

Medical Home

NEWS

Enhancing Primary Care through Telehealth

By Charlene McFeeley, MSN, NP-C, LNC, NLCP, SANE, CME and Barbara Pyle MSN, MBA, CRNP, FNP-BC, COHN-S, CME

According to the Agency for Healthcare Research and Quality (AHRQ), the primary care system in the U.S must be revitalized to achieve high-quality, accessible, efficient health care for all Americans.

The primary care medical home, also referred to as patient centered medical home (PCMH), health care home, and advanced primary care, offers a promising model for transforming the delivery of primary care.¹ This model promotes patient centric, timely access to affordable quality care. Studies demonstrate that PCMH reduces hospital readmissions, costs for chronic conditions, and emergency department utilization.²

AHRQ further recognizes the central role of health IT in successfully operationalizing and implementing the key features into the medical home model of care. Building accessible, and high-quality health care requires workforce development and fundamental payment reform.³

With eight billion mobile devices in use in the world, innovation will not cease. A recent Harris Poll indicates that 64% of patients are likely to engage in a virtual visit, if available with their own provider.⁴ Technology will greatly impact how primary care providers and patients interact to meet health care needs.

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Beyond the EMR: Technological Tools and Skills Needed in Patient-Centered Medical Homes

By Denise Woodworth, MBA, CHI, PCMH CCE; Nyann Biery, MS; and Kay Werhun, DNP, MBA, RN, NE-BC

Ask what technology is needed to transform primary care practices and often suggested is the Electronic Medical Record (EMR).¹ However, technology skills and technological tools needed in the outpatient environment often exceed the EMR alone.

Leveraging technology can improve care quality and facilitate delivery of proactive care. In order to deliver proactive care, skilled professionals need allocated time and they need data. Yet having access to data does not necessarily equate with using data in an informed manner. In some cases, additional technological solutions are needed. In other cases, the people working in a practice need training and coaching.

Beyond clinical changes, which are universally recognized as constant, the technology and software in use in health care continues to change and evolve. Many people who have expertise in using their EMR are not comfortable using software which is often associated only with the business environment. People in all practices could benefit from recognizing and admitting their skill gaps. Leaders should consider that technical skills are not only pertinent to funding and training on EMR systems; but additional skill maintenance, training, and support are also required.

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Editor's Corner

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Senior Editor, *Medical Home News*

We continue with our op-eds and brief reports from the field this month with a commentary from Israel Lifshitz on medical devices.



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Why Healthcare BYOD Strategies Must Strive for Data Security, Not Device Security

Health BYOD culture can be seen as both the future for business communications as well as one of its most complex change management challenges.

But as daunting as it may seem to implement a secure BYOD policy effectively in the private sector, those trials pale in comparison to the healthcare sector.

In an industry that requires using more equipment and devices than most, the convergence of smart technology, automation, and sensitive patient and medical data can be viewed as the perfect storm for BYOD security failures. Data breaches and medical device malfunctions span the compliance and liability spectrum, carrying with them significant financial and legal repercussions.

Finding sustainable solutions requires understanding the industry's largest concerns and from where they originate.

A Mobile Workforce Equals More Devices at Risk.

Doctors and other healthcare practitioners embody the word mobile like no other. Healthcare workers are constantly moving from one medical facility to another, and they are expected to deliver analyses, diagnoses, and treatment plans in a relatively expeditious manner. They're perpetually accessing medical and patient data on the go. And expectedly, this leads to many lost and stolen devices. Cloud security broker Bitglass published a [Healthcare breach report](#) in 2014 that revealed lost and stolen devices led to 68% of all data breaches in the industry since 2010.

Too many of these devices are not even sufficiently protected by basic passcodes and other security settings that users can apply. It's clear that healthcare providers need to devote more resources not only to security, but also to educating practitioners and instilling a sense of urgency to protect PHI (Personal Health Information) on their devices. EHRs are worth 50 times the black market value of a credit card because medical and patient demographic data can't be cancelled and remains valuable to thieves well after their theft is reported. Data breaches violating HIPAA legislation will run the provider a fine as high as \$1.5 million.

The need for a robust communications program to educate all applicable staff on why they must be mindful of these risks and how to employ security measures on their personal phones should be mandatory and should require follow up to ensure the staff is applying these practices.

So Many Sign-ons, So Little Time.

Imagine having to log in repeatedly to several different electronic medical databases, applications from several different PCs, and devices all in the same day. Now imagine that each log in process for each client can take up to seven minutes just to complete:

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Patients, Payments, and Productivity in a Pediatric Practice

By Edward A. Nichols, MD

In my memoir, *Fade to White*, I wrote about the problems that I had setting up a private practice in New York City.

After my military service in the United States Army Medical Corp Reserve, I had taken a job at the Neighborhood Health Services Program (NHSP) on 100th St. in New York City. One year into that, I was asked by the director of pediatrics if I would see a patient at the hospital's private doctors' offices. A parent had asked for a black male pediatrician, and he called me.

I saw the two boys, who had asthma, and treated them. They had recently moved to New York.

Their mother asked me, "What is your fee?"

I answered, "I have no idea."

