



**the**  
**MAGIC** of  
**PRAXIS**

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A Primer for Physicians

by **Steven A. Gold M.D., M.P.H.**

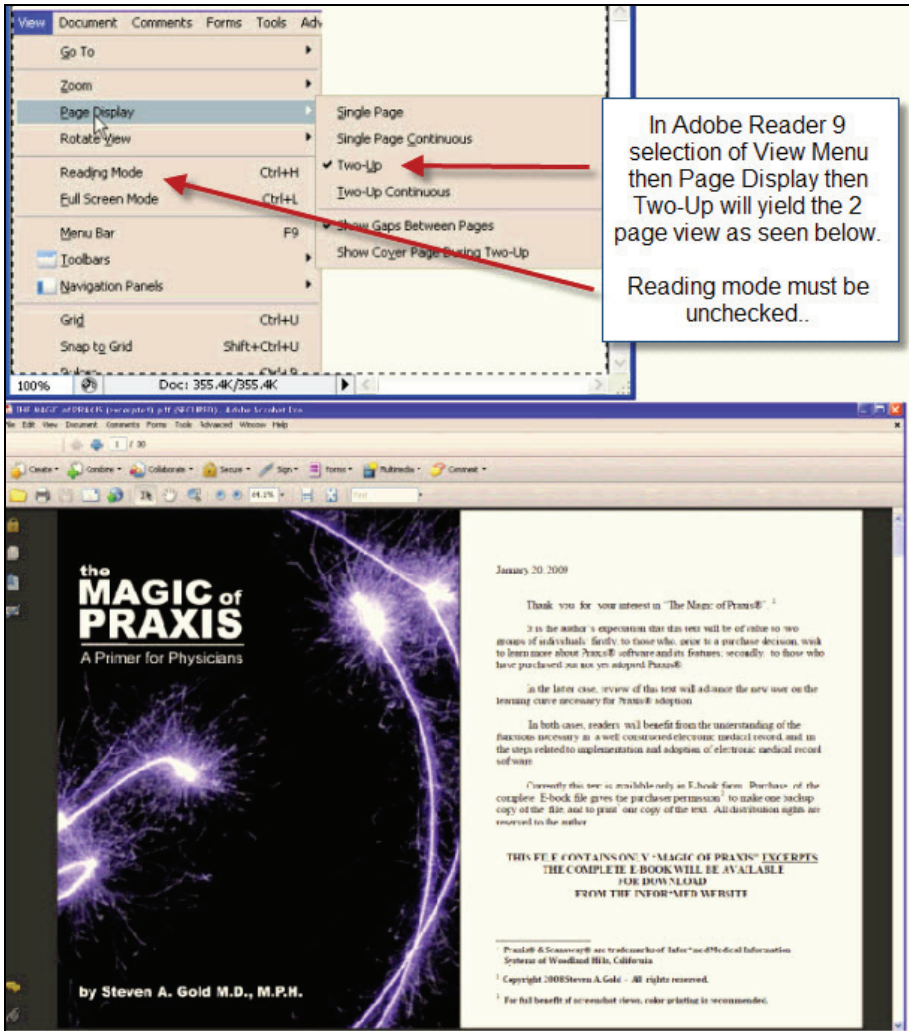




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As an alternate to the single page reading view, Adobe provides for a more typical 2 page view as in the illustration displayed in the lower half of this page.

The upper half of the illustration shows the Adobe 9.0 menu choices to achieve this display.





## **About the Author**

Dr. Steven Gold has practiced family medicine in both Canada and the United States for over 25 years.

In the midst of his first practice situation, a 12 year tenure with the Glazier Medical Center (a 40 physician multidisciplinary practice, in Oshawa, Ontario, Canada), Dr. Gold created his own electronic medical record using Filemaker Pro software on a MacIntosh SE20 computer. In the mid 1980's Dr. Gold chaired the Glazier Medical Center Computer Committee as it successfully adopted in-house electronic billing and scheduling software to replace an external billing service bureau.

