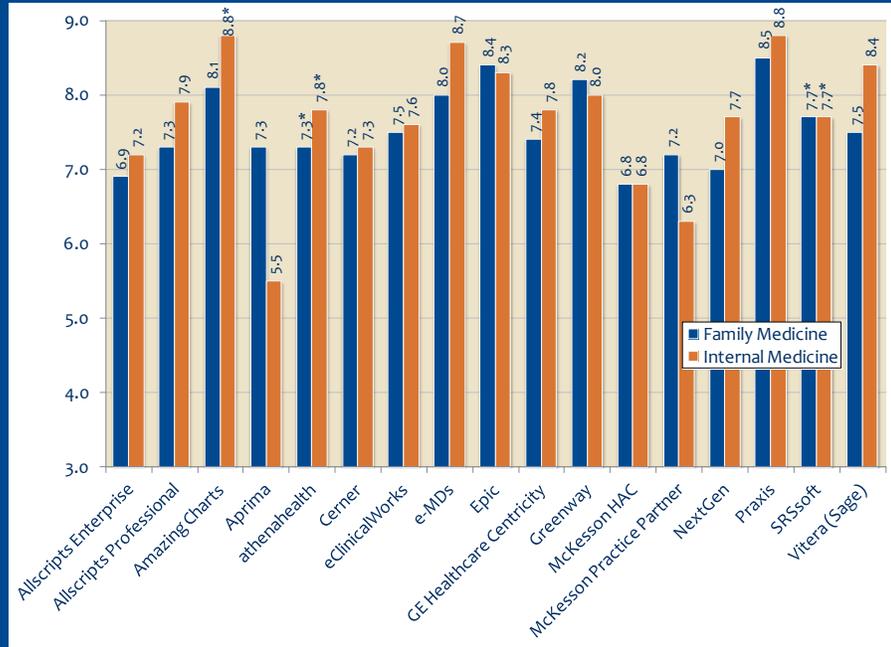


Figure 10

FAMILY AND INTERNAL MEDICINE

Most family and internal medicine providers indicated that their EMR vendor started out in family medicine and pretty much has the space down pat. The vendors that excel in this specialty do so by making it easy to formulate and document a wide range of visit types in a flexible workflow rather than a rigid, sequential workflow.

While customizable templates and reminders or alerts were mentioned as real benefits by providers, family and internal medicine have unique documentation needs. Providers like well-designed family history and allergy profiles. More and more, laboratory interfacing abilities are being incorporated and clinicians are requesting the ability to plug into third-party applications such as disease reference and drug reference databases.

Top-rated vendors for family and internal medicine are Praxis, Epic, e-MDs, Greenway, and Amazing Charts.

OB/GYN Performance Ratings

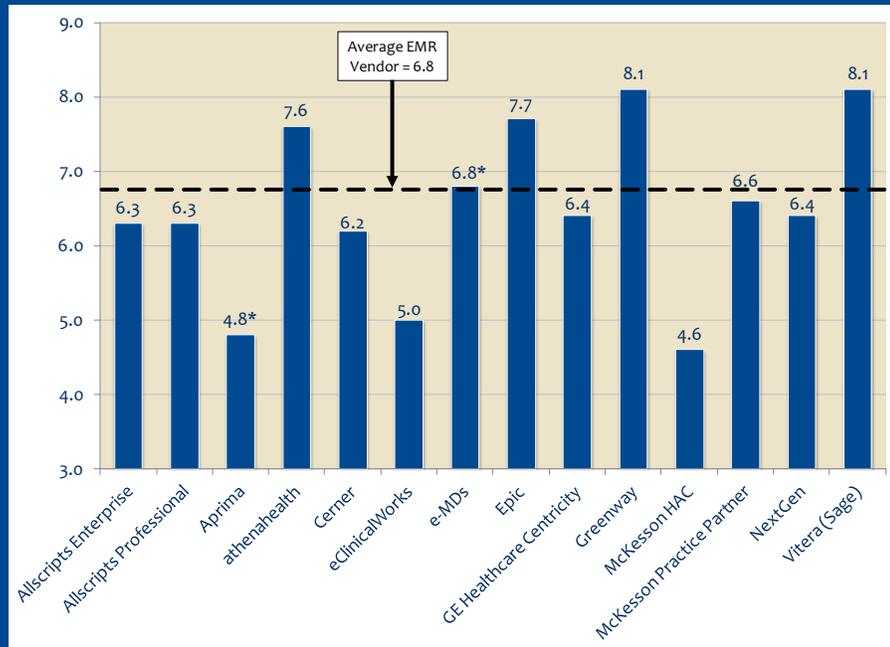


Figure 11

OB/GYN

The ideal OB patient record is well integrated into the comprehensive patient record and has tools designed for OB documentation, with charge capture built in. The vendors who excel in this space bring a broad library of well-designed reports with follow-up flow sheets and templates built specifically for OB/GYN that can be customized by the individual practitioner. Providers mentioned that the largest gap for OB specialties comes in the form of incomplete content, poorly designed templates, and perinatal records that cannot pass to and from the specialty's hospital triage L&D or CIS solution.

