

Bringing Physicians and Patients Together Via Smartphone? Dr. Church Has An App For That!



I am always excited when physicians design products for other physicians because they “get it.” Here’s the tale of a Midwest physician, Dr. Fred Church, who has developed a **free** app to communicate one-on-one with his patients via email or text.

Mary Pat: *Dr. Church, tell me how you came to design e-Consult My Doctor, an app that lets physicians and patients communicate with the ease of email and text in a secure environment.*

Dr. Church: I suppose the axiom of “necessity is the mother of all innovation/invention” applies here. I saw a growing need and had a growing **entrepreneurial passion** to solve the problem for more physician-patient interaction between scheduled visits. I believe we are at the precipice of still greater demand for mobile connectivity and services in America.

The premise of private communications to enhance doctor-patient relationships is not a novelty, but how to do it in a HIPAA-compliant manner that is also simple and convenient is a significant challenge. We are delivering an elegant smartphone app that uniquely understands a busy doctor’s and patient’s lives and works to serve them. We have created a utility that enables any doctor to be a concierge-service doctor and every patient to be the beneficiary of that great personalized care – care that is direct from the doctors that know them and whom they trust.

Mary Pat: *You describe e-Consult My Doctor as a tool to augment the physician-patient relationship, not replace the traditional office visit. Can you give some examples of this?*

Dr. Church: In no way is our communication management tool intended to replace the face-to-face interaction and

assessment between a physician and his established patient.

We have terms of service that users will explicitly understand and agree to prior to participation. Doctors will not have to worry about this being crystal clear to patients. Most reasonable people understand that emergency situations need to be dealt with in-person and this tool is not intended to deliver emergency communications.

Example Scenarios:

1. "Doctor, can you give me an evaluation of this mole as I think it has changed since you last saw me for my physical? You told me to watch it and document it myself on my phone... should I be seeing you now or wait until my next physical?"
2. "Surgeon, I am three days post-op and it's Sunday afternoon and I'm scheduled to see you tomorrow for follow-up. Can you take a look at these two pictures of my wound to tell me if I need to go to the urgent care or ER tonight before tomorrow's follow-up? I'm not alarmed but a little concerned at how it looks and I want to have your opinion before my scheduled follow-up."
3. "Doctor, one month ago I described to you during Betsy's well-child visit the rare sounds and behavior changes I was hearing and seeing from my 3 month-old daughter and felt like I was having difficulty adequately explaining it to you. Guess what, I was able to capture it on this video with audio. Can you listen to it and tell me your opinion if I should be concerned about it? Should I bring her back in after you view this so you can examine her again and/or do more lab workup?"
4. "Doctor, we talked about considering certain omega 3 supplements and I want your opinion on this particular supplement (see picture of label) from XYZ that the pharmacist recommended. Do you think it's a good one also? I appreciate your opinion before my next follow up with you."

Mary Pat: Foremost in everyone's mind is the privacy and confidentiality of texting and emailing – how does e-Consult My Doctor achieve HIPAA compliance?

Dr. Church: Our smartphone app technology uses best practice standards for data at rest and in transit using **AES 256-bit encryption**. Doctors and patients will have a secure login to their app so that if their phone is stolen or misplaced, the data is still encrypted and cannot be viewed without a user's password. If a user's account is somehow compromised, administratively we can suspend his account, his e-consulting relationships, and access to the information between those relationships.

Mary Pat: Do you see this product replacing the traditional function of a nurse triage in the medical practice?

Dr. Church: Absolutely not. In fact, it is intended to offload the burden that triage is often overwhelmed with. Traditional healthcare will always need people to properly triage communications at a doctor's office. Unfortunately, high volumes and increased costs mean that calls are not always responded to in a timely way. Doctors need communication tools that are portable and flexible and this describes e-Consult My Doctor.

Mary Pat: Your software has some interesting features, including a mini-EMR or PHR (Personal Health Record.) Can you describe the benefits of a mini-EMR available from a smartphone?