She said, "I usually pay fifty dollars," which she pressed in my hand.

Then she said, "When would you like to see them again?"

I replied that they might ask Dr. Stevenson. They both agreed that I should follow the children in the private doctor's room at the hospital the following week. Well, she told her friends, and they called for appointments.

That's how it started in 1970.

Soon, word spread that I was opening up a practice on the west side. I was soon asked if I wanted to rent an office on Claremont Avenue. They showed me a wonderful place on Claremont Avenue across from Barnard, which I could not refuse.

So, there I was with a large office and very few patients to start with. I decided I would keep my job at the NHSP "three-quarter time," and work "half-time" in my new office. I was taking a big leap. Everything was fitting together. The practice was installed in its new home. I was happy.

The photos of me at the time were incredible. I had black hair and a full beard, and I wore a white coat at the office. I was so proud. I just knew I had arrived. I was seeing quite a few patients, but of course not charging as much as I should have... Who could know? I had no one to teach me, and everything to learn. Each step of the way was a new adventure.

I could never calculate how much money I lost while I was learning how to practice medicine, but there was no one to teach me about billing. I did have a great boost in the early days of the practice through the help of Dr. Gil Fuld, who was gracious enough to refer a few hundred of his patients to me. He was leaving his practice in New York, and moving to carve out a new life in Keene, New Hampshire. Oh, happy day when they started coming to see me!

From the very first instance of seeing a private patient, I had no idea how much to charge. There was no one even to ask; all the other doctors who were practicing medicine were very tight-lipped about how much they charged, how much they earned, what the expenses were, and how to make a profit. I had to learn that it didn't matter how much money came in, but how much you took home. I didn't even know how to bill properly, and I couldn't even instruct my medical assistants on how to do it. For a while, it was the blind leading the blind. I was living on the cash that we earned.

I soon learned that my first medical assistant had no idea how to collect the money. Most of my new patients were also friends of mine who never even paid. It took a while for me to replace her.

I soon learned that my first medical assistant had no idea how to collect the money. Most of my new patients were also friends of mine who never even paid. It took a while for me to replace her. I then learned that there were two kinds of assistants: those who worked well in the front office (meet and greet patients, triage, answer phones, make appointments and referrals with specialists, and also collect fees or bill insurance), and others who worked better with me in the examining rooms prepping patients for the doctor (measuring weight, height, testing vision and hearing).

Many months later, when I got a new medical assistant who did work with another doctor, it became apparent that I had to make incredible adjustments to my practicing medicine. I had no problem seeing patients and doing physical examinations and talking to patients in the consultation room, but I had no clue how to bill (and what to bill), and how much to charge for any procedure.

Thank heavens after three years in practice, I hired a new medical assistant, Erika Martin, who told me that I was charging too little and billing too much. I was flabbergasted, but thank heavens she took charge. For the first time, income was coming in and bills were paid on time. Fortunately, she was Venezuelan and spoke excellent Spanish. That helped me, since I spoke Spanish like a five year old from what I learned in high school. She kept on reassuring me that things were getting better.

From the very first instance of seeing a private patient, I had no idea how much to charge. There was no one even to ask; all the other doctors who were practicing medicine were very tight-lipped about how much they charged, how much they earned, what the expenses were, and how to make a profit.

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Patients, Payments, and Productivity in a Pediatric Practice...continued from page 3

During the next 10 years, we went through all the processes of having a two-tiered system: private patients and Medicaid patients. Filling out the insurance claims was incredibly time consuming and often resulted in denials from the insurance companies. Often we did not resubmit the claims with different codes, and so we lost a lot of money in the process. Again, it was a long and cruel learning process. It seemed the insurance companies delighted in being picayune about the exactness of the codes we submitted. As an aside, we learned from parents who worked in the insurance claims department that the insurance companies counted on not paying the doctors 20% of the claims. One even said, "We know doctors cheat."

Years later, we used computers to keep records and also to build; this was an adventure. With time, HMO insurance policies were playing a major role in the practice. They were certain kinds of concepts and fees for services that we had to get used to. We learned how to resubmit claims immediately, which affected the turnaround of claims and the cash flow.

We had to learn how to increase cash flow recall of patients, and even marketing for new patients. I gave out my business cards wherever I thought they would be helpful. Most of my new patients came by word-of-mouth and not through referrals from the hospital with which I was affiliated. In fact, it increased competition among practicing pediatricians and the pediatric departments to get more Medicaid and also private patients in their roster, but this situation suited me well. At least it was working for me. I joined all of the HMO insurance programs as soon as they came out. Many other pediatricians refused to join the HMOs and soon lost many of their patients to practices like mine who accepted them.

When I took over Dr. Tom Patrick's office in Harlem, word went out quickly to his patients. In fact, Dr. Patrick hinted that we were related. He had known my mother when they were young. She always told him that I would take over his practice. I was happy to have an additional office with an established practice -- Dr. Patrick had started the office in 1937, and this was 1982.

It did take a few months that seemed very long for patients to start coming in for their school and camp physicals. But as word of mouth progressed, the practice became so large I had to hire other doctors to work better. Luckily, I found a few doctors who worked at Harlem Hospital who were eager to join me in the practice part time. Over the years, they have come and gone, started their own practices, retired, and even passed away.

