# Innovations in Health Care

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succession planning initiatives, including the creation of a centralized talent management system. Prior to joining HSHS, Clark was the president and CEO of the Texas region of St. Joseph Health System in Orange, California. She also served for nine years in the SSM Health Care System in various leadership positions, including president of DePaul Health Center. Clark holds a bachelor of science degree in nursing and a master’s degree in public administration.

Josh Wilks is a principal with the health care group of CliftonLarsonAllen specializing in application service for both internal and external clients. He is the principal in-charge of the St. Louis office’s health care practice and serves as the primary adviser for various hospitals and health systems across the Midwest. Wilks has considerable knowledge concerning the health care industry and has assisted a variety of organizations in assessing risks, redesigning internal control structures to properly assess, monitor and manage these risks. Wilks is the president of the Show-Me - Missouri Chapter of the Healthcare Financial Management Association. He is a Certified Public Accountant, licensed in Minnesota and Missouri. He is also a member of the AICPA, Missouri Society of Certified Public Accountants and the Health Care Financial Management Association.

Bill Wagner is the vice president - health care at S.M. Wilson & Co. and the AGC of Missouri. He is a Certified Public Accountant, licensed in Missouri. He also serves as general chairman of the Fair Saint Louis in the St. Louis community, as well as active in the American Society of Healthcare Executives.

Dr. Andrew Bland is the Vice President and Chief Quality Officer for Hospital Sisters Health System (HSHS). In the role, Bland provides oversight and consultation with the Chief Medical Officers and quality colleagues at Local Systems and physician enterprises. For the past two years, Bland has served as the Chief Quality Officer for HSHS Medical Group. Prior to joining HSHS Medical Group in 2014, Bland served as the Assistant Dean for Faculty Development and Associate Professor of Medicine at the University of Illinois College Of Medicine in Peoria. He also served as the Chief Medical Officer and Vice President of Operations for Proctor Hospital. Bland earned a Bachelor of Science from the University of Illinois in Champaign and completed medical school at the University of Illinois - College of Medicine at Peoria.

Steve Pozaric is a corporate partner and co-leader of the Health Care and Life Sciences practice at Armstrong Teasdale. With a focus on the health care industry, he represents health care systems, hospitals and physicians with all aspects of their business — ranging from operational matters, contractual and equity joint ventures, physician and other contracting, to tax exempt financing, and mergers and acquisitions. Pozaric has significant experience with physician employment agreements, medical staff issues, credentialing and disciplinary matters. He also counsels clients on compliance related matters, including the Stark Law, the Anti-Kickback statute, HIPAA and EMTALA, and has been involved with internal compliance investigations and self-disclosures. Active in the St. Louis community, Pozaric served as general chairman of the Fair Saint Louis Foundation in 2015 and 2016 and has been the fair’s general counsel since 2011.

Meg Louis became a registered nurse to care for others. After several years serving as a nurse in hospitals in both St. Louis and Chicago, she completed a MBA and turned her attention to health care design. Now as an operational planner for BSA LifeStructures, Louis provides oversight and consultation with clients to design of health care spaces. Her clinical experience, coupled with health care research and analysis, impacts key outcomes such as minimizing hospital-acquired infections and avoiding patient falls. As an operational planner, Louis studies health care processes and develops efficient “future state” plans for patients, staff and supplies. Her role expands upon her passion for patient care, as her impact improves the lives of all patients, staff and visitors in health care facilities.

Jim Dover serves as the president and CEO of the Hospital Sisters Health System Southern Illinois Division. In this role, he leads the overall direction and strategy for the Southern Illinois Division, which includes HSHS Holy Family Hospital - Greenville, HSHS St. Anthony’s Memorial Hospital-Ervingham, HSHS St. Elizabeth’s Hospital-Belleville, HSHS St. Joseph’s Hospital-Breese and HSHS St. Joseph’s Hospital-Highland. The division works in partnership with the HSHS Medical Group, Prairie Cardiovascular and HSHS Home Care and Hospice Southern Illinois to provide care to the Southern Illinois region. Dover has more than 30 years of leadership experience in health care. He has extensive health care leadership experience in very competitive markets where he has improved performance and market growth. He holds a master’s degree in hospital administration from the University of Minnesota, a bachelor’s degree in bacteriology from the University of Idaho, and is a fellow of the American College of Healthcare Executives.
The trend toward more outpatient facilities has changed the patient process from arrival to discharge. As Bill said, you check in online, register online, and even pay and submit your insurance online. Upon arrival, you can check in through an app on your phone, complete your treatment and then check-out using a kiosk. Patient care processes are transitioning to the virtual side, which frees up space on the inpatient side of the hospital. Another trend we see is the development of prototype designs ranging from a full-service inpatient hospital to the details of an exam room. The benefits of a prototype are increased speed to market, scalability and brand recognition.

