



AC Group Releases 2004 EMR Survey

Extensive Evaluation Ranks Top Electronic Medical Record Applications

A White Paper By:

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For more information on the detailed 160+ page report, visit the web site at <http://www.acgroup.org> or contact Mark R. Anderson at 281-413-5572 or by email at mra@acgroup.org



AC GROUP RELEASES 2004 EMR/EHR SURVEY

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Ft Lauderdale, FL (May 19, 2004) – AC Group, Inc. (ACG) released their third annual report on **Electronic Medical Record (EMR)** and **Electronic Health Record (EHR)** applications today at the TEPR conference in Ft. Lauderdale. This year's annual report provides physicians with one of the most comprehensive evaluations to date of leading EMR/EHR applications. According to the author, Mark Anderson, Healthcare IT Futurist, "The current pressures in the industry for increased efficiency and better care delivery, coupled with significant advances in technology and applications, have enabled EMRs to take center stage. The challenge with EMRs is that it is very difficult for the average physician practice to effectively evaluate its' options. The survey is an extensive evaluation of functional criteria that can serve as a valuable tool for the vendor selection process. The entire report is over 160 pages long and covers all 6 levels of technology for the physician's office.

Summary Results: To insure that the application met the real needs of physicians, a detailed study was conducted by AC Group, Inc. during the Spring of 2002, 2003 and then again in 2004. The AC Group annual EMR report is based on 28 months of research and the cumulative results of their 70-page questionnaire that included 5,155 functional questions divided into 27 categories and 4 methods of operations. The four methods of operation included:

1. Desktop capability (1,418 questions)
2. Wireless capability (1,447 questions)
3. Remote access capability (1,418 questions)
4. PDA and mobile capability (872 questions)



The 27 functional categories included sections on the Institute of Medicine's (IOM) requirements for a computerized patient record (CPR), along with functional questions relating to operational areas including prescriptions, charge capture, dictation, interface with laboratories, physician order entry, decision support and alerts, security, personal health records, reporting and documentation. The EMR/EHR evaluation included a weighted point value for each of the 5,155 question based on the following criteria:

- The current product **doesn't** offer this functionality
- The current product **provides** the functionality for an **additional cost**
- The current product **provides** the functionality from a **third party**
- A future product enhancement in the **next three months** will provide the functionality
- A future product enhancement in the **next six months** will provide the functionality
- A future product enhancement in the **next year** will provide the functionality
- The product **provides** the functionality currently

For the first time, the 2004 report includes a point system based on a combination of functionality, company size, client base, end-user satisfaction, and price. This will provide a more comprehensive view of the ability of the end user to derive benefits from the product. Through our research, we have learned that while

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having the appropriate level of functionality is critical, providers require a vendor that will support and continue to develop the product. Each area was given a weighted value, and each vendor was assigned a "Total Weighted Point Value". Overall, two companies, NextGen and Allscripts received the highest overall total rating. Three important caveats to keep in mind as you review the results:

1. Literally hundreds of products are identified as EMRs, and while a good faith effort was made to contact as many vendors as possible, many chose not to respond.
2. The survey findings are based on what *vendors* said about their *own* products.
3. Performance was assessed only for those vendors that ranked in the top 10 in self-reported functionality.

When evaluating functionality by different methods of input, the ACG team determined that today's technology allows end-users the same functionality no matter where they are located. In 95% of the cases, the vendor's application functioned the same on the desktop, from a remote location, and from a wireless PC device. Therefore, the EMR evaluation team was able to consolidate Desktop, Remote and Wireless functionality into one rating. The only major difference was the functionality on a PDA device – given that the screen size is limited. Therefore the EMR team created a separate rating for PDA devices. Simply stated, a number of the vendors that were highly ranked for the triad of desktop, remote and wireless, either did not offer a portable device or had one with limited functionality. When their overall performance ranking included low or nil scores for PDA their ranking dropped precipitously. The vendors that were included in the studies were:

- A4 Health Systems
- AllMeds
- Allscripts Healthcare Solutions
- Alteer
- Amazing Charts
- Amicore
- Axolotl
- Bond Technologies
- Cerner
- Chartcare, Inc.
- Chartlogic
- Cliniflow (Monarch)
- Companion Technologies Corporation
- Dr Notes
- eClinicalworks
- e-MDS
- EPIC
- GE Medical Systems Information Tech.
- Greenway Medical Technologies
- InteGreat, Inc.
- iMedica Corp.
- JMJ Technologies
- McKesson
- MDAnywhere
- MEDCOM Information Systems, Inc.
- Medical Information Systems, Inc.
- Medical Office Online
- MedInformatix
- Medinotes
- MediNotes Corporation
- MeridianEMR
- Misys Healthcare Systems
- NextGen Healthcare Information Systems
- Noteworthy Medical Systems
- OmniMD
- Orion Systems International Inc
- Physician Micro Systems, Inc.
- PraxisEMR
- Smart Doctor
- SynaMed
- Task Technologies (Chartlogic)
- The Medical Manager software from WebMD
- Vista Care
- Vitalworks
- Web MD Intergy

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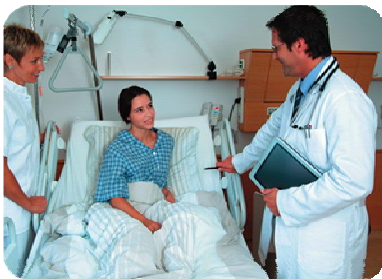
2004 EMR Functionality Results

Based on our findings, the top seven EMR application vendors overall were:

- Allscripts Healthcare Solutions, (TouchWorks EMR), www.TouchWorksEMR.com
- Bond Technologies, www.bondclinician.com
- eClinicalWorks, www.eclinicalworks.com
- iMedica Corporation, www.imedica.com
- Infor-Med Medical Information Systems, Inc. - PRAXIS EMR", www.praxisemr.com
- JMJ Technologies, Inc., www.jmjtech.com
- Medical Communication Systems Inc., www.medcomsys.com
- NextGen Healthcare Information Systems, Inc., www.nextgen.com
- Physician Micro Systems, Inc., www.pmsi.com
- Synamed, www.synamed.com

NextGen Healthcare Information Systems, Inc. continues to receive top honors in the annual EMR functionality report. With the acquisition of **Advanced Imaging Concepts**, the leading Document Imaging Company, **Allscripts Healthcare Solutions** improved their overall functionality and with Nextgen, were the only 2 vendors that received a 5-star rating this year.

Seven other vendors, Physician Micro System, Inc., SynaMed, Imedica Corporation, eClinicalWorks, Medical Communication Systems Inc, Epic Systems, and Bond Technologies received 4-Star (80-89% of required functionality). Eight others vendors received 3-Stars, including, A4 Healthcare, Greenway Medical, GE Medical, Misys Healthcare Systems, JMJ, PraxisEMR, MeridianEMR, Medinformatics, and eMDS.



When evaluating vendor applications based on current and future functionality, five vendors are expected to increase their overall functionality and should be certified as a 5-star EMR/EHR application by the fall of 2004. These top vendors include **eClinicalworks**, **Bond Technologies**, **iMedica**, **Medical Communication Systems Inc**, **Physician Micro System, Inc.**, and **SynaMed**. **By 2005, applications like WebMD's Intergy are projected to become 5-Star certified EMR/EHR solutions.**

Rating vendors only on functionality is not always helpful since certain vendors only sell their products to specific market demographics. For example, of the 42 vendor applications evaluated, 11 sell to smaller physician offices with 1-4 physicians, and only 12 sell to practices with more than 100 physicians. To help physicians understand which vendors are best for them, we have attempted to divide the marketplace based on practice size.

