





FRONT COVER:

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THE MCLAREN MISSION

McLaren Health Care, through its subsidiaries, will be the best value in health care as defined by quality outcomes and cost.

ANSWERING THE FUTURE OF HEALTH CARE'S CALL

The speed of change in health care over the past few years has been incredibly fast. In fact, in the year ahead, we expect a pace of change that will make recent history seem sedate.

McLaren Health Care has worked hard to get ahead of the new demands of state and national health care reforms, including the Affordable Care Act. Now, a new administration in Washington will likely upend many of these changes before they are even fully in place.

At McLaren Health Care, we are running a large, integrated health care system that millions of Michigan citizens depend on. And now, we have to accelerate the pace — while there are still many unanswered questions on where we are going.

For example, if someone should ask whether the current health care model for McLaren is based on delivering value or on delivering volume of care, the only honest answer is "both." The traditional hospital-based care model is built around filling inpatient care beds, both for usage and reimbursement purposes. Yes, the marketplace for health care is moving toward rewarding providers for offering the best value and quality — but this movement is inconsistent. In Michigan, major health care payers, such as Blue Cross/Blue Shield, still base their hospital reimbursement on the volume of patients treated.

We face other questions that defy easy answers. A basic inquiry on our system's clinical and financial results for 2016 brings a quick, one-word response — outstanding. We have achieved the best operational results in our history for this recent fiscal year. Efforts to fully integrate our 12 hospitals and other facilities, and to cut spending and improve efficiency are paying off both clinically and financially.

All good news ... but how will we need to reinvest these gains? Our system has seen a steady shift toward outpatient care, which is less costly and more flexible than traditional inpatient models.

Does this mean more of our capital budgeting should go toward outpatient systems? Perhaps — but we still have 12 community hospitals around the state that demand ongoing infrastructure investment to maintain inpatient quality. Further, while market forces have pushed hospitals toward outpatient innovation, an aging baby boomer population may boost a countertrend toward more expensive inpatient care. We're responding to these conflicting trends by investing \$650 million in acute care and ambulatory infrastructure for the next fiscal year. Once again, the only answer to the question of which direction we must follow is "both."

DANIEL BOGE Chairman, Board of Directors McLaren Health Care There's another funding issue that raises unanswered questions not only for McLaren Health Care, but for the whole U.S. health care system. The 2015 federal MACRA (Medicare Access and CHIP Reauthorization Act) made sweeping changes in how Medicare pays physicians for their services. Beginning in 2019, Medicare reimbursement will be based on new quality and economic metrics. We will be working directly with our employed physicians to help them prepare for these new payment models, but also assisting all of the physicians in our broader McLaren network.

Another subtle question for us would be, "Will McLaren continue to grow through acquisitions?" The best answer is "Yes — but not the way we did in the past." Our hospital merger and acquisition approach is more particular today. Industry consolidation has made agreements more complex, expensive and time consuming,

> with greater involvement by investment bankers and extensive legal reviews. Further, as we've looked outside of Michigan at possible regional linkages, we've seen state parochialism become an issue. Going into 2017, our

acquisitions will focus increasingly on physician practices. Our largest such deal to date, the 2015 acquisition of Mid-Michigan Physicians, involved 100 physicians, but future partnerships will likely be larger.

A final question for us may also be the biggest — "Is McLaren Health Care keeping up with the pace of change in the health care industry?" We believe our strategy, actions, and results all answer with a strong "yes," but the velocity of change is now so accelerated that we can never be too sure. We've had a great year for improvement in our clinical quality scores ... so next year we're aiming to improve those scores another 15 percent. In some areas, our performance ranks in the top decile in the country, but to remain competitive, our best has to get even better.

Our "systemness" approach to integration and consistency throughout the McLaren family is paying off. Initiatives like our blood management program and CUSP (Comprehensive Unit-based Safety Program) project are early efforts to deliver improved, uniform care, fewer complications, and lower costs. Now, we have to push even harder to build this systemness approach into other clinical and business processes across the McLaren platform. This may make some of us uncomfortable and require learning fresh approaches to delivering care, but the results so far are proving worth the effort.

We've raised many questions at McLaren Health Care in 2016. Some have straightforward answers, while many do not. We will let our results speak for themselves.

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PHILIP A. INCARNATI President and CEO, McLaren Health Care

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DANIEL BOGE Chairman, Board of Directors, McLaren Health Care

PHILIP A. INCARNATI President and CEO McLaren Health Care



What is the next step after improving both the quality and cost effectiveness of our care?



