Datum

Streaming Discrete Data Within Free Text

Praxis® Electronic Medical Records

To be released with Praxis Version 5.0
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The reader is also referred to the Praxis EMR Demo found at
www.praxisemr.com/demo for an overall explanation of the Praxis Engine.

Executive Summary

Medicine is an art as much as it is a science. However, the science of medicine is not rooted entirely in mathematics. Instead, medicine transcends mathematics and combines experience, research, talent, and compassion--all things that cannot be programmed or hard-coded.

Electronic Medical Records (EMR) that structure medicine like mathematics, such as those based on templates, do not help doctors practice better medicine. Although template-based EHRs do support discrete data and hidden codes, they also turn providers into technicians, forcing them to select scores of pick-lists to find the closest corresponding option. This flawed template process produces questionable results at best because the physician's medical judgment is constrained to conform to rigid pre-set options. Template-based EHRs benefit neither clinicians nor their patients. In fact, EMR systems based on templates may impede care[1]. Free text is a cornerstone of excellent clinical documentation. Medicine is not black and white; it deals in uncertainties and nuances.

The reason Praxis EMR is rated number one in physician user satisfaction[2] is precisely because Praxis is the only EMR that does not rely on templates. Praxis users are not forced to choose from preset pick-lists created by third parties. Instead, Praxis allows physicians the unrestrained use of free text to fully express their knowledge, experience and judgment in practicing the art of medicine. With Praxis, the physician's own words and phrases are recalled instantly so that new cases are generated easily and progressively faster. This unique method of documenting saves time and improves the practice of medicine.

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[1] *Hartzband P, Groopman J Off the Record — Avoiding the Pitfalls of Going Electronic, N Engl J Med 358:1656, April 17, 2008 Perspective*

Steven I. Kern, Esq., Hidden Malpractice Dangers in EMRs, April 9, 2009 **Medscape Business of Medicine**

[2] *See User Satisfaction With EHRs, Family Practice Management (Journal of the American Academy of Family Physicians) February 2008* **http://www.aafp.org/fpm/20080200/25user.html**

However, a fundamental need exists to query and exchange medical information within clinics, by other physicians, and across a multitude of medical organizations. This need calls for the use of discrete data, as opposed to free text. With Datum physicians can finally address this contradiction. Datum achieves what until now seemed impossible: the instant embedding of discrete data within free text.

There is no reason to use rigid templates to generate discrete clinical data. Physicians may now chart with complete freedom at extraordinary speed, and still produce all the discrete data required by their clinics and third parties.

Datum dramatically reduces the red tape of manipulating and transmitting clinical information. This alone will result not only in a decrease in healthcare costs, but an increase in payments for service providers as well.

Datum responds to the need for interoperability and data transfer required by the Federal government, third parties and other Health IT systems. In addition, Datum users will qualify for the Federal HITECH Stimulus (ARRA "meaningful use requirements"), but without sacrificing medical quality or personal time performing bureaucratic chores.

Datum now offers an eloquent way to transition from Defensive Medicine to Evidence-Based Medicine.

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History

- ### *Template-Based Electronic Medical Records*

  Twenty years ago, the only technology available to help doctors with the nightmare of clinical documentation was template-based EMR systems. Templates were an attempt to simplify data entry. At the time, software industry "experts" claimed that templates and their underlying structured language would pave the way towards standardized medical documentation, promote interoperability of systems, and allow third parties the ability to standardize data results for the good of medicine as a whole. They claimed that by using template-based EMRs, embedded with structured language, medical costs would be lowered and the practice of medicine improved. On the whole, template-based EMRs have failed to capture the hearts and minds of America's physicians largely because templates are designed on a fundamentally flawed premise.

  The template approach assumes that the template developer knows more about medicine than the physician who uses it. Of greater concern, this approach assumes that the template designer knows what the physician is thinking and what will be required at the point of care. The notion that a template manufacturer could know more about a physician's practice than the actual physician should be absurd to any experienced clinician.