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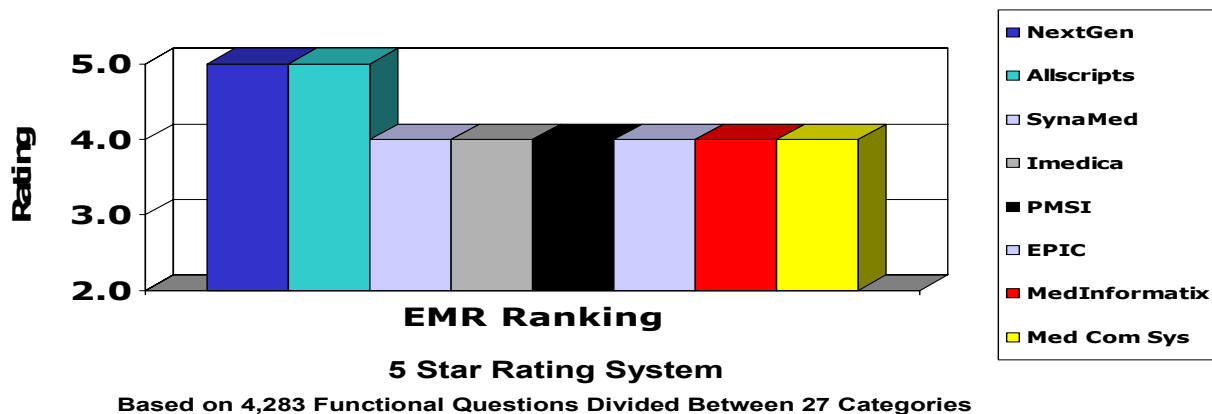
Extensive Evaluation Ranks Top EMR Applications

Large Practices (> 100 Physicians)

For larger practices with over 150 physicians, the top applications are from NextGen Healthcare Systems (95%) and Allscripts Healthcare Solutions (93%). Allscripts is the 2004 TEPR award winner for large EMR Applications and Nextgen was the TEPR award winner in 2001-04 and the MSHUG award winner in 2003 and 2004 . Five additional vendors, SynaMed (89.7%), iMedica Corporation (89.2%), Physician Micro Systems (83.9%), Epic (81.0%), and Medical Communication Systems (80.8%) scored 4-Stars in the EMR functionality rating. NextGen and Allscripts received the highest overall point ranking once you consider company size, client base, end-user satisfaction, and price.

	Total Points	Desktop	EMR Ranking	EHR Ranking	Overall Score
1	NextGen	95.0%	5	5	37
2	Allscripts	92.9%	5	4	37
3	SynaMed	89.7%	4	5	24
4	Imedica	89.2%	4	4	26
5	PMSI	83.9%	4	3	30
6	EPIC	81.0%	4	4	30
7	Med Com Sys	80.8%	4	4	23
8	GE Medical	74.1%	3	1	29
9	A4 Healthcare	73.9%	3	1	28

Top EMR Vendor Applications Large Practices Vendors Meeting a Minimum of 70% of Required Functionality



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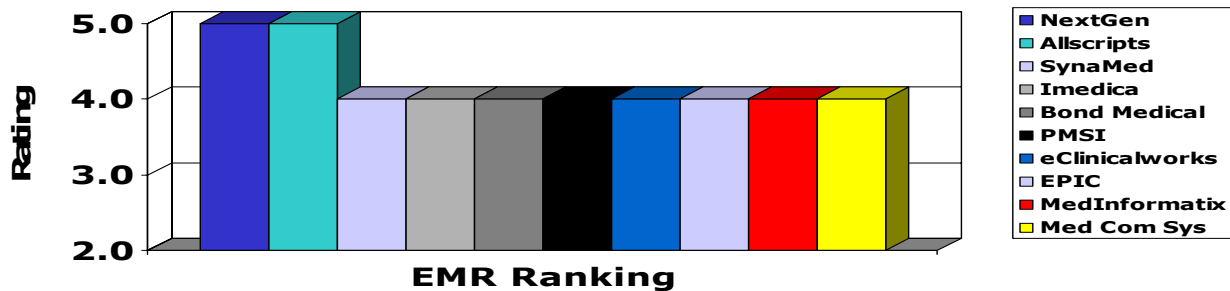
Extensive Evaluation Ranks Top EMR Applications