It was a very busy 20 years.

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As an aside, we learned from parents who worked in the insurance claims department that the insurance companies counted on not paying the doctors 20% of the claims. One even said, "We know doctors cheat."

Beyond the EMR...continued from page 1

When practices decide to apply to NCQA for Patient-Centered Medical Home recognition, there is a heightened need to use other software, including spreadsheet and word processing.² Even using the tools to complete the NCQA application and their Interactive Survey System (ISS) requires a level of technical savvy.

Three examples of using technology successfully to advance proactive care are seen at Lehigh Valley Health Network (LVHN) and are provided below. One speaks to improving care transitions for high-risk patients; the others speak to building technical skills in several Patient-Centered Medical Home practices that have applied or are applying for NCQA recognition.

Care Transitions. LVHN implemented a multifactorial model for inpatient to outpatient care transitions. First, a technology-based solution was needed. A user-friendly web-based program, Graphical User Interface (GUI), was built by our clinical informatics team and combined data from multiple electronic patient documentation systems. Through use of the GUI, data became available to notify practices of their patients in the hospital. This single source of consistent information was the foundation for a standardized discharge reconciliation process.

An algorithm (described elsewhere)³ based upon chronic disease states, poly-pharmacy, abnormal clinical indicators, and resource utilization to identify patients at high-risk for resource utilization was created. This registry is presented to clinicians who use their clinical judgment to add or remove patients from the high-risk registry.

Critical to the success of the work was the creation of Community Care Teams (CCT). The CCTs were designed and implemented to work with the high risk-population. The mission of the CCT is to promote health behavior change by providing comprehensive integrated care to support the primary care practice and address the physical, socioeconomic and psychosocial needs of the high-risk population.

Patients can receive one on one support from any one of four specialists, including but not limited to a nurse care manager, a social services care coordinator, a behavioral health specialist, and a clinical pharmacist. The CCT works to help keep patients out of the inpatient hospital setting by supporting and promoting health behavior change and transitioning care support within the outpatient primary care setting. All contacts with patients are documented within the EMR to enhance communication, and are tracked using the custom-built GUI.

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Beyond the EMR....continued from page 4

Each day primary care practices log onto our intranet and securely receive their list of admissions and discharges that include information such as select inpatient labs, utilization, high-risk status, disposition, and the names of inpatient providers. Each practice follows a standard process in reconciling our patients' discharges in an efficient, predictable and measureable manner within the EMR. The goal is to reconcile each of our patient's discharge within two business days of the patient's discharge. LVHN tracks each practice's performance and presents it on an electronic dashboard, which is available to all on our network's intranet.

Identification of high-risk patients upon discharge was implemented, supported by the CCT care manager, performance measurement, transparency and research on interventions, and the inclusion of care transition metrics within the practice. As a result, we have experienced impressive outcomes on admissions, readmissions, and emergency department utilization as well as reports of improved patient and employee satisfaction. Previously published data show that when the CCTs were first initiated in July 2012, the network's practices reconciled 25% of hospital discharges within two business days. By July 2013 we were able to nearly double our performance to 47%³. Coincident with this increased performance rate, the work of the CCTs on all high-risk patients has seen impressive outcomes whereby high-risk patients in CCT practices are 34-45% less likely to have an unplanned admission/readmission than high-risk patients in practices without CCT.

Building Technical Skills in PCMH Practices. Literature shows PCMH has gained momentum as a means of transforming primary care and that Practice Facilitation (PF) can be a vital resource to support transformation efforts.⁴ A cross-disciplinary Practice Facilitation team consists of three coaches from three different departments. Each is allocated on a part-time basis to work with practices on the NCQA applications process. The application is a goal, but the focus is on PCMH capacity building. The Primary Care Practice development goes across Pediatrics, Internal Medicine, and Family Medicine and includes residency practices.

While working with in practices, the facilitators observed that practice members were frequently unsure and even unaware of some technology tools at their disposal. For example, prior to the creation of the CCTs and prior to developing the GUI system, there was a Business Information System with registries useful for clinical initiatives. The access to data existed, but the data needed to be exported to Excel, analyzed, and prioritized so that action (proactive patient care) could be taken. Part of practice facilitation was to insure comfort with use of registries and manipulation of data. Improved technical skills allowed practices to further their existing outreach and document evidence of preventive and chronic conditions selected for the NCQA application. In all practices seeking NCQA recognition, clinical quality improvement initiatives were based on registry data which was tracked over time.

Another opportunity for skills development was presented with the use of SharePoint, which is a Microsoft team collaboration software tool. A SharePoint site was developed to collect documentation and evidence useful for NCQA applications. Practice members were trained on using the software to access and share that evidence. Saving resources and team building is part of PCMH development. This proves true not only for the clinical team members. Technology skills building and team collaboration was enhanced through use of both SharePoint and registries. These are just two examples of how improving software skills in practices helped with transformation, enhancing efficiency, and with applying for NCQA recognition.