  The fundamental issue is that no two doctors practice medicine the same way. Medicine is an art and physicians practice in infinite ways. Template-based systems force clinicians to think and practice within the constraints of the template, making data entry unnatural and cumbersome. A template cannot read a physician's mind, so it provides various options or pick-lists that force users to compromise opinions and observations by selecting closest options while treating patients. This not only increases the margin of error and the possibility of malpractice claims, but also puts into serious question the quality of the medical care given.

  Over the last decade, "codified" or "structured language" has appeared in the template market to further damage inflexible template technology. Despite little proof of clinical success (please see our discussion on Natural Language parsing, below), structured language licensors saw a monetary opportunity for "medical codes" that claimed to describe all medical events and nomenclature. The idea, unfounded by scientific research, was that medicine could be described by codes that computers would understand, and that these codes would accurately reflect
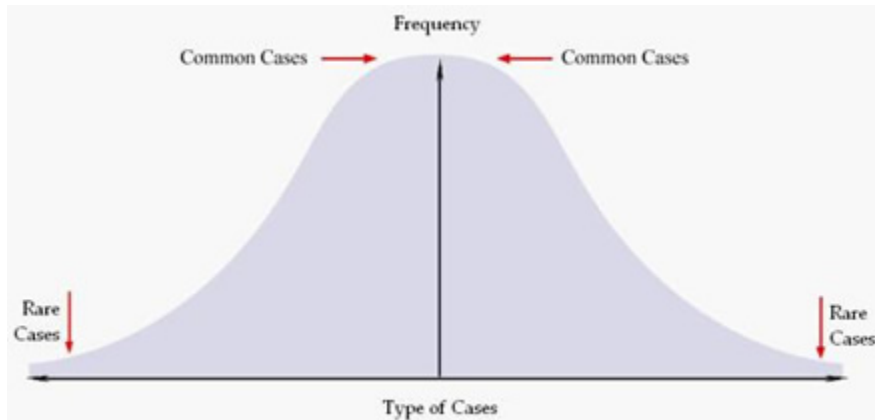
medical conditions and clinical performance. Many well-meaning leaders from industry, government, and teaching institutions still believe that once these codes get "hard-coded" into templates, the job will be done. For the physician users, however, these newer codes embedded in the templates are anathema[3].

- ## The Praxis Alternative

In 1989, it was the quest to find a better solution to the nightmare of clinical documentation that motivated a group of programmers who joined Richard Low, MD, a Yale Medical School graduate and Emergency Physician/Board Certified Internist, to solve this problem.

The result of Dr. Low's team effort was the Concept Processor approach to Electronic Medical Records. In essence, the Concept Processor is a neural-network-artificial-intelligence engine that instantly finds the most similar case to the one currently being seen by a provider and fills the new entry with text from the search results. The provider then effortlessly adapts the information to the current case and the documentation is finished. To make things even easier, all changes are memorized by the system to be used in future cases. Thus, the more the system is used, the less data entry is necessary and the smarter the system becomes. The documentation is not limited to charting, but includes all documents generated by the practitioner. Procedure reports, letters to referring providers and third parties, admitting orders to the hospital, written instructions to the patient, prescriptions, laboratory orders, even the superbill are generated by Praxis in one step together with the progress note. The generated documents are reviewed by the physician and then printed, e-faxed, sent electronically, and stored.

- [3]*"Do Electronic Records Impede Care?" THE WASHINGTON POST 5/13/08*
  http://www.washingtonpost.com/wp-dyn/content/article/2008/05/12/AR2008051202207.html?sub=AR

Frequency

Common Cases →   ← Common Cases

Rare
Cases

Rare
Cases

Type of Cases

Bell Curve of Case Presentation versus Case Type.

Some cases present more frequently than others. Praxis instantly finds the text of the closest case in relation to the current case so one can edit the text from that previous case instead of writing from scratch. All changes are then memorized for future use with other patients. The Bell Curve illustrates that the more one uses the program, the less data entry needs to be done.

Praxis EMR and Concept Processing technology became a huge success with early EMR the physician users who saw the importance of using free expression. Praxis not only eliminates enormous amounts of wasted time (it saves the provider about 80% of the time spent on documenting by hand) but more importantly, it creates a clinical encounter document that withstands subsequent legal and financial scrutiny, helps its user practice better medicine by learning from past experiences, and lets physicians get back to the art of medicine that they enjoy.