In mid career, Dr. Gold was attracted to the field of public and community health. He obtained his Master's of Public Health degree from Boston's Harvard University in 2002 majoring in Public Management & Community Health. During a 5 year stint in the field, Dr. Gold served the public health departments of the regions of Durham, Niagara, and Haldimand-Norfolk in Ontario, Canada. He received provincial appointment as Medical Officer of Health for the Region of Haldimand-Norfolk in 1993.

In late 1994 Dr. Gold moved his wife and 3 daughters to North Carolina, ultimately working with 2 separate county hospitals in helping to establish and evolve their first hospital-owned primary care clinics.

In 2000 Dr. Gold founded Graystone Family Healthcare, a private family practice in Hickory, NC. After searching for an electronic medical record for several years, Dr. Gold adopted Praxis® electronic medical record in 2002. Graystone Family Practice has since grown to 4 full time family practice providers – all successfully using Praxis® electronic medical records.

## **About the Author's Practice**

Following a 20 year career in medicine and public health, Dr. Steven Gold founded Graystone Family Healthcare in the year 2000.

Located on the border of Hickory, North Carolina, Graystone Family Healthcare currently uses 10 ½ full time equivalent support staff (including nursing, reception, billing and administrative staff), to assist 4 providers (2 physicians and 2 physician assistants) in providing a full range of outpatient family practice services. Each provider sees from 18 to 35 patients per day, dependent on demographic mix. The practice provides services to self-pay patients while the vast majority of patients are insured by Medicare, Medicaid or a variety of commercial insurers. The practice uses practice management software separate from Praxis® for patient scheduling, billing and patient accounts management. All insurance billing; practice bookkeeping & payroll; and referral authorization services, are accomplished in house.

In most cases, all office encounter documentation is complete by the time the patient is leaving the exam room. The clinic does NOT require transcription services. Laboratory results are downloaded to Praxis® via an interface with LabCorp®<sup>1</sup>. Imaging reports and other paper or faxed documentation are incorporated into the patient's Praxis® file via Scanaway® software.

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<sup>1</sup> LabCorp® is a trademark of Laboratory Corporation of America.

**Foreward by Dr. Richard Low:**

Doctor Steven Gold has asked me to write a foreword to *The Magic of Praxis*. I do so with feelings of honor and awe. There can be no greater honor than having one's life work recognized in writing by a colleague. Yet, as I read this book, I felt a bit like Alice in a land of Wonder as I read about Praxis - Praxis at its best !! Artists must surely get such feelings as they read critical reviews of their work.

Doctor Gold sees and talks about Praxis in a way that we, at Infor-med, had never imagined. He brings to the subject a wonderful flavor that only a very knowledgeable user could do. The point of view of the user is NEVER the same as that of the developer; it is always far better. And of course, Doctor Gold adds to this his masterful writing skills.

This feeling of awe is one that I have experienced throughout my career of working on Praxis. While I know I have had something to do with its development, the Praxis product has most often exceeded my efforts. Like Praxis, this primer clearly surpasses what I may have produced on my own.

This should not sound unusual. While a fan of the Microsoft Office Suite, when I first began learning to use its applications - Word, Excel, & Access - I found these softwares uncomfortably mysterious. I felt lacking. I could not get the "buttons" to perform the functions I envisioned. One day I came across a group of "how to" books known as the QUE collection. The original Microsoft manuals were nowhere near as good as these books in explaining use of their applications. Through these books I quickly learned the revolutionary programs that I have used day after day, over the past twenty years.

I must admit that we, the developers of Praxis, may not be the best people to explain the product. While Microsoft may have invested millions in hiring writers, their literary work fell short of the products of outside writers such as John Walkenback for Excel, or Rick Dobson for Access. Well, I am happy to say that it is Steven Gold, MD, MPH, for Praxis!

As with other great software application writers, Doctor Gold faced our product, undaunted, on his own. He worked through it for years and has developed his own ideas and concepts regarding its use. He calls them his "brews." They are not only about Praxis, but more importantly, about his own personal experience using Praxis in his real world Family Practice setting. There is NO WAY we, at Infor-med, could have written anything like this ourselves ! This is not to slight our manual, but it is, of course, 1800 pages ! Indeed, the manual may not be the best way to learn Praxis. (You are more than welcome to try!)