Redouble our efforts.

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KATHLEEN KUDRAY, DO Medical Director McLaren Health Plan

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DENYATTA HENRY, MBA, RN, CCS, CCDS Director of Clinical Documentation & Utilization Management McLaren Flint

Over the past few years, McLaren Health Care has forged a path of "systemness" in moving toward uniform and integrated models of care and operations.

This focus on systemness is driven by the need to survive and thrive in a radically changing health care world. We face a major shift to a high-performance, high-reliability, value-based world. While this has proven to positively impact clinical outcomes and patient care, it also has a very urgent, workaday impact. Quite simply, health care organizations must create health care value to get paid. If we're unable to demonstrate that we're keeping up with increasingly stringent outcome measures, we'll be penalized ... and possibly not be paid at all.

For example, physicians traditionally were paid on a fee-for-service basis for Medicare patients, and everyone got the same fixed fee. It was predictable, so it could be factored into financial decisions. Now, massive changes are underway.

One example would be the new Medicare Access and CHIP Reauthorization Act (MACRA) changes. Rules for this extensive payment overhaul were only finalized in October 2016. MACRA does away with the sustainable growth rate (SGR) formula for physician Medicare payments and institutes new rates based on clinical outcome measures, use of electronic health records and other technology, and quality improvement. These make Medicare payments variable — in the first year, a physician could get four percent more or four percent less — depending on his or her MACRA measures. The "at risk" portion of those payments will increase in future years.

The future of health care is already at our door, with a new emphasis not only on quality outcomes, but redefining "outcomes" to cover the full patient care experience. At McLaren Flint, for example, 2017 will see this new philosophy in action with the "bundling" of joint replacement procedure funding. When a Medicare patient comes in for a knee replacement, we'll no longer just perform the procedure and say goodbye. We'll soon be responsible for all related care over a 90-day period, including follow-up, home care ... everything. If we manage this arc of care well, patients (and our revenues) benefit. But if there is any weak link in the process, we all lose.

Further, this funding structure will be competitive among hospitals. Those that do well under this arc of care approach will receive more funding down the road. Those who lag behind will see less. Hospitals in the years ahead will increasingly be segmented into winners and losers. And the standards will be constantly improving.

This is a radical shift in how health care is funded, but we now must not only learn to make it work, but roll it out on an accelerated basis. Medicare





AT McLAREN HEALTH CARE, WE BELIEVE THAT WE CANNOT HAVE HEALTHY COMMUNITIES WITHOUT HEALTHY PHYSICIAN PRACTICES. payment for cardiac procedures using the same plan has been announced, and the hospitals required to start implementing it will be named soon.

The result is ongoing change in how we deliver care, how we measure its quality and value, and how we are paid. We now have to not only improve the quality of our health care, but master new, more precise tools for measuring that quality.

Just a few years ago, most measures of health care outcomes were simple, even crude, and largely process measures. The physician saw a patient with chest pains — did you give him an aspirin, yes or no? Now, we have more sophisticated tools to give insights on how we performed clinically. We've developed quality dashboards that allow us to continually review outcomes and compare them to national norms. We've invested hundreds of thousands of dollars in these data capture and analysis tools to stay on top of this, and our dashboard data is transparent to everyone — staff, regulators, funding sources. There are no secrets on the quality of care today. One result is that, for the second year in a row, we've shown a better than 16 percent improvement in our care quality scores as a system.

To continue to meet and improve upon these standards, hospitals and physicians will have to form tighter relationships. An ongoing focus at McLaren has been the support and training of physicians and their staffs in dealing with the tsunami of regulatory and practice changes they're facing. To help physicians fully comprehend the impact of these changes, we are working together to educate and assist them in getting the technology they'll need. Closer alignment between hospitals and physicians is the coming trend. At McLaren Health Care, we believe that we cannot have healthy communities without healthy physician practices. 🐼

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How can the lone physician survive in a radically changing health care world?



By not going it alone.

Neil C. Saliman. M.J. Dept. of Patholy

NEIL CALIMAN, MD Chair, Department of Pathology McLaren Greater Lansing Here is another question in search of an answer what can Michigan physicians do to cope with a new world of shifting payment standards, new rules, more paperwork, and tougher quality demands?

This one has a straightforward answer — physicians need to partner up.