Dr. Church: Because our solution is much less complex than an EHR (Electronic Health Record), a single adult patient user may keep and manage all of his dependents' information on one app securely. Our well-designed smartphone app stores all related health event reminders, vaccine history, and **PHR** information. The PHR on our smartphone app is viewable/editable without the requirement of an internet

connection, which is a clear advantage over EHR portals. When patients participate in managing their information and updating their PHR data between visits, it makes it easier for intake nurses/staff during scheduled visits to make sure the EHR's data is also reflecting recent changes that may be more current than EHR updates from various sources: other urgent cares/ERs, other specialty doctors, other health providers/doctors/sub-specialists (DDS, DC, DPM, etc.), hospitals etc. One of the main advantages of patients participating in their own PHR information is it will hopefully improve PHR accuracy, contribute to better patient compliance, and help serve both patients and doctors in traditional healthcare delivery.

Mary Pat: How does the documentation of the communication between the physician and the patient get back into the practice EMR?

Dr. Church: The app will allow for exporting content via PDF and both doctors and patients will have their own copy of e-consultation data on their apps. Doctors may elect to attach the PDF of the e-consultation interaction to their respective EHR if they believe it is important enough and pertinent to a patient's long-term record. For example, several EHRs do not have the ability to **import pictures, audio, and video content** which this app will easily store for minimal convenience fees. Additionally, a doctor can simply summarize the exchange in her next scheduled office visit's documentation if she feels the content is important enough. This will vary on an individual case-by-case basis and will be up to the doctor's judgment.

Mary Pat: Between the secure communication and the mini-EMR, e-Consult My Doctor sounds very much like a patient portal. Can your software replace a patient portal for a medical practice?


Dr. Church: The mission of our software is to deliver

a different and simpler solution for convenient communication and to augment the functionality of an EHR's patient portal. An EHR patient portal is valuable for a singular patient to see what his doctor's EHR documents as his current information including labs, vitals, etc. The **e-Consult My Doctor** app will allow direct one-to-one communication any time and anywhere the doctor and patient are willing to participate. One of the foundational premises of our product is that a doctor's extra time and effort should be rewarded directly by the beneficiary... like having pay-as-you-go access to their mobile phone or email for enhanced, personalized care between scheduled visits.

Mary Pat: *You have essentially designed a product that allows physicians to be reimbursed for care that they have been previously providing for free. Some patients will appreciate the convenience and be willing to pay for the personal attention and others will think it is akin to the airlines charging for luggage! How do you answer those who think healthcare is already too expensive without any additional fees?*

Dr. Church: I'm amazed how many people are willing to pay for the \$1,000 – \$2000 per patient per year for 24/7/365 access that they may only utilize a few times a year. I personally know concierge doctors who are eagerly looking forward to our HIPAA-compliant solution that will help them achieve better work-family life balance with our communication management tool. We believe our smartphone app will bring a revolutionary solution that allows every doctor and every patient to participate in a concierge e-consulting relationship at a potentially lower price point. Our solution eliminates the middleman with a convenient and simple solution at a very affordable price and payment is directly and immediately received by the doctor.

Mary Pat: *When will this product be available on the market and what will it cost physicians to purchase?*

Dr. Church: The anticipated market delivery date is **November 30, 2013**. The app will be free and the basic subscription level will also be free. Users will be given a limited amount of secure storage space and may upgrade to larger amounts based on their individual needs. We will also offer a premium subscription level that will afford a larger secure space allotment and additional valuable service offerings. Our app will offer a pay-as-you-go, transactional model for the basic subscription level and a fixed-price price point for the  value-minded user who wants more.

Mary Pat: *How can readers get in line to try your app?*

Dr. Church: They can go to <http://e-ConsultMyDoctor.com> and sign up for pre-launch information and be the first to try it out. We invite physicians who want to be beta-testers!

A Guide to Healthcare Buzzwords and What They Mean: Part Two (M through Z)



Meaningful Use (MU)

Meaningful Use is the phrase used in the 2009 HITECH Act to describe the standard providers must achieve to receive incentive payments for purchasing and implementing an EHR system. The term meaningful use combines clinical use of the EHR (i.e. ePrescribing), health information exchange, and

reporting of clinical quality measures. Achieving meaningful use also requires the use of an EHR that has been certified by a body such as CCHIT, Drummond Group, ICSA Laboratories, Inc. or InfoGuard Laboratories, Inc. The term can also apply informally to the process of achieving the standard, for example “How is our practice doing with meaningful use?”

mHealth

An abbreviation for Mobile Health, mHealth is a blanket label for transmitting health services, and indeed practicing medicine, using mobile devices such as cell phones and tablets. mHealth has large implications not only for newer devices like smartphones and high-end tablets, but also for feature phones and low-cost tablets in developing nations. Many different software and hardware applications fit under the umbrella of mHealth so the term is used conceptually to talk about future innovations and delivery systems.