Over 20 years of development, Praxis physicians (our greatest teachers) have provided us with the critical feedback necessary to turn this unique documentation approach into the award winning EMR that Praxis is today. The Concept Processor that initially helped the provider chart with speed and accuracy has been enhanced to generate reminders for the future, send control orders to the staff, and manage patient care by becoming a powerful clinical management and health maintenance tool. It was these same physicians who

provided us with a solution to the discrete data dilemma (see book by Gold, Steven, MD, The Magic of Praxis[4]).

- ### *What is Discrete Data?*

  As discussed, Praxis uses free text uniquely entered by each user. In contrast, Discrete Data is information that is broken down into small units and stored in unique locations in a "relational database". For example, by placing the information about the patient in fields such as Last Name, Date of Birth, Temperature (on the most recent visit), patients with a given name, who reside in a given area, who are older than a certain age, whose body temperature is higher than a given number may be readily found. This ability to obtain information by query is called Data Mining. Standard Query Language (SQL) is a programming language used to obtain and report this kind of information across diverse platforms.

  At the time, it was argued that if data were placed in a "free" textual form, such as that used in Praxis EMR, a search would not only run more slowly but might return erroneous results. For example, if the text says that "The patient's uncle Harry had a temperature of 101", and one were to search for all patients with a temperature higher than 100, this entry would likely be returned. But, how does one know that the temperature is not that of the patient but rather of the uncle? Computer experts have been grappling with these issues for decades in an effort to accurately find information contained within free text (see page 16 for Natural Language Parsing).

- ### *The Pure Relational Database Approach has not Worked in Medicine*

  Because the method of parsing data into fields and records has worked very well in business, banking, finance, and engineering, the medical software industry naturally assumed that this data entry method would work in medicine as well.

- [4] *The Magic of Praxis is the first book ever written on an EMR by an actual user of an EMR.*
  http://www.themagicofpraxis.com/

However, 20 years later physicians still do not want to use computers to document medical records. Medical records based on the pure relational database approach have failed in medicine precisely because they force clinicians to pick among often irrelevant preset options, instead of allowing the accuracy and nuance of free-text. This dilemma presents an apparent contradiction between the ability of a physician to accurately document at the point of care, with the requirements to extract statistical and other information later.

For many non-physicians a chart is used merely for statistical and financial purposes. Yet, medicine is not black and white; free text becomes an integral part of practicing medicine because medical thinking often lies in a gray area well suited to the English language but stifled by pick-lists required by the relational database approach.

Datum not only solves this dilemma of handling discrete data within free text, it does so far more effectively than the alternative template data entry approach.

The Datum Solution

- ### *Mechanism of Datum*

  The principle behind Datum is simple. Multiple discrete data units are easily embedded in the free text of all clinical documents. As explained earlier, the Praxis Concept Processor recalls words, phrases, sentences, and entire paragraphs from previous similar encounters of the patient in question and other patients instantly and intuitively via its neural network engine. When these texts return from previous use with other patients to populate today's encounter, they also bring with them the embedded discrete data.

  For example, the phrase:

  > *Elena Jones is a 58 year old female who presented with a potassium level of 6.2 taken on 3/3/09.*

  ...is composed of a combination of free text and discrete data structures seen in the Praxis Inside Editor as:

> *<Patient.Firstname> <Patient.Lastname> is a <Patient.age> year old*
> *<Patient.gender> who presented with a potassium level of*
> *<Patient.labs.K.value> taken on <Patient.labs.K.date>.*

The above depiction may look complex to the human eye, but once created, the above text can be automatically reused in many different situations and with many different patients, without ever accessing the inner editor shown above. Each time, the resulting text discloses the appropriate values automatically. Praxis generates the above construct as quickly and easily as it does any kind of free text or pictures—instantly!   The substituted data simply appears at the correct time and place to be of help to the busy practitioner. The combination of free text and discrete data in chunks known as "conceptual units" or "units of thought" is managed elegantly and effectively by the Concept Processor and is totally transparent to the user.