"The new value-driven business model [for health care] is here to stay," says Gary Wentzloff, president and CEO of McLaren Physician Partners (MPP). MPP is an integrated network with over 2,000 employed and independent physicians aligned with McLaren Health Care. The "value driven" approach to health care puts new demands on organizations and providers to meet tough standards of quality and cost effectiveness over a broader time horizon. Or, as Wentzloff sums up, it "means the right care, at the right place, at the right time."

Sounds good, but for many physicians who are making this transition, the process can be disorienting. The coming new era in health care reimbursement alone brings many unanswered (even unanswerable) questions, especially reimbursement shifts under the recent Medicare Access and CHIP Reauthorization Act (MACRA). "There is so much change in government funding, with bundled payments and the MACRA regulations, that it is overwhelming." Indeed, Wentzloff notes that surveys have found half of MPP physicians haven't even heard of MACRA, and a majority are not reporting the related quality metrics that are currently required by the Centers for Medicare and Medicaid Services (CMS).

"MACRA technically takes effect in 2017, but payment penalties and rewards [based on quality performance] won't happen until 2019." This sounds like physicians have several years to get their Medicare quality reporting in order, but Wentzloff notes the kicker — "CMS will be using 2017 as its base year." Non-reporting or poor performance on quality in 2017 will come back to bite physicians two years later, with penalties that can total up to four percent of Medicare payments.

Payment pressures are squeezing physicians from other sides as well. Nationally, the Affordable Care Act is expanding the number of low-reimbursement Medicaid patients physicians are treating, particularly in primary care. Physician fee schedules by Medicare, Blue Cross Blue Shield of Michigan and Medicaid are essentially frozen into the foreseeable future.

This income pressure goes hand-in-hand with a new philosophy of how much doctors and hospitals are supposed to do when it comes to keeping patients healthy. "What we've really become is a population health services organization," Wentzloff observes. A "population health" approach to care forces hospitals outside of their walls, a philosophy seen in one of the biggest McLaren Health Care landmarks of the year, the launch of a McLaren Accountable Care Organization (ACO) named McLaren High Performance Network, LLC. An ACO is a distinct legal entity that teams physicians, hospitals and other care providers to provide coordinated care for Medicare patients.

"An ACO is the tuition we pay for population health," states Wentzloff. "We need to take greater responsibility for people in our community." The ACO commits to a broader definition of care, extending from prevention, to acute care, to rehabilitation and post-acute care. "In the past, health care was episodic," says Wentzloff. "You came to see the doctor, we would provide services and we'd leave the lights on for you." Now, an ACO approach to Medicare includes reaching out to patients, especially those with chronic conditions, and even addressing some of the social determinants of care. "Is this patient mentally ill, economically depressed, or less likely to care for him- or herself?"

An ACO is expected to weigh these factors in care, assume risk for the cost of care, and offer an infrastructure for managing them. Further, "a lot of these things weren't reimbursed, but we're now developing reimbursement mechanisms for this." Blue Cross and Medicaid are also transitioning to ACO models and products in the marketplace "McLaren Physician Partners basically puts all components together to manage population health," notes Dr. Michael Ziccardi, a medical director for both McLaren Physician Partners and the McLaren Medical Group. "It connects all the services, networks, and providers, with MPP as the central hub."

This brings us back to the physicians, who must now transition their approach to how they practice medicine. As just one example, Wentzloff notes that physicians like to have all of their appointments for the day booked well in advance to assure the practice's revenue. But the new funding and practice standards require them to leave 30 percent of their appointments open to accommodate walk-ins and other urgent visits. Primary Care Physicians are now expected to coordinate a team of caregivers that manages the health of the practice's patient population. But again, structures and rewards are lagging behind these new expectations. "Some of the quality measures are out of the physicians' hands," says Ziccardi. A physician may prescribe a mammogram or a colonoscopy, but if the patient doesn't follow through and complete the testing, the physician's quality score is impacted negatively despite recommending appropriate quality care.

Yet despite uncertainty, the systems and tools are catching up with the practice of quality medicine at McLaren Health Care. Ziccardi finds "the grumblings are lessening" among physicians as they find many of the changes actually ease their burdens. "I think we're perfectly timed within the marketplace to start an ACO now," concludes Wentzloff. "The changes coming will drive physicians to organizations like McLaren, and we are well positioned to accommodate them."