Mid Size Practices (15 to 99 Physicians)

For larger practices with between 15 and 99 physicians, the top applications are from NextGen Healthcare Systems (95%) and Allscripts Healthcare Solutions (92.9%). Six additional vendors, SynaMed (89.7%), iMedica Corporation (89.2%), Physician Micro Systems (83.9%), eClinicalworks (81.3%), Medinformatics (80.9%), and Medical Communication Systems (80.8%) scored 4-Stars in the EMR functionality rating. Meridian EMR, Medinformatics, A4 Healthcare and GE Medical received 3-Stars. NextGen and Allscripts received the highest overall point ranking once you consider company size, client base, end-user satisfaction, and price.

	Total Points	Desktop	EMR Ranking	EHR Ranking	Overall Score
1	NextGen	95.0%	5	5	37
2	Allscripts	92.9%	5	4	37
3	SynaMed	89.7%	4	5	24
4	Imedica	89.2%	4	4	26
5	PMSI	83.9%	4	3	30
6	eClinicalworks	81.9%	4	4	29
7	MedInformatix	80.9%	4	1	25
8	Med Com Sys	80.8%	4	4	23

Top EMR Vendor Applications Mid-Sized Practices Vendors Meeting a Minimum of 70% of Required Functionality



5 Star Rating System

Based on 4,283 Functional Questions Divided Between 27 Categories

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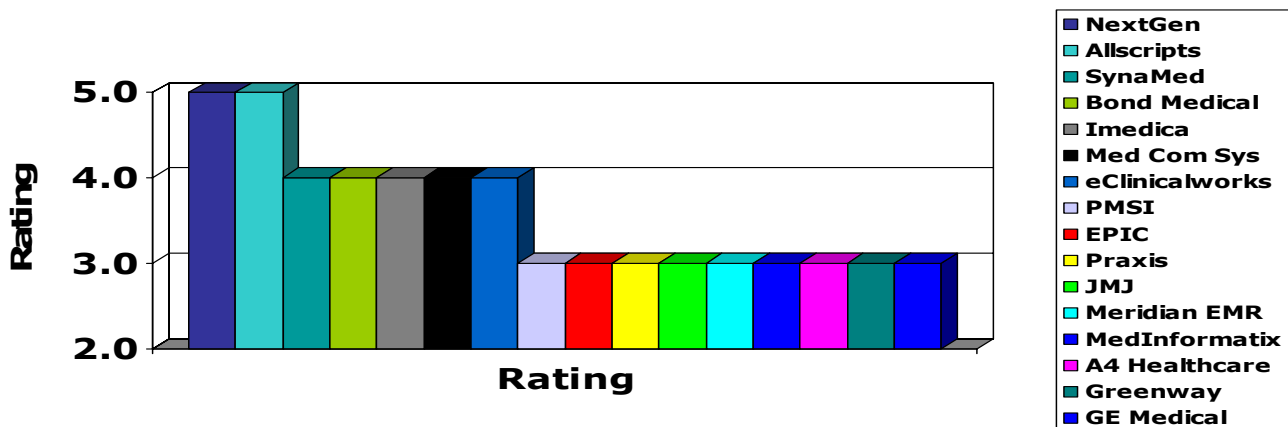
Small Practices - (5 – 15 Physicians)

For smaller practices with 5 to 15 physicians, once again, the top applications remain the same as the mid-sized practices. Two new vendors entered this category – Bond Technologies (88.1%) and JMJ Technologies (78.9%). In most cases, many of these vendors do not actively market to the size of practice. However, all will provide a bid if requested.

