Paper or Electronic Medical Records?
Quality Systems Inc. (NASDAQ: QSII) Has the Answer

March 29, 2011

Closing price of Quality Systems Inc. as of March 25, 2011: $81.99

It was a weekday morning in January of this year (2011) and I had just entered the office of my ophthalmologist.

It was 10:30 A.M. and I was a few minutes early. I approached the receptionist's desk, or more accurately the receptionists' desks, an area with several personal computers behind the counter but with a notable absence of the lateral files with their worn manila folders that one often observes in medical offices.

The absence of the lateral files suggested, I guessed, that the office of Todd Brockman, M.D. had embraced the concept of electronic records. The office manager, or whoever was in charge of expenditures to manage the flow of information that the office produced, encountered, and transmitted, was aware of the productivity improvements that electronic records could produce. Better productivity would mean more revenue and profit for the practice and enable the office to take even better care of its patients.

I was in the office of Todd Brockman, M.D. in Tulsa, for my annual examination, an examination which, believe it or not, I was actually greeting with excitement, or at least with no negative feelings.

After doing some paperwork, answering questions about the drugs I take, the allergies from which I suffer, and the surgeries I have had, one of Brockman's assistants, I remembered, would dilate my eyes and then lead me to a darkened room where I would sit in a comfortable chair watching peaceful scenes of lakes, of mountains, of beautiful homes, pictures designed to calm the patient. Bears would be walking along streams in the Alaskan wilderness, carefree dogs would be playing with each other on a well manicured lawn fronting a house whose owner, judging from her serene expression and relaxed pose, undoubtedly had significant amounts of money invested in Union Pacific (NYSE: UNP), Kansas City Southern (NYSE: KSU), and in Stericycle (NASDAQ: SRCL), investments that made her think that everything must be all right with the world.

The marketing sophistication that had led to the installation of the big screen television and its tranquillizing videos in the post dilation room suggested an office attuned to respect the needs of the patient, an office attuned to the reality of the healthcare world of 2011, a world in which the patient had gained the power to be treated as a client and as a consumer, a consumer that demanded courteous and respectful treatment, a consumer whose comfort, money and time were important.

Brockman's receptionist was on the phone. She hung up and greeted me warmly. Yet I could tell that she was preoccupied, rushed, and a little nervous. I gave her my name. She hesitated for just a second, and then said, "Mr. Russell, we are running at least thirty minutes late. The doctor is running behind. I am sorry, but if you wish to reschedule, we can do that."

I said, "No problem, I can work, I can use the time while I wait." I always have work to do, projects and tasks that I want to do, and ideas I want to consider. Some of the ideas and the tasks mean work but I am not sure that all of it is work, if you define work as something mandatory, imposed by outside forces, and unpleasant. (Do not worry; this letter is going to be long enough,

Quality Systems: Business Summary

The company is the domestic leader in the automation of medical and dental practices, such as physician hospital organizations, ambulatory care centers, community health centers, and medical and dental offices.

> The Company develops and markets healthcare information systems that automate certain aspects of medical and dental practices, networks of practices such as physician hospital - organizations ("PHOs") and management service organizations ("MSOs"), ambulatory care centers, community health centers, and medical and dental schools. The Company also provides revenue cycle management ("RCM") services through the Practice Solutions Division. *Quality Systems Inc. 10-K June 1, 2010. Page 1.*

so I will spare you an extensive philosophical discussion on what work really is.)

While I waited I called Meredith Cothran (this is the same Meredith Bohot who is now married and has worked with me, efficiently and pleasantly, and has helped our clients with many matters for more than five years) to make sure that everything was running smoothly at the office. Meredith was busily working away at her computer, but she had time to ask me how everything was going. I told her that Todd Brockman's office had entered the electronic age. She paused, noting that when she had had an office appointment with her internist Brent Laughlin, M.D. two weeks before my appointment with Brockman, she had noticed that, when Laughlin had entered the examination room, he did not carry a clipboard with a paper chart which contained information about Meredith's health, information that his office had collected over the course of Meredith's visits.

Instead, Laughlin carried a small tablet computer similar in size to an iPad. He placed the tablet into a docking station, allowing him to type notes on a keyboard set up in front of the monitor. (At the start of the letter, I ought to have issued a disclaimer as follows: during the letter that I am now writing I will most likely succumb to the use of jargon, especially, computer jargon. So, "docking station," "interface," "portal," and other computer jargonese may appear in this letter, appearances over which, unfortunately, I have little control.)