Indeed, without the Concept Processor the management of these phrases would be close to impossible. With the Concept Processor, the right text appears almost magically whenever needed, and so do its embedded discrete data elements. See our demo on Praxis EMR to witness the processor at work.

- **Entering Discrete Data From Free Text**

  Datum can also "push" discrete data, entered by a user during the charting process, directly into the relational database for immediate flowcharting, query, and transfer to other EHRs; as well as for external auditing using discrete data. All this happens transparently and automatically.

  Embedded discrete data within the free text is created only once (the first time a discrete data element is used in Praxis), thus resulting in faster, more "alive" charting.

  Some template systems attempt to allow <u>limited</u> free text into a few, discrete data fields. Praxis works the other way around: it allows insertion of data fields into <u>unlimited</u> free text, and then handles its appropriate distribution throughout the database.

- **Datum May Include Formulas**

  Each Datum element is actually an object in the Object Oriented Programming (OOP) sense of the word. Thus, the Datum elements can transform the incoming discrete data values into meaningful clinical information through the use of

formulas created by the clinician within the Datum element itself. This element saves doctors time and energy by allowing any created formula to automatically be reused for a variety of future encounters with patients.

As a good example, Datum can use a patient's weight and height to calculate the Body Mass Index (BMI) in kg/m^2, even if the data is entered in pounds and inches.

> Ms. Jones is a 48 year old female whose last body mass index was 25.7 kg/m^2 measured on 4/18/09.

The text above contains six datum elements ("Ms", "Jones", "48", "female", "25.7","4/18/09").

Once this formula is created, it is always available for any case or any patient that needs it. No more calculating BMIs, Creatinine Clearances, medication formulas. All that remains visible is normal language that in fact consists of a combination of free text and discrete data elements with built-in formulas.

Coupled with the Praxis Concept Processor, Datum allows for very flexible use of clinical text to chart at the speed of the mind. The resulting documentation is less vulnerable to human error and infinitely faster, resulting in better charting.

- ### *Information versus Noise*

  Datum, as a result, reduces the 'noise' factor classically associated with overwhelming amounts of irrelevant clinical data. The system essentially interprets information while removing "noise" from data (INFORMATION = DATA – NOISE).

  Data is everything that is captured by the system. Information is only the data that a provider needs to see exactly where and when it is needed to make a clinical decision. Everything else is noise and simply should not be there. Nevertheless, what is noise to one provider may be information to another, leading most systems to "cover their bets" by showing everything on the screen. Indeed, this creates significant noise which distracts the busy physician from making sound, clinical decisions fast.

  With Datum, and its calculated embedded formulas, the exact information desired appears to the doctor where and in the format it is needed. This is a

consistent feature of Datum, even if, for instance, incoming data has to be re-calculated automatically prior to showing it to a provider. (Why should a doctor write kilogram calculations if he or she thinks in pounds? This only wastes time when charting, is prone to errors, and distracts from the practice of medicine.).

- ### *Other EMRs Work Backwards*

  Today, the Health IT Industry is struggling with how to embed free text within discrete data structures. However, free text is not an afterthought; it forms the core of medical thinking. Doctors express their thoughts via nuance in free language. It is discrete data that provides additional value to the physician, and not the other way around. A venerated dictum of medicine has been "never treat the lab data; treat the patient!" An EMR must follow this dictum to be effective, and with Datum, Praxis EMR does.

- ### *User-Generated Variables*

  Perhaps the most exciting part of Datum is that it can be reused not only with incoming data, but also to quantify any discrete data values that the user may create on the fly.

  For instance, the provider may wish to create a *Wong-Baker Faces Pain Scale* measurement and embed it in the patient's general exam:

  > *Mary presents in pain with a Wong-Baker Faces Pain Scale of [Wong-Baker:|1|2|3|4|5|].*

  Now the user clicks "4"; once the document is generated it shows normally without brackets:

  > *Mary presents in pain with a Wong-Baker Faces Pain Scale of 4.*

  Then, Datum instantly inserts the discrete results in the database.
  The results may then be queried via SQL, flowcharted, and used anywhere (including in other areas of the same chart) or transferred to other systems as demanded by current or future interoperability standard. Any kind of data mining can be performed on the discrete data results, yet the doctor is still practicing medicine, not engineering!