Melinda Clark: Also, it creates a brand image of accessible, patient-first care. And we do that. We have small to large prototypes to fit the needs of our market.

Steve Pozaric: Many providers are looking to achieve a consistent-looking feel throughout their system. In the outpatient area, we have helped our clients expand their urgent care locations further out into the community, closer to patients. We have also seen a movement from one centralized facility to an expansion of specialized facilities such as along Highway 40 for orthopedics, children’s clinics and rehabilitation in order to disperse facilities closer to the community to increase convenience and accessibility.

How does that impact costs overall?

Bill Wagner: From a cost standpoint, the outpatient facility is actually less expensive to build because we’re not constructing an institutional building. At these facilities, patients are not spending the night, and it’s not a 24-hour stay. So it’s a B occupancy building, the building costs themselves are a little bit less. Costs are impacted from a technology standpoint, they’re adding more and more technology to these outpatient facilities. There’s more imaging. In the past when you visited a medical office building it was truly a medical office building. You may have had to go someplace else for imaging or even someplace else for labs. Well, now they are a one-stop shop. They have imaging, labs, and everything needed for outpatient surgery. It’s a much higher level of care, same-day care. Patients are coming in, they’re having a procedure done, there’s an imaging component, there’s a lab component, but you’re discharged at the end of the day.

Is duplication of these facilities driving costs up as well?

Melinda Clark: Taking a look from the physician perspective, we’re putting primary care and access to primary care out in the communities we serve. But when it comes to subspecialists, we’re putting them in centrally located facilities – in other words, destination locations because patients access primary care more frequently than specialty care. So we’ll build megacenters to house specialty patients, but for primary care we have more simple buildings with a lot of wiring for the data and technology needs.

Meg Louis: Understanding your strategic objectives is vital. There is a theory that we are overbuilding ambulatory care facilities. That is why it’s essential for health care leaders and executives to understand their data, metrics, utilization rates and volume projections. With this information you are building the right types of facilities in the correct areas to serve your patient populations. Often the best approach is to utilize your space more efficiently, rather than adding or building new space.

Bill Wagner: It’s still about the patient, and from their standpoint it’s all about convenience. So if the patient can visit a facility that is two blocks down the street instead of the hospital that’s two miles away, they will most likely choose the closer facility. It’s convenient for the patient. Duplication of facilities does not matter to them. The patient cares about how long they’re going to wait in line.

Steve Pozaric: Convenience is key. Many people, when they try to make an appointment for a checkup with their primary care physician, face significant wait times. If hospitals are able to increase their number of physicians and locate them close to the patient base, people are more likely to take advantage of the preventative care available, which is something we’re actively working on.

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will lead to a healthier population and result in lower overall health care costs. Also, some urgent cares now have the technology to post the wait times online.

Josh Wilks: And there’s certainly a market grab that’s going on with a lot of this, right? Clearly, we want to be the first to gain the market share, to have the entry points into our health system. So although we may be over-building it’s giving us a competitive advantage, there will certainly be winners and losers in the long run.

Talk about operationally-intelligent design. Why is it necessary? What’s the process to achieve it?

Meg Louis: Operationally-intelligent design creates efficiently functional space by focusing on all the essential flows of a health care environment. For example, in a hospital you have the flow of patients, staff, visitors, information, supplies, technology and materials. You need to understand the function of these processes before you create the form of the space. There is a twofold process to achieve operationally intelligent design. The first step is to understand your processes. You should not take old processes into a new space. To understand current state process, we meet with a representative from each department and create process maps of how they function today. We identify what is going well and what are the key issues they face. Utilizing lean facilitation tools, we develop an efficient future state of operations for all their processes. As a nurse, this is my favorite part – helping staff create new processes and translate their goals into design decisions. Secondly, you need to understand your current data. As I mentioned before, it is essential to understand your volume projections, utilization rates, growth projections of each service line and how those metrics align with your strategic initiatives. This information provides clear direction on where to grow and build and how to utilize space more efficiently. Operationally-intelligent design creates efficient space by understanding how the current space operates and partnering with all of the experts who make a health care facility run every day.