NLP

An acronym for Natural Language Processing, NLP is a field of study and technology that seeks to develop software that can “understand” human speech – not just what words are being said, but what is meant by those words. By “processing” text input into an NLP program, large strings of text can be parsed into more traditionally meaningful data. For example, narrative from a doctor in a medical record could be transferred into data for research and statistical analysis. If we had every medical record and narrative in history, we could search it and look for trends – and possible new cures and symptoms. IBM’s famous Watson machine that could “listen” to Jeopardy! clues and answer is an advanced example of NLP.

ONCHIT

An acronym for “Office of the National Coordinator for Healthcare Information Technology,” the ONCHIT is a division of the Federal Government’s Department of Health and Human Services. The Office oversees the nation’s efforts to advance health information technology and build a secure, private, nationwide health network to exchange information. Although the National Coordinator position was created by executive order in 2004, the Office and its mission were officially mandated in the 2009 HITECH Act as a part of the stimulus package.

Patient Engagement

Patient Engagement is a broad term that describes the process of changing patient behaviors to promote wellness and a focus on preventative care. “Engagement” can roughly be read to describe the patient’s willingness to be an active participant in their own care and to take responsibility for their lifestyle choices. Patient Engagement efforts can be as simple as marketing campaigns for public health and appointment reminders, and as advanced as wearable monitors that can transmit activity and exercise information so patients can track their fitness. Improving the health system’s ability to engage patients is considered key to lowering healthcare spending and attacking epidemics like obesity and heart disease.

Patient Portal

A patient portal is software that allows patients to interact, generally through an internet application, with their healthcare providers. Portals enable communication between providers and patients in a secure environment with no fear of inappropriate disclosure of the patient’s private healthcare information. Patients can get lab results, request

appointments and review their own records without calling the provider. Patient portals can be sold as a standalone software module or as part of a comprehensive Practice Management/EHR package.

Patient-centered Care

Patient-centered care is a healthcare delivery concept that seeks to use the values and choices of the patient to drive all the care the patient receives. As elementary as it sounds, developing a culture that places the needs and concerns of the patient – the whole patient – at the center of the decision-making process is a new development in the healthcare system. Patient engagement is at the core of patient-centered care, because the patient is the central driver of the decisions – as is only right!

PCMH

An acronym for Patient Centered Medical Home, a PCMH is a model for healthcare delivery where most or all of a patient's services for preventative, acute and chronic primary care are delivered in a single place by a single team to improve patient outcomes and satisfaction as well as lower costs. PCMHs may also operate under a different reimbursement structure, as they can be paid on an outcome basis or on a capitation model as opposed to fee-for-service.

PHR

An acronym for a "Personal Health Record," a PHR is a collection of health data that is personally maintained by the patient for access by caregivers, relatives, and other stakeholders. As opposed to the EHR model, in which a single hospital or system collects all the health information generated in the facility for storage and exchange with other

providers, the PHR is maintained, actively or passively with mobile data capture or sensor devices, by the patient. The PHR can supplement or supplant other health records depending on the way it is used.

PPACA

An acronym for the “Patient Protection and Affordable Care Act,” the PPACA was a federal law passed in 2010 to reform the United States healthcare system by lowering costs and improving access to health insurance and healthcare. The PPACA uses a variety of methods – market reforms to outlaw discrimination based on gender or pre-existing condition, subsidies and tax credits for individuals, families and employers, and an individual mandate forcing the uninsured to pay penalties – to increase access to insurance and lower healthcare costs.

PQRS

An acronym for the “Patient Quality Reporting System,” PQRS is a mechanism by which Medicare providers submit clinical quality and safety information in exchange for incentive payments. Physicians who elect not to participate or are found unsuccessful during the 2013 program year, will receive a 1.5 percent Medicare payment penalty in 2015, and 2 percent Medicare payment penalty every year thereafter.

