Phytel Case Studies

How leading health organizations are managing population health and navigating to value-based care
Orlando Health: Population Health Management in a Clinically Integrated Network

Automation of Population Health Management Aids Clinical Integration and Accountable Care Organization

Government and private insurers are moving away from encounter-based reimbursement and rapidly developing new payment models that reward coordination of care and population health management. Orlando Health, a seven-hospital, 1,780-bed Florida health system that is one of that state’s most comprehensive not-for-profit healthcare networks, saw the change coming and knew it must act. In standing with its size, the health system set an ambitious goal: to be the highest-quality, lowest-cost provider in central Florida.

“We like to be leaders, not followers,” explains Rick Schooler, Orlando Health Vice President and Chief Information Officer.

As a first step, in partnership with UF Health, the University of Florida’s healthcare system, Orlando Health’s leadership is working to form a clinically integrated network (CIN) that includes its 400 employed doctors, independent primary care and specialty physicians, and eventually practitioners employed by the University of Florida healthcare system. Clinical integration promises to coordinate patient interventions, manage quality across the continuum of care, drive population health management, and enable value-based contracting.

To get there, Schooler, a former CHIME/HIMSS CIO of the Year, realized the health system would need to significantly scale its care management and patient engagement efforts. Above all, it would need population health tools to help identify patients at risk of acute episodes, find the gaps in their care, engage them, and evaluate performance – all without spending large amounts of money on care coordination and care management.

“We knew that a key part of clinical integration and of surviving the future of health care is to manage the health of a population,” explains Schooler. “To do that, you need tools that are

“There is no population health management without this technology. You just can’t manage populations without data and the ability to make that data actionable. Phytel delivers both.”
tailored to the individual level that allow you to intervene, interact, prompt, reach out, remind and analyze. You have to be able to take that individual information and aggregate it to the population level to detect trends, stratify patients based on clinical risk or other factors to really understand how you are doing on quality and cost utilization.”

Adds Jennifer Endicott, Orlando Health’s Vice President of Clinical Integration: “We had already recognized that an EMR would not get us where we needed to go. An EMR is a data repository that’s designed to allow healthcare providers to manage those patients who are in front of them, not those who are not in front of them. That task is just too cumbersome and difficult and frankly impossible for most EMRs.”

An Exhaustive Search

When evaluating solutions, Orlando Health felt it was vital to invest in a single platform for both clinical integration and population health management. Moreover, it needed a solution that would not put added stress on an already overloaded IT staff. Like all health systems, Orlando Health has many competing demands and not enough resources. The solution provider would need to do the heavy lifting, including data integration and workflow assessments, data mapping to protocols, system configuration, training and implementation.

A member of Schooler’s senior project management team led the vendor selection committee. After a systematic search of 12 different vendors that included multiple site visits, the health system ultimately chose Phytel for its easy-to-use provider interface, snapshots of patient care gaps, integrated patient outreach and education capabilities, and the proven ability to interface with Orlando Health’s multiple EHRs as well as integrate pharmacy and lab data.

Schooler confirms that Phytel has lived up to expectations. At Physician Associates, the health system’s employed group of 100 primary care physicians, Orlando Health has successfully interfaced Phytel with the group’s Allscripts EHR and implemented four modules—Phytel Outreach™ patient engagement tools, Phytel Remind™ appointment reminders, Phytel Insight™ reporting and dashboards, and Phytel Coordinate™ care management tools. A fifth module—Phytel Transition™ to enhance coordination of discharged patients—is planned for implementation by the end of the year. Phytel also is interfaced with Orlando Health’s Allscripts Sunrise inpatient EHR to capture information on patients discharged from the system’s hospitals.

“Phytel did an excellent job of getting us up in a very short time,” says Schooler. “Unlike other IT products I’ve experienced, Phytel met all of their commitments, all of their timelines. We were surprised by the ease with which we were able to get the data out of the source systems, so it didn’t put much stress on our team.”

Endicott says physicians also have been pleasantly surprised. “I’ve heard from physicians and staff that Phytel has enhanced their workflow and been a value-add as opposed to a detractor,” she says. “Most of the time when you implement a new technology tool, people complain that it has increased their workload, and often made things more cumbersome and difficult. This is the first time that I’ve heard that it is quickly considered to be a value-add.”

Medical Homes, Neighborhoods and Beyond

Orlando Health’s due diligence has paid off as Phytel’s on-time and on-budget implementation and proven technology is helping it move from a focus purely on acute episodic illness to true population health management. The health system is moving forward on several fronts. Orlando Health is one of 15 health systems nationwide to participate in a CMS-funded Patient Centered Medical Neighborhood demonstration project. The initiative, which utilizes Phytel technology for population health management, is designed to connect acute-care hospitals with technology-empowered primary care, specialty and subspecialty practices to drive better quality, superior patient experience and population health at a more affordable cost.

Key to Orlando Health’s selection for the program was that a majority of its ambulatory care offices have been officially recognized by the National Committee for Quality Assurance (NCQA) as patient-centered medical homes (PCMH), thanks in part to their use of Phytel and its ability to deliver NCQA auto-credit toward PCMH certification. The medical home model is widely embraced as a prerequisite for population health management.

Chris Jordan, Orlando Health’s Chief Applications Officer for Ambulatory Systems, says Orlando Health struggled to achieve PCMH status before Phytel. “We were having a very hard time producing the kind of reports that are required for the medical home,” he recalls. “We were trying to create custom reports manually and hand them to case managers one at
a time and say ‘here’s a patient who had problems with diabetes but hasn’t been in for two years.’ And that’s all we knew about the patient. Phytel helped us get to PCMH status very quickly by helping us do many of the things we couldn’t before.”

An early win for Orlando Health has been its use of Phytel Outreach, the patient outreach tool. By creating ongoing automated messaging campaigns, Orlando Health has persuaded many patients who need preventive or chronic care to make appointments with their doctors.

But while Jordan says Phytel Remind and Phytel Outreach were essential to driving the group’s success with PCMH, it is Phytel’s reporting and care management tools that have him really excited. Phytel Insight, the reporting module, excites Jordan “because it allows providers and case managers to look at our entire population and see how we’re doing,” he says. “Their favorite tool is the scatter plot that lets you look at all our diabetics or heart failure patients or any other cohort across our 100 primary care providers and see where their vitals fall. On just one screen, they can see thousands of patients and see who the outliers are.”

Physician Associates’ care coordinators utilize the tool to focus their resources on the patients who need them most, Jordan points out. Instead of having to search electronic charts and run reports, he says, the care coordinators can use Phytel Insight to spot “the 50 or 100 patients who are way outside of the control factor and concentrate on them first.”

The practice also is using Phytel Insight to help determine physician quality bonuses, which track their compliance with quality measures, Jordan says.

“For instance, our doctors need to have 60 percent of their hypertension patients in control (with blood pressure 140 over 90 or less). Insight is really cool because we can go in and say ‘show me every doctor and their status on their entire population of hypertension patients.’ And we can immediately qualify them for their quarterly bonus. Without that tool, it would be really, really difficult for us to do that.”

Care Management on a Different Level

Phytel Coordinate gives Physician Associates’ care managers precise hands-on tools they need to stratify patients by health risk and decide which ones they need to address first, both in the office and between visits. The automation solution aggregates and normalizes data supplied by the group’s EHR so that the care coordinators can focus on patient care rather than waste time gathering the data they need from patient charts. Phytel Coordinate also flags all patients who are high risk and in need of immediate attention, whether or not they have visited their provider recently.

Moreover, Phytel Coordinate can be used to launch a variety of interventions for different segments of the population. If Physician Associates wants to offer a diabetic education program, for example, the Phytel Coordinate enables the care managers, with the click of a button, to e-mail or send automated personalized communications to all of the patients who could benefit from such a program.

“This is case management on a different level entirely,” says Jordan. “Prior to Phytel, our case managers and care coordinators had no way to efficiently and proactively identify patients in need of care and reach out to them.”

ACO Assistance

Orlando Health’s most ambitious population health effort yet is its accountable care organization (ACO), a Medicare Shared Savings Program participant. Under the program, Medicare rewards ACO participants for meeting certain thresholds of quality on 33 different population health measures. Orlando Health will be able to utilize the Phytel platform

“Phytel is helping us change our care model, identify gaps in care for the patients in front of us, and, more importantly, the gaps in care for the people who aren’t in front of us, which is what we need to succeed as an ACO and under value-based care in general. That was just simply not going to happen with our existing systems.”