The PF team has assisted 15 practices that received either Level 2 or Level 3 NCQA recognition. This includes four Internal Medicine, two Pediatric, and nine Family Medicine practices

Practice Staff Communication with Technology. LVHN has begun to employ an instant messenger program for communication among all practice staff. Historically, if there was a question about a patient, it could require a phone call to the back office or someone leaving their station and interrupting a patient encounter to get an answer. Now a practice member can ask a question without leaving their computer. If it is a simple question, the response is quick, and most times any patient present is unaware of the interruption. O'Malley et al (2015)⁵ showed that although in-person communication is important, the use of the EMR and instant messaging enhanced communication in some practices.

This was observed within one family medicine practice. The nurses would send messages to the clinician about their next patient, or ask clarifying questions about vaccines for a patient. This would occur without knocking on the door to interrupt the clinician interaction with a patient. The clinicians noted that this saved them time and was preferred, because the patient usually did not notice the communication, as the clinician was already using their computer to enter information in the EMR.

Discussion. We have demonstrated, with three case examples, how technology has been employed at one health network to facilitate the development of patient-centered medical homes. The use of CCTs and the technology associated with it reduces hospital related utilizations, increases access, has a population health focus, and allows for comprehensive, patient-centered, high quality care. Utilizing instant messaging tools in a practice setting increases the pace of staff communication and prevents interruption of clinician visits with patients. Practice facilitators enhance practice use of registries and introduce SharePoint for data-sharing.

Promoting ongoing quality improvement efforts and building staff efficiency are the result of building technical tools and skill sets. There is significant opportunity present and a need for technology beyond the EMR in the PCMH.

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Enhancing Primary Care through Telehealth...continued from page 1

Traditional health care means patients wait for appointments, sometimes miss work, and often incur travel expenses. Patients are expected to discuss all their medical conditions, medications, preventative health needs, immunizations, social concerns and spiritual issues in 15 to 30 minutes. This is not appealing to a patient and is equally difficult for the primary care provider. Clearly, it's not enough to just offer care during the course of the day and via telephone after-hours.

Telehealth serves as an alternative to the traditional patient encounter. There are several modes of telehealth transmission. Store-and-Forward (SAF) involves the acquisition and storing of clinical information (e.g. data, image, video) that is forwarded to another site for clinical evaluation. In real-time telehealth, the provider and patient interact via live videoconferencing online for diagnosis and treatment for a variety of conditions.

In remote monitoring, the patient has a central system that sends information from sensors and monitoring equipment (e.g. blood pressure monitors, blood glucose meters, oxygen saturations) to an external monitoring site. This can be done in either real-time or SAF mode. HIPAA compliance is essential with all modes of transmission.

Telehealth has been used for many acute and chronic conditions in various areas of healthcare with demonstrated improvements (e.g. neurology, cardiology, long term care, occupational medicine, maternal fetal medicine, radiology, dermatology, behavioral health, pediatrics, ICUs, and schools). In primary care, providers can use telehealth to fill gaps in care, meet many must-pass guidelines, and address some critical factors for PCMH 2014 standards.

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Telehealth Use Cases in Primary Care

PCMH 1

Patient-Centered Access: Providing same-day alternative types of clinical encounters for routine and urgent care outside of regular business hours.

Superficial Laceration

Mike sustained a superficial laceration of his right hand while working on his car on Saturday evening. A telehealth visit with his PCP was scheduled promptly. The PCP visualized the wound and determined no suturing or antibiotic was needed. Mike was given wound care instructions. His last Td was in 2004, so a Tdap order was e-scripted to Mike's pharmacy. After Mike received his immunization that evening at the pharmacy, the pharmacist forwarded Tdap notification to the PCP.

PCMH 2

Team-Based Care: Providing continuity of care using culturally and linguistically appropriate team based-approaches.

Brain Tumor

Steve is a 45 year-old male who was newly diagnosed with a brain tumor. He requested a second opinion with a tertiary facility that specializes in brain tumors to better understand his treatment options and prognosis. Steve's PCP initiated a telehealth visit amongst the patient, neurosurgeon, and adult children living in another town. The neurosurgeon reviewed the diagnostic studies via the telehealth platform and recommended non-surgical treatment options. The next week, the PCP facilitated the consult with the radiation oncologist and integrative medicine team remotely for ongoing care coordination. Steve could not travel due to weakness. A telehealth visit saved him time and money while offering access for second opinion care. (Note: some telehealth platforms allow for a multi-disciplinary team approach with access up to 8 individuals on the site simultaneously.)

PCMH 3

Population Health Management: Providing clinical data to manage the health of an entire patient population.

School Health

A school has 80% of students qualifying for federal subsidized lunch programs. The school nurse has identified an obesity problem in the student population. Through incorporation of telehealth, students and parents receive after-hours education and coaching regarding proper nutrition, exercise, weight management, and health risks of obesity. The student logs used in the telehealth process show reductions in BMI, increased activity levels and improved nutrition in this specific population.

Additionally, the school extends the telehealth services to include acute and chronic care management for children during the day with their PCP or pediatrician. This allows the school nurse, teachers and health care providers to communicate more effectively to improve the health of students.