I think our manual is best used as a reference for areas of obscurity. As Doctor Gold has stated in this primer, the new user's most important resource is the live Praxis trainer. Such training may be supplemented by our Webinar video



recordings, and our regular user meetings. As a new user, however, you must begin with *The Magic of Praxis*. This wonderful book will get your “feet wet” and your “mouth watering.”

In addition to a primer on Praxis, Doctor Gold includes discussions of staff training, and actual office flow, learned first-hand by using Praxis in his practice, and, by teaching its use to his partners and staff. Lastly, *The Magic of Praxis* includes knowledgeable discussions of the finance and staging of electronic medical record implementation. Doctor Gold has "been there and done that" and he is now sharing his very rich experience with you.

In short, I believe *The Magic of Praxis* gives you something special - the excitement of a physician who has successfully implemented the Praxis application in his practice. The text describes the reasons for his wonderment, as he so well puts it - the “Magic” he has discovered in Praxis. We have never conceived of Praxis as a substitute for the physician’s mind, rather as a potentiator and aid, a tool to help the physician save time and effort in his/her special work. I believe that Doctor Gold's book captures the essence of this tool, and presents it in a unique and exciting way.

All I have to say to Steven is THANKS. I thank him for being such a great client, for his constructive feedback through the years. Most importantly, I thank Steven for making us feel that, like you, we are helping physicians practice better medicine easier- indirectly helping many patients as well.

Thanks, Steven, for writing *The Magic of Praxis* !

Richard M. Low, MD  
CEO  
Infor-Med Corporation  
"Makers of the Praxis EMR"

## ***Introduction***

As a longstanding family physician, and experienced user of Praxis® electronic medical record (EMR) software, my purpose in preparation of this primer on the Praxis® version 4, is not to provide a full manual. Rather, my desire is to provide an overview of Praxis' conceptual framework, its features, and practical steps towards adoption in the clinical setting. My hope, in the composition of this text, is that it will give the reader enough insight into the product to make a “yea” or “nay” purchase decision, while furthering the reader's understanding of some of the issues involved in the documentation of the medical encounter, and the implementation of any electronic medical record (Praxis® or otherwise).

Furthermore, for the physician choosing to adopt Praxis®, a good understanding of its conceptual framework and features will advance the individual along the learning curve necessary to adopt this software. Accordingly, the reader will note that key Praxis® concepts are repetitively underlined in the text of the various chapters. My hope is that the repetition will embed these concepts in the reader's “memory banks.” In addition, I have inserted multiple screen shots and an occasional manual excerpt in the text. I would expect that most readers would already have viewed the latest Praxis® demo. Clearly, repetitive viewing of screen shots will add some familiarity with the software interface.

For the physician who chooses to adopt Praxis®, to supplement personal live training (which is critical), Infor-med Corporation has prepared several educational vehicles to assist the new physician or provider, and staff, in implementation and use of this powerful software. Amongst these vehicles are:

1. An organized set of downloadable video tutorials on key topic areas, viewable via the downloadable Camtasia video player,
2. Regular user meetings with instructional sessions,
3. A 1700+ page manual which permits detailed research and learning of individual features, and
4. A technical manual which describes issues related to network setup and software loading (most appropriate for the network administrator).

In writing this primer, it was important to me not to create a dry and soporific text. Accordingly, I have chosen to adopt the Magic theme (which is more prominent in the earlier chapters), to provide the reader with a tincture of stimulation and entertainment.

Nevertheless, the critical aspects of this primer are the Concepts and features of Praxis®; and tips on incorporation into the clinical setting.

Accordingly, early chapters will discuss the Concept Processor, Medical and Patient Knowledge Bases, and other key concepts. As we get into the primer, we will discuss important features of the software including the management of the many

multiple chronic problem patients via the chronic Assessments; health maintenance; and tremendous efficiency tools including presoap protocols and flowcharts.