I, too, had noticed that electronic records played an important role in Laughlin's office. On my last visit, I was pleasantly surprised when he looked at my medical history on his tablet and referred to visits that I had made to the Urgent Care Center owned by the St. John Health System, visits made when Laughlin's office was closed. He noted my surprise at his access to the center's records, saying that he receives, electronically, a summary of each visit that all of his patients make to the center. I was impressed and I told him so and he noted that his office was one of the first offices to go electronic in the state of Oklahoma.

I like Brent Laughlin and his wife, Lucia. They are down-to-earth and friendly. He is competent and always tells me what is wrong in language that I understand, and always without condescension. Besides, when he works out on the elliptical machine at the St. John Health Club he usually is reading *The Economist*, and seeing him with that magazine makes me feel as if I have a kindred spirit. I have always wanted everyone to know that I read *The Economist*, even though I could never see what real knowledge and usefulness it provided. Its very format, covering so many countries every week, is almost guaranteed, as Warren Buffet would say of a portfolio that was constructed of too many companies, one hundred or more, to have no intelligent or pragmatic focus. In other words, the magazine covers too much. Yet when I saw Brent Laughlin with *The Economist*, and knowing that one of the magazine's strengths

was its thoughtfulness and interest in new ideas, it reinforced my impression of my internist as a good listener, someone receptive to new ideas and to the other person's opinion, and to serious discussion. I had a feeling that he actually reads *The Economist*, a publication which is indeed loaded with much useful information, instead of just carrying it around as I have been known to do.

As I waited in Brockman's office, after I had filled out the usual patient questionnaire, I recalled some of the major events that would change the world of healthcare in the United States. One event was the passage, on February 17, 2009, of **the American Recovery and Reinvestment Act (ARRA)**, a $787 billion dollar bill which has authorized the payment of money to doctors' offices and to hospitals to reimburse them for expenditures made to create a 'meaningful' conversion from paper to electronic records.

I remembered that the passage of the **ARRA** had motivated me to search for companies that specialized in software creation for electronic medical records.

One of these companies was Quality Systems (NASDAQ: QSII).

Quality Systems*: Investment Thesis*

> The diversity of payor organizations, as well as government regulation and changes in reimbursement models, have greatly increased the complexity of pricing, billing, reimbursement, and records management for medical and dental practices. To operate effectively, healthcare provider organizations must efficiently manage patient care and other information and workflow processes, which increasingly extend across multiple locations and business entities. Quality Systems *10-K, Year Ended March 31, 2010, page four.*

The old paper system does not work well. Maybe it worked well before healthcare became complicated and before medicine made so many wonderful advances, ironically creating the need to keep up with an exploding amount of information. But the paper system today is antiquated, inflexible, and slow.

If we can anthropomorphize the American healthcare information systems, and make information systems a middle-aged patient, and overhear him talking to his doctor, we would hear strident, consistent complaints of extreme fatigue and overwork. Today's paper systems are tired, desperately seeking rejuvenation.

For example, a patient presents to his primary or first doctor nerve tingling in his arm. The doctor can attempt to solve the problem himself or send the patient to one of several specialists, such as a neurosurgeon. Medical offices must keep track of referrals and symptoms and the specialist must let the primary doctor know what he or she concluded: what she observed when she saw the patient, the tests recommended for the patient, and the results, and further recommendations. If this is the end of the route, then records are complete.

But often it is not. The specialist sends the patient, dissatisfied with the tests, not sure that the tests arrive at a definitive conclusion, to another specialist. Now we have three sets of reports that must be circulated, making urgent the need for rapid communication, preferably in real time.

We continue with Quality System's 10-K for the year ended, March 31, 2010:

As the reimbursement environment continues to evolve, more healthcare providers enter into contracts, often with multiple entities, which define the terms under which care is administered and paid.

In response, healthcare provider organizations have placed increasing demands on their information systems. Initially, these information systems automated financial and administrative functions. As it became necessary to manage patient flow processes, the need arose to integrate "back-office" data with such clinical information as patient test results and office visits. We believe information systems must facilitate management of patient information incorporating administrative, financial and clinical information from multiple entities. In addition, large healthcare organizations increasingly require information systems that can deliver high performance in environments with multiple concurrent computer users. Quality Systems *10-K For the Year Ended March 31, 2010, page four*.