The school nurse has identified an obesity problem in the student population. Through incorporation of telehealth, students and parents receive after-hours education and coaching regarding proper nutrition, exercise, weight management, and health risks of obesity.

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PCMH 4

Care Management and Support: The practice plans, manages and coordinate care.

Depression

Tim is a 39-year-old male with a previous history of situational depression. He was treated with an anti-depressant and counseling with a good response. Tim stopped his medication 4 years ago and remained functional until now. He is now experiencing difficulties with both work and marriage. The PCP conducts a thorough history and depression survey, assesses appropriate labs and then prescribes an antidepressant. Arrangements are made for counseling via the telehealth platform from the patient's home to accommodate the patient work schedule. There is shared decision making amongst Tim, the PCP, and the behavioral health providers.

PCMH 5

Care Coordination and Care Transitions: Systematic tracking of tests and coordination of care.

Abnormal Lab

Jane had an elevated TSH. She had no prior diagnosis of hypothyroidism. Four weeks later, Jane had a repeat TSH drawn while she was out of town visiting her mother. She scheduled a telehealth visit with her PCP and the diagnosis of hypothyroidism was confirmed. Thyroid medication was prescribed electronically with repeat labs ordered via the EHR. Jane's care was enhanced through accurate diagnosis, treatment and education via a telehealth visit.

PCMH 6

Performance Measurement and Quality Improvement: Improved clinical quality, efficiency and patient experience.

Wellness Group

Five patients are identified in the practice that are ready to quit smoking. A stop smoking telehealth clinic is scheduled every Saturday morning for 30 minutes. Education is provided about tobacco cessation, medication options, stress management, proper nutrition, and exercise. After 8 meetings, 4 out of 5 patients stop smoking. Monthly follow up is planned for a few sessions for additional coaching and support.

CHF

Nancy is a 72 year-old female with known CHF. She has been identified as high risk after her last hospitalization. She is accustomed to remote monitoring and has a portable medical device in her home. She closely watches her weight, blood pressure, pulse and oxygen saturation readings on a daily basis. Nancy has noticed some swelling of her ankles over the last few days. She initiates a follow up visit with her provider. Nancy's vitals and oxygen reading are forwarded to her PCP. The readings are all stable. In his HPI, he notes that Nancy has consumed some high sodium foods over the past few days and has been sitting with feet in dependent position. Vital signs are stable except a 1 ½ lb. weight gain. She is taking medications as prescribed. Nancy denies shortness of breath, cough, activity intolerance, or orthopnea. The PCP conducts an exam. Nancy has no respiratory distress or change in her skin color. A new virtual stethoscope is used to listen to Nancy's heart and lung sounds remotely. The PCP notes no abnormalities. Nancy is instructed to elevate her feet 15-20 minutes three times a day, avoid high sodium containing foods, and check daily weights. The PCP requests a follow up visit with Nancy in 24 hours to check her status. The use of telehealth and peripherals provides data for continuous quality improvement and measurement. The PCP can customize coaching for patients and families through remote self-management to improve health, reduce catastrophic events, and lower costs for readmission through better monitoring through telehealth.

Staying Relevant in Health Care

Based on the preceding use cases, telehealth services clearly enhance patient engagement and address PCMH 2014 standards. There are still some barriers to telehealth usage such as state regulations and reimbursements that must be navigated. Finding a holistic telehealth platform can be difficult. The market has a few telehealth platforms that help providers and practices overcome these issues. Selecting a robust telehealth platform with core features that support documentation, referrals, coding, billing, peripherals, cash payments, and co-pays enhances provider ease of use and adoption. In addition, a platform that offers one touch technology for patient use is important. If it is easy, providers and patients alike will use it.

To stay relevant in health care, PCPs are challenged to change their present method of patient care delivery. The opportunity to incorporate telehealth services provides practices with a viable solution to meet the shifting demands of patient care. The primary care providers who choose to adopt telehealth today will be the leaders of tomorrow.

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Thought Leaders' Corner

Each month, *Medical Home News* asks a panel of industry experts to discuss a topic of interest to the medical home community. To suggest a topic, write to Editor@MedicalHomeNews.com.

Q. For medical practices with little or no experience with capitation, what should they be doing now to get ready for the next generation of ACOs and beyond?

"The change from services as a cost rather than revenue is a major mind switch. If every patient is given appropriate care, the change is not difficult. Develop more efficient methods of delivering care rather than visits. Appropriate care may be given online or over the phone in much less time than an office visit. Train office staff to provide more care so the physician's time is used for services that require that level of expertise."

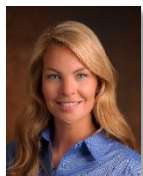


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Rancho Mirage, CA

"Though not all providers will operate under capitated arrangements, risk-bearing is the future of health care in the U.S., with capitation being the ultimate goal for many. While fully embracing and successfully operating under capitation requires thoughtful and calculated planning, it also necessitates that providers adopt a new attitude towards the health care delivery system. Under capitation, practices must stop focusing on revenues and instead attend to costs, quality, managing care, and keeping patients healthy.