Jennifer Endicott
VP of Clinical Integration,
Orlando Health
to track and improve each of these performance measures. Phytel Insight delivers metrics and dashboard reporting that enables the health system to evaluate and measure its effectiveness across key quality initiatives. And Phytel Coordinate provides care teams with an advanced toolkit to risk-stratify patients and create personalized, automated interventions to better manage those populations and optimize each patient encounter.

The Orlando Health team in charge of the ACO reporting program has designed it to reduce physician work, minimize new clinical documentation steps, and have the same clinical documentation process address both the federal Meaningful Use program and ACO documentation, when feasible.

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Right Tools, Right Partner

Moving forward, the second phase of Orlando Health’s Phytel deployment will make the platform available via health information exchange (HIE).

“We will tie our population health solution into our HIE so that our affiliated physicians in the field can get access to the Phytel reports on care gaps and other functionality,” explains Jordan. “We’re also going to be implementing a patient summary screen within our affiliated physicians’ EHRs to provide an at-a-glance summary view of the patient’s care gaps.”

The next step will be to integrate all of the Phytel tools with a single patient portal for the CIN.

Endicott says that Phytel so far is saving manpower at Orlando Health, where 15 care managers currently use the system. “And, now that we have access to timely data and are changing out clinical model, we’re getting closer to being able to accept risk contracting arrangements.”

She points out, “The most obvious positive result of our use of Phytel is the ability to have patients contacted through automated outreach. We have physicians saying that after years of trying to get patients to come in with their medications for medication reconciliation, they now have patients showing up with all of their medications in a bag. It sounds like a small thing but it’s essential and wasn’t happening prior to our use of Phytel.”

Schooler concludes: “There is no population health management without this technology. You just can’t manage populations without data and the ability to make that data actionable. Phytel delivers both.”

### Solution: Phytel Population Management System

<table>
<thead>
<tr>
<th>PRODUCT DISTINCTIONS</th>
<th>RESULTS</th>
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<tbody>
<tr>
<td>+ Drives population health management</td>
<td>+ On-time, on-budget implementation of Outreach, Remind, Coordinate</td>
</tr>
<tr>
<td>+ Can be used to build medical homes and ACOs</td>
<td>and Transition for 100 physicians</td>
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<tr>
<td>+ Generates demonstrable quality improvement</td>
<td>+ Integrated data from Allscripts inpatient and ambulatory EHRs,</td>
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<tr>
<td>+ Implementation is smooth and rapid</td>
<td>capturing patient information across the continuum of care</td>
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<tr>
<td>+ Nationally recognized, evidence-based protocols are customizable</td>
<td>+ Sped NCQA PCMH certification for a majority of Orlando Health’s</td>
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<tr>
<td>+ Registry seamlessly integrates with EMR, PM and other systems</td>
<td>medical practices via Phytel NCQA autocredit</td>
</tr>
<tr>
<td>+ Identifies gaps in care in a patient population</td>
<td>+ Enabled management to determine physician quality bonuses by</td>
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<tr>
<td>+ Automated patient messaging can be repeated at preset intervals</td>
<td>tracking compliance with quality measures</td>
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<td></td>
<td>+ Enabled Medicare Shared Savings ACO reporting, minimizing physician</td>
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<td></td>
<td>work and clinical documentation steps, providing dual documentation</td>
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<td>for ACO and Meaningful Use</td>
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Northeast Georgia Physicians Group:
Phytel is Essential to Population Health Management

Automation of Population Health Management Has Helped Practice Build Patient-Centered Medical Homes While Improving Quality of Care

Northeast Georgia Physicians Group (NGPG), the largest multispecialty practice in its region, views Phytel’s enterprise care management platform as a key resource for automating population health management as it builds patient-centered medical homes and prepares for accountable care.

“Phytel is an indispensable part of our broader program of quality improvement and enhanced care coordination,” says Marlene McIntyre, Director of Quality and Patient Safety for NGPG. “We tried to manage population health with our EHR and we just couldn’t get the answers we needed in a timely fashion. Now our providers and care managers can use Phytel at the point of care to identify gaps in care in real-time. That capability has been huge for us.”

Phytel has helped the 200-provider group achieve a specific short-term goal. Early in 2012, NGPG leaders determined to get all their primary care sites recognized as patient-centered medical homes. To get there, the practice had to be able to scale its care management process quickly to the PCMH requirements of the National Committee on Quality Assurance (NCQA). As NGPG recognized, Phytel had the domain expertise and the technology platform the group needed to do that, including providing NCQA autocredit toward 2011 patient-centered medical home (PCMH) criteria. Phytel could also integrate its solution with the group’s electronic health record (EHR) and practice management system to obtain the necessary data.

The first Phytel tool adopted by NGPG was Phytel Outreach™, which combines an electronic patient registry with automated messaging to patients who have preventive and chronic care gaps. Triggered by nationally recognized clinical protocols, the messages urge patients to make appointments with their providers.

“We chose Phytel because their product best matched our patient care needs. Phytel not only has the tools we need to help transform our physician practices into patient-centered medical homes, but it also provides us with guidance on how to use them.” — Antonio Rios M.D., Chief Physician Executive, NGPG
“Phytel Outreach allowed us to identify very easily those patients who have care gaps or opportunities and use technology to reach them,” notes McIntyre. For example, the system contacts patients with diabetes who haven’t seen their provider in six months or more, women who are due for mammograms, and adults over 50 who haven’t had colonoscopies.

“The greatest thing about Phytel is that it gives us easy access to the data that we knew we always had,” she says. “I can get data on hundreds of patients and risk-stratify it in literally three clicks, versus submitting a report request to our IT team and working with an analyst for months, by which time the data is too old and doesn’t have the level of detail that we get with Phytel. If you don’t have a system that does that automatically, those patients may fall through the cracks. You’re waiting for the patient to remember to come in, which may not happen.”

Antonio Rios, M.D., NGPG’s Chief Physician Executive, believes the group has just begun to tap the potential of Phytel. “We’re realizing we’re just scratching the tip of the iceberg, this tool has so much potential,” he says.

Care Management Tools

After seeing the success of Phytel Outreach, which has since been rolled out to all of NGPG’s primary care practices, the group implemented Phytel Insight™ reporting and dashboards and Phytel Coordinate™ care management tools across all of its sites. Phytel Insight enables healthcare organizations to measure their clinical processes and their performance in population health management. Phytel Coordinate provides a set of tools that care managers can use to stratify patients by health risk and intervene with those who need help to improve their health.

Phytel Insight excites McIntyre “because it allows me to look at our entire population and see how we’re doing,” she says. “My favorite tool in that module is a scatter plot we can run for diabetic patients. I can look at all our diabetics across our 50 primary care providers and see where their A1cs fall. On just one screen, I can see thousands of patients and see who the outliers are.”

NGPG’s care coordinators have utilized that tool, as well, to focus their resources on the patients who need them most, she points out. Instead of having to search electronic charts and run reports, she says, the care coordinators can use Phytel Insight to spot “the 50 or 100 patients who are way outside of the control factor and concentrate on them first. Insight gives you a lot of tools to automate that risk stratification process that we’ve tried to do manually in the past.”

Phytel Coordinate—which was introduced a couple of months after Insight—gives the care managers even more precise tools to stratify patients by health risk and provides hands-on tools to develop personalized care interventions across the population. This automation solution aggregates and normalizes data supplied by the group’s EHR so that the care coordinators can focus on providing exceptional patient care rather than waste time gathering the data they need from patient charts.

Care coordinators who are imbedded in practice sites “are able to look at the provider schedule and, right under each patient’s name, see opportunities for their care to be improved,” McIntyre notes. “They can see the patient is past due for an A1c test or hasn’t had a mammogram or hasn’t had a colonoscopy.”

The big advantage for the care coordinator, she says, is that when she clicks on a patient’s name, “Phytel takes you to a patient summary profile that shows you everything you need to know about that patient: their last blood pressure reading, their last A1c and so on.” While that information is also available in the EHR, she adds, the nurses might have to click through six to eight screens to collect it. In addition, Phytel aggregates data outside their EMR such as patient-entered information and predictive risk scores.

Moreover, she emphasizes, Phytel Coordinate flags all patients who are high risk and in need of immediate attention, whether or not they have visited their provider recently. “Without that type of prioritization, nurses are able to see the patients in front of them, but they may not easily be able to see Mr. Jones with an A1c of 14 who hasn’t been in for nine months. Using technology that continually mines that data provides our care teams with important information to improve the health of our patients.”