McLAREN PHYSICIAN PARTNERS (MPP) QUALITY PROGRAM SUCCESSES

- BCBSM¹ July PGIP² payment increased to \$2,708,791 from \$1,734,433: an increase of 56%
 - Attributed to increased registry utilization and PCMH³ capabilities
- BCBSM October Quality Metrics payment increased to \$770,000 from \$380,400, an increase of 102%
 - Based 70% on performance and 30% on improvement on final HEDIS⁴ metrics scoring for 2015
- Total Payments received for HEDIS incentives, PGIP, shared savings contracts October YTD 2016 is \$7 million, a \$2 million dollar increase over October 2015

- Final 2015 BCBSM PGIP Quality score ranking among 46 Physician Organizations: MPP **improved to 19th** from being ranked 28th in 2014
- Health Plus shared savings program Quality payment increase to \$526,001 from \$269,000, an increase of 96%
- Commercial and Medicare Advantage quality metrics
- BCN⁵ PRP⁶ payment increase to \$617,585 from \$233,400: an increase of 164% including MMP⁷, 39% excluding MPP

¹BCBSM: Blue Cross Blue Shield Michigan ²PGIP: Physician Group Incentive Program ³PCMH: Patient Centered Medical Home

HEDIS: Healthcare Effectiveness Data and Information Set

5**BCN:** Blue nd Care Network **PRP:** Performance Recognition Program

7**MMP:** Mid-Michigan Physicians

MICHAEL WAGNER, DO Orthopedic Surgeon McLaren Macomb

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BRAD ROPP, MD Chief Medical Officer McLaren Medical Group



Does joining in a group practice make physicians' lives easier, or does it help them practice better medicine?



Yes, on both counts.

The McLaren Medical Group (MMG), our network of employed physicians and community medical centers, knows first-hand how joining together offers them the tools and support needed to excel at 21st Century health care.

MMG is growing fast, says Dr. Brad Ropp, chief medical officer for the group. "We're at around 450 members now, but could easily add another 100 to 150 physicians in the next year." The burdens of dealing with reimbursement, insurance and regulatory issues have grown to the point where even independent practices can no longer keep up with the paperwork and costs. Now, with MACRA (Medicare Access and CHIP Reauthorization Act) changes upsetting the whole structure of reimbursement, and more data on physician quality rankings being made public, smaller practices urgently need a helping hand.

"In the past, new regulation would come up, and people just assumed it was a passing fad," Ropp observes. "But the way health care is going now, with reimbursement caps, transparency, and so on, more practitioners want to join a larger system."

For 2017, Ropp sees MMG refining its services and structure to better accommodate its

growing membership's needs. "We'll focus more on provider training and coaching that's important for us." Compensation plans customized for MMG primary care and cardiology providers are in the design stage, with plans for further specialties in the works.

Growth also makes good physician engagement with the group more crucial. "We're building more physician involvement into the governing structure." Sixteen new member committees have been formed for specialty practices, with more planned in specific governance areas, such as strategic planning.

The end result has been a win/win for all, with physicians gaining support and advocacy through MMG, while quality indices have improved. "MMG has shown a steady improvement every quarter — we're now in the 50th percentile nationally," Ropp notes. "We'll continue to grow as more providers realize we're here to help them."

"Since joining McLaren Medical Group, we've kept our autonomy, and we still manage our practices. There's a McLaren administrator, but day-today control stays here. I see this as the coming trend for medical practices. Being part of a bigger group means that if we want to expand, we'll have the help of a bigger system. It is mutually beneficial."

DR. VASKEN ARTINIAN, McLaren Port Huron
Pulmonology, Critical Care, and Sleep Medicine

MIA MICHELENA, DO Chief of Staff Elect,

Internal Medicine McLaren Greater Lansing MMP H. Michalana, 2.0., 9. 5.8.0.9. Internet Myricens



How does McLaren's stroke network stand out among other stroke programs across the country?



It is the only program in the country where every patient is seen by a stroke-trained interventional neurologist within minutes, 24/7.

JANE POQUETTE, MSN, RN Trauma Program Manager McLaren Northern Michigan

R MCLAREN NORTHERN MICHIGAN TRAUMA PROGRAM

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Stroke is the third most common cause of death in the U.S., killing 140,000 annually. With no other medical trauma is time so precious in effective treatment — every second of delay in stroke care means the death of brain cells.

But this care must also be delivered with expertise — a stroke treatment that in one instance can limit damage may cause irreparable harm if misapplied.