In preparing to bear risk, practices should, to the best of their ability, exercise actual cost accounting. Having real insight into the cost of services you provide is absolutely critical in comparing actual operation with target utilization -- an exercise that is too often overlooked and undervalued.

Secondly, practices should explore other transitional payment models, such as shared savings and bundled payments, to experiment with managing risk. Some providers may be waiting to participate in risk-bearing until they feel equipped for 'the real thing'. However, providers should view these alternative models as a stepping stool for the increased risk of capitation. Learning how to successfully operate under a capitated system takes time, but once you learn how to operate successfully under capitation, shared-risk arrangements are less desirable, as you may not want to share the benefit of your own efficiencies."



Kate de Lisle
Research Analyst
Leavitt Partners
Salt Lake City, UT

"Practices will be better off forming a group without walls and merging their managed care contracts under a single signature. They will get more leverage to stabilize a fee schedule and can, as a group without walls, build some infrastructure they will need to report ACO-like performance statistics, a requirement under the SGR bill just passed by the U.S. House of Representatives. They can still practice in their own office making their own decisions. They just merge their contracts and billing and, if they can, form an MSO. Outsource the pain, focus time on the patient."



William DeMarco MA CMC
President & Chief Executive Officer
Pendulum HealthCare Development Corporation and DeMarco & Associates, Inc.
Rockford, IL

Thought Leaders' Corner

"The answer? Flee! Capitation is a form of risk transfer, and the only medical practices that should be engaged in a fixed payment systems are those that understand direct and indirect program support costs as well as the downside perils of spending more than you have. Success is critically dependent on a large patient base, significant financial sophistication, and a willingness to bet on actuarially sound projections of utilization. If there is little or no experience with capitation, medical practices should look to limit risk and stick largely to fee-based care while they pilot limited forms of capitation."



Jaan E. Sidorov, MD, FACP
Chief Medical Officer, medSolis
Author, Disease Management Care Blog
Harrisburg, PA

"For medical practices with little or no experience in a capitated environment, two fundamental preparation milestones are these: (1) establishing strong electronic information exchange mechanisms; and (2) standardizing select care protocols. Beyond that, effectively engaging and educating physicians on population health, changing incentive structures, and new quality and coordination expectations, as well as investing in care management infrastructure to manage high- and rising-risk patients can set a medical practice up for success in an ACO."



Jason Glaw, PhD
Consultant, Research and Insights
The Advisory Board Company
Washington, DC

"The extent to which practices are able to embrace a new PBP or a risk-adjusted primary care capitation model depends on the extent to which they are incentivized to do so and the barriers to adoption are minimized. When payment aligns with practice readiness, with appropriate HIT support and access to real time data, primary care practices across the U.S. are eager to embrace delivery reforms. For advanced primary care to reach its potential, however, we must increase the total financial support for, and investment in, primary care; but these higher payments must also be fundamentally restructured to support enhanced primary care services, especially those related to care coordination and asynchronous communication. Because advanced primary care models call for more care to be delivered outside of traditional face-to-face office visits, fee-for-service is not a sufficient mode of payment if health system transformation is the goal."



Marci Joy Nielsen, PhD, MPH
Chief Executive Officer
Patient-Centered Primary Care Collaborative (PCPCC)
Washington, DC

Why Healthcare BYOD Strategies Must Strive ...continued from page 2

That should give you an idea how excruciatingly complex a practitioner's workday can be, and how this also slows down his/her ability to service patients, resulting in stress and dissatisfaction for everyone involved. Lack of IT standardization means that each medical facility is typically using a different application to record and store patient data. This presents a unique integration challenge. But implementing a Single Sign-on (SSO) system is fast becoming another necessary investment for the industry as its reliance on IT and mobility increases. Moreover, vertical solutions that are tailored to the unique data management and security needs faced by healthcare will be ever-present going forward. The key for organizations will be learning how to evaluate all of these offerings and accurately assess how they solve not just one set of problems but the bigger picture, which encompasses both service delivery and data security.

Unique Problems Require Unique Solutions. While many corporations have turned to Mobile Device Management (MDM) solutions in recent years, the fragmented nature of the healthcare continuum severely undermines the workability of such systems. That's because doctors working for multiple providers would need to give control of all applications and data to one organization. The reality of so many personally-owned devices accessing multiple applications means that healthcare organizations should prioritize data security, not security. Virtualized solutions have emerged which manage all apps and data on a secured cloud or on-premise server. Not allowing any medical data to be stored on staff devices in the first place addresses not just lost or stolen devices. It also removes the weakest link for hackers and other security threats to exploit.

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Beyond the EMR...continued from page 5**References**

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Industry News

**Physician Practice Experience in New Payment Models**

In a new joint study by the RAND Corporation and the American Medical Association, researchers performed case studies of 34 physician practices in six diverse geographic markets to determine the effects that alternative health care payment models are having on physicians and medical practices in the U.S. Payment models included episode-based and bundled payments, shared savings, pay-for-performance, capitation, and retainer-based practices, as well as ACOs and medical homes.

Practices were frustrated when necessary data was not available or different payment models conflicted with each other. The bottom line: "For alternative payment methods to work best, medical practices also need support and guidance. It's the support that accompanies a new payment model, plus how well the model aligns with all of a practice's other incentives, that could determine whether it succeeds."