Eighty per cent of medical records are in paper medium today, creating a huge opportunity for a company like Quality Systems.

There are more patients, more procedures, more institutions involved in billing and collecting money, more branches of medicine, specialties and subspecialties, more knowledge, more government regulations regarding privacy and protection of documents, more of everything but doctors and nurses and other hard-working, conscientious professionals with the almost impossible job of having to be compassionate yet efficient throughout the day, as well as when they are on call many nights and weekends.

With private insurance companies and Medicare flexing their muscles and positioning their octopus-like bodies into every opening of the healthcare infrastructure, demanding more information from doctors and patients, the need for efficient electronic information becomes more compelling every day.

The oligopolistic nature of the healthcare insurance industry powers the creation of more forms, more questions, and more complexity, creating of course not only an expensive bureaucracy, a punitive tax on the delivery of healthcare, but also advancing the need for electronic communication, the most efficient way that doctors' offices and hospitals can manage the burden of extensive and burdensome information that the insurance companies, because of their market position, can demand and can get, making what Quality Systems calls "the reimbursement environment" a truly contentious and often hostile and litigious experience With respect to market power, for example, United Healthcare provides insurance for twenty five million Americans.

My first experience with a "reimbursement environment" came when I was in seventh grade growing up in New York City, before my parents had decided that I was bright but difficult and that they ought to encourage me to go away to prep school at Deerfield Academy in Massachusetts, where I would have to study hard and would wear myself out every day with rigorous and compulsory exercise, and perhaps, if everything went well according to plan, even develop a love for learning. I would have to say that the New England winters were long and dreary, but the plan seems to have worked.

My father would ask me to get some newspapers, some coffee, and other items from the Walgreen's

All businesses face risks. Below is an excerpt from the Quality Systems 10-K filing for the year ended March 31, 2010. Quality Systems operates in a competitive environment, as the materials below indicate.

Risks Related to Our Products and Service

If our principal products and our new product development fail to meet the needs of our clients, we may fail to realize future growth. We currently derive substantially all of our net revenue from sales of our healthcare information systems and related services. We believe that a primary factor in the market acceptance of our systems has been our ability to meet the needs of users of healthcare information systems. Our future financial performance will depend in large part on our ability to continue to meet the increasingly sophisticated needs of our clients through the timely development and successful introduction and implementation of new and enhanced versions of our systems and other complementary products. We have historically expended a significant percentage of our net revenue on product development and believe that significant continuing product development efforts will be required to sustain our growth. Continued investment in our sales staff and our client implementation and support staffs will also be required to support future growth.

There can be no assurance that we will be successful in our product development efforts, that the market will continue to accept our existing products, or that new products or product enhancements will be developed and implemented in a timely manner, meet the requirements of healthcare providers, or achieve market acceptance. If new products or product enhancements do not achieve market acceptance, our business, results of operations and financial condition could be adversely affected. At certain times in the past, we have also experienced delays in purchases of our products by clients anticipating our launch, or the launch of our competitors, of new products. There can be no assurance that material order deferrals in anticipation of new product introductions from ourselves or other entities will not occur.

If the emerging technologies and platforms of Microsoft and others upon which we build our products do not gain or continue to maintain broad market acceptance, or if we fail to develop and introduce in a timely manner new products and services compatible with such emerging technologies, we may not be able to compete effectively and our ability to generate revenue will suffer. Our software products are built and depend upon several underlying and evolving relational database management system platforms such as those developed by Microsoft. To date, the standards and technologies upon which we have chosen to develop our products have proven to have gained industry acceptance. However, the market for our software products is subject to ongoing rapid technological developments, quickly evolving industry standards and rapid changes in customer requirements, and there may be existing or future technologies and platforms that achieve industry standard status, which are not compatible with our products.

