

Advanced Data Conversions

The Essential Ingredient to insure an effective EHR implementation



A White Paper By:

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Executive Summary:



We believe that no one should be stuck with an EHR system that just isn't working for them. Imagine being able to switch from any EHR to any EHR freely without losing vital patient data & encounter notes. The concept is unique, but with an overall national EHR failure rate over 60%, physicians need the option of selecting new products without the risk of losing their patient's data.

In fact, during the past three years, over 50,000 physicians have purchased a new Electronic Health Record (EHR) product for their medical practices. Once implemented, the EHR vendors have claimed that the average medical practice will achieve a quick return on investment by reducing the time spent looking for information by an average of 22%, improving coding and reimbursement by an average of 6.8%, and improving workflow throughout the medical practice. The EHR vendors have claimed that once automated, most medical practices could eliminate more than 92% of their internal paperwork and will be able to implement procedures to scan in more than 97% of paper that comes in from outside sources.

However over the past five years, most medical practices have not realized the majority of the cost savings that were promised by the various EHR vendors. One reason for the lack of initial operational improvement and cost savings is the lack of discreet patient information in the EHR when the physician initially starts using the EHR software. In fact, once a medical practice goes live on the EHR, 99% of the patient's clinical information is still embedded in an older EHR or in the patient's paper chart, not in the new EHR. The reason, most EHR vendors do not offer adequate "data conversion" capability from one system to another is due to the complexities involved in discrete data conversions.

Apart from having resources, processes and infrastructure, these complexities include extracting data elements such as Patient Demographics, Insurance, Appointments, Past Medical History, Family History, Social History, Surgical History, Medications, Allergies, Vitals, Immunizations, Images, Scanned Documents, Lab Results and Encounter Notes. Once the data is extracted, conversion process begins by translating each record into a format readable by the new EHR. Each EHR stores data in its own individual format (database files, text documents, photos, etc.) that comprise patient medical records. Upon completion of a conversion, EHR vendor needs to test if the final data meets the technical specifications of their EHR and ensure that patient charts get displayed accurately in the new system.

The actual use of EHR is still in question. As shown on Figure 1, the 2010 CDC/NCHS national Ambulatory Care Survey projects that almost 50% of physicians have already purchased some type of EHR product, but only around 10% are using the product as a fully functional EHR product. Around 25% of physician practices are using an EHR as a basic input system. This means that 15% of all providers have purchased an EHR and are NOT using the product at all. Part of the reason is usability, identified slowdown in patient care, and many of these systems have crashed over time and data was lost. When this occurs, physicians lose trust in the EHR solution.

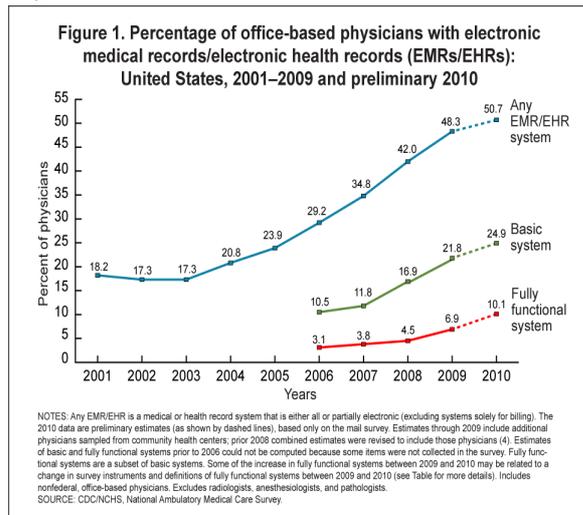
The purpose of this white paper is to discuss the value of "data conversion" prior to going live on a new EHR product and to introduce the concept of "advanced data conversion" via electronic means.

Advanced Data Conversion:

Data Extraction services are available even if the previous EMR software vendor is no longer in business or no support is available. Practices need the ability to "extract" data from whichever system currently being deployed, and 'convert', or reformat it, to meet the new software's specifications. This frees the physician using the legacy EMR system as a history archive.

When considering converting from one EHR software product to another, medical practices must consider the amount of discrete data that they would like to move from their current computer systems to their new computer systems. In most cases vendors offer patient demographic data conversions, but rarely do they offer conversions of clinical data. Also, most vendors assume that no discrete data can be converted from the legacy systems. Of course, this means that the physician has no discrete data about the patient, only scanned images.