"With stroke, time is of the essence," says Dr. Aniel Majjhoo, an interventional neurologist and medical director of the McLaren Neuroscience Program. But the expertise and resources needed for on-the-spot stroke intervention are scarce commodities. McLaren Health Care has a large geographic footprint covering most of Michigan, and includes smaller, outlying community hospitals. How can the knowledge and resources McLaren offers at its larger, urban centers be shared immediately with our more distant locations?

With technology. McLaren has launched the McLaren Stroke Network across nine of our hospitals using telemedicine technology. An interventional neurologist at a central McLaren facility can "see" stroke patients at distant locations through the innovative TeleStroke system 24 hours a day. The specialist can assess patient symptoms and vitals, review CT scan images remotely, and offer guided care to medical staff attending the patient. Expertise that was once hours away is now offered on the spot.

The McLaren Stroke Network "gives everyone across the system access to expedited care," says Majjhoo, noting that the process has been developed and implemented in a coordinated manner with input from stroke experts across McLaren. First, best-practice procedures had to be developed for stroke treatment system-wide, with McLaren Flint and McLaren Macomb designated as neuro critical care hubs. Then, the logistics and technology needed to make the TeleStroke system effective had to be put in place, with ironclad reliability assured.

But the outcome has seen McLaren Health Care doing what it does best — finding the best treatments, and then turning them into a system-wide standard. "This is clinical integration throughout the system through telemedicine," Majjhoo said. If more intensive treatment of stroke is required than can be delivered at the remote locations, the Stroke Network helps stabilize the patient for transport to one of McLaren's critical care centers.

The first full year for the McLaren Stroke Network (which launched in mid-2015) has shown impressive results. Over 200 TPA treatments were administered, among the top 10 in the country, according to Majjhoo. Surgical outcomes for patients saw a 10 percent improvement in outcomes. Further, by enabling better diagnosis and treatment of patients at the distant sites, the stroke network allows for less unnecessary transport of patients, which is always stressful and dangerous. "We might have 140 calls [on strokes] a month, but only five or six require transport," says Majjhoo. "But if those patients weren't transported, they would die."

The McLaren Stroke Network is proving a model for a "network" approach with expansion into further telemedicine formats in the works for 2017. "Our hospitals gain access to a new, expedited level of care they never had before," Majjhoo says. "McLaren embraced a systematic approach to this, and it's proving very effective."

ROB LEE, RT(R) Surgical Radiographer McLaren Greater Lansing



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What is the biggest single thing we can do to improve health care quality?



Achieve excellence in a lot of little things.

In health care, as in so many other areas of life, the biggest, most powerful, most successful projects are made up of many small parts. These parts may seem minor, repetitive or inconsequential, but they compound in astonishing ways.

The delivery of quality health care is an excellent example of this rule. The brilliance of physicians, the dedication of medical personnel ... these are absolute musts. But achieving consistent, everincreasing levels of quality care calls for another discipline, one that demands a long-term, sometimes frustrating accumulation of small steps. It requires research, long study, careful analysis of data, and achieving small victories. McLaren Health Care invested heavily in these steps toward excellence in 2016, and they are paying off in higher standards of care, healthier patients, and less waste.

As anyone watching a TV show set in a hospital knows, acronyms are an integral part of modern health care. But one newer acronym is shaking up (and improving) outcomes at McLaren Health Care — CUSP. Comprehensive Unit-based Safety Programs break down health care procedures into their basic elements, find best practices for each, and then train personnel to implement them as a total procedural structure. Through these steps, CUSP builds safety and best practice into each unit's procedures.

In 2016, McLaren brought the CUSP approach to another hospital acronym that's more familiar — ICU. McLaren Health Care's intensive care units, as the name implies, demand the highest standards for care. But this critical phase in care also makes every element involved all the more important — and more dangerous if it's not the best.

For instance, the use of mechanical ventilation is commonly needed for ICU patients. Ventilation



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Sibin K. Zacharias M.D. Interventional Cardiology





is a life-saving necessity — but brings its own risks. "A lot of our ICU patients end up on mechanical ventilation," notes Dr. Andrew Staricco, medical director of critical care at McLaren Macomb. Mechanical ventilation, even when done well, brings potential risks. First, introducing a foreign object into someone's airway will never be comfortable. This in itself can require sedation. Second, ventilation raises the risk of infections and other complications, particularly pneumonia. "CUSP will help us reduce complications," says Staricco.

Staff at McLaren Macomb has incorporated research done by Johns Hopkins University and the Michigan Health and Hospital Association to seek better options. "This is evidence-based medicine that makes ventilation safer and more effective," adds Staricco.