As a contractor how do you reduce costs and deliver projects faster to meet the needs of your clients?

Bill Wagner: First of all, in the health care side, the more advantageous delivery of construction is a CM, or construction manager, which allows us to come on board early and be part of the decision-making team. It’s not a traditional design bid/build approach. We come

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JIM DOVER, HSHS Southern Illinois Division
on board about the same time or a little after the architect. We’re involved very early with the pre-construction aspect. We’re looking at costs and constructability as a team member. In the traditional design-bid-build, the drawings are completed and put out on the street for three or four contractors to bid. In the CM approach, there could be a competition to determine the CM, which is based on qualifications, fees and general conditions, but the CM is engaged early, and working with the architect and the owner as part of a team. This is much more of a team concept. Probably 95 percent of the time on health care projects, that’s the kind of delivery that you see for construction. With the CM approach, pre-construction is very important in the planning. Pre-construction ensures cost control and constructability, which is required for the Certificate of Need process. Another significant component of delivering our projects more cost effectively and timely is Building Information Modeling (BIM). With BIM, we can bring people to the table earlier and coordinate construction activities before we ever go out and build them, and that’s very advantageous. We also use a lot of pre-fabrication. One example, was at the BJC campus renewal project. We built the whole penthouse on the upper level using pre-fabrication. We basically built the penthouse away from the site. Then we took it apart and put it on skids small enough that we could lift it with tower cranes and set those skids in place. We were able to bring that penthouse on board probably nine months earlier than we would have if we would have built it in place. With traditional building, you would have to build the structure first then place all of the piping and ductwork and weld it. Because all of that could be done off-site it saves a lot of time, money, and it’s also a lot safer environment for the tradesmen. And, an owner likes it because it’s done in a quality-controlled environment rather than on the 13th floor of the building. The delivery, BIM and prefabrication are some of the things that we’re doing in the industry that are saving time and money.

**What is the best technology innovation in health care construction?**

Bill Wagner: As I touched on earlier, I think the BIM modeling is very important. It gives us the ability to plan and see things before you ever put them in place. This saves costs of re-constructing or the time it takes to coordinate a solution when you have labor standing there waiting for the solution. BIM allows you to deal with a conflict before construction begins, and define spaces for the trades to ensure all systems fit. The other technology innovation is PlanGrid, one...
you can imagine the old superintendent and project manager carrying this big roll of plans, and then those plans were not being updated on a daily basis – they didn’t always have the latest set of documents. Today with the iPads, everyone has the latest documents, they’re downloaded on a daily basis. They have the specifications and the shop drawings that hyperlink to cuts. Those are just a couple of things that have had a huge impact from our side of the business in the last five to six years.

Meg Louis: I’ll add to what Bill shared from the perspective of technology in design. We use software programs such as BIM, Revit and Enscape during our meetings with clinicians and staff to provide three-dimensional views of spaces. When I was a nurse, I didn’t understand how to read floor plans. Now when we work with clinicians and hospital staff during the design phase, we guide them virtually through spaces. Users are able to see and fully experience the look and feel of a space, bringing the two-dimensional floor plan to life. Our software tools improve understanding and communication while speeding up the planning and design process significantly.

Melinda Clark: We’re actually seeing significant expansion of electronic technology and electronic health records. So the private offices that providers used to have are gone because now you have team delivery of care, and you now have iPads versus computer docking stations. But we also are learning that patients want to see their electronic health records. So we have piloted large interactive screens, which gives the provider the ability to turn on a screen with the trend blood work, blood pressures, or other information and the patient can look at it live. So, again, that’s a flat screen on a wall versus having patients go to a separate office to have the conversation with the provider. As far as trends for the future, I don’t think there will be any waiting rooms in offices of the future. In a provider office, we’re to the point that you literally walk in and it’s more of a cafe. We’re reducing our waiting room sizes by 50 percent right now to try to get folks used to it. Ideally, you will check in online, come into the clinic and be taken right to your exam room.

Bill Wagner: Patient satisfaction and their HCAHPS scores drive everything. We’re reducing our waiting room sizes by 50 percent right now to try to get folks used to it. Ideally, you will check in online, come into the clinic and be taken right to your exam room.