Overcoming the challenges of the OB specialty has proven difficult for many EMR vendors. Vitera has been able to score

highly because of a flexible platform that allows providers to set up charting parameters “exactly how [they] want.” Another provider said, “The doctors were able to generate their own template for things that are just normal everyday things that women go to the doctor for. . . . We literally looked at 45 OB/GYN systems, and Vitera was the only one that bit off the whole bill.”

Greenway also scores high in this specialty due to templates that “are very flexible.” One provider said, “We can delete whatever we don't need . . . [or] even create our own templates [so OB/GYN doctors] can select their templates and put in all the information and notes that they need.”

Epic and athenahealth are the two other vendors that outperform the market average for OB/GYN.

Orthopedics Performance Ratings

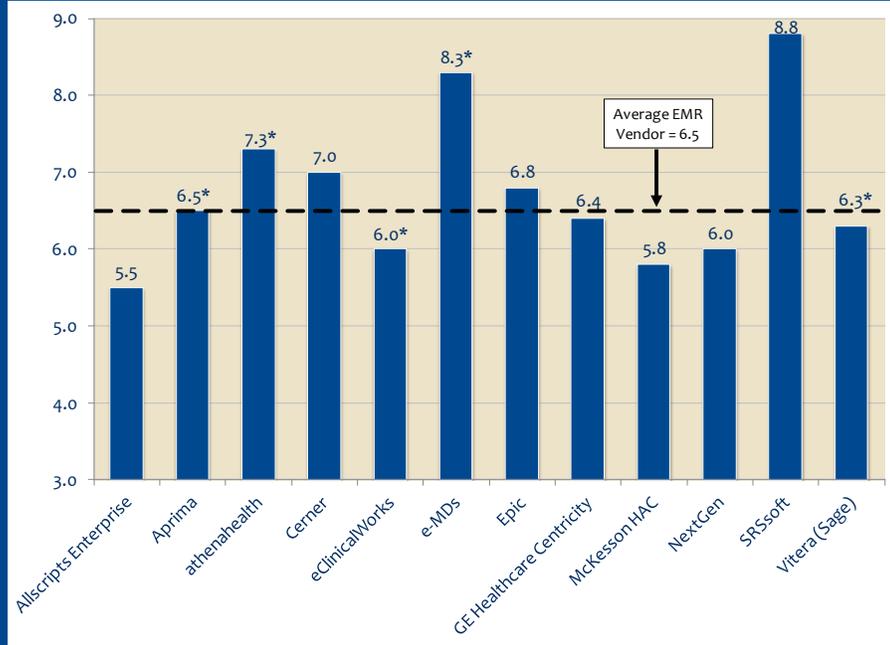


Figure 12

ORTHOPEDICS

High-performing orthopedics EMR technology is built around documentation speed, physician efficiency, and patient throughput. The best EMR vendors have dedicated resources to build EMR templates around those parameters and have invested time to learn and understand the orthopedists' workflow. *"The biggest problem is orthopedic [EMR vendors'] approach to templates. While the other specialties begin with everything being normal and clicking on what is wrong, the orthopedic doctors are specialized by body part, and they want to start with what is abnormal. They say it takes a gazillion clicks to use the template in the EMR, and we have struggled to get the orthopedic doctors to buy in."*

The end result of a good vendor is an EMR that reduces the number of clicks to navigate through the patient encounter and automates as much of the visit as possible, as well as having intuitive screen flow. SRSsoft is the clear winner in this category, posting 8.8. However, SRSsoft's system is not considered a complete EMR at this time. The company is in the process of releasing physician documentation functionality that will allow their system to be considered a complete EMR solution. Cerner follows SRSsoft's score with the second-highest score of fully rated vendors at 7.0.