What would happen if an EHR vendor started offering "advanced data conversion" via electronic transfer of data from multiple sources? The answer is obvious. The medical practice would achieve EHR go-live sooner and would achieve operational improvements and cost savings in a shorted amount of time. Therefore, Physicians need to be in charge of determining their data conversion needs and controlling the implementation and go-live process.



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In fact, our 2011 survey on successful EHR implementations showed that physician productivity was 69% higher if the EHR was populated with discrete data before the medical practice went “live” on the new EHR product. Based on these third party validated statistics, a medical practice should **not sign** a contract with their new EHR vendor until the vendor has provided pricing and a data conversion methodology that meets the needs of the medical practice.

Most vendors will provide data conversion services and will provide the practice with an estimated cost to convert prior practice data. However in 87% of the contracts we reviewed in the last 8 years (476 contracts), the vendors do not provide adequate “descriptions” of what they plan on converting. In 72% of the contracts, “data conversion” only included “Patient Demographics” with no real definition on what is actually included. Only 5% of the vendors, including NextGen and eClinicalworks provide a more detailed definition of “Data Conversion” and yet they do not cover all the modules various specialties require.

A recent “Data Conversion” survey conducted by AC Group during October through December of 2011 showed that most vendors (94%) are not providing adequate data conversion capabilities to insure that patient clinical data is available in the new EHR on the go-live date. The reasons for the lack of data conversion are:

- 76% - the physicians did not asked the vendor to convert the data
- 65% - the costs were too high to convert clinical data
- 58% - the clinical data was not available electronically



Through education, all three of these top reasons for not converting prior data over to the new EHR can be eliminated. Let’s review all three reasons for a lack of adequate data conversion:

First Statement: 76% - the physicians did not asked the vendor to convert the data

When evaluating a new EHR product, physicians should spend more time discussing data conversion capabilities with the various EHR vendors that they are considering. Based on EHR vendor feedback, we determined that in 76% of the cases, physicians are not asking the appropriate questions relating to data conversion and based on physician satisfaction surveys, 72% of physicians are not satisfied with the EHR product during the first three to six months after go-live. The main reason – 68% of the physicians indicate that the EHR slowed them down because the physician had to access the paper chart too many times to find prior medical data about the patient.

We must start by educating Physicians on the clinical and financial value of converting data from any current software application to a new software application. Before considering multiple “data conversion” methodologies, a medical practice should answer the following questions

1. Do you want data for all patients or only a sub-set of active patients?
2. How much of your existing historical data would you like to be converted from the older system? All of the existing data? Two years worth of existing active data? The patient’s last three to five visits?
3. Can the new vendor accept prior patient discrete data and if so, in what format?



Once a medical practice has answered these questions, the next step is to provide the potential new vendors with the medical practice’s “data conversion matrix requirements”.

Second Statement: 65% - the costs were too high to convert clinical data

Second, why is the cost so high for data conversion? The main reason is that the EHR vendors are not experts in data conversion and have limited access to knowledge regarding other EHR products that they are replacing. We believe that the best option is to identify 3rd party vendors that specialize in data conversion.



One such company is ELLKAY, LLC based in Teaneck, NJ. (<http://www.ellkay.com>). ELLKAY, a leader in healthcare connectivity solutions, offers a full range of PM to PM as well as EMR to EMR Data Extraction and Conversion services, leveraging over 20 years of experience working with over 100 healthcare software vendors. Their suite of data conversion service provides a worry-free and cost effective way to migrate priceless patient demographic and discrete clinical data from one system to another.

ELLKAY has been successful in completing over 2,500 data conversions with over 100 different healthcare software vendors over the past 20 years. In twelve data conversions that we have reviewed, ELLKAY was able to meet the practice’s data conversion requirements and was able to complete the project 65% faster than the EHR vendor had originally estimated. Additionally since ELLKAY specializes in data conversions, ELLKAY was able to complete the data conversion for 50% of the initial data conversion costs estimated by the EHR vendor.

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Third Statement: 58% - the clinical data was not available electronically

One area of going concern is that most vendors tell practices that data is not available electronically, thus there is no way to convert the data into the new PM or EHR software products. Based on AC Group's evaluations, we found that a large percentage of prior patient medical information is actually available electronically today. There are numerous sources of electronic discrete data that can be obtained to insure that patient data is available in the EHR at go-live.