	Total Points	Desktop	Rating	EHR	Overall Score
1	NextGen	95.0%	5	5	37
2	Allscripts	92.9%	5	4	37
3	SynaMed	89.7%	4	5	24
4	Imedica	89.2%	4	4	26
5	Bond Technologies	88.1%	4	5	24
6	PMSI	83.9%	4	3	30
7	eClinicalworks	81.9%	4	4	29
8	MedInformatix	80.9%	4	1	25
9	Med Com Sys	80.8%	4	4	23
10	JMJ	78.9%	3	1	22
11	Praxis	77.2%	3	1	25
12	Meridian EMR	76.8%	3	1	15
13	GE Medical	74.1%	3	1	29
14	A4 Healthcare	73.9%	3	1	28

Top EMR Vendor Applications Practices with 5 to 15 Physicians

Vendors Meeting a Minimum of 70% of Required Functionality



5 Star Rating System

Based on 4,283 Functional Questions Divided Between 27 Categories

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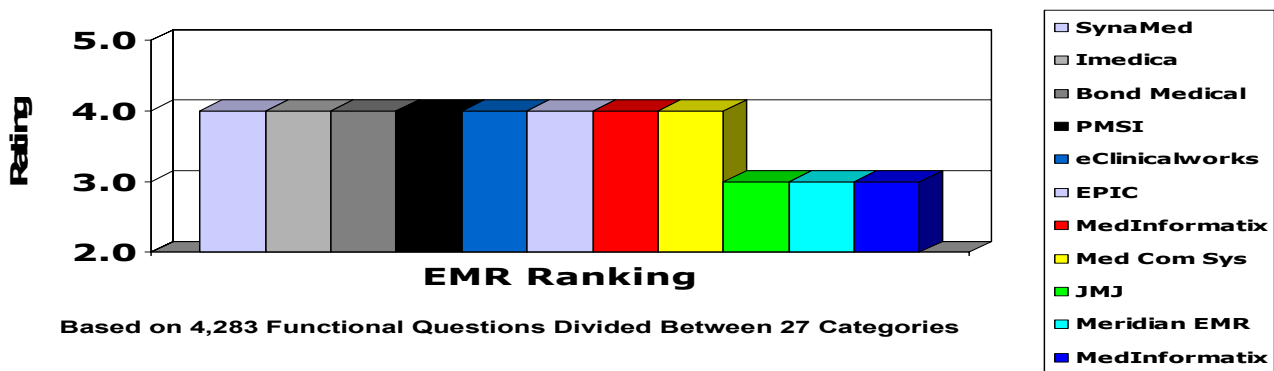
Extensive Evaluation Ranks Top EMR Applications

Small Practices - (1 – 4 Physicians)

For smaller practices with less than 5 physicians, **SynaMed, Bond Technologies, Physician Micro Systems, and eClinicalworks** received 4 Stars with more than 80% of the current requirements. **Physician Micro Systems and eClinicalworks** received the highest overall point ranking once you consider company size, client base, end-user satisfaction, and price. PraxisEMR, JMJ Technologies, Meridian EMR, MedInformatix, A4 Healthcare, and Greenway Medical rounded out the top 10 EMR vendor applications for the small physician office. The rating by vendor is displayed below:

	Total Points	Desktop	Rating	EHR	Overall Score
1	SynaMed	89.7%	4	5	24
2	Bond Technologies	88.1%	4	5	24
3	PMSI	83.9%	4	3	30
4	eClinicalworks	81.9%	4	4	29
5	MedInformatix	80.9%	4	1	25
6	Med Com Sys	80.8%	4	4	23
7	JMJ	78.9%	3	1	22
8	Praxis	77.2%	3	1	25
9	MeridianEMR	76.8%	3	1	15
10	A4 Healthcare	73.9%	3	1	28
11	Greenway	73.7%	3	NA	18