RAC

An acronym for “Recovery Audit Contractor,” a RAC is a private company that has been contracted by the Centers for Medicare and Medicaid Services to identify and recover fraudulent or mistaken reimbursements to providers. There are four regions of the United States, each with its own RAC which is authorized to recover money on behalf of the Federal Government. A pilot program between 2005 to 2007 netted nearly

\$700 million dollars in repayments and the program was made permanent nationwide in 2010.

REC

An acronym for “Regional Extension Center,” a REC is a organization or facility funded by a federal grant from the Office of the National Coordinator for Health Information Technology to provide assistance and resources to providers who want to adopt an EHR and achieve meaningful use but need technical or deployment support to get their system up and running. There are currently 62 RECs in the United States who focus primarily on small and individual practices, practices without sufficient resources, or critical access and public hospitals that serve those without coverage.

Registry

A Registry is a database of clinical data about medical conditions and outcomes that is organized to track a specific subset of the population. Registries are important to track the efficacy of drugs and treatment, as well as to analyze and identify possible treatment and policy opportunities to improve care. A registry can also be used to report PQRS.

Telehealth

Telehealth is a broad term that describes delivering healthcare and healthcare services through telecommunication technology. Although the terms telehealth and mhealth can be used somewhat interchangeably, “telehealth” tends to focus more on leveraging existing technologies – phone, fax and video conferencing to deliver services over a long distance, or to facilitate communication between providers. Remote evaluation and management and robotics are both examples of care innovations that would fall under the telehealth umbrella.

Value-based Purchasing

Value-based purchasing is a reimbursement model for health care providers that rewards outcomes for patients as opposed to the volume of services provided. Both through increased payments for positive outcomes, and decreased payments for negative ones, value-based purchasing seeks to lower costs by focusing on increasing quality and patient-focus. Accountable Care Organizations and Patient Centered Medical Homes are both examples of delivery systems that rely on value-based purchasing.

Blue Button Initiative Offers a Glimpse into the Future of Sharing Health Data

The most exciting thing for me about being in healthcare today is the contrast between steep challenges the industry faces on so many fronts – and the vast potential offered by biological and information technology. We do have some dragons to slay, but we also have amazing tools: genetic research, stem cell therapies and nanotechnology, alongside the potential for insight gleaned from mountains of big data. It's an exciting time, to be certain, and with so much change happening on so many fronts our work is in the spotlight more than it has been in a long time.

We don't have to wait for exotic technologies or highly educated software to make a positive difference in patient care and outcomes. Often the most empowering tools for the

patient are the simplest to use. If engagement is the holy grail of patient-centered care, then it has to be our goal to make that engagement simple and effective. In the United States especially, with an aging demographic and a generation behind it accustomed to slick consumer-driven technology, it is not enough for new treatments to be powerful – they also have to be approachable.



One of the most interesting ways this is being done right now is at the Department of Veterans Affairs (or the VA) with the **“Blue Button Initiative”**. The project has given veterans the ability to click a “blue button” and download their own health and military service records into a simple text file or pdf.

“Blue Button gives veterans complete control of this information – without any special software – and enables veterans to share this data with their health care providers, caregivers, or people they trust.” – from the VA’s Website

This project works in conjunction with the **My HealtheVet Personal Health Record**, which has been online since 2003. My HealtheVet allows veterans to access and store their own health data: from lab reports from VA hospitals to self-entered data like weight and vital signs taken as part of regular care, plus food and activity journals for veterans trying to control weight.

By clicking on the Blue Button, patients can get their entire PHR (Personal Health Record) from My HealtheVet (or only information of a specific type, or from a specific time period) and immediately have control of their data. The beauty of the Blue Button is its simplicity – simple to download, and simple to share, too. The text file created by the Blue Button is machine readable, so it is easily read by a computer program, and simple to view on any computer or mobile device

regardless of platform or software.

The Blue Button concept can work the other way as well. Once patients have their data, they can easily share it: with paramedics in emergency situations, with their own doctors at appointments, or between appointments to track progress, and with caregivers in the home. By allowing a way for health information to be shared simply and without worrying about the platform on either end of the transmission, the Blue Button opens the door for some amazing advances down the road. Blue Button data could easily be de-identified and used in clinical research trials or community health projects. Public Blue Button repositories of this data could allow patients to compare their health statistics to those with similar demographics and histories to track their own health goals. And on top of all of this, the patient becomes more experienced, knowledgeable and confident about accessing, controlling and sharing their own data.