For example:

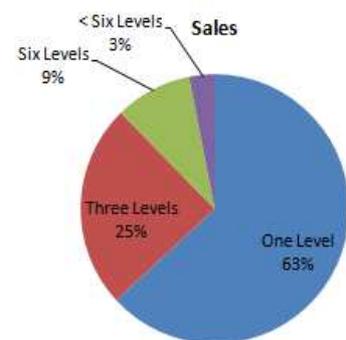
- Patient Demographics, guarantor, and patient insurance information are available from the current Practice Management Software (PMS) product.
- The patient's last visit date and reason for last visit can be obtained from the PMS' CPT-4 code list inside the patient encounter database.
- The patient's problem list can be obtained from the PMS' ICD-9 encounter database.
- The patient's encounter prior encounter dates and reason for visits can be obtained from the PMS' CPT-4 code list inside the patient encounter database.
- The patient's prior medical and surgical history can be obtained from the PMS' CPT-4 code list inside the patient encounter database.
- The patient's prior immunizations can be obtained from the PMS' CPT-4 code list inside the patient encounter database.
- The Patient's prior Laboratory Results are available from LabCorp, Quest, and Local Hospitals. Most organizations maintain between six months and two years of prior lab results in LOINC code format.
- The Patient's active and discontinued medications are available from the SureScripts PBM electronic Network.
- The Patient's prior dictated and transcribed reports are also maintained electronically for a period of time. Note check with your transcription company on their retention time. The transcribed reports can be electronically posted into the EHR based on the encounter date without manual scanning. Additionally, through the use of "Discrete Reportable Transcription (DRT)" technology, vendors can now run a prior transcribed clinical note through a DRT software application and the DRT application can generate a flat file of discrete data following SNOMED CT standards. This DRT capability can then export patient specific discrete data from the actual note including problem lists, vital signs, immunizations, prior medical, social and family history, ROS, HPI, Physician Exam, assessment, education information, and final disposition of the patient.

Summary:

Based on AC Group's sixteen levels of data conversion, over 65% of the EHR vendors only offer Level 1 data conversion capability. Around 25% of the EHR vendors provide three levels of data conversion while only 12% provide more than six levels of data conversion. Only 3% provide more than six levels and as of December 15th, not one of the 65 vendors we evaluated offered more than nine data conversion levels.

We believe practices should only consider EHR vendors that can provide a minimum of eight levels of data conversion. The eight levels should include:

1. Expanded Patient Demographics information
2. Patient Prior Problem List
3. Patient Prior Procedure list
4. Patient Active Medications
5. Patient Prior Immunizations
6. Patient Prior Lab Results
7. Patient Prior Encounter Data
8. Patient Prior Office Notes



To gain a minimum of eight levels of data conversion, practice may want to look to companies like ELLKAY for their data conversion needs, since ELLKAY specializes in PMS and EHR data conversion. Additionally, to assist the average medical practice, AC Group has prepared a matrix of seventeen (17) different types of data conversion options. Starting on page four (4), we have provided a description of the sixteen "Types" of data conversion, "examples of data to be converted" and the "Value Proposition" for converting the data from the prior systems to the new system – ways never considered by EHR vendors in the past.

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Level	Type	Type of Data included	Value Proposition
1	Patient Demographics	Patient Name, address, phone number(s), age, sex, etc. Source: PM Registration System	<ul style="list-style-type: none"> Obviously, before a medical practice can enter data into the EHR, the physician would need to identify the patient. In 69% of the cases, vendor data conversions are limited to this one option. Time required to find the appropriate information in the patient chart and to enter the information by hand: 9 Minutes
2	Expanded Patient Demographics information	<ol style="list-style-type: none"> Everything included in Option 1, plus Responsible party name address, phone, relationship to patient, employer information Insurance information Employer information Relative and next-of-kin information Referring Physician Source: PM Registration System	<ul style="list-style-type: none"> If a practice is converting from one Practice Management System (PMS) to another, the practice will need to convert over the patient's responsible party information, the patient's insurance information, employer information and additional data like Next-of-kin and other data. Only 48% of the vendors are providing level 2 data conversions. In one case, a 12 provider practice needed to add 4 additional registration staff just to reenter the patient's data when the vendor did not convert expanded patient demographics data to the new system. Most practices do not understand that this data is needed within the EHR. For example, medication management is depended on the patient insurance information for formulary compliance. Lab order placement is depended on the insurance information since many insurance plans have contracted with either LabCorp or Quest for lab result delivery. The insurance and the employer information are needed for workman's compensation claims since clinical data must be reported to specific employers and WC carriers. Referring physician and PCC information is needed so that the physician can communicate effectively with other treating providers. Time required to find the appropriate information in the patient chart and to enter the information by hand: 14 minutes
3	Patient Prior Appointments	For medical practices that want to track prior patient appointments, no-shows, and cancellations. Source: PM Appointment Product	<ul style="list-style-type: none"> Many practices want to track patient no-shows, cancellations, and when the patient arrived. Without this data, the practice loses all of their prior appointment data about the patient. In some cases, medical practices do not maintain this type of information or they find that prior patient appointment data is not valuable. Time required to find the appropriate information in the patient chart and to enter the information by hand: 9 minutes

