A. Introduction:

Physician practices, like all healthcare institutions, have been hesitant to invest appropriately in information technologies that can improve operations. We are still at the beginning of the technology revolution in healthcare, and practices are reluctant to commit to expensive new systems. But decreasing reimbursements and lower net profits are forcing radical changes in practice management and have accelerated the adoption of technology beyond the billing office into the full point-of-care arena. On top of these basic economic incentives, new requirements from CMS and other payers will soon force doctors to computerize the collection of patient clinical data.

The challenge for now is to find a foundation of technology that will enable you, the physician or healthcare



information manager, to build a complete solution in the future. This foundation is likely a clinical information management system that serves as the connecting point or collection device for all of the technology deployed within the physician office. Such a system can also act as a depository of information, and it can provide you with an organization system for all of the information that flows into, or out of, the office. Could all of this be done with a computer? The answer is yes.

However before you run out and purchase a new clinical information system, you may want to research the amount of "local support" that each of the vendors provides. We have found that there is a direct correlation between the amount of support provided, especially local support, and end-user satisfaction. In fact, 89% of the practices stating that they are very happy or extremely happy with their EMR have local support for their product. Conversely, 76% of the practices that are not satisfied with their product have no local support; their support is provided by a national office located outside of a two-hour driving distance.

During the 1990's companies supplying non-clinical IT solutions to doctors – including Medical Manager, Compusense, and Millbrook – developed an extension network of local sales and support executives, otherwise known as value-added resellers (VARs). These VAR's sold the products locally and provided local support for the applications. Physicians became used to having representatives visiting their offices on a routine basis to insure that everything was operating effectively. Vendors for other healthcare professions, such as pharmacy detail representatives and office supply store representatives, followed the same model. Today, however, many clinical technology applications are being sold via internet "web casts." In 38% of cases, the physician never meets the technology company's sales representative until after the sale. This model of sales and support is cost-effective to the software vendor, but we wonder how effective this method will be in the long-term for the physician's practice.

To insure that a practice makes the right clinical technology decision, we recommend three standard protocols:

- Obtain advice from outside experts in the technology field those with extensive software knowledge.
- 2. Look for vendors that provide local support for their product within 100 miles of your central office location. If they do not provide local support, clearly understand "how" you will be supported.
- 3. For small practices with < 10 physicians, consider an ASP option in order to decrease risk and to insure adequate technology overview.

B. Outside 3rd Party Consultation

Physicians are looking for a 3rd party independent evaluation of the various EMR/EHR offerings in the marketplace today. To evaluate how well and completely each of these offerings meets the real needs of physicians, AC Group, Inc. conducted a detailed study during the Spring of 2002, 2003, and 2004 and then again in October of 2003 and 2004. The AC Group EMR functionality report is based on 34 months of research and the cumulative results of a 90-page questionnaire distributed to each participating vendor. The questionnaire included 5,455 functional questions divided into 27 categories and 4 methods of operations.

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 2004 report included, for the first time, a point system based on a combination of functionality, company size, client base, end-user satisfaction, and price. Each area was given a weighted value, and each vendor was assigned a "Total Weighted Point Value". This provides a more comprehensive view of the ability of the end user to derive benefits from each evaluated product. Through our research, we have learned that while having the appropriate level of functionality is critical, healthcare providers require a vendor that will support and continue to develop the product. To see the summary report, go to: http://www.acgroup.org.

C. Installation, Training, and Support

As mentioned earlier, the installation, training and support offerings vary greatly among the different EMR vendors. About 10% of vendors provide no on-site support or training at all – everything is handled via the internet and phone calls. Of those that do provide on-site training, 32% provide < 10 hours per physician, 33% provide between 10 and 24 hours per physician, 9% provide between 25 and 40 hours per physician, and only 6% provide more than 40 hours of training per physician.

To insure an effective installation, physicians must receive the training man-hours necessary to maximize the usefulness of a new EMR product. If a practice receives inadequate training, the loss in productivity could cost the practice as much as \$50,000 per physician per year. Additionally, practices need help maximizing workflow and reorganizing activities based on the functionality provided by the software application. With many vendors, the relationship resembles the process of buying a car. The sales person sells you a car and tells you how to operate the radio and the door locks. But the sales person does not teach you how to drive and does not provide you with a road map to get from the showroom back to your practice. You are on your own. Based on a survey conducted by AC Group, Inc. of 69 EMR vendors, < 15% actually work with you and your practice and teach you how to drive The remaining 85% leave that learning up to the practice.

What the EMR marketplace most needs are organizations that can provide local installation, training, configuration, and on-going support. These organizations can include Independent Physician Associations (IPAs), Management Service Organizations (MSOs), and Value-added resellers (VARs). This collection of organizations can organize and provide superior market intelligence and technology support for local physician groups. Two promising groups are the MedAllies, located in the Hudson Valley, NY, and Pro Practica, Inc., a private company headquartered in the Cleveland, OH area. Both are profiled below.