The Blue Button Initiative has now expanded to partner with other large repositories of Personal Health Information to expand the Button's capabilities beyond just the VA. Both government agencies and private insurers as well as data repositories have added Blue Button access to their online portals so that their own patients can easily capture and control their health data. Just last week United Healthcare announced they would add Blue Button functionality to their customers online records for 500,000 of their members in Nevada. The company plans to roll out the technology to 26 million members by the middle of 2013.

When the benefits of simple technologies are powerful for everyone in the system: patients, provider and payers alike; simple ideas can have a profound affect on large scale problems. With the Blue Button Initiative the VA, Centers for Medicare and Medicaid Services and many private partners are achieving just that.

The Personal Health Record (PHR) is Alive and Well! Meet Zweena.

✘ A personal health record (or PHR) is an individual electronic health record that is stored securely on the Internet so it can be accessed by medical providers and caregivers who have permission.

PHRs allow the storage of all critical health history information in one place. In the event of an emergency, the patient, caregiver or family member can give providers access to health information. By having the most current information always available, duplicate or unnecessary tests can be avoided as can possible drug interactions. This benefit is achieved without having to rely on the memory or incomplete records of the patient. PHRs also allow patients, caregivers or third-party vendors to update information regularly over the Internet so that new data can always be accessed by stakeholders.

Although Personal Health Records have been around for more than 10 years, they have gained little traction. Amidst a healthcare environment that is increasingly supportive of the empowered patient, most patients have neither the time nor the knowledge to enter their own records into a PHR. Many PHRs can interface with an individual hospital or physician's EHR system, but most are unable to share information bi-directionally with more than one entity or flow seamlessly into a Health Information Exchange (HIE).

With that being said, PHRs could be poised to make a big

impact on the future of the delivery of health services. Today's providers are shifting their focus from individual visits to entire episodes of care across the care continuum, which has the potential to benefit from digitized patient records. As more providers convert to electronic medical records, one of the next steps towards fulfilling the Meaningful Use criteria needed to receive Federal incentive payments is to achieve Enterprise Integration with their electronic records, defined by the HITECH act as:

“the electronic linkage of health care providers, health plans, the government, and other interested parties, to enable the electronic exchange and use of health information among all the components in the health care infrastructure in accordance with applicable law.”

In short, healthcare providers have to adopt systems that can then interface with other providers to share patient data, and collect public health data for comparative effectiveness research.

Although the death of Google Health this year has led many to speculate that the PHR is an idea too far ahead of its time, Zweena is challenging that notion.

Zweena is a personal health record management solution, as opposed to a standalone PHR. Zweena overcomes the traditional downfall of PHRs by taking care of everything for the patient and bridging the (huge) gap between healthcare providers and patients. Upon request by the patient, Zweena contacts the patient's care providers, requesting their records and entering the record information into the PHR properly. The patient record, accessible via Microsoft Healthvault, is then available for easy exchange with hospitals, physician offices, continuing care communities, family members and others permissioned by the patient.

Zweena is involved in a fascinating pilot program starting

October 2011. Virtua Hospital in Southern New Jersey has contracted with Zweena to provide ALL residents in a three-county area a free PHR with all the heavy lifting done by Zweena. This three-year agreement will be a tremendous test of the concept of the personal health record and the improvement of health and healthcare for these communities.

Zweena CEO John Phelan comments, "Most of us only think about our health and our medical records when we are reacting to a health crisis. By then, it is too late to harness the power of our assembled health information. Zweena gives all of us an opportunity to use the information we have today and be more proactive and engaged with our own health information and the information for those we love and care for."

Image by Mary Pat Whaley

This article was first posted on Technorati.

Google PHR is Going Away – What Did We Learn?



The death of Google's Personal Health Record (PHR) should be a wake up call to everyone about electronic medical records (EMR) – **it's not a walk in the park!**

Granted, the fact that EMR is very complex software is not the only reason Google Health couldn't hack it. Many fine articles and blogs point to under-marketing, an unrealistic reliance on consumers to enter data to complete their own records,

unusually slow adoption by consumers, and a possibly unrealistic revenue model (selling data.) I'm pretty sure the readers of Manage My Practice could have predicted most of that, especially the part where consumers are not incentivized to enter their own health information.