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Level	Type	Type of Data included	Value Proposition
4	Patient outstanding balance only	No charge or payment detail – only the “patient only” balance as of a certain data. Source: PM Billing System	<ul style="list-style-type: none"> Value – When a patient pays their bill, all prior and new payments can be posted in the new system Without this, prior encounter patient payments must be posted in the older system and new encounter patient payments must be posted in the new system. When a patient sends in a payment, you would have to check both systems to see if there is a prior patient balance without this type of data conversion Workload is increase if the information is not available in the new system. Time required to find the appropriate information in the patient chart and to enter the information by hand: 3 minutes
5	Patient Prior Problem List	Provides a list of relevant clinical problems, both current and historical, that are present for the patient at the time the document was created. Source: PM Patient Encounter file ICD-9 Codes: All codes Other Source: Prior EHR product	<ul style="list-style-type: none"> The third ONC requirements requires the practice to maintain an up-to-date problem list of current and active diagnoses based on ICD-9-CM or SNOMED CT® Since all of the patients in the registration system have already been seen by a physician, most physicians would like to have the patient’s complete problem list available in the new EHR. One option is just to list all of the unique ICD-9 codes Another option is to list all of the unique ICD-9 codes along with the initial date that the problem was identified and the date that the problem was last identified. Time required to find the appropriate information in the patient chart and to enter the information by hand: 5 minutes per patient
6	Patient Prior Procedure list	Provides a list of all relevant and notable procedures or treatments, both current and historical. Source: PM Patient Encounter File CPT Codes: 10000 to 69999 Other Source: Prior EHR product	<ul style="list-style-type: none"> Most physicians want to track all of the patient’s prior medical procedures. Most physicians want to see the date of procedure, the procedure code and description, who performed the procedure, and the location of the procedure. Without this data, the physician cannot make adequate medical decisions since prior procedures could affect medication management and clinical decision support alerts. Time required to find the appropriate information in the patient chart and to enter the information by hand: 12 minutes per patient

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Level	Type	Type of Data included	Value Proposition
7	Patient Active Medications	<p>Provides a list of the patient's current medications and relevant historical medication.</p> <p>Source: SureScripts</p> <p>Other Source: Prior EHR product</p>	<ul style="list-style-type: none"> • One of the ONC 2011 requirements is to maintain an active list of patient medications and to perform "medication reconciliation". • Most physicians want to know all of the medications the patient is currently taking and in some cases, they also would like to know prior medications that the patient was taking. • Via the SureScripts Medication Management system, the practice can obtain an electronic list of all patient medications that have been paid for by the patient's insurance provider. • A complete list of the patient's active medications provides the physician with value information about the patient. • The data can be obtained electronically by checking the eligibility on each patient via the SureScripts Network. • Time required to find the appropriate information in the patient chart and to enter the information by hand: 18 minutes per patient
8	Patient Prior Immunizations	<p>Type of immunization and date immunization was provided</p> <p>Source:</p> <ul style="list-style-type: none"> • PM Patient Encounter File • CPT Codes: 90200 to 90800 • Other Source: Prior EHR product 	<ul style="list-style-type: none"> • One of the ONC 2011 requirements is to maintain and monitor Patient Immunizations. • Gives information the patient's current immunization status plus pertinent historical information about past immunizations. • Most physicians need patient immunization records, especially for pediatric patient and geriatric patients. • The future of US healthcare will be focused increasingly on prevention. Improving the population's health through prevention, rather than depending on cures, is an economic priority. In particular, vaccines combat many long-established infectious diseases, and they are tomorrow's hope for emerging health threats. • NQF # 0041 requires the reporting of patients more than 50 years old who received a flu vaccine. • NCF # 0038 requires the reporting of two-year-old children who received DTaP⁵, polio, MMR⁶, flu, hepatitis B, chicken pox, PCV⁷, hepatitis A and rotavirus vaccines by their second birthday • Time required to find the appropriate information in the patient chart and to enter the information by hand: 12 minutes per patient