We face the possibility of subscription pricing, which may force us to adjust our sales, marketing and pricing strategies. In April, 2009 we announced a new subscription based, Software as a service delivery model which includes monthly subscription pricing. This model is designed for smaller practices to quickly access the NextGen or NextGen products at a modest monthly per provider price. We currently derive substantially all of our systems revenue from traditional software license, implementation and training fees, as well as the resale of computer hardware. Today, the majority of our customers pay an initial license fee for the use of our products, in addition to a periodic maintenance fee. While the intent of the new subscription based delivery model is to further penetrate the smaller practice market, there can be no assurance that this delivery model will not become increasingly popular with both small and large customers. If the marketplace increasingly demands subscription pricing, we may be forced to further adjust our sales, marketing and pricing strategies accordingly, by offering a higher percentage of our products and services through these means. Shifting to a significantly greater degree of subscription pricing could adversely affect our financial condition, cash flows and quarterly and annual revenue and results of operations, as our revenue would initially decrease substantially. There can be no assurance that the marketplace will not increasingly embrace subscription pricing.

across the street from our apartment house. He would say, "Take the cash out of your allowance and I'll reimburse you when you get back."(He was not mean but he liked to continuously test me to see whether I was sharp.) After I had returned from Walgreen's he claimed it hard to believe that what I claimed as the amount of the expenditure was the truth. In those days drug stores had food counters where you could get hamburgers and milk shakes, and he always claimed that I had stopped at the luncheonette counter to fill myself up. So early on I learned how contentious or hostile a "reimbursement environment" could be.

That was my first experience with reimbursement anxiety, an anxiety that I am sure would never approach the anxiety of the accountant in the doctor's office who wonders whether the doctor will ever get paid (by the patient, the private insurance company, or by Medicare) for the emergency procedure the doctor did on a Saturday night, having been awakened at three in the morning to take care of an auto accident victim whom he does not know and who may or may not have the money to pay him for life-saving work.

As we learned more about Quality Systems, my interest grew. We decided to call the company, which is based in Irvine, California, to learn more about what Quality Systems did. So one morning in January of 2010, I dialed the company's number.

The phone rang, and when the operator answered, I asked for the head of investor relations. The operator said, "That's Steve Plochocki." I said, "Isn't he the CEO?" She said, "Yes, but he likes to talk to investors."

This was very refreshing. In contrast, often you get someone in investor relations, and as you are talking to him, you feel as if he is reading from a script. You can hear the excessively cautious legalese, as if he is worried that the legal department is going to review everything he says. Often, too, you recognize the jargonic quality of his sentences and his ideas, but when you challenge the jargon, instead of getting a gracious welcome, you often feel the barricades going up (if we receive resistance from Katie, our portfolio manager, we say she is throwing up barrikaties, though of course this is rare).

It is our job as investment managers, in charge of your hard-earned money, to see what is important, what is not, and then to act. To see what is important often means challenging or pressing a company to deliver information (never illegally) that is not available in a public document such as a 10-K or a 10-Q, or in an annual report, a report which is usually a public relations exercise, almost always with a picture of the chief executive officer on the first or second page, telling the reader, in the best of corporate jargon, that everything the company is doing is "best in class." Yet our mission will not succeed if we are aggressive. We must build a rapport with the company, encouraging them to expand on their statements. We must create a dialogue, a friendly discussion. Creating a dialogue was easy with Plochocki. We asked some tough questions and he never became defensive. He was knowledgeable, friendly, and confident about the company's prospects, providing much information to reinforce my instinct that the company was on the right path.

A few days after we spoke with Plochocki, we took a position in Quality Systems.

As the months went on Quality Systems reported many software wins and the stock price rose, reflecting the company's success.

A few months later, Katie Michaels-Johnson, (the firm's portfolio manager) and I decided to check in with Plochocki. We agreed to talk on January 5, 2011 at 10 A.M. Tulsa time, or 8 A. M. California time.

At the appointed time we called and Plochocki answered the phone promptly. "How are you doing?" I asked. Plochocki said he was nervous but excited and confident. I asked him why he was

nervous and he said that he was in his car in the parking lot of a sizeable hospital complex, where, along with his sales team, he would be making a presentation at 9:30 A.M (his time) to win the hospital's paper to electronic conversion business.

My purpose for making the phone call to Plochocki was to learn more about the $787 billion dollar American Recovery and Reinvestment Act's [ARRA] impact on Quality Systems, and to get more details on the Act, to enhance the information we received on the first phone call with Plochocki.