In addition, Phytel Coordinate can be used to launch a variety of interventions for different segments of the population. If NGPG wants to offer a diabetic education program, for example, the Phytel solution enables the care managers to e-mail all of the patients who could benefit from such a program with the click of a button. And they can do the same for elderly patients who are due to come in for flu shots.
Another thing that McIntyre likes about Phytel Coordinate is that it “prioritizes patients for you. It uses green-yellow-red identifiers, so those patients who are poorly controlled and have the most care opportunities float to the top and have a red icon next to them. Those who are better controlled and have fewer opportunities are at the bottom and are green. So if I’m a care coordinator and have four hours on this day that I can dedicate to my care coordination patients, this tool allows me to see which patients need my time the most, and I can focus on them to really make a difference for those people.”

For their part, NGPG’s physicians also use Phytel to manage their daily patient load. Dr. Rios and his care team use the solution every evening to look for care gaps in patients scheduled for visits the following day. Knowing in advance which patients are missing tests or need additional support helps the team pre-schedule tests and assign the appropriate caregiver to the patient. A patient with extensive psycho-social needs related to their diagnosis, for instance, may be better off seeing a care manager instead of, or in addition to, their physician.

“It’s still a relatively new process for many of our providers but more and more of them are adopting this approach because they finally have data that they can act upon right now,” says Dr. Rios. “Claims-based data is useful for a picture of patients who seek out-of-network care but it’s too old in and of itself to be actionable. We need the real-time data that Phytel provides, that’s specific to the patient, that’s a call to action.”

**Positive Results**

The three Phytel products that NGPG has implemented so far—part of Phytel’s complete population health management platform—have already helped the group improve the quality of care and make strides in building its medical homes. Three of its practices have already received NCQA recognition as Level 3 PCMHs – the highest level of accreditation. Further evidence of the technology’s impact can be found in NGPG’s effort to help patients with diabetes get the disease under control.

In the six months between January and July 2013, NGPG tested the use of Phytel in combination with aggressive care management outreach to help diabetic patients in 10 clinics. McIntyre first used Phytel to identify a pool of patients in all 10 clinics with uncontrolled diabetes – those with hemoglobin A1c levels of 9 percent or higher. Then embedded care managers in each of the clinics used Phytel on a daily basis to target and track those 860 patients, scheduling them for missed services identified by best practice guidelines and helping them to stay on track with their treatment plans.

The results were remarkable. By the end of the six-month trial, NGPG had helped 412 of the target patients lower their A1c scores below 9 points—a decrease in the uncontrolled population of nearly 50 percent. Moreover, the patients’ A1c scores declined by an average of 1.8 percentage points—a significant reduction. In one clinic serving a heavily Latino population with a particularly high rate of diabetes, the average drop in A1c was 3.3 points.

The study’s results may be a predictor of NGPG’s ability to succeed within an accountable care organization or other risk-based payment arrangement that rewards providers for improving the health of populations. Studies show that for every 1 percent reduction in A1c, the risk of developing eye, kidney, and nerve disease is reduced by 40 percent while the risk of heart attack is reduced by 14 percent.

“We are extremely excited by these results,” says Dr. Rios. “It’s a very strong example of how having the right information can really make a huge difference on a population. It would have been virtually impossible for us to get that information without Phytel.”

### Diabetes Management Results after Six Months’ Intervention by Phytel

<table>
<thead>
<tr>
<th>Clinic</th>
<th># patients in study</th>
<th># patients in study with lower A1c levels after 6 mo.</th>
<th>% patients in study with lower A1c levels after 6 mo.</th>
<th>Average individual decrease in A1c levels after 6 mo.</th>
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</thead>
<tbody>
<tr>
<td>Clinic A</td>
<td>135</td>
<td>79</td>
<td>58.5%</td>
<td>1.65</td>
</tr>
<tr>
<td>Clinic B</td>
<td>57</td>
<td>27</td>
<td>47.4%</td>
<td>1.84</td>
</tr>
<tr>
<td>Clinic C</td>
<td>90</td>
<td>53</td>
<td>58.9%</td>
<td>1.35</td>
</tr>
<tr>
<td>Clinic D</td>
<td>73</td>
<td>42</td>
<td>57.5%</td>
<td>1.35</td>
</tr>
<tr>
<td>Clinic E</td>
<td>116</td>
<td>42</td>
<td>36.2%</td>
<td>3.32</td>
</tr>
<tr>
<td>Clinic F</td>
<td>107</td>
<td>35</td>
<td>32.7%</td>
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<tr>
<td>Clinic G</td>
<td>55</td>
<td>34</td>
<td>61.8%</td>
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<tr>
<td>Clinic H</td>
<td>41</td>
<td>26</td>
<td>63.4%</td>
<td>1.75</td>
</tr>
<tr>
<td>Clinic I</td>
<td>108</td>
<td>40</td>
<td>37%</td>
<td>1.4</td>
</tr>
<tr>
<td>Clinic J</td>
<td>78</td>
<td>34</td>
<td>43.6%</td>
<td>0.71</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>860</strong></td>
<td><strong>412</strong></td>
<td><strong>47.9%</strong></td>
<td><strong>1.8</strong></td>
</tr>
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**Improvement Summary**

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“We are extremely excited by these results,” says Dr. Rios. “It’s a very strong example of how having the right information can really make a huge difference on a population. It would have been virtually impossible for us to get that information without Phytel.”
The group’s diabetes results may have been better still in a more homogenous population, notes McIntyre. The average decrease in the number of uncontrolled patients and their average declines in A1c were significantly higher in the five NGPG clinics whose patient populations more closely mirror the national average (clinics A, C, D, G, and H). Results were less dramatic, though still positive, in the five clinics (B, E, F, I and J) with proportionately higher populations of indigent and health-illiterate patients.

To address these disparities in care, the NGPG Foundation has deployed a program that provides supportive services for indigent and illiterate patients with diabetes, including free access to blood testing kits and test strips.

Phytel has had an impact on a broader scale outside NGPG’s diabetes population as well. Overall, in its first 12 months of use, Phytel generated over 8,000 appointments with NGPG providers for necessary preventive and chronic care. Of these appointments, more than 5,000 were “adherent events,” meaning that the appointment resulted in closure of the care gap that originated the Phytel communication. McIntyre credits most of the additional care to Phytel.

**A Partner, Not a Vendor**

The positive results achieved so far by NGPG’s deployment of Phytel are due as much to the supportive nature of the partnership as to the technology itself, says Dr. Rios. “We’ve been very fortunate to find a partner that has been supportive but not pushy,” he says. “Some partners try to shove things down your throat but not Phytel. We’ve established a very healthy chemistry with their people, and they are always accessible and able to respond to our needs quickly.”

Without Phytel, McIntyre notes, NGPG wouldn’t have been able to roll out the patient-centered medical home model to all of its primary care providers, because it would have been too much work. “When you have to utilize a nurse to spend four to five hours of their day digging through medical records to pull information out manually, that’s four or five hours that they can’t spend with a patient,” she observes. “So our intent in adopting the Phytel tools was automating everything we possibly can so that the nurses can spend that additional time with patients.”

NGPG’s experience with Phytel bodes well for other practices, McIntyre adds. “For people who are thinking of heading down the path of PCMH and population health but don’t know how to get started, we think our experience demonstrates how practices can take a first step and make significant progress very quickly.”

Dr. Rios concludes: “For us, this is the beginning of a journey. We’re excited to see where it takes us.”