In fact, Datum elements can create formulas based on the presence or absence of the existing Datum elements (e.g., a bullet counter for Levels of Service, or the sum of a Zung Depression Scale Inventory that adds the bullets of items selected by the user and displays the resulting value using a formula designed beforehand). Again, the Concept Processor ensures that this is done only once and reused automatically for other similar cases. Unlike other systems that require programmers to create these formulas for the user within a complex template structure, in Praxis EMR this eloquently "happens" as the doctors practice medicine. It is transparent to the user, and takes no significant time or programming experience.

The critical aspect of Datum is that each user only creates something (like the Wong-Baker Faces Pain Score) once, and it works automatically on other patients from then on. The initial effort is immediately rewarded the more the system is used.

Making Datum Incorporation a Breeze: The Praxis Knowledge Exchanger

Providers need not personally generate all these datum elements to satisfy the needs of third parties.

Last year, Praxis released a special engine to external medical knowledge bases called the "Knowledge Exchanger" for which Praxis EMR received the 2008 Frost & Sullivan Healthcare Innovation Award. In essence, the Praxis Knowledge Exchanger is a way to incorporate Praxis knowledge from one or more providers as an outside reference, without using template technology. The receiver simply selects text from other providers, changes the foreign text in any way desired, and then adds all or parts of it to their personal knowledge base. Once accepted as the user's own, the Concept Processor insures that the text will be instantly available whenever needed.
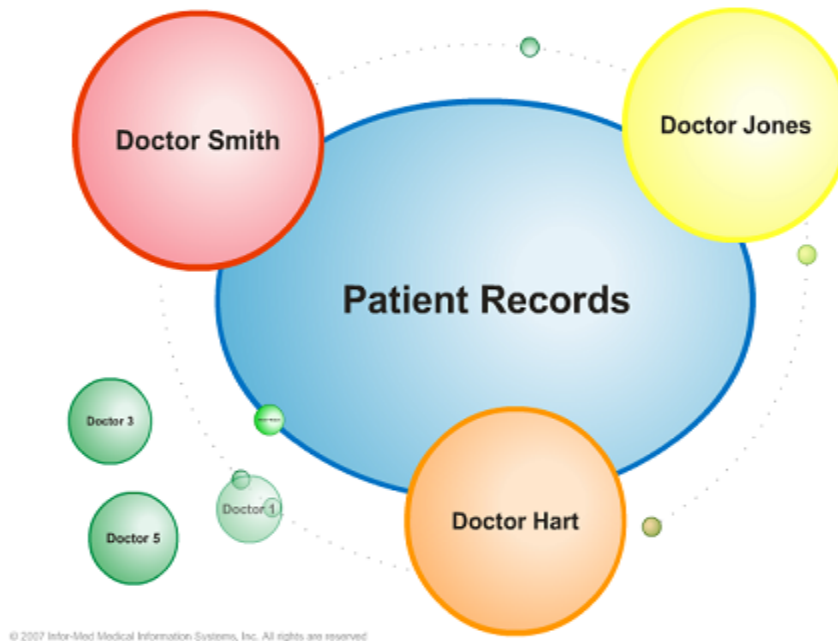
Figure 1.   *Praxis Knowledge Exchanger, a way to exchange medical knowledge from one or more doctors to another*

The Knowledge Exchanger can also include the described Datum elements and formulas. If a provider creates a formula or critical pieces of discrete data required by third parties, other providers may benefit from its creation as well, without having to recreate them. Getting a knowledge base from another provider or expert that includes these Datum requirements is all that is needed.

HL7 – Level 3 - CDA/CCD

Datum employs the full richness of the HL7 Standard to be instantly available at the point of care in an elegant format that any physician may use.

HL7 Level 3 is the most ambitious creation of discrete data in clinical medicine, with many hundreds of experts participating worldwide. Its purpose is to ensure that the entire world uses the same language to interface clinical information across diverse systems and devices.