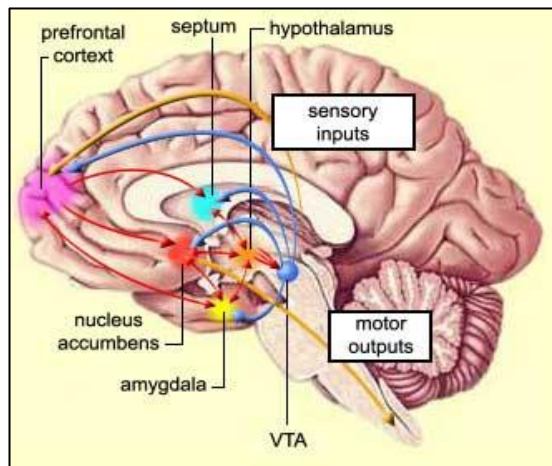
As he spoke, we felt again the energy and enthusiasm he brought to his job, and we print what he said below. We were able to get a virtually verbatim account of the conversation because Katie Michaels-Johnson can type fast, and as Plochocki spoke, she was hammering away at the keyboard. (I made sure to make some coffee for her before we made the call, so that she would be energized enough to keep up with Plochocki.) After exchanging some more pleasantries, I asked this question: how important is the American Recovery and Reinvestment Act for Quality System's future? He answered as follows:

> The big drivers of our entire sector are tied in to the stimulus [ARRA] signed February 17, 2009. The stimulus put us in a position in which it can basically be said that the government has upward of fifty billion dollars in incentives for the medical industry to go paperless and electronic by 2015. The bill that was signed into law stated that in order to qualify for stimulus dollars, a doctor's office or hospital had to communicate electronically in a meaningful fashion on a certified electronic records system.

Plochocki continued:

> The stimulus is a five year run. Money will be allocated every year from 2011 to 2015 if you're an electronic-based healthcare system. To date, about twenty percent of healthcare providers have some form of electronic methodology in place, **so we have eighty percent of the healthcare market to go in the next five years. We think it's going to take the better part of the decade to get healthcare all the way electronic, but the stimulus will kick-start the process pretty aggressively.**

My ears perked up when I heard this. With eighty per cent of the market to go, and with Quality Systems an important player, I suddenly felt warm and fuzzy, as my nucleus accumbens (the section of the brain that anticipates monetary reward) began to charge feverishly.



The brain, with the area that registers the anticipation of pleasure, the nucleus accumbens, highlighted in red.

The nucleus accumbens releases dopamine (the pleasure chemical) when the brain *anticipates* pleasure. The *experience* of pleasure releases dopamine in the striatal dopaminergic system. Eating a delicious helping of

Moo Goo Gai Pan Fred (that is, Moo Goo Gai Pan with Fred veggies, my signature dish at P.F. Chang's in Utica Square in Tulsa, Oklahoma) activates the striatal dopaminergic system, but listening to Steve Plochocki and anticipating Quality System's opportunities set my nucleus accumbens to work. (Menon, Vinod & Levitin, Daniel J. 2005. *The rewards of music listening: Response and physiological connectivity of the mesolimbic system.* NeuroImage 28(1), pp. 175-178). (P.F. Chang's in Tulsa is to Fredric E. Russell as Gorat's in Omaha is to Warren Buffett, a place that is part of my routine as Gorat's is part of Buffett's.)

Later, after we had hung up with Plochocki, we were curious about how Quality Systems publicly described its plan to convert the medical world to electronic form. We went to the company's website and found the following, and realized that it will be expensive for a doctor's office NOT to convert to electronic records.

Stimulus Overview

The American Recovery and Reinvestment Act (ARRA), signed into law by President Obama in February 2009, is a $787 billion stimulus package that includes the Health Information Technology for Economic and Clinical Health Act (HITECH Act), which directly and positively impacts growth for technology suppliers in the healthcare information technology (HIT) sector.

The Stimulus and Healthcare Information Technology

Included in the Act is more than $60 billion in funding allocated to healthcare information technology, which includes significant financial incentives through Medicare and Medicaid to hospitals and physicians who adopt and use certified electronic health records (EHR), such as those provided by Quality System's NextGen Healthcare and NextDDS units.

The Rules

Physicians, physician assistants, nurse midwives, nurse practitioners, and dentists are eligible for $40,000 - $65,000 in funding for demonstrating that they are meaningfully using EHR. Federally qualified health centers and other non-profit organizations are eligible for funding through the Medicaid program. Practices that fail to implement EHR will be penalized over time with decreasing Medicare and Medicaid payment. In other words, medical and dental practices that adopt the Quality Systems suite of clinical applications, including EHR, can access those funds after demonstrating "meaningful use."