D. ASP – Application Service Providers

In the acronym-laden world of healthcare, ASP (application service provider) is one of the most frequently

heard – a being the most popular member of a vocabulary categorizing the various service providers that have come into existence as a result of the Internet. As the tech phenomenon continues to shake out, successful service providers are settling into a role of broader responsibility in their customers' organizations, thereby demonstrating their true value. BSPs (business solution/service providers) are the next step in evolution of the ASP model. These companies let healthcare



organizations outsource entire segments of their business, not just one certain aspect, allowing them to concentrate on their core competencies. Examples include, technology support outsourcing, supply tracking and re-ordering, accounting services, and billing and collection services

ASPs offer many advantages, particularly to small practices with fewer than 15 physicians. They allow IT spending to take place in increments rather than in one large licensing and implementation expense. But perhaps their biggest benefit is that they permit tremendous flexibility. Organizations are able to implement solutions quickly; affect plan, privacy and functionality changes fairly quickly; and even change technology providers without delay. An ASP scales one IT professional across three or four companies, depending on the application and the complexity. Another obvious benefit is the total cost of ownership. It's a lot less costly to run equipment in an ASP model than having to have everything in-house. Another key advantage is you can get work done more quickly. Physicians can make a decision and know it's going to be done and dealt with right away.

The ASP pricing model, like everything else, varies based on the services that are provided. We estimate that the total cost for an EMR delivered via ASP should be in the range of \$800-\$1,250 per month. In most cases, a physician can contract for a flat monthly fee of between \$400 and \$1,000 per month for a complete EMR application. However, there will be an additional price for installation, training, and initial configuration. Some vendors require these "consultative" fees upfront, and others build them into the monthly contract. Adding hardware, networks, and mobile devices brings the average cost per physician for technology to more than \$15,000 per year. In all cases, physicians must look at a 3-year total-cost-of-ownership model when considering either a purchase or an ASP model.

E. MedAllies

Under the leadership of John Blair, M.D., the MedAllies has established the Taconic Healthcare Information Network and Community (THINC) collaboration. In short, THINC is a collaborative approach that brings together the healthplans, employers, hospitals, and physicians with the single goal of improving clinical quality while reducing the cost of healthcare for all parties. The project involves the capturing of clinical data at the point of care for up to 2,300 physicians who serve more than 1.2 million individuals throughout the Hudson Valley, NY. The program is intended to create a set of standardized quality measures across the plans, making it easier for physicians to participate in the program, and validating the measures. According to Dr Blair, "The MedAllies will provide on-site support for newer technologies for any and all of their physicians via collaboration with a company specific designed to provide knowledge and local support - MedAllies". Under the support model, each physician receives up to 80 hours of installation, configuration, training, and support the first year and between 40-60 hours of on-going support each additional year. The

purpose of MedAllies is to insure that physician practices maximize the value of their new technology via onsite support and workflow redesign.

F. ProPractica

Pro Practica, Inc. is a promising new company with national reach. Unlike typical EMR vendors, the company's focus is on service, not simply on software. ProPractica's main service offering, StreamlineMD, delivers a fully robust EMR solution, with scheduling tools included as well, through an ASP model. As noted above, this is ideal for physicians in small and medium-size practices. Of particular importance is the ease with which ProPractica can deploy updates and upgrades to its software. StreamlineMD also includes all training and support a practice needs to begin using clinical information tools as quickly as possible, and to stay up-to-date on the latest technologies. ProPractica believes that practices learn at different speeds and in different ways, so its training program is flexible. As AC Group, Inc. recommends, ProPractica provides all of its training and support through local representatives, with most of its training delivered in-office. Another important feature is that StreamlineMD is paid for through a monthly subscription fee of \$770-\$800, which is below the range for almost all other providers. There is also a very small implementation cost. The easy-to-understand subscription model is likely to help doctors get over the hesitation they have about adopting new clinical information technologies. AC Group, Inc. has stated for years that the missing element in the market is a service organization that will organize and deliver a complete technology package for independent doctors. ProPractica is the first company to fully embrace that challenge.

G. 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 incentives, 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 hundreds of clinical information technology choices? The physician can spend weeks searching and evaluating all of the options. And maybe in the near future, physicians will be able to look towards leaders within their own medical specialty for guidance and knowledge. For now, the best solution is to hire an outside consultant with relevant expertise to help select a solution that includes local service, training, and support. Smaller practices, and many medium-size practices, should limit their searches to companies that deliver their solutions via ASP. Two trailblazers are the MedAllies, which can serve as a model for a community-based

approach, and Pro Practica, Inc, which can help independent doctors bridge the divide between paper-based and computerized clinical information systems.

More about the Author:

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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 MedAllies, a 2,300 Physician IPA 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 22+ years working with physician offices, 9 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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