In the latter half of the primer, several chapters will be devoted to an overview of implementation issues including hardware and network management; interfaces with practice management and other software; staff and provider training; and the creation or acquisition of Medical Knowledge Bases. Lastly, I will devote a chapter to Scanaway® software, which effectively may allow any clinic to go “paperless” (digitize all records), even without adoption of full Praxis® software.

Having read this primer, particularly the sections on the Concept Processor and the Knowledge Bases, I think you will find that Praxis® is unique amongst electronic medical record softwares, in that it allows the physician freedom to document according to his or her style of practice rather than according to a format structured by the software designer. Further, Praxis® accomplishes this with great efficiency, such that it was originally regarded as “the best (medical office) note generator on the market.” While Praxis® will not suit all readers or all clinical situations, the software merits attention as an elegant solution to the “digitization” and automation of the medical encounter, and, in fact, clinical office workflow. For those of us, early adopters, who have used Praxis® on a daily basis for years, Infor-med has been a reliable and visionary company, responding and adapting to the needs of its clients in the face of the demands of complex medical office operations .

Finally, as noted above, I must address an issue which is viewed by many as the chief obstacle to EMR adoption. I have stated that Praxis® has been regarded as the best (medical office) note generator on the market. In our own practice situation, my partner and I alone would have had combined spending of at least \$2,000 monthly on transcription in order to provide a high-quality Progress Note for each visit. Having eliminated transcription fees via use of Praxis®, such funds are available to manage the cash flow requirements associated with the necessary hardware, software and purchases and support fees. On the note generation feature alone, our clinic (currently 4 providers), has saved well over a hundred thousand dollars, over the past 5-6 years, by our use of Praxis®. Furthermore, the additional features of Praxis® such as Scanaway®, Fast Rx, Agents and others, permit efficiencies in our practice operations, which ultimately reduce the cost of staff time associated with routine and repetitive office procedures.

I have practiced family medicine for over 25 years. For many of those years I dreamed of software, which would make my practice life easier. After years of search, my discovery of Praxis® in 2002 was an exciting moment in my life – the potential for realization of that dream. Essentially, I had found a note (and Rx) generator built on a sensible conceptual clinical framework. Nevertheless, Praxis® had been simply that, an excellent note (and Rx) generator. The dream of making office processes more efficient has taken more time; however, with version 4, I believe Praxis® has realized much of this dream.

I do not wish to convey that the adoption of EMR software is a simple task. It will require commitment, organization, planning, training; and ongoing learning and practice. Yet, with an adequate timeline, these endeavors are all within the capacity of physicians, ancillary providers and general medical office staff. Ultimately this endeavor is well worth the cost and effort – frankly, the only sensible direction to go.

Steven A. Gold M.D., M.P.H.



1. **My Eureka Moments:** *Discovering the Magic*
2. **The Concept Processor:** *The Way the Wizards Brew*
3. **The final documents:** *Black on White Magic*
4. **Medical Knowledge:** *More Black on White Magic*
5. **Patient Knowledge:** *Blue on White Magic*
6. **Chronic problems & Health maintenance:** *More Blue on White Magic*
7. **From Virtual to Confidential:** *Brown on White Magic*
8. **User Alerts:** *Red on White Magic*
9. **PreSOAP protocols:** *The Slickest Tricks of All*
10. **Agents:** *Carrier Pigeons*
11. **Flow & Growth Charts** *Indispensables*
12. **Knowledge Base Imports:** *Intelligent Seeds*
13. **Interfaces** *Joining Forces*
14. **Planning the Transition:** *Setting the Stage*
15. **Network installation:** *Magic at the Point of Care*
16. **Physician training:** *Learning the Power*
17. **Staff training:** *Assistant Power*
18. **The First Encounter:** *Going Live*
19. **The Healing Arts:** *White Magic*



Chapter 1:

***My Eureka Moments: Discovering the Magic***

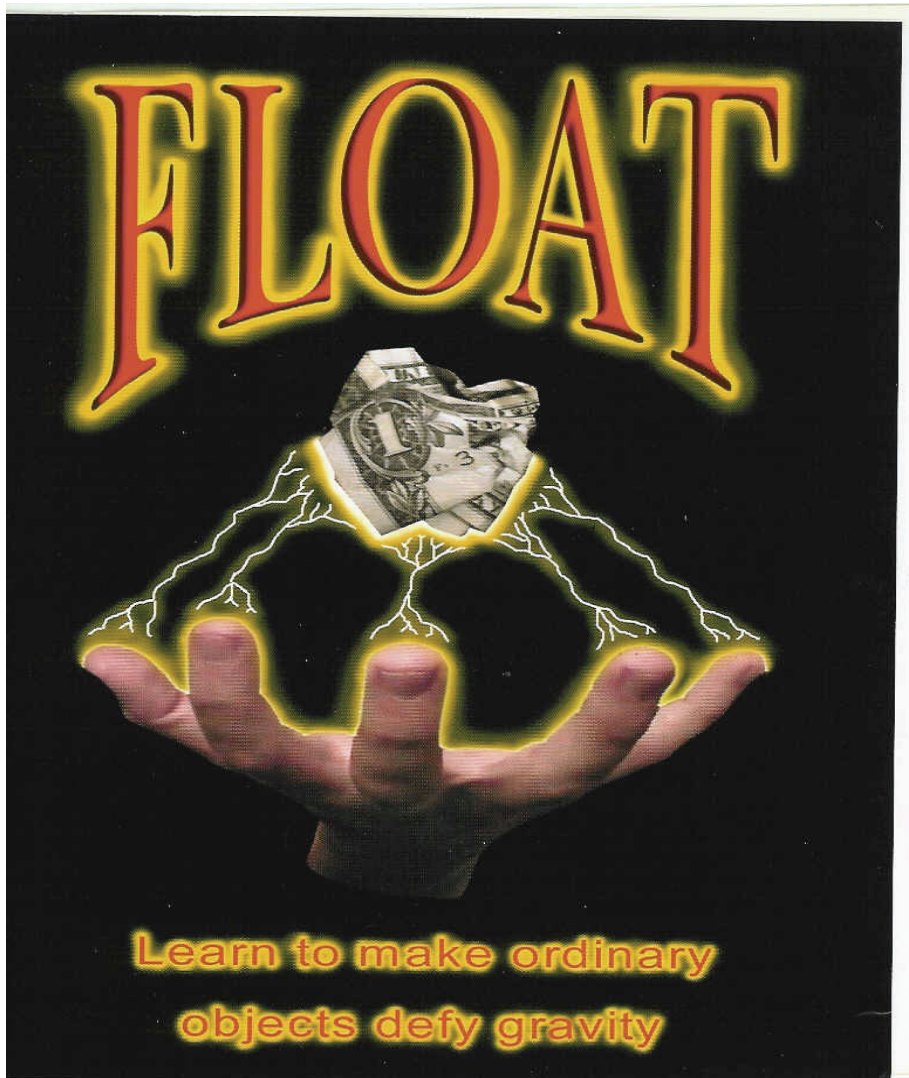
The most difficult part of writing these pages probably came at the beginning. How may I do justice to Praxis®; its founder, its creators and developers, its trainers, support, and loyal beta testers; set the right tone, and get off on the right foot? It took several weeks of cogitation before the eureka moment came. In order to explain, let me tell you a story:

On November 21, 2004 at about 5:30 pm, I found myself biding time in the terminal at the Philadelphia airport. My wife and I were just returning from our first ever visit to Las Vegas, that adult Disneyland. Frankly, I was quite tired. Our day had begun at 5:30 that morning as we had the “misfortune” of a connecting flight in Philadelphia to our home north of Charlotte, North Carolina. Nevertheless, I was still suffused with memories of “O” (Cirque du Soleil), gondolier arias at the Venetian and a mildly treacherous hike through a riverbed in Red Rock Canyon.