2 Diabetes Disparities Among Racial and Ethnic Minorities Fact Sheet

**Solutions:** Phytel Outreach, Phytel Insight, Phytel Coordinate

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<th>PRODUCT DISTINCTIONS</th>
<th>BENEFITS</th>
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<tr>
<td>+ Web-based products require no technical expertise or extra equipment</td>
<td>+ ROI in first 60 days of implementation at five sites</td>
</tr>
<tr>
<td>+ Implementation carries light footprint with all heavy lifting of data integration from source systems completed by Phytel</td>
<td>+ More than 2,000 patients made appointments as result of automated messaging in that time period</td>
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<tr>
<td>+ Specialty-specific, nationally recognized protocols are customizable</td>
<td>+ Changes the existing paradigm by empowering NGPG providers to proactively manage patients with care gaps back to office, instead of waiting for the same patients to close the gaps on their own</td>
</tr>
<tr>
<td>+ Registry seamlessly integrates with EMR, lab, imaging and PM systems</td>
<td>+ Helped all primary care sites gain NCQA Level 3 recognition as patient-centered medical homes</td>
</tr>
<tr>
<td>+ Automated patient messaging can be repeated at preset intervals</td>
<td>+ Increased patient and provider satisfaction</td>
</tr>
<tr>
<td>+ Phytel Insight provides comprehensive care gap identification</td>
<td>+ Ability to scale population health management across the organization</td>
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<td>+ Phytel Coordinate allows care manager to prioritize workloads</td>
<td>+ Reduced expected number of care coordinators that practice had to hire</td>
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<td>+ Phytel Outreach ROI is guaranteed</td>
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Population Health Management Platform Improves Diabetic Outcomes by More Effectively Engaging Patients

North Mississippi Medical Center (NMMC) knows its way around quality of care. The non-profit, community-owned 650-bed facility in Tupelo, Miss. is the 2012 recipient of the prestigious Malcolm Baldrige National Quality Award. So it’s no surprise that NMMC is ahead of the curve when it comes to adjusting to the shift from fee-for-service to value-based care. Yet, like virtually every other provider organization in the country, NMMC is challenged with what is perhaps the most critical ingredient in the value-based recipe—patient engagement.

Engaging patients in their own care has always been a challenge. Healthcare professionals can recommend a treatment regimen but if the patient isn’t committed to following it, steps are likely to be missed. Studies demonstrate that patient engagement is essential to improving health outcomes, and that lack of engagement contributes to preventable deaths. In fact, it is estimated that 40 percent of deaths in the U.S. are caused by modifiable behavioral issues, such as smoking and obesity. Yet, on average, people with chronic diseases take only 50 percent of the prescribed doses of medications. Half of all patients do not follow referral advice, and 75 percent don’t keep their follow-up appointments.

Those statistics are even worse in Mississippi. According to the Mississippi State Department of Health, cardiovascular disease (CVD), the most dangerous chronic condition, is the leading cause of death in Mississippi. The state’s CVD mortality is the highest in the nation, 29 percent higher than the U.S. as a whole. Tragically, more Mississippians die each year from CVD than from all types of cancer, traffic injuries, suicides, and AIDS combined. The numbers are equally depressing for diabetes, stroke and other preventable conditions.

North Mississippi was committed to improving those numbers. As the flagship hospital of North Mississippi Health Services, NMMC is the largest non-metropolitan hospital in the nation, serving residents from more than 24 counties in northern Mississippi and northwest Alabama. The medical center’s physician clinic system, North Mississippi Medical Clinics, Inc (NMMCI), is

Patient engagement is the future of healthcare and the only way you can do that is with a solution like Phytel that automates it and helps you identify patients that are not at goal between their visits, and then automates reaching out to them. That’s critical if you want to really drive health outcomes and improve the customer experience.
part of a regional network of 38 primary and specialty clinics. In 2012, the clinic system decided to initiate contact with patients prior to office visits, and to encourage them to engage in their own healthcare during and between visits.

The Challenge

Healthcare has traditionally been a reactive industry focused primarily on managing acute events. The shift to value-based care requires providers to be more proactive, especially by encouraging patients with chronic or preventable conditions to become more involved with managing their own care.

Providers need to maximize the effectiveness of time spent with patients by reviewing factors such as test results with them and explaining how modifying their behaviors can improve their health. Unfortunately, they often lack the population health management (PHM) tools they need to perform these actions.

A true PHM initiative aggregates and analyzes data from multiple applications, including clinical data from Electronic Health Records (EHRs) and claims data from Practice Management systems and outside sources to capture a full view of the population. The process needs to match data from these sources with evidence-based chronic and preventive care protocols to identify patients due for service and notify them to make an appointment, while also tracking patient compliance with treatment and measuring quality and financial results.

It’s a tall order. While some organizations have tried to get their EHR systems to do all of this for them, EHRs are primarily data repositories; they’re not designed to perform the full spectrum of activity required for successful population health management. Like many large health systems, NMMCI had invested in a state-of-the-art EHR that digitized records across its network. Yet its providers still felt held-back by a lack of automated tools that would make true population health management practical.

“Ideally, we want to review the records of all our patients with chronic or preventable conditions before they come in, to see how they’re doing on their home care programs, and to see what tests they’ll need or which ones they may have missed,” explains Dr. Brad Crosswhite, MD, FAAFP, a family physician at NMMCI’s Barnes Crossing Medical Clinic. “If we can schedule tests prior to their next appointment, the results will be available so the physician or healthcare manager can discuss them with the patient during their visit. The reality, however, is it is nearly impossible to review so many records manually.”

This challenge was exacerbated by the limitations of the existing patient registry, which NMMCI has used for many years.

“The primary view our registry provided was of patients a physician had seen over the last 30 days,” says Connie Renfroe, RN, Best Practice and Innovations Manager at NMMCI. “That allowed us to put point of care processes in place. However, we wanted to put processes in place to identify patients due for an office visit. That was a piece of population health management that we were missing. We needed to gain a broader view over time to spot trends and identify the patients whose at-home behaviors and/or long-term conditions required the most attention.”

Committed to delivering better patient outcomes, NMMCI wanted to implement technology that would automate the review process, making it easier for the staff to identify individual patient needs, and assist in the creation of a thorough, proactive patient communication campaign.

The Solution

NMMCI implemented the Phytel population health management platform, a robust suite of scalable, Web-based tools and services designed to help healthcare organizations deliver timely, coordinated care for their patients. The Phytel platform enables providers to manage quality more effectively in order to proactively improve chronic and preventive care across a population.

Barnes Crossing Medical Clinic initiated a population health project aimed at improving the outcomes for 76 patients with diabetes who had poor hemoglobin A1c control, defined as A1c levels of 9 or higher. The initial goal was to use the Phytel platform to identify the highest-risk patients, and engage them prior to an office visit with a robust care management program.

“It starts with pre-visit planning,” says Dr. Crosswhite. “Nurses can use the Phytel platform to generate a work list of patients by provider that shows all preventive services, wellness services and labs required based on the specific
diagnoses for patients who are coming in for appointments in the next two days to two weeks. We developed standing order sets based on gender, problems, preventive care recommendations and followed evidenced-based standards of care.”

Once the nurses had the work list, they called patients and encouraged them to get their labs done prior to their visit. (Using Phytel’s micro-campaign capabilities, NMMCI could have launched an automated email campaign to communicate with patients identified as high-risk by the system. In this instance, however, most of the contact was made by phone since NMMCI realized it only had email addresses for 40 percent of its diabetes patients). Special emphasis was placed on communicating with high-risk patients with A1c levels above 9, which the Phytel platform made easier to identify.

“We may have had 70 patients with diabetes coming in the next week, most of whose scores were fine,” says Renfroe. “If we had to review all 70 records manually to find the two or three high-risk patients it would require a lot of time. With Phytel we can spend less time reviewing the data and more time doing something about what the data is telling us. It’s a whole new ball game. We have been able to gain efficiency by leveraging technology.”

The Phytel platform automatically alerted nurses as to which uncontrolled diabetics were coming in that week so they or the population health managers could plan to spend time with those patients after their office visit to provide them with counseling and a diabetes toolkit.

“They talk about diet, portion control, exercise, medication adherence, and give the patients a Self Management Action Plan,” says Dr. Crosswhite. “We use the Phytel platform to help us monitor these high-risk patients every week and see how many fall off our list. Initially we found most hadn’t even seen us in more than six months, so this program gives us a way to pull them back in to be engaged in their care.”

As the program has progressed, NMMCI has been able to use the Phytel platform to automate the workflows so the entire process is standardized. This standardization makes it easier to ensure all steps have been followed and no patients “slip through the cracks,” as Renfroe says.

Included in the process is a service initiative. Phytel Coordinate campaigns are sent to patients who have been seen at NMMCI during the previous week to assess their satisfaction with the experience. The campaign is also used to thank them for the visit, and reinforce that if they have any questions about their plan of care they should call back, which helps build a stronger patient/provider relationship.

The Results

The use of the Phytel platform for PHM among high-risk diabetics at NMMCI has produced significant improvements in diabetes management. Of the 76 patients who had hemoglobin A1c levels greater than 9, 31 (41 percent) are now below 9.

For the 45 patients who are still considered at-risk, 39 (nearly 87 percent) have now received specific education on how to manage their diabetes more effectively. While taking advantage of that information is still ultimately up to the patients, NMMCI feels they’ve made a real difference in patients’ understanding of what they need to do, which may result in further gains as time goes on.