Here's my advice to anyone who wants to capture the health data market:

1. Any personal health record must be **connected to my primary care provider**. I don't want my PHR to be freestanding from my PCP's (primary care physician/provider) EMR. Really wasteful.
2. I want someone I know and trust – maybe someone associated with my PCP – to **show me how to use and understand the information in my PHR**.
3. I want all my other physicians and test centers to **automatically send my records** to my PHR and for it to load without my participation.

Wow, that really sounds like my PHR is an offshoot of my PCP's EMR, doesn't it? Everyone sends the records to my PCP and my PCP gets the data into her EMR, then information feeds into my PHR in a format I can understand. Maybe my PHR resides in the practice's patient portal where it is protected and secure, but I can still get to it wherever I am.

Of course, my PCP is already overworked and underpaid, so this scenario isn't very realistic. Unless...a new HCPCS (Healthcare Common Procedure Coding System) service code is developed for "provider and patient load medical records together" and the insurance companies pay for it based on the fact that the more data the PCP has about the patient, the more customized and efficient the care can be. AMA, are you listening?

Photo credit: Mary Pat Whaley

Talking With Matthew Browning, RN, Family Nurse Practitioner and Founder of “Your Nurse Is On”

☒ When Matthew Browning first described YNIO (Your Nurse Is On), I was really surprised to learn what his product was. I don't know what I expected, but it wasn't the elegant solution to staffing he described.

Here's the description from the YNIO website:

Your Nurse Is On™ was developed in 2000 by a trained Family Nurse Practitioner in response to the inefficient relief staffing procedures found in healthcare today. With today's challenging environment of cost savings and instant communications it became apparent that calling replacement staff one at a time was no longer an adequate solution.

With the improvements in internet telephony that occurred around 2005, we created a system that allows you to call any available nurse to fill your vacant shift. You now have the power to contact many nurses, in any order you choose, on whatever device they prefer. Since the nurses on our system make their availability known in advance, you will never disturb another unavailable nurse or waste your time calling them.

I could really relate to this solution! Who among us hasn't spent hours on the phone filling staff slots, getting coverage for unexpected medical leaves, and trying to piece together

coverage for routine vacations?

YNI0 distills the product down to four easy steps:

1. Scheduler creates a request for staff.
2. YNI0 contacts all available staff – instantly.
3. Staff receives the request and accepts or rejects the shift.
4. Scheduler is immediately notified.

And what are the proposed benefits to a facility using YNI0?

- Save time – system can call dozens of nurses simultaneously
- Save money – no more dollars wasted calling nurses who are unavailable
- Fill shift vacancies – expanded pool of available nurses
- Increased employee morale – decreased shift vacancies can decrease shift call outs, injuries and burnout
- Increased efficiency – leverage technology to save money, save time, quickly fill shift vacancies and save paperwork with our paperless billing and performance tracking systems.

This sounds like a needed solution for practices, nursing homes, hospitals, and home health agencies. I am also fascinated by the creative process of innovation and delivery to the market and asked Matt a few questions about the development of his product.

MARY PAT: Matt, what does it take (emotionally, financially and otherwise) to conceive an idea and bring it to the market?

MATT: I believe it begins with a personality that is inclined to analyze situations and procedures with an eye toward improvement. “How can we make this, or do this, better than we are today?” □ As this behavior becomes internalized and part of our daily routine, we begin to generate ideas, “maybe this could work” □ type of thoughts that can result in some solid

ideas, proposals and hypotheses. This stage of innovative thought is rather common and many people have an idea that could "change the world," however an idea at this stage is often lacking a "vision" of how it can interact with our current realities, change existing processes, improve outcomes, save time and reduce expenses. The basic business infrastructure, legal processes, finances and team that are very important considerations to bring an idea from conception to market are often not understood, at this point of the innovation cycle, by the inventor and are definite challenges. These challenges may be the reason that many potential innovations are never brought to market.

So, besides an idea, and a "vision" of how it fits into the world, flexibility, determination and persistence may be the most required traits for the innovator. The key to this game is teamwork, assemble the highest quality team you can, rely on experts for knowledge outside of your personal domain and remember that the objective is bringing the product or process to the world to make it a better, safer, more enjoyable place for as many people as possible. Success is often a direct result of service to others and bringing your innovation to the world can be a great service.