Wandering through the terminal, I came upon a small group of people standing near a kiosk. Curious, I managed to position myself to the left of center stage, standing room only. Inexplicably there stood a young man clearly levitating a dollar bill. Now I have seen many acts of magic - almost always on TV - but here I was face to face with the supernatural, AND I COULD NOT EXPLAIN IT !!!! The young man proceeded to ask for a quarter from a gentleman in front. And lo and behold, he levitated the quarter, and then a pen, and then he levitated the pen inside a closed bottle. Lastly, he asked for \$34.95 for the secret of this act; and I was badly torn inside. Clearly, he must be standing on some kind of magnetic force field. Of course, there would be hot air blowing from below ‘cause even I knew that there was not metal in that dollar. But how do they give you all that in a small DVD case for \$34.95 ? Part of the dilemma was that I have twin nephews, children of a dear departed younger brother; and you bet, I wanted to do this for them. So, following the lead of the gentleman next to me, I pulled out my trusty MasterCard and became the proud owner of a mysterious and magical trick.

Now don’t expect me to reveal the secret to y’all even for \$34.95. For that you’ll have to type [www.wowmagic.com](http://www.wowmagic.com) and pay the proper piper. But what I will do is attach a picture of the FLOAT.













I had been mesmerized now at least thrice this week, first at “O”; second, by the gondoliers at the Venetian; and thirdly, by a young magician during an “unfortunate” stopover in Philadelphia, PA.

So what does this all have to do with Praxis®? Well earlier this evening I was corresponding with my friend & fellow “Praxite,” Roger Van Torres. We Roger and I were active bloggers on EMRUpdate.com. Earlier that day I had posted on the topic of EMR regulatory standards, trying to give new readers a sense that future standards may narrow the EMR field and force physician providers to switch

EMRs. I wrote to Roger that it may be appropriate to induce paranoia, as the choice of EMR was a “whopping big” decision, and closed the post as follows:

[sgoldmd](#)  
Senior Member  
★★★  
USA  
  
270 Posts

Posted - 01/22/2005 : 8:37:33 PM       

Let me close by saying that I have been a very careless purchaser in that I did not ask these questions of my own EMR vendor, and perhaps the same vendor does not know what the certification requirements may be.

Edited by - sgoldmd on 01/22/2005 8:54:25 PM

In later discussion Email correspondence with Roger, this is what I wrote:

Jan 23, 2005 12:47 AM

..Roger, as I had written on another post, this is a "whopping big" decision for anyone seeking EMR. I too relied on intuition. From the first moment I saw the old (2.19) Praxis® demo of the diabetic, out of control during a bout of acute pharyngitis, I knew Praxis® was the one for me. My first taste of EMR (electronic medical record) occurred around 1985, and I had spent the prior 3 years searching the current field. But the sight of the Praxis® “demo” was a "eureka" moment.

So let the truth be told, I, like Roger and many others, had been mesmerized by *The Magic of Praxis®*. As Praxis® version 2 advanced in years, we remained patient with our old friend, helping to nurture her through version 3 to current version 4. This is an evolution which has placed Praxis® amongst the best full-featured electronic medical record softwares on the market. I will leave it to Infor-med to inform the reader of Praxis® awards and accomplishments. I am but here to explain what underlies the Magic.

Praxis® is built upon a relational database (known as Oracle). It is that which offers much of the Magic that was originally unique to Praxis®. So we’ll need to start

by discussing the Magic. Now as you are all aware, there's White Magic and Black Magic, but other colors too. So we'll start with Black on White

Magic, and move on to Blue on White Magic, Red on White Magic and so on, until you've got the act down and pat.

But first, *The Magic of Praxis*®, has its foundations, as does the art and science of medicine. So put on your Wizard's hat and let's learn about CONCEPT PROCESSING, otherwise known as “the Way the Wizards Brew.”