Melinda Clark: You will have the accommodations if someone has the need. But most of the time they will come straight to a check-in desk, go right to the exam room and be ready to see their provider. I would rather give the provider an extra exam room than have a waiting room that is half empty all of the time.

Let’s talk about value-based care. How does it differ from traditional health care?

Dr. Andrew Bland: Traditional health care is based on fee-for-service and the
routine of waiting for the clinician and enduring inconveniences because you only went to the doctor when you were sick or needed to be in the hospital. It’s more inpatient-focused and more episode-focused. That’s traditional care. The design changes we are seeing are a result of the move to value-based care because it’s now about engaging patients. As an example, in the past a patient who had a heart attack would get the artery opened up and go about their daily life. The concept of value-based care educates patients about heart disease before they have a heart attack so the individual is healthier. This is more focused on preventative care, which has led to the construction of more outpatient facilities. This is also why you’re seeing medical providers trying to gain market share because they want to engage the patient across the continuum. To put this in perspective, if you see your doctor every three months for 15 minutes at a time, that’s 60 minutes out of 129,500 minutes. So where do you think patients live their life? They don’t live it in the 60 minutes that they’re seeing the doctor; they live it in the other 129,000 minutes of their life. And medical providers have to engage them in those 129,000 minutes. Which is why patient satisfaction is important because people don’t care how much you know until they know how much you care. So if we can’t engage them in a space that is comfortable where they’re able to view and understand things, they can’t make changes. For instance, with hypertension control, it’s not about having the patient take their pills and then see you every three months. It’s about making sure their diet is controlled, they are exercising and they’re coming to see you. They also need the technology that Melinda referenced in a room that Bill and Meg discussed, which is designed to engage them so that they can see the effects of their choices outside of that. That also means you have to have a population level to be able to drive this because value-based care is a very different reimbursement model than episodic-based care. It’s more about taking risk, and to do that, you have to have the population to control for the outliers. If you don’t have that population, it’s impossible to have that one outlier patient that, in essence, previously would have been considered revenue and is now cost. This is where insurance companies come in. So you have to have that population to be able to mitigate that to have the resources to be able to put in front of them. You also need resources on the outpatient side to be able to drive that value. That means having the health coaches and nurse navigators who reach out to you and with whom you’ve developed a relationship. So when you have heart failure and you’re struggling and you’ve gained three pounds, you can call them rather than waiting until you’ve gained 20 pounds and your shortness of breath is
so bad that you need to be in the hospital. They also need to have all those technological channels, which are the secure messaging, video chatting, urgent care accessibility and tablets, for example. And there has to be someone there to receive the communications coming from these various channels.

Steve Pozaric: There is more value-based care coming in the future. The Department of Health and Human Services has indicated they want to shift half of Medicare payments into alternative payment models from traditional fee for service. So I heard about value-based care. Medicare said they’re going to put 50 percent enrollees within five years in the Medicare Advantage Plan. So consequently, as a health system we have to be thinking ahead. Let me provide an example. We’re in St. Louis Blues territory. We’ve got to skate to the puck, right? We don’t wait for it. So from a capital standpoint, future capital allocation, we might allocate around $150 million or $200 million dollars a year for future capital. We’re not putting that all in hospitals. What we’re putting it into is ambulatory centers, virtual technology and population health. So the change toward value-based health care has required health systems to step back and say, “for the next five years, when we put money into hospitals, we have to be very careful and be very judicious.” It used to be acceptable to say that a specific inpatient room is only used for ICU or the room is used for surgery. Now we have rooms that can be adapted based on acuity which means that if it needs to be used as a surgical room on Tuesday, it can be used in this manner. If it then needs to be used as an medical room later that same day, it can be used for this purpose as well. Another consideration is the geographical distribution of our primary care platform. And then lastly, investing in technology. We are investing over $120 million dollars in the Epic platform that creates seamless continuity of care for our patients. We might see 20,000 discharges a year within the Southern Illinois division; meanwhile, we see three-quarters of a million ambulatory visits for an ambulatory platform. So where are we going to put our investment? We’re going to put it into an ambulatory platform, because that is where our patient population is encountering care.

**Jim and Melinda, how do HSHS service lines such as LeadWell Corporate Health and Wellness and Anytime Care fit into consumer-driven health care strategy?**

Melinda Clark: Let me start off on you with finding a primary care provider. Anytimecare.com has been taken off rapidly, and we’re seeing more and more people engage with us. It’s also great for our practices after hours — patients can use Anytime Care instead of going through an emergency room for something as simple as a urinary tract infection or a bad sinus infection. The other product we put together is called LeadWell. That’s a product for self-insured companies that gives them the ability to have an on-site clinic exclusively for their employees. This is a doctor’s office on-site. It gives the company the ability to have open access, no appointment scheduling necessary, and helps reduce the overall health care claim cost.