Individual outcomes from the enhanced patient engagement have also been impressive. For example, over a period of three months one at-risk patient’s A1c level dropped from 11.4 to 8.6. That patient also lost 50 lbs. after participating in four face-to-face meetings. Another, who had just one face-to-face meeting, lost 10 lbs. and reduced his A1c level from 10.2 to 8.4. A third lost 41 lbs. in less than a year, and two others quit smoking. Many of those results were achieved by leveraging technology, allowing care managers to work with patients more effectively.

“My team and I have been impressed with how Phytel processes and merges the data from the EHR and practice management systems,” Renfroe says. “It has given us information we wouldn’t have known otherwise. Even little things, like the percentage of phone numbers that don’t match across the two systems, are important to us as we try to increase the level of patient engagement.”

NMMCI is using the Phytel platform to assist with remote monitoring as well. Bluetooth glucometers, blood pressure monitoring and electronic scales provide biometric data between patient visits, which allows staff to identify patients who are not adhering to care plans or who are not at goal.
“When we started using remote monitoring, I went straight to Phytel to see who should be using the equipment,” Renfroe says. “I was able to drill down to the high-risk patients in minutes – something that would’ve taken much longer otherwise. It makes a great starting point for all sorts of information-gathering, which we have done to initiate many performance improvement projects targeted at improving patient outcomes.”

While a few patients have declined to be contacted about making appointments or overdue services through Phytel outreach tools, the overall reaction has been positive.

“Patients come back and tell us how much they appreciate us reaching out to them to become involved in their own healthcare and thank us for the extra time we’ve spent with them,” says Dr. Crosswhite. “They also appreciate our saying thank you for using our services and checking back on their experience. They feel a much greater connection to us.”

Maybe one of the biggest impacts Phytel has made has been with the physicians themselves. In the past, physicians would question data showing the population wasn’t at goal, suggesting that staff didn’t have their filters set correctly. When the data comes from Phytel, however, the physicians are willing to accept it at face value.

Both Renfroe and Dr. Crosswhite feel one of the big keys to success is the support NMMCI has received from Phytel. Rather than simply selling a product, they say Phytel delivered a total solution.

“Phytel helped us with the implementation, and then provided on-site training to get us using the platform quickly,” Renfroe says. “They helped us get our staff engaged and supportive, which I don’t think would’ve happened had it just been left to web-based training. We also have weekly status calls with our implementation manager, which I didn’t think we’d need at first. Now I’m thankful we do them. It’s been a very positive experience for us.”

The next step, according to Dr. Crosswhite, is to begin using the Phytel platform for various PHM initiatives across all North MS Medical Clinics.

“We’ve already been using Phytel to remind patients to come in for preventative services such as mammograms, pap smears, colonoscopies, etc.” he says. “Our latest is a patient communication campaign to encourage patients to receive their flu vaccine. We’re also rolling out a campaign to send post-visit thank you emails for all physicians whose Press Ganey ratings are below 75%. The more we can engage our patients in a meaningful way, the better value we’ll be able to provide. Phytel will be an important part of making that future a reality.”

Adds Renfroe, “Patient engagement is the future of healthcare and the only way you can do that is with a solution like Phytel that automates it and helps you identify patients that are not at goal between their visits, and then automates reaching out to them. That’s critical if you want to really drive health outcomes and improve the customer experience.”

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**Solution: Phytel population health management platform**

**Product Distinctions**

- Web-based products require no technical expertise or extra equipment
- Implementation carries light footprint with all heavy lifting of data integration from source systems completed by Phytel
- Specialty-specific, nationally recognized protocols are customizable
- Registry seamlessly integrates with EMR, lab, imaging and PM systems
- Automated patient messaging can be repeated at preset intervals

**Benefits**

- Increase in patients receiving preventive and indicated care
- 76 patients were identified with poor A1c levels greater and targeted in communication campaign
- Significant improvement in diabetic patients below 9 A1c levels
- 87% of at-risk diabetic patients received specific education
Prevea Health Automates Population Health Management and Improves Health Outcomes

After adopting the patient-centered medical home care delivery model to improve the health and satisfaction of patients, Prevea Health needed an infrastructure to help its physician practices automate population health management and patient engagement. The multispecialty physician group found the solution it needed in Phytel.

The Challenge of Managing Populations in the Practice Setting

Prevea Health’s 180 physicians deliver primary care and specialty care in more than 50 specialties at 20 health centers throughout Green Bay and northeast Wisconsin. The physician group launched its first patient-centered medical home (PCMH) in 2009 and now has patient-centered medical homes in 15 primary care sites that include 50 providers and 17 care managers who care for 29,000 patients.

Prevea’s leaders committed early to the transition to value-based care, determined to move away from episodic care and embrace population health management. In 2007, before creating its first medical home, Prevea launched a progressive patient outreach initiative to identify gaps in recommended care and engage at-risk patients to receive necessary services within its practices. Based on this and other work focused on managing its patient population, the group received National Committee on Quality Assurance (NCQA) recognition for its medical homes.

However, the ability of Prevea’s practices to manage population health hit a wall when they attempted to expand the PCMH model. Their system simply did not scale. According to Ashok Rai, MD, Prevea Health’s president and CEO, “We were doing a good job with patients we were seeing regularly, getting them in for checkups and providing chronic disease management. But it was a difficult and daunting task to consistently reach out to patients across our community who did not come in routinely.”

We couldn’t be happier. Phytel was genuinely committed to being our partner in this project and to make sure it was successful. They clearly have a handle on quality programs.

ASHOK RAI
MD, chief medical officer
Prevea Health
Complicating the problem, care management processes were largely manual, automation was limited and registries were rudimentary. Prevea's care managers had to identify and engage both the sickest patients and those at-risk of developing complications—a difficult task, even with Prevea's electronic health record (EHR). In addition, the care teams needed to reach out to those patients with education, preventive care reminders, community resources, nutrition advice and wellness opportunities.

The organization looked at several solutions, most of which were limited to automating patient outreach calls. Prevea wanted technology that would do more to help it manage its populations.

An Automated Solution for Patient Engagement

When Prevea leaders discovered Phytel, they knew they had found what they needed—a suite of solutions designed to help them manage their populations and improve outcomes. Moreover, Phytel’s “prevalidation” status from NCQA meant that Prevea practices that used the solution would receive automatic credit toward NCQA’s 2011 PCMH criteria. “We have great care managers but we needed to get the right tools in the hands of the right people to engage those patient populations in most need our help,” said Dr. Rai. “That’s where Phytel comes in.”

As an initial step, Prevea decided to implement Phytel’s solution that automates the process of identifying gaps in care and performing patient outreach. The solution:

+ Identifies patients due for recommended care based on evidence-based guidelines
+ Automatically notifies these patients through automated messaging
+ Tracks patient response and monitors compliance

For Prevea, a significant strength of the Phytel solution was its ability to integrate smoothly with its Epic EHR. Phytel representatives sat down with Dr. Rai and members of the Prevea IT team to outline and establish the implementation and integration plan. Phytel delivered on its commitment of an efficient, straightforward implementation.

Phytel’s technology operationalized data from Epic by:

+ Identifying the last scheduled appointment for patients with selected chronic conditions and looking ahead to see if they had a future appointment scheduled. If the patient did not have an appointment in a period of time recommended by evidence-based practice, the Phytel system generated automated outreach communication.
+ Detecting clinical indicators that might necessitate follow-up visits—for example, HbA1C data for diabetic patients. This component facilitated effective and efficient outreach for preventive and chronic disease care.

Dr. Rai explained, “In a way, we were doing two things with Phytel. We were re-engaging a non-adherent patient population and also preventing upcoming adverse events by engaging patients who needed care earlier.”

Results: Successful Outreach, Reduced Gaps in Care and Increased Quality

Prevea staff quickly saw the positive impact of the Phytel implementation. According to Jody Weise, RN, Quality Initiatives Coordinator, Prevea knew almost immediately that the Phytel implementation was a success. “We had scheduled the Phytel system to send out outbound communications to patients at about 10 a.m. every day,” she said. “Our staff would begin to field calls from patients wanting to schedule appointments by about 11 a.m.” Any uncertainty staff had harbored about being more aggressive in their outreach disappeared when they began seeing patients who hadn’t come into the practice in years. The group’s outreach efforts have increased the number of patients receiving appropriate care.