**END CHAPTER ONE**

**TO FOLLOW IS ANOTHER SAMPLE CHAPTER, IN THIS CASE, DESCRIBING THE PRAXIS FEATURE: “AGENTS”**

Chapter 10:

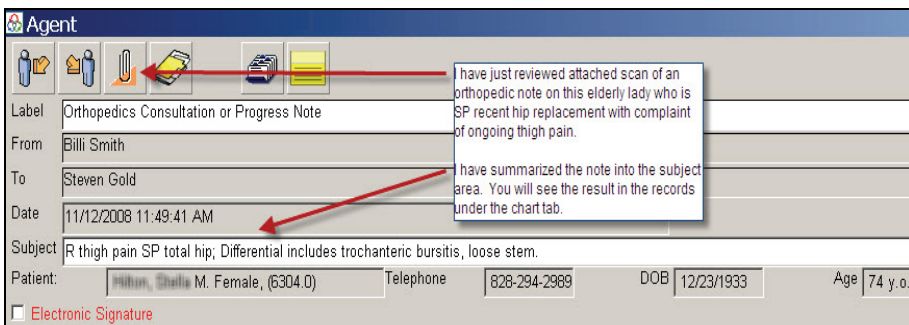
**Agents: “Carrier Pigeons”**

Agents are truly magical features of Praxis®. Essentially they are intra-office Emails; however, Agents have two powerful features. Firstly as expected, Agents are often tied to specific patients, expediting linkage to patient chart data; and, perhaps more powerfully, Agents may be delivered at varying times depending on particular events.

For example, Agents may be delivered now, or urgently (accompanied by audio signal), at next chart open, or at next appointment.

Most commonly Agents are used to handle phone messages, which are recorded by assistants and sent onto providers either now or rarely, urgently. In our clinic, we label these Agents (not surprisingly) “Telephone Message” Agents. Since free text entry is permitted within Agents, staff have full freedom of expression.

All our scanned incoming medical documents are attached to patient specific Agents for transfer across the provider desk. These various agents are labeled according to document attached e.g. MRI Lumbosacral Spine, or Cardiology Consultation or Note, or Home Health Report etc. Thus, once reviewed by the provider, they are stored in the Praxis® electronic chart and reviewable by simply pulling the Agent carrying the desired label. As the subject of the Agent is also visible under the Chart view tab, I often synopsize the report into the subject. Thus, in the future, I may be able to forego actual review of the original document. For instance, the screenshot below occurs after I have just reviewed orthopedic consultation report on this elderly female patient:



As a result, under the patient’s chart view tab, I may note orthopedic consultation with subject “R thigh pain SP total hip.....” etc

Steven Gold, M.D.: Family Practice

Clipboard Scheduler Databases

Main New Entry Chart Medications Labs Flow Chart Patient Data

Milton, Sheila 74 y.o. Female (6304.0)

Previous Encounters and Inserted Notes :

11/12/2008 11:48 AM	Orthopedics Consultati ...	R thigh pain SP total hip; Differential includes trochanteric bursitis, loose stem.
11/06/2008 06:04 PM	Forward labs to specialist	Please fax her CBC, CMP results to Dr. Paul, nephrologist
11/06/2008 05:38 PM	1. Lab Results to Patient	Hb 10.6 Cl 20
11/03/2008 10:39 AM	Office Visit	Chronic renal failure
10/08/2008 01:35 PM	Lab Result on your patient	24 hr urine showing
10/08/2008 09:25 AM	Nephrology consultatio ...	Stage 4 chronic renal
10/07/2008 02:33 PM	Check patient status	Check patient status
09/25/2008 04:52 PM	Prescriptions	Labetalol
09/05/2008 10:03 AM	Office Visit	Chronic renal failure
08/28/2008 10:21 AM	Office Visit	New patient initial as

At her son's request, I began seeing this elderly woman in August 2003. She presented with severe uncontrolled hypertension having developed acute renal failure post hip replacement. Working with a nephrologist we were able to achieve good outpatient control, but she has developed some moderately severe R thigh pain which I hope is not a loose prosthesis (she has endured enough post op trouble!).

Note the subject of the orthopedics consultation label is a brief synopsis of the note, so I now do not have to read the actual note unless I am seeking more details.