Jim Dover: The investment in the technology side is not small. So back in the day, we may have spent less than 1 percent of our total expenses on information technology. Now, investing in technologies that connect directly to the patient is probably five to seven percent of our total and increasing every year.

Bill Wagner: Besides the technology, there’s also been more investment in hybrid operating rooms in the last five years. It used to be that you would transport the patient between the imaging room and the OR. Now the imaging can be in the OR. We built the first intra-op robotic OR with the MRI in the country that goes back and forth between two ORs at BJC. The MRI was stationed off of a railroad track type structure that hung from the ceiling. The MRI can actually be transported back and forth to OR. So you’re seeing some of these hybrids, and of course, the robotics that have been significantly changing health care in the last few years.

**Jim Dover:** The way you treat patients is going to be a change in the way we construct and automate rooms. Construction and automation is planned based on functional needs. For example, to perform procedures to treat heart disease, which remains the No. 1 killer in the United States; we used to crack open the chest and go in and operate. Now, within our system, we’re literally inserting heart valves into the heart through a catheter without ever having to open the chest. In order to do that remotely, the imaging requirements are extensive. In the past, we may have started a procedure, such as a stent, in one surgical room, like the cardiac cath lab, and then move the patient to the larger operating room due to the setup of the room. Now, we can start and end the procedure in one room because we think differently about functionality. Therefore, the construction and automation follows functionality. And frankly, it’s better for patient care and achieves better outcomes.

**Melinda Clark:** Following up with what Dr. Bland said with the care team, you don’t always have to see the provider, but you do need to see a member of the care team. So that’s what we encourage — same day access — depending on your reason for calling. We’re building a care team model around that provider that expands the number of patients they can see, and we have that care team. We have a pharmacist now for outpatient provider practices, and we are looking for other key members to enhance the care coordination.

**Has that been a difficult transition for patients?**

Melinda Clark: It depends on the hand-off. It’s how the provider presents the care team and how it can benefit the patient. Some examples are diet control, exercise management, wellness exam. Setting up a clear message on how the care team works makes a difference.
**Jim Dover:** I’ll come back to Dr. Bland’s concept of population-based health. There’s now more people in the United States than there are baby boomers. You know, that population has never waited for a thing in their life. They’ve got instant technology, they’ve got iPads, they’ve got ATMs, they’ve got drive-throughs. So this concept of waiting to see a select type of provider is a concept that is going away. And it’s already being driven by the demographics of the population. The other thing is we can’t go through this today without at least having one comment about public policy and funding for access. OK? So regardless of where you fall in the political spectrum, there’s lots of research out there from Kaiser Family Foundation and others that shows that when people have insurance they are half as less likely to die from breast cancer and those sorts of things because they get early detection. When you do not have insurance you do not get the preventive care, you do not get the early detection, and your mortality rate is higher. So consequently, from our perspective as a Catholic health system we take a very strong position around getting people access to insurance because we know that in the broader scheme of things we don’t care where you go and which health system you use, but when you have access to insurance you have access to primary care. And therefore, by having access to care, you will then have a better life expectancy.

**What are the financial implications of transitioning to a value-based health care model as the industry’s payment streams continue to evolve?**