"Using Phytel creates a win-win situation for me as a care manager and for my patients. It saves me time and gives me capabilities to reach out to more patients. It lets me know how my patients are doing with managing their chronic disease. Most importantly, patients don’t fall through the cracks like they might have in the past with our manual processes. Patients throughout our community get the continual follow-up they need.”

KIM SCHMELING
Care Manager, Prevea Health
Prevea documented the effect of their automated outreach on the quality of patient care, and the results were published in a peer-reviewed study in the Journal of Population Health Management. The research showed that automated patient identification and proactive outreach based on recommended treatment guidelines can deliver 2-3x higher compliance rates for both diabetes and hypertension.

The study revealed that patients who were successfully communicated with visited their physicians at significantly higher rates than those who were not part of the program. Depending on the protocol, contacted patients completed two to three times the number of visits recorded for non-contacted patients. Noncompliance dropped by nearly 50 percent over the six-month period.

Successfully contacted diabetes patients had the highest rate of success, with a visit rate 207 percent greater than that of the non-Phytel group. Among noncompliant patients who were successfully contacted, 40.6 percent visited their physician, versus only 13.2 percent of those not contacted.

Impressive results were seen with noncompliant high blood pressure (hypertension) patients as well. Forty-seven percent of contacted patients subsequently visited their physician, while only about 22 percent of non-contacted patients had a visit during the study period.

Combined results indicated that outreach efforts had a strong positive impact on non-compliant chronic patients in general. During the study period, the number of office visits for contacted patients—across both hypertension and diabetes protocols—was 124 percent higher than the rate of visits for non-contacted patients in the same categories. The study verified Prevea’s assumption that simply identifying patients with gaps in care is not enough. Without a means to effectively engage those patients, they will delay treatment or not seek treatment at all.

The Next Phase: Scaling Care Management

Encouraged by the success of its care coordination and patient engagement efforts, Prevea decided to roll out more of Phytel’s solution suite. Prevea’s leaders, clinicians and care managers now use the patient-centered registry for more advanced care interventions. With this data-driven insight, they are:

- Using risk stratification software to identify patients whose care falls outside established guidelines
- Designing online interventions for groups with low, medium and high health risks as part of their population health management strategy
- Generating pre-visit and post-visit reports to view care gaps for a patient before, during and after the visit so that staff prepare efficiently for patient encounters and better manage follow-up care

“"In the past, we couldn’t easily access the information from our EHR to determine which patients needed care without spending hours generating reports that were outdated by the next day,” said Kim Schmeling, a senior Prevea care manager. “Our care management program started by focusing only on the high-risk patients who came into the practice. Now with Phytel, I don’t have to do the manual work of identifying which patients are at risk, or keeping track of when to contact them and how our last contact went. I know that the patient’s information is going to be real-time data, and it’s going to be accurate.”

JODY WEISE
RN, Quality Initiatives Coordinator, Prevea Health
The Phytel solution suite is also enabling Prevea to evaluate its own effectiveness at managing population health, including:

- Producing worklists to track and manage quality measures and initiatives
- Demonstrating quality improvements to qualify for Meaningful Use, pay-for-performance and other incentives
- Assessing individual provider and practice performance on quality guidelines

“We can look at the big picture of our performance as a clinic as a whole, or we can drill down to the individual provider level,” Schmeling added. “Service-line directors can easily see which providers might need a little bit of help to manage a certain population. This helps us focus our resources where they’re needed most.”

Besides enabling easier identification of high-risk patients and streamlining the care management workflow, Prevea’s leaders also noted that the Phytel solution was helping them bridge the difficult transition between the traditional fee-for-service reimbursement model and value-based reimbursement based on overall population health. This transition often requires significant upfront investment before yielding any financial reward. By engaging patients to bring them in for recommended and preventative care, Prevea inadvertently increased fee-for-service revenue while at the same time delivering care interventions that would keep its patient population healthier.

**Improving Transitions of Care**

Another significant Prevea initiative is providing better follow-up care for at-risk patients discharged from acute or urgent care settings. The physician group has used the Phytel technology to smooth care transitions and help prevent 30-day readmissions. The solution performs an assessment to identify at-risk patients just discharged from the hospital. It then routes these patients to care managers for follow-up. Prevea can then dedicate the necessary post-discharge attention to high-risk patients.

Contacting these patients within 24-72 hours of discharge, care managers answer patients’ questions about post-discharge instructions. Patients and care managers also discuss what medications to take and when. And if a patient needs a follow-up appointment, the care manager can schedule it. This timely communication with high-risk patients ensures that the patient and everyone on the care team has the information and coordination they need to ensure a positive health outcome.
Blood Pressure Control Program

In further proof of the power of Phytel’s automated care management program, Prevea is participating in a pilot of the American Medical Group Foundation (AMGF) to reduce the incidence of hypertension, a leading risk factor for heart disease, stroke, kidney failure, and diabetes complications. AMGF’s Measure Up/Pressure Down program has a goal of bringing 80 percent of patients with high blood pressure under control by 2016.

Using Phytel, Prevea has implemented a blood pressure quality improvement program to identify high-risk and noncompliant hypertensive patients and encourage them to get their condition under control. The results have been promising. In its first 60 days of operation in four pilot clinics, the program achieved an average 97 percent patient compliance rate with routine blood pressure measurements.

HTN Pilot Applying Increased Patient Engagement Results at 60 Days Compared to Baseline

Prevea Health’s commitment to the PCMH model, combined with care management solutions delivered by Phytel, are making it possible for the physician group to manage the health of its patient populations and positioning itself for success under value-based reimbursement.

Solution: Phytel population health management platform

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<th>PRODUCT DISTINCTIONS</th>
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<tr>
<td>+ Focus on care management protocols</td>
<td>+ 250% improvement in care management efficiency</td>
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<td>+ Risk stratification</td>
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<td>+ Automated outreach</td>
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<tr>
<td>+ Ability to benchmark and track physician and practice performance</td>
<td>+ Improved FFS revenue while transitioning to value-based care</td>
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Building the Roadmap to Population Health Management with Bon Secours Virginia

For traditional health systems and physician groups, embracing the Accountable Care Organization (ACO) model is no easy matter. Value-based care has turned the tables on traditional fee-for-service reimbursement, rewarding providers instead for keeping an entire population healthy regardless of engagement status. Even before the advent of value-based care, though, pioneering medical groups and health systems were deploying population health solutions to drive higher-quality, more efficient patient care at a lower cost. With each new success, they have refined the roadmap for achieving truly impactful population health management.

Bon Secours Virginia Medical Group (BSVMG), a hospital-owned multi-specialty group practice with more than 100 locations in metropolitan Richmond, Va., is one such pioneer. In partnership with Phytel, BSVMG has been applying the roadmap for population health management success since 2010, with remarkable results. BSVMG’s 400 providers—45 percent of whom are primary care providers (PCPs)—serve more than 500,000 patients each year. Its transformation into an organization that embraces population health management is the result of a systematic strategy to reengineer clinical practice and integrate new technologies into clinician workflow.

This case study examines in more detail BSVMG’s approach to transitioning to value-based care—and outlines Phytel’s recommended roadmap to successful population health management. Physician practices that follow this roadmap will be well positioned to achieve quality outcomes and financial success in the changing healthcare environment.

Commit to Patient-Centered Medical Home (PCMH) Delivery Model

The first step in the roadmap to successful population health management is an organization-wide commitment to the Patient Centered Medical Home (PCMH) delivery model. The foundation of BSVMG’s strategy for value-based care is its medical home initiative—the Advanced Medical

Using Phytel to improve our quality scores was a no brainer. We’ve almost reached our payer’s quality target. We simply have to ramp up those quality protocols a bit more in the Phytel, and we’ll meet that objective. The result will be shared savings for that payer contract. That more than pays for the cost of Phytel.

ROBERT FORTINI
VP, Chief Clinical Officer,
Bon Secours Health System
Home Project. One of the most significant objectives of the Advanced Medical Home Project is to improve capacity—making it possible for PCPs to double the size of their patient panel without overburdening themselves or sacrificing quality of care. Such an effort requires reduced waste, improved effectiveness and proactive initiatives to increase patient compliance with care plans. To meet this objective, BSVMG has invested in reengineering and refining clinical practice by implementing new technologies and care management processes.

“At first blush it may seem unlikely that traditional hospital leaders would embrace the medical home model and population health management,” said Robert Fortini, PNP, BSVMG’s Chief Clinical Officer, who was recruited by the medical group after launching and directing several successful NCQA-recognized medical home practices in New York state. “But with the advent of the Affordable Care Act, value-based purchasing, and opportunities like the Medicare Shared Savings Program, it makes strong financial sense for a healthcare institution to change the dynamic dramatically.”