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Level	Type	Type of Data included	Value Proposition
9	Patient Prior Lab Results	<p>Source:</p> <ul style="list-style-type: none"> LabCorp or Quest Laboratory Companies Hospital Labs Local Lab companies Prefer LOINC or HL7 compliant discrete lab results data <p>CPT Codes: 80000 to 89999</p> <p>Other Source: Prior EHR product</p>	<ul style="list-style-type: none"> The second ONC requirements requires clinical lab test results Incorporate into EHR as structured data Patient specific clinical laboratory data is essential to all physicians. Scanning of paper documents does not provide and actual discrete data. Laboratory results need to be maintained as discrete data and should be viewable within a patient's flowsheet, displaying results by time frame in reverse chronological order. (Mark - Not sure but the discrete might be mandatory for HITECH act) Without EHR data conversion or data transfer from the various laboratory companies, the physician will not be able to view clinical laboratory results over time. Additionally, many physicians want to compare laboratory results compared to active medications to determine if the medication is actually helping the patient. Without discrete laboratory data, this information would not be available. Time required to find the appropriate information in the patient chart and to enter the information by hand: 19 minutes per patient
10	Tobacco Use and counseling	<p>Tracks when a patient has received counseling on Tobacco use and which physician provided the counseling.</p> <p>Source: PM Patient Encounter File</p> <p>CPT Codes: 99406 to 99409</p> <p>Other Source: Prior EHR</p>	<ul style="list-style-type: none"> One of the ONC 2011 requirements are to identify patient that smoke and to insure that the patient is receiving maintain an active list of patient medications and to perform "medication reconciliation". NCF 0028 requires the reporting of patients more than 18 years old who were seen at least twice and asked at least once about tobacco use in 24 months, and who received cessation intervention if they are users Time required to find the appropriate information in the patient chart and to enter the information by hand: 2 minutes per patient
11	Patient Prior use of Medical Equipment and implants	<p>Provides a list of medical equipment and any implanted or external devices relevant to patient treatment.</p> <p>Source: PM Patient Encounter File</p> <p>CPT Codes: To be Identified</p> <p>Other Source: Prior EHR</p>	<ul style="list-style-type: none"> Most physicians are interested in knowing any and all medical devices implanted into the patient; include pacemakers, Prostheses, stents, etc. If the patient has Prosthesis, the patient's medical history should be updated and during the physical Exam, the Prosthesis should be noted. Without this data, the physical exam may miss an imported clinical indicator Time required to find the appropriate information in the patient chart and to enter the information by hand: 8 minutes per patient

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Level	Type	Type of Data included	Value Proposition
12	Patient Prior Encounter Data	<p>Details relevant past healthcare encounters including the activity</p> <p>Source: PM Patient Encounter File</p> <p>CPT Codes: 99000 to 99999</p> <p>Other Source: Prior EHR product</p>	<ul style="list-style-type: none"> • Most physicians want to know when the patient was in last, who they saw, and the specific reason for the visit. • Most physicians would also like to have access to historical information regarding the patient encounters for a specific timeframe including dates, who saw the patient, and all related diagnosis codes. • Another reason for having all of the encounter dates is that the EHR then has each encounter listed as a separate encounter file where paper documents can be scanned to a specific encounter date. • Time required to find the appropriate information in the patient chart and to enter the information by hand: 6 minutes per patient
13	Patient Prior Office Notes	<p>Source: Transcribed Reports</p> <p>Source: Paper Charts</p> <p>Other Source: Prior EHR product</p>	<ul style="list-style-type: none"> • Most physicians want access to the patient prior clinical note. • Because patients are seen for multi reasons, most physicians would like to maintain all clinical office notes for a specific period of time. • The actual clinical note can be in the form of a written paper document, an electronically generated transcribed report or stored in a prior EHR. • Patient handwritten or transcribed encounter notes can be scanned into the EHR based on "Old Chart" categorization or scanned specifically into the appropriate encounter date as defined in Level 11. • Transcribed reports are also maintained electronically for a period of time. Note check with your transcription company on their retention time. The transcribed reports can be electronically posted into the EHR based on the encounter date (level 11) without manual scanning. • Additionally, through the use of "Discrete Reportable Transcription (DRT)" technology, vendors can now run a prior transcribed clinical note through a DRT software application and the DRT application can generate a flat file of discrete data following SNOMED CT standards. • This DRT capability can then export patient specific discrete data from the actual note including problem lists, vital signs, immunizations, prior medical, social and family history, ROS, HPI, Physician Exam, assessment, education information, and final disposition of the patient. • To date, only 2% of the EHR vendors provide DRT Extraction capability, but the capability is available to all EHR vendors today. • Time required to find the appropriate information in the patient chart and to enter the information by hand: 28 minutes per patient