Secure Data, Protected Practice

The benefits of medical and dental practices using web-based practice management software are numerous. Time and money is saved as the need for creating an internal server is eliminated. The practice management company handles back-ups and data security, essentially shielding the practice from responsibility and cost if a breach were to occur. Consequently, "Service as a Software" systems such as Quality Systems' NextMD and NextDDS solutions help doctors be HIPAA compliant and reduce liability fees.

Meaningful Use

To access stimulus funds, it is not enough just to adopt EHR; the EHR technology must meet certain criteria and physicians must be able to show meaningful use of their EHR system.

Specific Criteria for EHR:

- CCHIT Certified® 2011 Certification
- ePrescribing Functionality
- Interoperability and Communication with External EHR Systems
- Clinical Quality Reporting

Quality Systems, Inc. website, March 16, 2011(http://www.qsii.com/stimulus.shtml)

One thing is certain: To get the stimulus money for conversion to electronic records, you have to play by the rules. A medical office will have to effect a "meaningful conversion to electronic records." What this means is not clear, at least to me, but one thing is sure: it will be no piece of cake to get the stimulus money. A doctor's office will have to show Medicare that it has made significant moves toward electronic records. What more effective way than to demonstrate meaningful use to the Medicare auditors, who often virtually sleep at many hospitals, than to show these auditors the bill for paper to electronic form that Quality Systems is all too glad to provide? "Meaningful," I am sure, will mean buying a lot of Quality Systems software.

Not everyone is crazy about the advent of electronic medical records. Not everyone believes that there is a good payback for the adoption of electronic records. Lynn Frame, M.D., a highly respected gynecologist and a friend of mine whom I see a few mornings every week at the St. John Health Club, resents the fact that he "will have to spend fifty thousand dollars to convert [his] office into electronic recordkeeping mode."

Plochocki, who must have had more than three cups of coffee at Starbucks before he talked to us, continued as follows:

> Here's an easy example to understand. The incentives are aligned for doctors and hospitals. It's a garden-variety through-practice deal.
>
> Take a deal like we did two quarters ago: a hundred doctors. Now in the stimulus a doctor is entitled up to $44,000 over a five-year period if he files electronically. This is done in five different allocations. At the beginning of 2011, a physician is entitled to $18,000 if filing electronically for 2011. In 2012, it's $12,000; in 2013, it's $8,000; in 2014, it's $4,000, and in 2015, it's $2,000, for a total of $44,000. Beginning in 2015, the government will start cutting reimbursement, by one per cent in 2015 up to a five per cent reimbursement cut in 2019. It's all carrot and then all stick.
>
> So, a hundred doctors bought a hundred licenses. At $10,000 each, they gave us a million dollars. We then embarked upon an implementation and training process. We typically charge ten to twelve per cent of the license fees for this process. The reason for the variance is logistics. If it's all in the same facility, it'll be ten per cent; if it's in five different facilities, it's going to be closer to twelve or thirteen per cent.
>
> Say it's ten per cent. They give us $1.1 million in the first three months of the deal. Then, once

it's fully operable, we charge them about eighteen per cent of the license deal, or $180,000 annually on an ongoing basis for maintenance. All upgrades, enhancements, the guarantee to keep them meaningful under the government program, twenty-four/seven coverage, and any other requirements based on payers and pilot programs. It's concierge service to keep them advanced and moving forward.

Then take the incentive. If those hundred doctors get their full $44,000 each, they get $4.4 million over a five-year period. That might help a bit with the cost and the math. They'll have a lot of free cash tied into what they invested in their systems.

I always say I'm an old war horse. I've been running healthcare companies for over thirty years. The government didn't even have to do that. Is that enough money? Sounds like a pretty good deal to me. But they didn't have to do that. They could have just said, if you're not electronic by this date and time, you're not approved under Medicare, but they didn't.

As a matter of fact, people always ask me, how did they come up with that $44,000 per doctor? You'll have to ask the finance committee, because I have no idea. All I know is it more than covers the investment. We have our government liaison officer Charlie Jarvis and medical director Dr. Sarah Corley in Washington but even they don't know. I say, Charlie, people are always asking and he goes, I don't know, we can't get a clear answer on it. Well, it doesn't matter, clearly it's enough of an incentive and that's all we care about.

It's a unique time. I have built about four companies in my career, and I've been in businesses before where I had eighty per cent of the market to go and had some of the best products and services to offer and that's great. But I've never been where I have eighty per cent to go, the best products, *and* an independent third party to push the market to me faster with fifty billion dollars in incentives.