Top EMR Vendor Applications Small Practices with < 5 Physicians Vendors Meeting a Minimum of 70% of Required Functionality 5 Star Rating System



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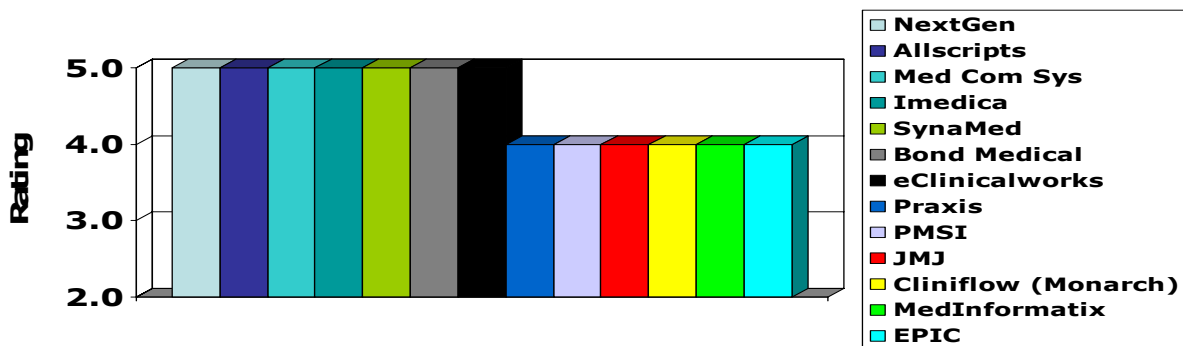
Future Functionality:

When evaluating vendor applications based on current and future functionality, six EMR vendors are expected to receive a 5-Star rating by December of 2004. As shown below, SynaMed, Bond Technologies, iMedica, and Medical Communication Systems and eClinicalworks are expected to become certified EMR Vendors with an overall rating of 87.5% or above.

	Total Points	May-04	Dec-04	% Change	Rating - May 04	Rating - Dec 04
1	NextGen	96.8%	97.3%	0.5%	5	5
2	Allscripts	92.9%	94.6%	1.8%	5	5
3	Med Com Sys	80.8%	93.7%	16.0%	4	5
4	Imedica	89.2%	92.1%	3.3%	4	5
5	SynaMed	89.7%	91.4%	1.9%	4	5
6	Bond Technologies	88.1%	89.9%	2.1%	4	5
7	eClinicalworks	81.9%	88.0%	7.4%	4	5
8	Praxis	77.2%	84.6%	9.6%	3	4
9	PMSI	83.9%	84.0%	0.1%	3	4
10	JMJ	78.9%	83.8%	6.2%	3	4
11	Cliniflow (Monarch)	78.1%	82.6%	5.7%	3	4
12	MedInformatix	80.9%	81.1%	0.3%	3	4

Top EMR Vendor Applications Future Functionality – 3 to 6 Months

Vendors Meeting a Minimum of 80% of Required Functionality



5 Star Rating System

Based on 4,283 Functional Questions Divided Between 27 Categories

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How much does an EMR system cost? There are a broad range of costs associated with the purchase and implementation of a system. These include:

- Software licenses, which are typically sold on a per-workstation basis
- Hardware, consisting of both individual personal computers for office and exam rooms as well as central database servers, network hardware, and modems
- Training and implementation, which involves pre-installation planning as well as on-site training of individual users
- Software support, represented as an annual contract typically sold as a percentage of the total sale, providing both help desk functions (technical support) and software updates
- Hardware and network support, which is primarily on-site or telephone support for hardware-specific issues and problems
- Typical prices range from \$15,000 to \$50,000 per physician, including all of the components noted above.
- Software costs alone per physician vary by company and are not necessary related top functionality.