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14	Patient Prior Radiology Reports	<p>Source: PM Patient Encounter File</p> <p>CPT Codes: 70000 to 79999</p> <p>Other Source: Interface with Radiology reporting system</p> <p>Other Source: Prior EHR product</p>	<ul style="list-style-type: none"> • Most physicians want to know what type of radiology exams that patient has had prior to this encounter, including the date of the exam, where the radiology exam was performed, and who order the radiology exam. • Most physicians would also like to match the radiology exam encounter with the actual written report from the radiologist. • Most physicians would also like to match the radiology exam encounter with the actual written report from the radiologist as well as a link to the actual PACS image if available. • Usually, this can be accomplished via a two way interface with the local Radiology vendor, but physicians need to make sure they can access prior radiology results to insure the physician has the right and timely information at the point of care. • Time required to find the appropriate information in the patient chart and to enter the information by hand: Information is too hard to obtain by hand
15	Patient Prior Hospitalization	<p>Source: PM Patient Encounter File</p> <p>Admit date: CPT 99221 to 99236</p> <p>Disc Date: CPT 99238 and 99239</p> <p>Source: Hospital Transcribed Reports</p> <p>Other Source: Prior EHR product</p>	<ul style="list-style-type: none"> • Most physicians want to know if and when the patient had been admitted to a hospital and the reason for the admission. • Most physicians would also like to match the admission dates with specific hospital transcribed reports including discharge summary, consultation reports, and the Initial H & P report. <ul style="list-style-type: none"> • The actual hospital reports are electronically generated transcribed report or stored in a prior EHR. • Transcribed Hospital reports can be scanned into the EHR based on “Old Chart” categorization or scanned specifically into the appropriate hospitalization folder based on the hospitalization date. • Transcribed reports are also maintained electronically for a period of time. Note check with your hospital’s transcription company on their retention time. The transcribed reports can be electronically posted into the EHR based on the hospitalization date without manual scanning. • The same DRT capability can be employed with Hospital Transcribed reports. • Time required to find the appropriate information in the patient chart and to enter the information by hand: Information is too hard to obtain by hand

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Level	Type	Type of Data included	Value Proposition
16	Patient Prior Emergency Room Visits	Source: Hospital ER Department Other Source: Prior EHR product	<ul style="list-style-type: none"> • Most physicians want to know if and when a patient had been treated in the emergency room and the reason(s) for the ER visit. • Most physicians would also like to match the ER date with specific hospital ER reports either handwritten or via transcribed ER reports <ul style="list-style-type: none"> • The hand written ER report or the Transcribed ER reports can be scanned into the EHR based on "Old Chart" categorization or scanned specifically into the appropriate ER visit folder based on the hospitalization date. • Transcribed reports are also maintained electronically for a period of time. Note check with your hospital's transcription company on their retention time. The ER transcribed reports can be electronically posted into the EHR based on the ER date without manual scanning. • The same DRT capability can be employed with ER Transcribed reports. • Time required to find the appropriate information in the patient chart and to enter the information by hand: Information is too hard to obtain by hand
17	Patient Prior outside clinical Notes and Reports	Other Paper documents or Transcribed reports Source: Other care providers	<ul style="list-style-type: none"> • Most physicians want to know if and when a patient had been treated in physician offices or other clinical settings not associated with the practice, the hospital, or the emergency room. <ul style="list-style-type: none"> • In most cases, these outside reports are obtained via fax or via US mail. • In the near future, practices will be able to obtain outside clinical reports via a secured data exchange using a community Health Information Exchange (HIE) • Time required to find the appropriate information in the patient chart and to enter the information by hand: Information is too hard to obtain by hand

More About the Author:



Mr. Mark Anderson, CEO of AC Group, Inc. 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 more than 850 conferences and meetings since 2000. He has spent the last 37+ years focusing on Healthcare – not just technology questions, but strategic, policy, and organizational considerations. For the past eight years, Mr. Anderson has spent the majority of time in the evaluation, selection, and ranking of vendors in the PM/EHR healthcare marketplace and during those seven years has published a semi-annual report on the Digital Medical Office of the Future. His EHR evaluation decision tool has been used by more than 25,000 physicians since 2002.