On the emotional and financial fronts, expect the endeavor to take twice as long as you expect and to cost twice as much as you expect. Having an awesome team and a supportive social network are invaluable to the eventual success. I am fortunate to have a very supportive family that believes in me and our innovation and they have been very tolerant of the extraordinary amount of hours and obligations that are part and parcel of this innovator's life. To summarize, I believe a good idea can become a vision that with a very dedicated individual can become a team working toward the release of an innovation commercially. Hard work, perseverance, flexibility, ability to learn and the ability to delegate are all requisite as well.

MARY PAT: What's been your lowest moment to date in bringing your product to market and what has been your highest?

MATT: My personal and corporate nadir occurred, ironically, during one of the best events of my life, the birth of my son, Arthur. Our product, YourNurseIsOn.com, was struggling through the "proof of concept" phase, after nearly a year in development and design, when my wife had an unexpected, emergent delivery of our son. We were traveling in Florida on a doctor-approved combination business and family trip, when our son decided he was coming into the world, nine weeks early. Aside from a very difficult and dangerous birth experience, we were over 1500 miles from our home in New Haven, CT. Our company was being run from my laptop and mobile phone and I was juggling a fully packed calendar of business obligations all while running from ICU to NICU, for 5 weeks. It was two months before I was able to safely return my family to our home in New Haven. In addition the amazing amounts of time needed for both my wife, Phoebe, and my son, I still needed to meet with potential customers, conduct regular tech meetings, solicit further investment and continue to work on intellectual property issues, technological challenges and personnel needs.

We had invested our life's savings to get to this point and now, with this amazing, yet traumatic family event, we began to question many of the decisions that had brought us to this place and time. Out of time, out of money and out of my home, it was easy to think how much "better" it would be if I "just" worked as a Family Nurse Practitioner as I was trained to do and could bring home a regular ol' paycheck for "only" 40 hours. Those questions never last for long, the "vision," never sleeps, it never relents and it can become all-encompassing and turn us into 4am to 11 pm machines but, occasionally, even entrepreneurs are human ☐

Conversely, our highest point to date has been our attendance at HIMSS 2010 this March. We were selected to present at the

Healthcare IT Venture Fair and after an exciting presentation we were no longer unknowns to the major players in the healthcare arena. When big names like Intel, Blue Cross, GE, McKesson, Blank Rome and the United States of America take note of your product and want to engage in investment, customer and business development discussions, you begin to realize that the power of the innovation is becoming recognized. The time since HIMSS10 has been a constant blur of inquiries, customer demos, partner requests, commercialization deals, amazing pilot discussions, customer implementations and, of course, investors.

MARY PAT: Is this a product that can be affordably scaled for any customer, or do you anticipate the ROI being on target for a specific type/size of customer?

MATT: Our product, YourNurseIsOn.com, is a Software as a Service (SaaS) product that helps allocate the right healthcare staff, where they are needed, when they are needed there, by instant, 2-way text, phone and/or email communications. We are a Software as a Service (SaaS) platform that allows for quick and easy adoption, keeps customer costs low and removes their maintenance responsibilities.

We offer a number of value propositions for the customers including faster speed of fulfillment, decreased nurse vacancy, reduced overtime spending, increased patient-provider contact hours, improved patient outcomes, license management, call order adherence, expanded communications capabilities and amazing compliance reporting performance. Flexible scheduling, with all the extra communications needed, has become a best practice for healthcare workforce recruitment and retention. YourNurseIsOn.com makes these communications effortless. For organizations that rely on communicating with a distributed workforce, to operate around the clock, our solution is quickly becoming indispensable.

The ROI metrics are being compiled presently and should prove

to be favorable for any size organization. We expect the return on investment period to be very brief as we can provide over 8 hours of phone calling in under 30 minutes and provide the 2-way text and email channels for improved efficiencies. Our soon to be announced pilot with a nationally recognized health provider network will soundly demonstrate our scalability for any sized facility, organization or governmental body.

MARY PAT: Where do you want YNIO to be in 5 years?