HL7 Level 3 represents a generational improvement in the model of clinical interoperability, a full discussion of which is outside of the scope of this paper. Please see an excellent paper on this:

http://www.neotool.com/resources/whitepapers/The-Evolution-Of-HL7

The Concept Processor ensures that any HL7 item linking is performed only once. This makes the use of HL7 Level 3 straightforward.

HL7, in turn, permits the development of an effective method of clinical transfer via Clinical Document Architecture (CDA). Datum makes using CDA a child's game for busy practitioners. Any future requirements by the government or third party systems will be easily adapted in Praxis and used automatically, creating the perfect combination of total flexibility with negligible additional data entry. The same can be said of the Continuity of Care Document (CCD) that will be used to share clinical information among diverse EMRs. Each of these utilize HL7 protocols and can be instantly inserted into the clinical free text via Datum.

As mentioned earlier, the Knowledge Exchanger will also facilitate the sharing of HL7 links created by clinical users on Praxis systems everywhere. We foresee our clients and other experts developing HL7 interfaces within Datum, and then providing them to other clinicians through the Knowledge Exchanger.

Queries/Practice Guidelines and Evidence-Based Medicine

- ### *The Praxis DataMiner: Querying Clinical Medicine via Standard Query Language (SQL)*

Datum also plays an important role in the unique handling of queries by Praxis EMR. Praxis has always been uncompromising about the use of free text as the cornerstone of excellence in medical care. Free text, however, is perceived as unquantifiable data, impossible to query to evaluate quality of care. Datum refutes this perception. The Datum solution proves not only to be elegant, but medically superior to the one offered by structured templates for the purpose of querying. Any information desired can be placed in discrete data format within the Datum elements, and can then be easily queried. Furthermore, the Knowledge Exchanger may also be used to pre-load and keep discrete data elements up-to-date that might be desired by a clinic, regional group, third party payer, or government organization.

Because of the Flexibility that Datum brings into the richness of discrete data, Praxis 5 has also developed the Praxis Dataminer, an application based on Standard Query Language (SQL) that anyone trained in the language may use without an advanced programming degree. These queries are also exportable and importable; this will allow clinics and third parties to develop specialized clinical queries for others to use.

Defensive Medicine

The ability to transmit Practice Guidelines at the point of care, together with the superior documentation generated by the Concept Processor, followed by the analysis via discrete data generated by Datum, will provide the best legal protection for physicians, as well as the best quality of medicine at the lowest cost.

In addition, by using Evidence-Based Medicine, doctors will be protected from having to order tests simply as a defensive mechanism. When physicians are not performing clinically unnecessary tests and therapies, the quality of medicine improves while the cost of healthcare decreases for us all.

Natural Language Semantic Parsers

As mentioned, Praxis is essentially the only EMR in the market that works with free text rather than templates. This difference is dramatic and fundamental. It means that Praxis enables personalized, patient-centered care, rather than forcing both the description of the care and ultimately the actual care itself into a pre-determined, restrictive straightjacket.

The challenge, of course, is how to obtain meaningful information from pure text in addition to the queries that can now be performed on discrete data.

The solution lies in the increasing power and accuracy of natural language parsers, which have been specifically developed for medical information.

Praxis is, therefore, especially pleased to announce that it has begun to lay the groundwork for the development of a project which combines the free text collected by Praxis with the natural language parser (and accompanying xml-based markup language) developed by a team led by David Rothwell, MD, at the Health Language Center and Naomi Sager, PhD, Professor of Linguistics at New York University. Dr. Rothwell is one of the creators of SNOMED, and is a world-

renowned expert in the mapping of clinical description into medical information structures.

In the first phase of the project, a select group of Praxis users will make a subset of their clinical encounter descriptions available for processing by the parser, and will then evaluate the usefulness of the clinical information that is provided back to them.

We are also working with Doctor Werner Ceusters, Chairman of the Ontology Research Group of the NYS Center of Excellence in Bioinformatics & Life Sciences of SUNY who is performing similar research with the development of an Ontologic Metadata engine derived from free text[5].