Secure Payer Involvement and Alignment

Securing payer involvement is an important step in establishing a financial mechanism to sustain and scale the PCMH initiative. Although involving payers from the outset is ideal, often a practice must invest upfront in population health processes and technology to demonstrate results before payers will sign value-based contracts. BSVMG is a prime example of this.

The medical group took a leap of faith implementing its PCMH changes, recalled Fortini: “I got carte blanche from Bon Secours to do it the best way possible. So we purchased Phytel and ambulatory Epic with all its modules, and we embedded RN case managers in every practice – all without a proven model for payment. So for Bon Secours it was really an ‘If you build it, they will come’ investment. And they did come.”

First to come was Medicare, the biggest payer of all. BSVMG was selected as an early participant in the Medicare Shared Savings Program. And the practice has inked value-based contracts with two commercial payers—CIGNA and Anthem. CIGNA currently gives BSVMG a per-member per-month (PMPM) adjustment for care coordination. Anthem, the group’s biggest payer, pays a care coordination fee and will change to PMPM in the coming year. Several more commercial payers are lined up to sign contracts with the group.

Having the technology infrastructure in place and the ability to show how BSVMG could identify and intervene with at-risk populations and individual patients was key to gaining payer involvement.

Leverage Care Management Resources

The third step in the roadmap is putting the appropriate care management personnel and processes in place to support practices as they manage their patient populations. An important goal of BSVMG’s PCMH strategy was to create high-performance care teams led by physicians, which requires physicians to delegate clinical responsibilities so they can focus on those patients who truly require their attention.

To facilitate this process, BSVMG has invested significantly in embedding care managers into the primary care team. These embedded, professional case managers—called nurse navigators—are each assigned a panel of approximately 150 high-risk patients. They are able to meet the patient’s needs while freeing up physicians to see other patients. BSVMG also outsourced care management duties to inHealth (formerly CenVaNet), a Richmond-based care management organization that specializes in delivering a full continuum of services designed to help providers establish patient-centered medical homes for the patients they serve. InHealth, a Phytel partner, introduced BSVMG to Phytel and the potential of its ambulatory registry and software for managing population health.

Implement Technology to Identify and Address Gaps in Care

A critical complement to organizing the care team is implementing health information technology that empowers the team to efficiently manage population health. This technology is the key to enabling practices to scale their system for value-based care. With the right technology in place, organizations are able to realize the fourth step in the roadmap: identifying high-risk patients and gaps in care to prioritize appropriate interventions.
Phytel recommends implementing protocol-driven registries that automatically identify care gaps and trigger messages to patients for recommended care; applications that stratify patient populations according to identified health risks and create personalized, automated interventions; automated communications that follow a patient’s hospital or ER discharges to help prevent unnecessary readmissions; and sophisticated analytics that measure an organization’s effectiveness in its quality improvement initiatives.

BSVMG began its technology path on its own and has since partnered with Phytel. As a first step, BSVMG implemented Epic’s ambulatory EHR across the enterprise, establishing a strong foundation for documenting care and accessing health records. Then they turned their focus to building a registry within Epic’s inpatient EHR to help nurse navigators prevent 30-day readmissions. Based on the success of this initiative, BSVMG plans to delegate handling of care transitions directly to Phytel Transition™, a solution that will help scale the system more easily than the current homegrown approach allows. An important aspect of this scalability is the ability to align with multiple payers’ quality definitions and denominators while enabling analytics and predictive modeling across multiple clinical conditions. For organizations with multiple payer contracts, this flexibility is crucial. As each payer launches a unique quality improvement initiative with BSVMG, the switch to Phytel will enable the medical group to track, manage and demonstrate compliance with various quality measures and evidence-based standards simultaneously.

Through its contract with inHealth, BSVMG is already benefitting from Phytel functionality for addressing gaps in care. inHealth’s care management personnel use Phytel’s ambulatory registry and population health solutions to identify gaps in care among BSVMG’s populations and make appropriate interventions. Because Phytel automates these interventions, care teams are able to communicate with many patients at once, as specified by condition, measure and clinical protocol.

Phytel’s platform integrates with BSVMG’s ambulatory Epic infrastructure, as well as that of other critical source applications, and aggregates the data into a population-wide registry that enables the organization to implement multiple quality-improvement programs simultaneously. The registry stratifies the population by risk—providing a total population view while enabling each care team to drill down to the data they need on cohorts and individual patients. On behalf of BSVMG, care managers proactively run reports on patient populations in the Phytel registry. A typical query to the registry searches for diabetic patients who have not had a chronic condition visit-related charge in the previous six months and do not have a visit scheduled in the next two months. Whatever the targeted protocol—whether searching for patients with a chronic condition of those who simply require a preventive procedure like a colonoscopy—the system identifies patients due for recommended care and notifies them through automated outbound messaging. The care team is then able to track patient response in the Phytel system and monitor whether they come in for the necessary appointment.

Results

Using Phytel technology has helped BSVMG succeed in its performance-based contracts with commercial payers. For example, in the first six months of their value-based contract with CIGNA, BSVMG practices have hit many of their care quality metrics. By only slightly improving their gap-in-care metrics, BSVMG can achieve the index necessary to qualify for gain sharing—a development that will bring a projected annual savings of $4 million. Because the quality measures that need improvement line up with existing Phytel protocols, BSVMG plans to dial up those quality indicators in the Phytel system and give them more pronounced attention. They are confident that by doing so they will sufficiently improve their care quality index to qualify for shared savings in the coming year.

Another indicator of success is that BSVMG is demonstrably bridging the gap between value-based care and the fee-for-service (FFS) model. This transition is often a difficult one, requiring significant upfront investment before seeing any financial reward. By practicing population health management to bring patients in for chronic and recommended care, BSVMG has both improved quality and increased FFS revenue. Using the Phytel platform for patient outreach, BSVMG generated approximately 40,000 unique patient visits—all for preventive, follow-up or acute care. These visits generated more than $7 million in revenue for the organization and a return on investment on their technology spend of 16.6. This ability to transition to value-based care while achieving success in the current FFS model helps individual physicians and practices more readily embrace the PCMH model.
Implementing Phytel’s technology also has furthered BSVMG’s goals of gaining medical home recognition. Phytel is the first non-EHR vendor—and only the second company overall—to secure an agreement with the National Committee for Quality Assurance (NCQA) that allows practices using Phytel’s solutions to automatically meet certain NCQA requirements for recognition as a PCMH. Since BSVMG’s medical home project began in 2010, eleven practices have earned NCQA recognition as patient-centered medical homes (Level 3), and the organization may seek system-wide recognition.

Measure Quality-improvement Effectiveness with Analytics

The fifth step in the roadmap to successful population health management is to implement sophisticated analytics that measure an organization’s effectiveness in quality improvement initiatives. BSVMG has reached this point on the roadmap and will soon be expanding its implementation of the Phytel platform to include performance measurement at the level of individual groups, sites and providers, as well as feedback to providers on variances in care and quality reporting.

This functionality is particularly important to the medical group as they move into the accountable care organization (ACO) setting. BSVMG has contracted with multiple payers under ACO agreements, which requires the medical group to measure quality across all of the payers simultaneously. They must also provide quality reporting tools to their care managers. Phytel’s clinical analytics solutions play a key role in helping BSVMG manage risk contracts across multiple payers. This functionality for analytics and insight on both the clinical and administrative level will help the organization ensure that it is meeting the Triple Aim – lowering costs while improving quality and the patient experience.

As one of the most established vendors in the growing market for population health management, Phytel has the expertise to move your organization successfully along the roadmap to better outcomes at lower cost.

“We’re finding new and creative ways to use Phytel every day,” said Fortini. “I think embracing and using technology like this as completely as possible is going to be transformative for medical groups.”

1 As of March 2013, Bon Secours Medical Group has 8 practices recognized under the 2008 NCQA PCMH standards and 3 recognized under the 2011 NCQA PCMH standards.