**Josh Wilks:** We describe it as walking a tightrope when you have this fee-for-service environment where we’ve traditionally been and we need to move to a value-based payment environment in the future. So you’re walking a tightrope between two buildings, if you can envision it. The key is not to fall off the tightrope, obviously, because as we’re making all of these different types of investments and changing the way that we provide care, the reimbursement models today for the majority are not set up to reward us for those or to compensate us for that care. Obviously, the Medicare Accountable Care Organization models, the value-based payment arrangements and some of these other mechanisms are moving us in that direction. Managed care plans and other risk-sharing arrangements with non-governmental payers are moving us in that direction as well. But as we sit today, the majority of revenue is still tied to this fee-for-service world. So the expectation is there for us to transition to population health from reactive care, but the reimbursement is not in place today to completely force us into that environment. And there are enormous financial implications on the cost side. Obviously, the investment in technology is tremendous and these folks have been burdened by the investment. Jim’s already alluded to the growing cost of IT and that’s going to continue to increase. Many health systems have invested majorly in electronic health record platforms, and the reality is that none of them talk well to each other. So maybe within their own health system they can integrate and connect.
Outside of that environment there is little connection from health system to health system. Obviously, there is an important connection necessary to be able to clearly manage people’s health in a more global setting. And, there are other issues from a regulatory perspective that need to continue to evolve. For instance, IRS nonprofit organizations get into this complex situation of what is unrelated business income. We have a client that built a CrossFit gym. And when you think about it, it’s about improving the health of the community. But the IRS looks at it and asks, “Is that unrelated business income tax?” In that example, the hospital’s CEO says to us, “You know we want to improve the health of our patients, but the IRS continues to still look at this under the old system.” Regarding Medicare and how they treat areas such as this from a reimbursement perspective. If you’re a critical access hospital that gets cost-based reimbursement, these costs get kicked out of your reimbursement and typically ends up a negative implication to the facility. The same negative impact can occur on the wage index for community and urban facilities as well. So there are a lot of regulation tie-ins right now that are really based on the old system, and there’s going to have to be an evolution to get to the new system so we can effectively do population health.

Steve Pozaric: Value based models and bundled payment initiatives can require hospitals to manage the continuum of care, which necessitate working with an array of health care providers, including primary care physicians, skilled nursing facilities, rehabilitation facilities, home care and so on. These may be associated with the hospital or third parties. The way the bundled payment models are currently designed, though, the burden of reducing costs generally falls on the hospital because, at least in the Comprehensive Care for Joint Replacement and cardiovascular models, there will be a true up calculation based on the whole episode of care over a specified period of time. The penalty, or the benefit, will be paid to the hospital. As a result, the hospital is beholden to the performance of the other providers. Hospitals are able to enter into agreements with these downstream providers to shift some of the risk or share the reward under these initiatives, but they have to find the right providers to do that with. These arrange-

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STEVE POZARIC, Armstrong Teasdale

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ments must be carefully structured and documented to comply with the regulatory restrictions and properly align each party’s goals and incentives.

Jim Dover: The financial incentives that are set for health care organizations are really counter-intuitive to their purpose, to care for the sick. We get paid when people are sick, not when they’re well. Outside companies that are not really part of the organization get paid when people don’t come to us. This leads to a natural tension. For example, we give free flu shots to keep people healthy and out of the hospital. In contrast, I don’t know any airline that gives out free, $25 gift certificates at Thanksgiving saying “don’t fly.” But health care organizations do. And so someone else receives the financial benefit.

Josh Wilks: There’s a tremendous amount of data that’s going to be required for that to be effective. So understanding not only your cost of care, but understanding the cost of the full continuum of care is extremely important. So as you develop those relationships with other providers, such as the skilled nursing facilities or the primary care and specialty docs, if you don’t own them, there has to be a tremendous amount of data back and forth to understand the total cost of that episode of care.

What are the financial investments health care providers need to make to be successful under a value-based system?

Josh Wilks: I think we’ve touched on the majority of that, but certainly technology. It’s a tremendous investment that’s been made. The federal government pumped a significant amount of money into hospitals over the last several years with electronic health records incentives. That money is now gone and has been spent. Hospitals are going to be carrying the burden of these tremendously expensive electronic medical record systems. Not only are they expensive to implement, but they’re expensive to maintain on a go-forward basis. They need to be constantly upgraded and kept secure.

Melinda Clark: The other expense is the colleague investment around care coordination. In the past, that was primarily in the hospital and associated with an illness. Now those individuals are moving to the ambulatory side, and it’s really managing patient care inside and outside the provider’s office. So the colleague investment is still going to be high. You can do this virtually, but it’s still a significant investment in how you handle that entire continuum of care.