Our conclusion is that the joint use of Datum plus the ability to perform meaningful queries on natural language will make all forms of obtaining clinical data based on templates obsolete, whether one uses codified vocabularies or not. In other words, even considering the inherent limitations of retrospective query as opposed to prospective queries, natural language processing used on the free text found within Praxis will be a far more effective retrospective reader than any based on templates, which are not free at all, and therefore of questionable clinical validity. However, if the government or other third parties mandate the use of codified vocabularies, they can be easily incorporated via Datum.

ARRA/ HITECH – Evidence-Based Medicine and Medical Outcomes

President Obama has made it very clear. He has expanded on the mandate by The Bush Administration to have a completely computerized healthcare system and has allotted significant funding for physicians to accomplish this goal under the American Recovery and Reinvestment Act (ARRA). The exact requirements for compliance with ARRA have not yet been defined, but a cornerstone of ARRA

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[5] **http://www.infor-med.com/downloads/articles_downloads/Praxis_EMR_SUNY_Interoperability_Project.pdf**

will be the ability to send and receive discrete clinical information from EMRs in an easy and flexible manner. Praxis EMR now qualifies for all applicable HITECH (ARRA) Stimulus Program funds.

An argument has been forwarded that much inefficiency in medical care can be ascribed to performing unnecessary procedures and not doing enough in the area of prevention. We agree that electronic medical records will dramatically reduce the cost of healthcare by highlighting inadequacies in the delivery mechanism. We believe these inadequacies are centered not on hardworking physicians and their staff, but on the huge bureaucracy built around them. This bureaucracy was purportedly built to manage this process and lower costs, but in reality it has had exactly the opposite effect. Praxis dramatically reduces the bureaucracy required to manipulate information, and this alone will result in not only a decrease in the cost of healthcare, but also an increase in payments for services to providers.

- ### *Why Doctors Don't Like EMRs*

  Until recently, doctors were not motivated to use EMRs. Many reasons have been ascribed to this apparent lack of interest: "lack of financial resources," "technical difficulty with computers," "conservative behavior," "computer phobia," and even "lack of intelligence". These explanations would be amusing if they were not so serious.

  We submit that the reason for the lack of adoption has nothing to do with physicians' lack of interest or low technical acumen. On the contrary, the answer is far more simple: Template EMRs are not adequate to the task at the point of care.

  Physicians are scientifically trained and often sense a logical flaw within a technologic approach such as templates, although they may not explain this objection in the manner we have. Physicians certainly have sufficient technical savvy to realize templates are not the answer. From our experience with Praxis EMR, we know that doctors love to use an EMR that enables them to provide better care, more easily and that is why Praxis is number one in user satisfaction. Template based systems go in the wrong direction in terms of this critical user-friendly requirement.

  We do not believe that financial pressures will be enough to motivate physicians to move to EMRs unless doctors are also convinced that the software will be a positive use of their time and will improve quality of care. Praxis EMR is based

on the way a doctor thinks and therefore is the most physician-centric EMR on the market. With Datum, Praxis EMR offers the medical community the information it requires to perform outcome-based analyses and evaluate the cost effectiveness of methods for improving care.

Conclusion: The Practice of Medicine is an Art Form

Better medical outcomes based on clinical evidence require that today's clinicians—whether part of a large group of providers seeing millions of patients annually, or a solo practice offering home visits—have quality tools to measure the effectiveness of the medicine they practice, but the process should be straight forward and not affect the speed or flexibility of the "note" generation.

Praxis EMR has been developed over 20 years with feedback from countless physician-users in all specialties of medicine. Praxis is founded on the theory that each doctor is unique and should be allowed to practice medicine in their own way. The purpose of any great EMR should be to empower the provider to practice more efficiently, and not to micromanage their practice. Doctors must be informed at the point of care, but they should not be manipulated by remote control.

We believe that the combination of Datum and the Praxis Concept Processor will allow Praxis EMR to reach a new plateau in Electronic Medical Records. Indeed, Praxis EMR should be the standard for EHRs' functionality in the future. Datum now offers an eloquent way to transition from Defensive Medicine to Evidence-Based Medicine. Most importantly, with Praxis EMR physicians may practice their own way, with less stress, and truly enjoy their art of medicine.

With Datum, Praxis EMR allows queries without boundaries or restrictions, rendering template-based EHRs obsolete.