MATT: YourNurseIsOn.com is focused on excellent customer experience, and service, for every single client that engages our services, and we will continue with that focus relentlessly as we continue to grow and scale our platform. YourNurseIsOn.com is well poised to become the de-facto communications method for healthcare organizations that need to contact and confirm their specialized, distributed workforces on demand. The ability to easily reach specific individuals, that are qualified and available for a specific function, in a quick and easy manner on any device of their choosing will only become more important given the coming increases in healthcare demand and simultaneous scarcity of all healthcare providers. YourNurseIson.com has the ability to efficiently deliver caregivers where they are needed, not only in institutional settings, but in the communities where the majority of care is being delivered. YNIO, with its international patent -pending status will be the communications "glue" that holds it all together.

MARY PAT: Many people are predicting that NPs and other mid-level providers will be the future of primary care if physician shortages play out as expected. What do you think?

MATT: Personally, as a nurse practitioner, I feel that this is all too often the focus of discussions about the future of healthcare and is, just as often the beginning of contentious debate that ends in a turf war between doctors and other

providers. I do not believe that either of us are the future of healthcare. I believe that we cannot possibly train sufficient numbers of providers to care for the onslaught of demand that is quickly approaching. The future of primary care will lie in the hands of the individual, their families and their communities. This will be supported by tele-medicine, bio-sensors and smart homes to begin and eventually lead to caregiver robots and software algorithms diagnosing and treating your ailments:

- A wristwatch, scale and shoes that track your fitness regimen, downloaded nightly into your Personal Health Record and gently recommending tomorrow's diet or workout schedule.
- Personal reminder software to gently prod you to take your medicine, engage in physical activity or to remember a wellness event or medical appointment.
- Accentuated reality software to help make informed dietary, activity or purchase selections based on wellness scales, provider recommendations or personal preferences.
- The ability to export this information to your Electronic Health Record to share with your providers, specialists or family
- A smart home with a bed that signals that Grandma woke up later than usual after a restless night, a chemical sensor toilet that signals she may be a bit dehydrated, a pill bottle that alerts when she hasn't opened it- these types of events triggering personal reminders, check-in requests to a neighbor, visit requests to family, or send an alert to her community caregivers, etc. If no one is able to check on her status, emergency services could be automatically notified.

Couple these technologies with instant, 2-way, verifiable communications systems, and these networks will provide the bulk of care in the near future. There simply are not enough

resources to provide care any other way. I hope to see NPs continue to expand their roles, earn autonomy and continue to provide excellent care to millions of people. NPs, MDs, therapists, etc. are all going to be in short supply and high demand. All of these professionals are important to the healthcare delivery team and will have to be allocated with, supported by and communicated to with advanced technologies to expand their practice reach, improve their collective effectiveness, begin to decrease costs, and continually improve outcomes.

It was a real pleasure talking with Matt and getting to know more about YNIO and more about him (the geek in me enjoyed the geek in him!) I truly appreciate how open he was in the interview. Thanks, Matt!

The YNIO (Your Nurse Is On) website is [here](#). Matt recently guest posted on HealthcareIT Today which can be found [here](#). You can connect with Matt here:

Email

Twitter

LinkedIn

**Google Health's Newest
Version Makes Personal Health
Records Accessible to**

Visually Impaired Users

☒ **Google Health announced today** that the newest version of its patient-managed medical record is accessible to visually-impaired users. Using voice prompts and auditory icons, users of assistive technology are now able to open Google Health profiles and populate them with their own medical information including vitals, conditions, medications, allergies, procedures, test results and immunizations.

Assistive technology such as screen readers, which translate text into speech or text into Braille, offer computer access to the blind, visually impaired and illiterate.

Writing about the launch of Google Health's newest enhancement, Google Blogger and Research Scientist T.V. Raman, notes that

"Google Health gives me a single unified web interface to manage all of my health-related information. Kudos to the Google Health and GWT teams for creating an extremely useful and usable solution!"

T.V. Raman is also the author of Emacspeak, a speech interface available free on the Internet that allows visually-impaired users to access computer applications, including video gaming. T.V. Raman, himself a visually-impaired user, discusses the software requirements to use the Google Health.

"Note that the accessibility support in Google Health requires support from both the browser as well as the adaptive technology in use. At present, we recommend Firefox 3.0 with screenreaders that support ARIA, alternatively, you can also use Fire Vox, the self-voicing extension to Firefox 3.0."

In addition to improving accessibility for users, Google

Health continues to seek relationships with **innovators in healthcare**, including those developing applications for disease management, secure messaging, and research.

Look at Google Health here.