	Company	Software Cost per Physician		Company	Not Reported
1	DR Notes	> \$20,000		Web MD Intergy	NA
2	EPIC	> \$20,000		Vista Care	NA
3	Alteer	> \$20,000		Orion	NA
4	OmniMD	\$12,501- \$17,999		Noteworthy	NA
5	Greenway	\$12,501- \$17,999		Medical Office Online	NA
6	Meridian EMR	\$12,501- \$17,999		Medical Manager	NA
7	Imedica	\$10,000 - \$12,500		McKesson	NA
8	NextGen	\$10,000 - \$12,500		iGreat	NA
9	Misys	\$10,000 - \$12,500		GE Medical	NA
10	Bond Technologies	\$10,000 - \$12,500		e-MDS	NA
11	Axlotl	\$10,000 - \$12,500		Companion Tech	NA
12	AllMeds	\$10,000 - \$12,500		Cliniflow (Monarch)	NA
13	PMSI	\$7,500 - \$9,999		Chartlogic	NA
14	MedInformatix	\$7,500 - \$9,999		Chartcare	NA
15	Smart Doctor	\$7,500 - \$9,999		Cerner	NA
16	SynaMed	\$5,000 - \$7,500		Allscripts	NA
17	eClinicalworks	\$5,000 - \$7,500		A4 Healthcare	NA
18	Medinotes	\$5,000 - \$7,500			
19	Med Com Sys	\$5,000 - \$7,500			
20	Amicore	\$5,000 - \$7,500			
21	JMJ	\$5,000 - \$7,500			
22	MDAnywhere	\$5,000 - \$7,500			
23	Praxis	\$5,000 - \$7,500			
24	Vitalworks	\$5,000 - \$7,500			
25	Amazing Charts	< \$1,000			

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Conclusion:

Technology is only a tool and if used effectively can improve the flow of information and potentially improve the efficiency of the physician's practice. However in reality, if "change" is not embraced, the probability of success is very low. We learned in the 1980's that we needed to change the process of billing for services – or we would not be paid in a timely and effective manner. Therefore, the practice of medicine, from the business point of view, changed. Now with newer technologies, government regulations, and the right financial incentive, physicians will begin embracing new levels of technology that were not available just 5 years ago. But where does a physician in a small practice turn to learn about the 100's of technology choices? The physician can spend hours searching and evaluating all of the opportunities. Or maybe in the near future, physicians will be able to look towards leaders within their own medical specialty for guidance and knowledge.

More about the Author:

Mark R. Anderson, FHIMSS, CPHIMS – Healthcare IT Futurist

Mr. Anderson is one of the nation's premier IT research futurists dedicated to health care. He is one of the leading national speakers on healthcare and physician practices and has spoken at > 350 conferences and meetings since 2000. He has spent the last 32+ years focusing on Healthcare – not just technology questions, but strategic, policy, and organizational considerations. He tracks industry trends, conducts member surveys and case studies, assesses best practices, and performs benchmarking studies.



Mr. Anderson is also the CIO for the Taconic IPA, a 3,000 Physician group based in upper New York. Prior to forming AC Group, Inc. in February of 2000, Mr. Anderson was the worldwide head and VP of healthcare for META Group, Inc., the Chief Information Officer (CIO) with West Tennessee Healthcare, the Corporate CIO for the Sisters of Charity of Nazareth Health System, the Corporate Internal IT Consultant with the Sisters of Providence (SOP) Hospitals, and the Executive Director for Management Services for Denver Health and Hospitals and Harris County Hospital District.

His experience **includes 20+ years working with physician offices, 7 years in the development of physician-based MSO's**, 17 years with multi-facility Health Care organizations, 15 years Administrative Executive Team experience, 6 years as a member of the Corporate Executive Team, and 9 years in healthcare turnaround consulting. Mr. Anderson received his BS in Business, is completing his MBA in Health Care Administration, and is a Certified Fellow with HIMSS.

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