**Medical Homes Lead to Fewer ER, Hospital Visits**

A new study by researchers from George Washington University, RTI, and Mathematica published in the *Annals of Emergency Medicine* compared growth rates for emergency department (ED) use and costs of ED visits and hospitalizations (all-cause and ambulatory-care-sensitive conditions) between 308 patient-centered medical homes recognized in 2009 or 2010 and 1,096 practices without such recognition.

The rate of growth in ED payments per beneficiary was \$54 less for 2009 patient-centered medical homes and \$48 less for 2010 patient-centered medical homes relative to non-patient-centered medical home practices. The rate of growth in all-cause and ambulatory-care-sensitive condition ED visits per 100 beneficiaries was 13 and 8 visits fewer for 2009 patient-centered medical homes and 12 and 7 visits fewer for 2010 patient-centered medical homes, respectively. There was no hospitalization effect.

**AHRQ Begins New Primary Care Team-Based Training**

On March 8 the Agency for Healthcare Research and Quality offered a new team-based training program for staff in primary care organizations and outpatient medical offices: TeamSTEPPS in Primary Care. A hybrid model involving three weekly online lessons and a one-day onsite training day in Chicago on April 10, the goal is to produce effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for their patients.

Annals of Internal Medicine

Nine Percent of Primary Care Doctors Say No to EHRs

A new study of 3,437 physicians, mostly in primary care, conducted by Mathematica Policy Research and published in the *Annals of Internal Medicine* found that nine percent had no Electronic Health Record in place and moreover no plans to adopt one. The non-adopters tended to be solo practitioners or independent physicians in very small practices, as well as older than their counterparts in the survey. They also used fee-for-service as their compensation and tended not to participate in incentive based payment programs based on care coordination for chronic patients or quality metrics.

**Phytel Earns NCQA PCMH Recognition Auto-Credit**

Phytel has announced that NCQA will allow physician practices using Phytel's solutions to automatically meet a significant portion of NCQA's 2014 criteria for recognition as a patient-centered medical home (PCMH). Phytel is the first population health technology provider to be pre-validated for the 2014 PCMH criteria by NCQA.

The agreement means that physician practices using Phytel solutions can fully automate several of the most challenging requirements of formal NCQA PCMH recognition, such as the identification of patients with gaps in recommended care, outreach to better engage those patients, and the ability to generate performance reports on a multitude of population health quality measures. In January Phytel was recognized as the population health management category leader in the 2014 Best in KLAS awards.

Industry News



Evaluation of VA PCMH Experience

Writing in the *American Journal of Managed Care*, staff from the Veterans Administration evaluated the VA's experience with its medical home model, the Patient Aligned Care Team or PACT, initiated in 2010. The longitudinal study of 2,607,902 patients from 796 VA primary care clinics examined changes in reported implementation of PCMH components in all VA primary care clinics, and patients' utilization of acute and non-acute care and total costs after two years. Clinics reported large improvements in adoption of all PCMH components from FY 2009 to FY 2011. Higher organization of practice scores was associated with fewer primary care visits, and greater care coordination and transitions were modestly associated with more specialty care visits and fewer ED visits. None of the PCMH components were significantly related to telephone visits, hospitalizations related to ambulatory care-sensitive conditions, or total healthcare cost.

JAMA Internal Medicine

Cancer Screening Improves in BCBS Michigan PCMHs

A new study published last month in *JAMA Internal Medicine* shows Blue Cross Blue Shield of Michigan's Patient-Centered Medical Home model improved overall cancer screening rates for colon, breast, and cervical cancer. The three-year longitudinal study reviewed breast, cervical and colon cancer screening rates of 2,218 practices across the state. Screening rates improved across all socioeconomic contexts, and the disparity in rates among patients in high and low socioeconomic groups significantly narrowed in practices where the PCMH model was fully implemented.

PEDIATRICS

Medical Home Models Serve ADHC Children Better

A new study in the journal *Pediatrics* by Dr. Michael Silverstein, a pediatrician at Boston University School of Medicine, notes that for children with attention-deficit/hyperactivity disorder (ADHD), receiving the kind of patient- and family-centered care offered in a medical home model may be more effective than standard care. Researchers followed 156 children in an urban setting for one year after they were referred for testing for ADHD. The children were randomly assigned to receive standard collaborative care or enhanced collaborative care. Care managers delivering enhanced care received training in the Positive Parenting Program (Triple P) and motivational interviewing and checked in with families regularly to see how they were doing, ensuring they understood and agreed with the treatment recommendations, and identifying and alleviating any obstacles to treatment.



Guthrie, Blue Cross of NE Pennsylvania PCMH Pilot

Blue Cross of Northeastern Pennsylvania and Guthrie Medical Group have implemented a new Patient Centered Medical Home pilot program. BCNEPA's staff of Blue Health Solutions Care Managers have access to the same tools and reports as Guthrie Medical Group's 25 practices, enabling them to work together to manage patient care needs. The pilot has helped Guthrie's practices in north central Pennsylvania transform into patient-centered medical homes. Guthrie manages more than 1,000,000 patient visits a year in Pennsylvania and southern New York.