Solution: Phytel Population Management System

<table>
<thead>
<tr>
<th>PRODUCT DISTINCTIONS</th>
<th>RESULTS</th>
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<tbody>
<tr>
<td>+ Drives population health management</td>
<td>+ Prompted 40,000+ unique patient visits for preventive, follow-up or acute care</td>
</tr>
<tr>
<td>+ Can be used to build medical homes and ACOs</td>
<td>+ Generated more than $7 million in revenue through these visits</td>
</tr>
<tr>
<td>+ Generates demonstrable quality improvement</td>
<td>+ Earned a return on investment on their technology spend of 16.6</td>
</tr>
<tr>
<td>+ Implementation is smooth and rapid</td>
<td>+ Registry seamlessly integrates with EMR, PM and other systems</td>
</tr>
<tr>
<td>+ Nationally recognized, evidence-based protocols are customizable</td>
<td>+ Identifies gaps in care in a patient population</td>
</tr>
<tr>
<td>+ Registry seamlessly integrates with EMR, PM and other systems</td>
<td>+ Automated patient messaging can be repeated at preset intervals</td>
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Riverside Health System Improves the Patient Experience with Phytel Transition

Automated Post-Discharge Calls Lift Riverside ED’s Press Ganey Ranking Five Points in First Year

Press Ganey data shows that when hospitals call discharged patients to check on their health, patient satisfaction rises and they are more likely to recommend the hospital. Renee Rountree, Vice President of Emergency Services at Riverside Health System in Newport News, Va., wanted to apply that insight to improve Press Ganey scores for the emergency departments at Riverside’s hospitals. But she had a problem: The four-hospital system didn’t have enough personnel to make the calls consistently to all discharged patients. Riverside’s ED triage nurses were only able to call three types of patients—those who left without being seen, the parents of pediatric patients, and people discharged to home with a fever of unknown origin or abdominal pain.

To ensure that all discharged patients were called, Rountree sought an automated messaging solution. She was already familiar with Phytel’s Outreach™ solution, which Riverside’s 350-physician medical group had been using with great success since 2009 to automate callbacks of ambulatory patients who needed preventive or chronic care. With that positive experience in mind, she selected Phytel Transition™, part of Phytel’s population health management suite, for ED post-discharge follow-up.

Riverside Regional Medical Center (RRMC), a 510-bed hospital with 57,000 annual ED visits, began using Transition in its ED in January 2012. Today, Transition is being used in three of Riverside’s four EDs and will be introduced in the ED of Riverside’s new hospital in Williamsburg when it opens in May 2013. In addition, Riverside has begun deploying Transition in the inpatient units of its hospitals, starting with RRMC.

"Jumping from 58 to 63 percent in the Press Ganey rankings is a very positive trend line. It’s huge to go up five points in four quarters, and in percentile ranking, it’s very big."
How the system works

Phytel Transition enables healthcare systems to engage discharged patients about their care needs and their ED or hospital experience. When a patient is about to be discharged from a Riverside ED to home, for instance, a doctor or a nurse tells the person to expect an automated call from the hospital within 24 hours. Phytel’s automated message asks patients to complete a short assessment. They are asked how they are feeling and whether they understand their discharge instructions, whether they have questions regarding their medications, and whether they have contacted their primary care doctor. At Riverside’s request, the script also urges patients to fill out Press Ganey surveys when they receive them in the mail.

If people indicate that they’d like the hospital to contact them to answer their questions, Phytel places their names on an “escalation list” that is available for the case manager in the Atmosphere platform. Phytel also includes the names of those who said they would not recommend the ED so that the nurses can call them back to find out why. The names of patients who indicate that they do not need personal follow up do not appear on the list.

Three RRMC nurses call patients on this escalation list from home, using cell phones that the hospital gave them. These nurses, who work three 12-hour shifts per week in the ED, each spend about four hours weekly phoning patients. Shielded from interruptions, the nurses are able to focus on the needs of the two dozen or so patients that each of them calls during a given week.

Riverside’s ED EHR generates the demographic and contact data that underpin Phytel’s automated messaging. By screening the codes for transfers and discharges, the ED system ensures that Phytel calls only patients who have been released to home, not patients who have been admitted or transferred to other facilities.

First-year results

Patient satisfaction with the RRMC ED increased significantly after the introduction of Phytel Transition, through the end of the year. According to Press Ganey data, the ED’s mean percentile ranking for the fourth quarter was 62.9, compared with 57.9 in January.

“Jumping from 58 to 63 percent in the Press Ganey rankings is a very positive trend line,” Rountree points out. “It’s huge to go up five points in four quarters, and in percentile ranking, it’s very big.”

During the same period, she said, the likelihood of discharged patients recommending RRMC rose from 60.1 in January to 64.1 in the fourth quarter. This also represented a significant improvement, Rountree says.

Other factors could have helped raise the scores, she adds. During 2012, the RRMC ED put an emphasis on hiring friendly nurses, improving the quality of care, decreasing wait time, and rounding hourly. Nevertheless, Rountree is convinced Phytel Transition was a major contributor to the improved patient satisfaction scores.

Escalation list

During the period from January 2012 to February 2013, Riverside sent Phytel lists that included a total of 81,254 discharges from the three EDs that were using Transition. Phytel attempted to contact all of the patients for whom it had good contact information. It reached 44,303 of these people, or 55%. Of those who answered the phone, 22,502, representing 28% of the total discharges, completed the RRMC survey.

The results showed that nearly 90 percent of the patients would recommend the care they received in Riverside EDs. Of the patients who asked to be contacted, 1,026 had questions regarding their discharge medications, and 809 had questions about discharge instructions.

Peer-reviewed studies have demonstrated that post-discharge calls can help patients resolve medication-related issues and answer their questions about referral and aftercare instructions. Such messaging is an integral part of programs to reduce readmissions, such as the Naylor transitional care model, the Coleman care transitions intervention, and Boston University Medical Center’s Project RED.
Turning perceptions around

The follow-up assessments generated by Phytel Transition have helped Riverside’s EDs in several ways. First, the patients who requested callbacks to answer their questions received information that improved their ability to manage their health. That was not only good for the patients, but also enhanced Riverside’s reputation. If the patients indicated they lacked a primary care physician, they were placed on the escalation list so nurses could refer them to doctors in the Riverside Medical Group (RMG).

Second, nurses callbacks have helped resolve problems that patients have encountered with the healthcare system. For example, when one nurse found out that a patient was having trouble getting insurance company authorization for a prescription at the pharmacy, she intervened and was able to obtain the authorization. The patient was very appreciative.

The use of Phytel Transition for post-discharge messaging, Rountree says, also generates goodwill that can drive business to Riverside’s hospitals. “For example, say that someone is treated at the ED for a sprained ankle and they get called back after discharge. That patient is more likely to return to Riverside for a major operation, because they’re impressed that the hospital called them back.”

Bid to raise HCAHPS scores

Following on the success of Transition in its EDs, Riverside is beginning to roll out the solution to its inpatient units. Riverside’s readmission rates are fairly low, so the healthcare system’s main goal is to boost their HCAHPS patient satisfaction scores, Rountree says. This is important not only because Medicare’s value-based purchasing program incorporates HCAHPS, but also because the Centers for Medicare and Medicaid Services (CMS) publishes HCAHPS scores on its HospitalCompare website.

Riverside’s leaders are very impressed by the significant increase in RRMC’s Press Ganey scores, and they believe that Phytel Transition made the difference, Rountree reports. “A four to five point gain on the ED side is hard to argue with,” she notes.

At RRMC, Rountree adds, Phytel’s integration of Transition with the inpatient ADT system "went really smoothly. I’ve had projects that haven’t gone nearly as well, and this one was just really simple to make that demographic feed happen.”

All in all, Rountree concludes, Phytel Transition is helping Riverside improve quality and patient satisfaction while preparing it for the future. "The Phytel Transition program allows us to focus our callback efforts with a screening process,” she notes. “As we are facing the ACO environment, and doing more with less, this provides the most efficient use of our resources.”

Solution: Phytel Transition

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<thead>
<tr>
<th>PRODUCT DISTINCTIONS</th>
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<tbody>
<tr>
<td>+ Web-based product requires no technical expertise or extra equipment</td>
<td>+ Improved Press Ganey scores from 58 to 63%</td>
</tr>
<tr>
<td>+ Patient messaging is totally automated</td>
<td>+ Increased patient recommendation scores from 60 to 64%</td>
</tr>
<tr>
<td>+ Product generates lists of patients who need additional help for referral to case managers</td>
<td>+ Reached 55% of discharged patients through automated contact</td>
</tr>
<tr>
<td>+ Enables organizations to contact all discharged patients without hiring additional staff</td>
<td>+ Improved quality of care by providing additional support to patients who need it</td>
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<tr>
<td>+ Can be used in both EDs and inpatient departments</td>
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