Pediatrics Performance Ratings

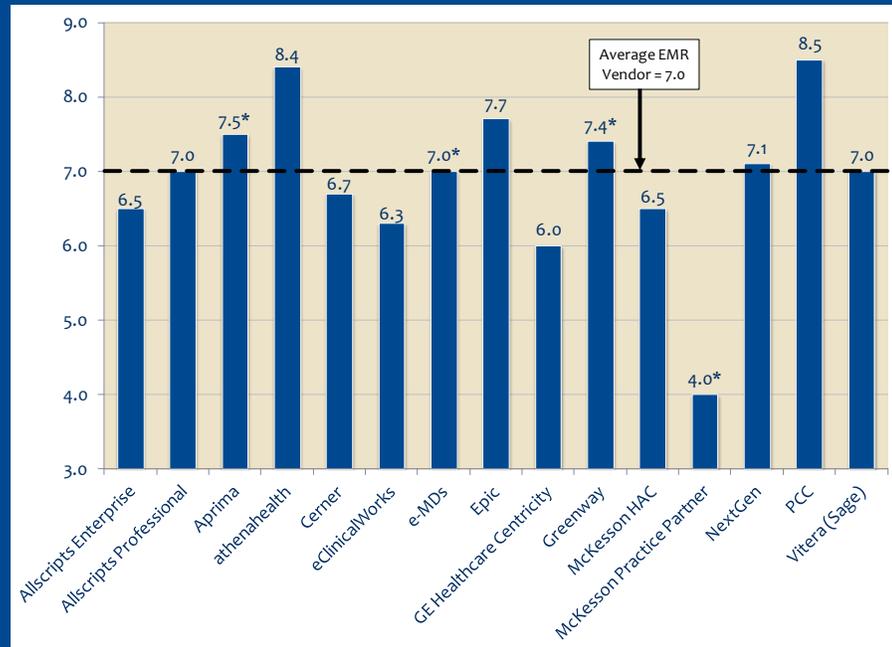


Figure 13

PEDIATRICS

Pediatric charting and documentation take into account many parameters that are often overlooked or not needed in other specialties. The strongest EMR solutions present ways to customize the standard adult medicine flow sheets to produce pediatric-specific needs such as order sets, medication dosing based on child size, growth charts, and content for premature and handicapped children. One provider commented, “As pediatricians, we noticed immediately that the EMR is geared toward adults. The loaded diagnoses and procedure processes do not have a lot of common pediatric options.”

The ability to report immunization records to state registries is a critical focus of development. Providers also liked the ability to search their database by child

name, parent name, date of birth, or home address as well as the ability to add pictures of the children. Commonly cited challenges with pediatric EMR systems were missing growth and development charts and the inability to associate multiple parents or guarantors to the record.

Vendors that do well in pediatrics provide an EMR that is flexible enough that the standard adult medicine flow sheets can be customized to pediatric-specific needs and content. These vendors have the ability to track or submit immunization records, document dosing based on weight, and provide customizable growth charts. PCC and athenahealth top the charts in this area, scoring an 8.5 and 8.4, respectively.

Surgery Performance Ratings

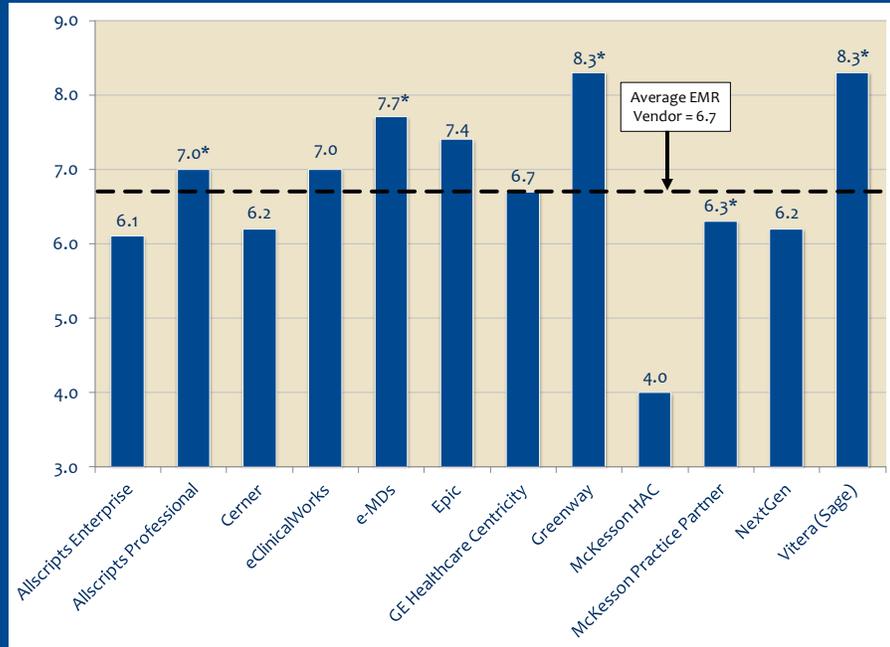


Figure 14

SURGERY

General surgery is adequately supported by most EMR solutions. However, when providers look to add inventory management, anesthesia documentation, and other features, these vendor solutions tend to break down. One provider said, *“The surgeons just have a different workflow and don’t like to get bogged down in the EMR. They just want to dictate their notes and move on to the next patient.”*

Scheduling can also be problematic because surgeons often work out of multiple facilities. Keeping track of and

grouping their cases by facility is important. *“The surgeons visit and interact with the patient very differently from the rest of the doctors. They do more procedures, H&Ps, and follow-up visits, and they are always moving between the hospital, the clinic, and the outpatient surgery areas.”*

Only a few vendors have demonstrated strengths in surgery scheduling and integration with additional needed functionality. Those vendors include Epic and eClinicalWorks, which score 7.4 and 7.0, respectively.



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