Catching up withcontinued from page 12

Medical Home News: You have just taken an extensive trip to the U.S. to look at different accountable care and medical home models. What lessons did you take back to New Zealand?

Helen Parker: Well firstly we were reassured that everyone finds change is a long game and requires patience and persistence! It also confirmed for us that the right culture is the ultimate enabler and without that, it's just ticking boxes. We feel even more strongly our strategic vision is the right one however we need to be careful that virtual medicine doesn't become additional work that places more pressure on clinicians. We heard from some physicians who were overwhelmed by emails and managing these outside of working hours. At the moment, we think we have the balance right but we will keep monitoring it. This confirms for us also, that it is the core principles and intended outcomes of a care model that are important and there needs to be local flexibility in how these are achieved.

Medical Home News: Finally, tell us something about yourself that few people would know.

Helen Parker: I'm trying to get my private pilot's license, but work and lots of travel means time for this is limited!

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Catching Up With ... Helen Parker, RN, BSC, MSC

Helen Parker is General Manager, Integrated Family Health Services for Midlands Health Network in Hamilton, New Zealand. She is also a Visiting Senior Fellow with the Nuffield Trust, London. She has had a clinical, managerial and academic career in UK health care spanning 30 years, most of that time working in, or around, primary care. Before moving to New Zealand in 2013, she was involved at a national and local level in the development of new models of general practice and now supports the development and implementation of the Primary Care Medical Home model across the Midlands Health Network. She talks about the New Zealand workforce, the origins of her work in New Zealand, what she learned from a recent trip to the U.S., and herself.

Helen Parker, RN, BSC, MSC

- General Manager, Integrated Family Health Services, Midlands Health Network, Hamilton, New Zealand
- Visiting Senior Fellow with the Nuffield Trust, London
- Director, Practice Partners, UK
- Co-Director, Health Services Management Centre, Birmingham University, UK
- Director of Community Services, Wyre Forest Primary Care Trust UK

Medical Home News: *The U.S. has a pretty dismal (i.e., high) ratio of specialists to primary care physicians. What's it like in New Zealand, and do you also worry about demographics and a PCP shortage?*

Helen Parker: I'm not sure of the exact figures but it's certainly more balanced in New Zealand. We also have a range of specialists working in community based settings, including Clinical Nurse Specialists. Yes, the ageing primary care workforce, both nurses and doctors, is a big driver for us in developing new models of care with an extended workforce. We were very impressed by what we heard at the Medical Summit of those PCMHs using community health workers to support chronic disease management and will be thinking how we can develop this in New Zealand. We have also recruited some pharmacists to teams and looking to integrate social workers into primary care teams.

Medical Home News: *A propos of the previous question, do you have physician assistants and advanced practice nurses in the clinician workforce there who could manage medical/health homes, and is this a prickly issue for the physicians?*

Helen Parker: I am used to working with PAs in the UK but the role is very new to New Zealand. As you would expect, their introduction has had a mixed response from our medical and nursing workforce. Whilst some can see that we need to expand the workforce to ensure sustainability of our primary care services, some see the role as duplication of our Nurse Practitioners and we should be promoting this role more. The Ministry of Health has recently completed a two year pilot and we had two pilot PAs working in one of our practices. They quickly became invaluable members of the team and we are planning to expand our PA workforce in our network. In fact, before the Summit, I was in Seattle and interviewed PAs for 6 vacancies we have. I think PAs or Nurse Practitioners managing a Medical Home would be one step too far at present but we have certainly discussed this as a solution for our more rural areas where medical recruitment is challenging.

Medical Home News: *Was the American patient-centered medical home model something you discovered, or did you already have most of the essential principles in place and wanted to compare notes?*

Helen Parker: New Zealand historically has a very strong primary care system with practices delivering high quality chronic disease management and managing acute demand effectively. However, we know this isn't sustainable given the rising demand, the ageing workforce and a model that is centered on face to face contact with a physician. Midlands Health Network reviewed a number of models globally and liked what we saw with concepts of the Medical Home. A team spent some time with Group Health in 2010 and then developed our current model to include call management and increased models of access such as telephone consultation and email. We also developed the Medical Assistants role, a greater degree of standardization and huddles.

Medical Home News: *You have looked at the experience of other countries with advanced primary care and health care coordination models. What did it suggest for your work in New Zealand and how do you now assess the U.S. marketplace in terms of real patient-centered primary care?*

Helen Parker: The integration of primary care, community services and our specialist services is variable and needs to be improved. Part of our challenge is an antiquated patient management system with separate hospital and community systems and we are currently investing in a more modern system that will integrate all patient information and care plans into a single, shared patient record. We have a focused program for our higher needs patients in our Medical Homes that co-ordinates care across professional disciplines. We have been exploring the new technology associated with smart phones to increase access for patients and impressed by what we saw at the Summit with examples such as WebMD. We saw a lot of great examples of patient-centered care in our practice visits and at the Summit but suspect we have just had exposure to forward thinking and innovative PCMHs.

(continued on page 11)