Besides serving at the CEO of AC Group, Mr. Anderson served as the interim CIO for the Taconic IPA, 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. **Mr. Anderson's expertise includes:**

- Electronic Health Records, Electronic Medical Records, and Practice Management Systems
- Personal Health Records with emphasis on community and regional PHRs
- HIE connectivity models and the associated technology standards and related key market leading vendors
- Familiarity with/knowledge of CCHIT certified software and NIS testing.
- Strong understanding of the Payer/Provider/Consumer (Member) Health Information Technologies (HIT)
- Numerous speeches on ARRA 2009, HITECT, and CMS impacts on HIT
- Understanding of the business process relating to the facilitation of clinical data exchange.
- Clinical and Operational Transformation, necessary to insure effective technology implementations

His experience includes 15+ years as a Hospital CIO, 20+ years working with physician offices, 7 years in the development of physician-based MSOs and IPAs, 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 Fellow with HIMSS. Additionally, he serves on numerous healthcare advisory positions and has developed programs including:

- o Developer of the Six-levels of Healthcare IT for Hospitals and the Physician Office
- o Researcher and producer of the 2002-2011 PMS/EHR functional rating system
- o Advisory Board and Content Chairman – Future Healthcare, 2007-10
- o National EHR advisor to HBMA. 2008-2011
- o National Speaker at HIMSS, 1976, 1985, 2000, 2002, 2003, 2006, 2008, 2009, 2010, 2011
- o Advisory Board and Content Chairman – Physician and Hospital Bonding Summit, 2008 - 10
- o Advisory Board and Content Chairman - Healthcare IT Outsourcing Summit, 2002-08
- o Advisory Board and Content Chairman - Patient Safety and CPOE Summit, 2002-06
- o Advisory Board and Content Chairman – Consumer Driven Healthcare Conference, 2003, 2004
- o Advisory Board and CPOE Chairman - Reducing Medication Errors, 2003, 2004, 2005
- o Advisory Board of TETHIC 2003, 2004, 2005
- o Advisory Board of NMHCC 2000, 2001, 2002, 2003, 2004, 2005
- o Advisory Board of TCBI Healthcare Conference 2000 - 10
- o Advisory Board of TEPR and MRI, 2000-09
- o Advisor to Future Healthcare Magazine
- o Past President of Local HIMSS Boards – Houston, Tennessee, Southwest TX, Kentucky
- o Editorial Board of Healthcare Informatics 2001 - 06
- o Judge, MSHUG ISA, 1999-2005, TEPR Awards, 2001-2009, TETHIE 2003-05, HDSC 2003-05
- o National HIMSS Chapters Committee 2001 - 04
- o National HIMSS Fellows Committee 2001, 2002, 2004
- o National HIMSS Programs Workgroup Committee 2001, 2002, 2003, 2004, 2007
- o Chair HIMSS HIE Education Task Force - 2007-08
- o Member of HIMSS RHIO Best Practices - 2007-09

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More about AC Group, Inc.

AC Group, Inc., formed in 1996, is a healthcare technology advisory and research firm designed to save participants precious time and resources in their technology decision-making. AC Group is one of the leading companies, specializing in the evaluation, selection, and ranking of vendors in the PMS/EMR/EHR healthcare marketplace. For the last seven years, AC Group has produced an annual report on the Digital Medical Office and the use of Technology by physicians. This comprehensive report includes detailed reviews of the Mobile Healthcare, Document Imaging, and EMR marketplace. The report also includes the most comprehensive evaluation of vendor EMR functionality to date - more than 5,000 questions. This evaluation decision tool has been used by more than 25,000 physicians since 2002. Additionally, AC Group has conducted more than 300 PMS/EHR searches, selections, and contract negotiations for small physician offices to large IPAs since 2003.