Dr. Andrew Bland: For me, value is essentially quality plus satisfaction, divided by risk, times cost. And so you need the systems to manage all of that. So for quality, you need the systems to be able to pull the data, and be able to integrate data from claims, from the EHR, from external sources. So you need an entirely different set of processes. And in thinking about that, it’s not just the EHR anymore. It’s how do you combine all of these data streams and turn them into information. As a system, we’re still learning how to do that because we didn’t have to think about that in a fee-for-service model, where in a value-based model you have to. Then you have to integrate the patient satisfaction data because satisfied patients are engaged patients, and you’re not going to change outcomes unless you engage them. Then you have to take a look at the cost, and then be able to integrate that cost back in and you need to see it again, across not just the hospital and the physician practice, but see it in post-acute care and see it in rehab. You have to see all of those costs coming in. So you need partnerships with insurance companies to look at their claims as they come back. You have to have a system to say, using your intelligent design to manage risk, where are the opportunities in this and what is the process improvement we’re going to do to be able to go through and fix all of that. So it requires an entirely new set of infrastructure and skills, because, again, you’re analyzing the data, and you’re trying to predict in a population who to focus on because you don’t have the resources to focus on all 100,000 covered lives and give them exactly the same thing. We need to figure out who in the population needs what and what intervention works. And then you need the technology to identify and engage them. There’s just a lot of moving pieces that’s very different than a fee-for-service model.

What is different about working on contracts in health care space compared to regular business?

Steve Pozaric: Data security in health care is a huge concern right now. And in particular, one of the main issues is ransomware. Overall, ransomware attacks were up 300 percent from 2015 to 2016. What happens with ransomware is that someone clicks on a link in an email or goes to a website which then infects the computer or system with malware. The health care, you have the overlay of the federal laws, such as the Stark Law, the Anti-Kickback Statute and False Claims Act. In non-health care settings, it is not uncommon for businesses to pay something for a referral. If you do that in a health care business, you will likely pay fines, some of which have been in the tens of millions of dollars, and could even end up in jail as a result of these laws. The Anti-Kickback Statute prohibits giving or offering to give anything of value for the referral of patients or business or the purchase of goods and services if they are payable under a federal program such as Medicare or Medicaid. Similarly, the Stark Law prohibits a physician from referring a patient for certain designated health services to an entity with which the physician has a financial relationship. There are, however, certain exceptions and safe harbors that apply to these restrictions. As a result, in addition to the normal business issues, when I work with a client, I have to make sure that what our client wants fits into one of the exceptions or safe harbors in order to avoid the fines and other penalties.

What are the issues around data security in the health care industry?

Steve Pozaric: Data security in health care is a huge concern right now. And in particular, one of the main issues is ransomware. Overall, ransomware attacks were up 300 percent from 2015 to 2016. What happens with ransomware is that someone clicks on a link in an email or goes to a website which then infects the computer or system with malware. The
malware encrypts the data making it unusable, unreadable or inaccessible. The hackers responsible for this will then approach the company and demand a ransom, payable in bitcoins or other cryptocurrencies, to release the data. We have seen this locally with the recent attack on the public library. Unfortunately, if health information is attacked, this is potentially a breach of electronic protected health information and of HIPAA. If this happens, the entity must determine if there is a low probability that the protected health information (PHI) has been compromised by looking at the nature and extent of the PHI that was affected; the person who was involved in and who actually viewed the data – whether it’s some hacker or if it’s a health care worker who viewed a coworker’s patient records; whether or not the data was actually used or viewed; and how the risk can be mitigated. Then, a breach has occurred. We’ve counseled clients who have been hit by some very prominent attackers in this area and helped guide them through the process. The key, though, is to avoid having that happen. You have to conduct a thorough risk assessment of your systems and address any vulnerabilities, including blocking websites or flagging certain types of emails. Your systems also have to be kept up to date, and you have to have really well-trained employees. A lot of our clients conduct phishing attacks on their own employees to test their awareness of this danger.

Josh Wilks: We recommend to all of our clients that performing an IT security risk assessment is critical. It’s challenging when you stand up in front of a client and make this recommendation because it’s completely overhead. It’s an administrative cost burden to them, but at the same time you have the HIPAA laws and regulations out there. And the reality is you’re still penetrable or at risk, but if you do nothing and then you have a problem I’m guessing as the regulators come in at least you can say you did all of these steps to protect the organization and versus you did nothing at all.

Steve Pozaric: In addition to disclosing the breach to those affected, if it affects 500 or more people, the provider must make a public disclosure. In addition to the harm to those people, this can hurt your reputation and drive business to some of your competitors. It’s something which every health care provider needs to be very aware of.

Dr. Andrew Bland: You have to make the data completely transparent to the patient and immediately usable while making it completely hacker proof and secure. It’s a balancing act. There is no perfect solution.

We recommend to our clients that IT risk assessment is critical. It’s challenging when you stand up in front of a client and make that recommendation because it’s completely overhead.

Josh Wilks, CliftonLarsonAllen