Wow, my nucleus accumbens was really firing now. A market in its infancy, a dominant player, and the federal government through Medicare indirectly subsidizing the companies producing the software for the conversion to electronic records. Add the factor of the entrenched nature of software and the investment in Quality Systems, I thought, could be a home run.

The medical world has been using electronic records for decades, usually to make appointments and for billing purposes, to note that bills have been sent, accounts receivable have been created, and cash has been received, either from the patient, or the insurance company, but apparently going electronic now means something more, doesn't it, I asked him.

Good software produces recurring revenue.

What do I mean by 'the factor of the entrenched nature of good software'? Once a software system is in place, and provided there is decent maintenance and good upgrades, the user is extremely reluctant to replace the software with a new system. To change the software means a lot of money spent, and many risks of things going wrong during the replacement or conversion, especially when you are dealing with software as complicated and as expensive as the software that Quality Systems creates and installs.

In our offices, we have used the same portfolio management system for more than twenty years. It is excellent. Of course, from time to time we have considered other investment software, but we always have come to the same conclusion: replacing our software will not achieve the improvement that the energy and time would demand. And every year the company that creates our software increases our maintenance fee by five per cent.

Plochocki answered as follows.

> We're at the point right now like when you have a home built. The foundations have been poured; the frame is up; the floors are layered, and now you have to bring us in with the tool belts to wire the house so you can complete it. That's our job. We're the contractors. Our job is to wire the house so the government can reform it.

While Plochocki was speaking, I did force myself to keep perspective, to remember that the conversion from paper to electronic will not be effortless. Every doctor's office, every hospital making a conversion from paper records to electronic records will not experience an easy transition. Here are some memorable incorrect assumptions in business: the check is in the mail, the conversion to a new software system will be easy, and my investment letters will be short.

In fact, training costs are significant, not just in money but in time and also in tension when you convert from paper to electronic form.

Plochocki continued:

> The bigger issue will be that the operating practices have been so historically paper-based it will be a little more difficult to move to an electronic based system. But if you look at it, we've brought 2,700 group practices into the electronic world over the last ten years, and every one of them has grown, expanded, and improved return on investment by moving to e-methodologies and off of paper. *The real key is that the payers, not just the government, who are funding it, are over time not going to have the capital to interact with any provider on an information or billing basis unless filings are electronic.* So we're moving into a new modern era of healthcare that's going to be a requirement if you're going to practice medicine. Some practices may think it's a voluntary thing, but it's not. It's going to be a requirement for practicing medicine, and the sooner you get there the more opportunistic it will be for you and your marketplace.

Plochocki took a breath, and we thought about a *The Wall Street Journal* article on the conversion of records from paper to electronic form:

Electronic records also require doctors to change how they go about their daily work. During routine office visits pediatricians typically wait until the end of a visit to check whether a child needs vaccinations. Now, they have to have that discussion at the beginning and then order any necessary shots on their computer so a nurse will have them ready at the end.

At Yale-New Haven Health System and the Yale School of Medicine, training accounts for about 3% of the $250 million five-year budget to implement [an electronic records] system, according to Chief Information Officer Daniel J. Barchi. But including the time that the physicians and nurses will spend learning the system rather than performing their clinical work, it's more like 10% (Hobson, Katherine."Getting Docs to Use PCs." *The Wall Street Journal.* March 15, 2011).

Plochocki took a sip of coffee, and I thought, how did he get all his energy? Does he have electronic records at home that save him time, money, and energy, energy that he can then expend advancing the cause of Quality Systems?

On a macro basis again the decade we're in will be dedicated to healthcare reform. The stimulus bill is essentially the front piece of the reform. The only way the government and payers can start managing healthcare in a cost effective way is to get it wired, and then in the second half reforms will take place. We have to take one sixth of the economy to an

Meredith Cothran digs in to her digiChart during lunch

Every year patients must update their medical history before seeing a doctor for an annual visit. This usually takes an additional twenty minutes to fill out and update forms while in the doctor's office. So I was surprised when the assistant at my doctor's office told me that she would email a link to me so that I could update my history online.

I decided to pull up the email which contained the link to the Patient Portal for my digiChart using my iPhone while I was grabbing lunch at Chipotle. I took a bite of my burrito bowl and logged in to my digiChart. I was able to update my history while finishing lunch, and the doctor's office was notified that my history had been completed before my visit.