I use Agents daily upon review of lab reports. For instance, in the screen shot below I may review the chart and then send an Agent to my nurse to advise the patient of the information and a recommendation of prescription. Such use of Agents expedites my ability to delegate tasks to the more appropriate level of task execution.

Hopefully most Agents only result in a quick “Lab Result to Patient” Agent stating: “lab results are fine.” My nurse then leaves this message, often on the patient answering machine. Using the Magic of Agents, my nurse may also easily document her action.

Home

## Labs

Steven Gold, M.D.: Family Practice

Patient: **Watson, Gloria B, Female, (1980.0)**

Provider: **Steven Gold, M.D.: Family Practice**

Print    Delete    Electronic Signature

**303756 Lipid Panel** StartDate:

Name	Value	Unit	Range
<b>Cholesterol, Total</b>	257	mg/dL	100-199
Triglycerides	110	mg/dL	0-149
<b>LDL Cholesterol Calc</b>	172	mg/dL	0-99
VLDL Cholesterol Cal	22	mg/dL	5-40
HDL Cholesterol	63	mg/dL	>39

I am reviewing my prior day's lab results. This lady's fasting LDL cholesterol is elevated.

I have the option of reviewing her chart via the button below or sending my nurse an agent to call her with the information and a recommendation or prescription. Since I recall her history and my conversation with her yesterday I need only send the "Lab results to patient" agent, which I can choose after clicking the "Send Agent" button.

Do not apply     
  Abnormal     
  Very abnormal

Show Log >    Chart Review    Send Agent    Edit Comments

One of my favorite use of agents involves simply sending myself an Agent, scheduling it to arrive at next patient appointment. Thus, when “John the Snorer” arrives for his annual physical, upon opening his Praxis® chart, I would anticipate receiving an Agent reminding me that his wife had left a message several weeks ago complaining of his horrific nocturnal breathing. Ergo: “ Magic !”

In the following screenshot I am sending myself an Agent which will arrive at time of my next office visit with this diabetic patient, reminding me to discuss her annual ophthalmology Assessment.

Agent

Label: Warning: Health Maintenance

To: Steven Gold

Date: Next Appointment  Urgent!

Subject: Remind about ophthalmologist next visit

Patient: Hughes, Sue Female, (637.0) Telephone: 336-921-2338

Save in Chart.

Patient related information

I had forgotten to discuss need for annual ophthalmology checkup with this young diabetic woman. Consequently I received an overdue notice from Praxis' health maintenance engine. I have forwarded this agent back to myself but to arrive at the NEXT APPOINTMENT. Checking urgent would add an audio signal at the appointment.

Previous chat:

On 4/16/2008 12:00:01 AM, Steven Gold, M.D.: Family Practice Wrote:  
The following order was lost because patient did not come to his/ his office visit  
Referral : Ophthalmologist [Q 1 Years; A-: 30 Days A+: 60 Days; 02/16/2007]

I have probably left out a dozen further uses of Agents in our clinic. Your office may develop your own Agents for any imaginable purposes, all of which may serve to streamline communication. Suffice to say that Agents are powerful tools in our bag of magic tricks.

March 16, 2009

Thank you for your interest in “The Magic of Praxis®”. This has been an excerpt from the 90+ page text of the Magic of Praxis.

It is the author’s expectation that the full text will be of value to two groups of individuals: firstly, to those who, prior to a purchase decision, wish to learn more about Praxis® software, and its features; secondly, to those who have purchased but not yet adopted Praxis®.

In the latter case, review of the full text will advance the new user on the learning curve necessary for Praxis® adoption.

In both cases, readers will benefit from the understanding of the functions necessary in a well constructed electronic medical record, and, in the steps related to implementation and adoption of electronic medical record software.

Currently this text is available only in E-book form. Single file purchases may be made by any interested individuals. Pricing for multi-provider clinic use is dependent on the number of providers. Each authorized user is permitted to make one paper copy of the text and to maintain 1 backup digital file. Details are on the website.

For further information or purchase, please visit:

**[theMagicofPraxis.com](http://theMagicofPraxis.com)**





[www.themagicofpraxis.com](http://www.themagicofpraxis.com)