Electronic health records (EHR) could save my doctor and his staff time, but my time as well. I also felt more inclined to include details about my history that I may have otherwise left out to save myself from having to scribble the information hurriedly on the forms so as not to delay my appointment with the doctor further.

This way my doctor had my digital history before I even came in for my visit. It was easy for him and his staff to access and I did not have to bother with forms during my visit. I was able to check in and see the doctor right away and the nurse and doctor were able to conveniently scroll through my information and type in additional comments on a laptop as we chatted.

Meredith Cothran

> acculturation of moving off paper onto systems. It will go through a system of conversion. When we do a deal and take a group process off paper and onto an electronic system, we'll help them load all the information on their current active patients. On a going-forward basis, any inactive patients who become active will be loaded into the system. So as you work through a year or so you get to the point where everything's systemized and nothing's done on paper. As far as old patients, you still have to hold records for seven years and those paper records will still be there.

Plochocki continued:

> As a matter of fact, the group which assesses electronic medical records for functionality, which includes storage criteria, in their assessment which they did in the quarter ending December 2009, they went through all the electronic medical record products in the market and came back and concluded that we ranked, through our NextGen product, we ranked number one in all functionality areas for small, mid-, and large-group practices. It was the first time ever that one product swept all three physician groupings simultaneously.
>
> So I'll say, today we have the best capabilities in that area today. Now are we going to get better? Sure! That's how we stay at the top. We work at this stuff all the time.

I had been thinking about Quality Systems and our phone call with Plochocki when I suddenly realized that I had yet to complete the forms that Brockman's receptionist had asked me to complete. So I returned to the task at hand and gave Brockman's office all the data they wanted about my health. When Brockman's nurse came for me, I followed her into an office where she dilated my eyes.

After dilation and some time watching peaceful scenes, a nurse led me into a room where I waited for Brockman. Soon he came in, trailed by a student who was following Brockman as he moved from one patient to another. I've known Todd Brockman for a long time, and he used to exercise at the St. John's Health Club, but as I noted to him I hadn't seen him there in a couple of years. He explained that he and his wife now had personal trainers and did not use the health club. So I grabbed his bicep and said, "You are in pretty good shape. I guess I will do what you tell me to do during this appointment." He laughed.

I could see as Brockman worked on the computer that his office was now able to do more than just bill. It was able to enter vital, critical information so that he could get a much more detailed and organized picture of the status and history of my ophthalmological health.

For example, as he leaned toward me and told me that he could get my vision a little bit sharper for driving at night and during the day, I could see that he was updating the strength and acuity status of my eyes and comparing today's look or view with what he found at my last visit. He also noted that I had a very mild cataract, which, he said, someday we might have to take a look at. By noting this incipient condition in his records, he had everything pertaining to my eyes in one convenient place, could be conveniently moved around, so he or his nurse or his billing department, if necessary, could have convenient access to the information he had just entered into

the system, a far cry from cumbersome paper records.

Todd Brockman seemed to be at home with electronic communication. He is an affable type who seems to adjust to change easily. But not all of us do. Some of us are stubborn and recalcitrant, and resist change. Hospitals are offering training any hour of the day or night, converting vacant buildings into training facilities and using computer programs to get physicians up to speed quickly.

Postscript: My friend, John Fucci, M.D., a highly respected Tulsa gastroenterologist does not think much of electronic records. They are not worth the cost, he says, and they will inadvertently produce more unnecessary information. I hope his prediction is correct because that will surely mean more business for Quality Systems.

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As of the close of business on **March 25, 2011**, clients and employees of our firm owned **48,365 shares** of **Quality Systems Inc.** with **a market value of $1,182,001.15**.

We may liquidate, decrease, or increase our position in **Quality Systems Inc.** at any time, without notice before or after we do so.

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Fredric E. Russell has a B.A. from Swarthmore College in Swarthmore, PA; and an M.B.A, and a M.A. from Washington University in St. Louis, MO. He also holds the CPA certificate and has taught accounting and finance at three universities. He believes his love for writing and his usually correct grammar come from spending four years learning the English language at Deerfield Academy in Deerfield, MA, and from reading everything well-written he can find.

Katie Michaels-Johnson and Meredith Cothran made important contributions to this letter.

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You may read more about us, find other investment letters, and see the details of our record on our website: *www.fredricerussell.com*.