He says a first step is to more carefully monitor the use of sedation. Lung function improves faster "if people aren't too sleepy." The next step is to reduce the patient's overall time on ventilation with more active use of spontaneous breathing trials. "We have a matrix that we look for with the CUSP," says Kevin Arnold, director of patient care services for McLaren Flint. "We look at getting patients up and mobilizing them."

It may seem "counter-intuitive to get people up and out of bed when they're on life support," Staricco observes. But more activity for ICU patients reduces the amount of rehab therapy needed later, prevents muscle atrophy, and reduces the number of days patients need to stay hospitalized. This approach extends to overall ICU patient activity keeping heads better elevated to avoid lung secretions, and encouraging those still bed-bound to try some stretching and flexing of limbs. "We try to get them up at bedside, even if it's in just the sitting position," Arnold notes.

The key to making the CUSP approach work for ICU ventilation improvement has been "willingness to look at data objectively and change practices as needed. We've been educating the clinicians on this." Teams for clinicians, nursing and support care work together closely, collaborating to implement changes and identify potential problems. "A lot of this is communication," Staricco concludes. "It's important to build lines of understanding. This only works as well as people are willing to push the process." MORE ACTIVITY FOR ICU PATIENTS REDUCES THE AMOUNT OF REHAB THERAPY NEEDED LATER, PREVENTS MUSCLE ATROPHY, AND REDUCES THE NUMBER OF DAYS PATIENTS NEED TO STAY HOSPITALIZED.

CLARENCE SEVILLIAN Chief Executive Officer McLaren Bay Region



What is the best way blood transfusions can save lives?



By using fewer of them.

It has now been 50 years since the first successful human heart transplant was performed, and over the past half century, organ transplants have become a widespread lifesaving surgical procedure.

But did you realize that "organ transplants" have actually been performed for centuries, and happen hundreds of times daily in most hospitals?

We are referring to blood transfusions. While transfusions are so common in trauma and surgical procedures that we barely give them a thought, in a sense they are "transplants" — introduction of bodily tissue from a donor source. And this also means that some of the same dangers of rejection, organ damage and infection, though far fewer, are still present.

Blood transfusions raise other problems in the hospital setting. Supply of the proper blood and blood products will always be mismatched to demand, and blood has a very limited shelf life. Blood programs are also very expensive and time- and resource-intensive, especially given the volumes of blood used in most hospitals.

Emerging best practice is for health care providers to seek ways to make smarter, more efficient use of blood applications. McLaren Health Care launched a blood management program in 2014, with the support of Mediware, a noted blood management consulting firm. The result has been "dramatic successes we're proud of," says Dr. Dennis Spender, chief medical officer of McLaren Medical Laboratory.

Spender notes that the system-wide program initiated with Mediware's support is not focused on using less blood in procedures, but in using it more wisely. "While the amount of transfusions has decreased over the past two years, we've also seen marked improvements in the quality of patient care." Standards on when to transfuse, how frequently, and with how much blood product guide staff on the optimal point to use transfusions for best effect. A top-down order to just use less blood might have failed, but McLaren took a smarter approach. "We developed a system-wide effort through each subsidiary based on a triad of support personnel — a project manager, a physician champion and an executive sponsor." This nucleus in turn works with transfusion committee groups at each facility to put specific policies in place and monitor results.

"We look at each individual and assess their need for blood products," says Stacie Smith, transfusion safety officer at McLaren Greater Lansing. This means assuring that each patient receives blood products as needed, but refraining if it is clinically not indicated. Smith reports that the internal medicine staff and hospitalists were carefully trained on the new procedures for blood usage.

For example, the simple step of ordering one unit of blood at a time rather than multiples cuts waste and lessens unneeded transfusions. At McLaren Lansing, "we set a goal of 50 percent single-unit ordering [for procedures], and we have exceeded that, reaching 77 percent." Slowing the rate and volume of transfusions also allows staff to better watch for and prevent adverse patient reactions.

"The results in Lansing have been remarkable," says Smith. She predicts that the hospital's total mortality rate will fall by one percent just through this step alone.

The blood management program is showing benefits throughout McLaren Health Care. Nursing care time and labor is less, patients see a shorter length of stay, and Spender estimates the dollar savings throughout the system at \$2.8 million. Perhaps best of all, notes Spender, the program "is a model for collaboration system-wide, with all subsidiaries engaged."

VANNY LY, RN, BSN Float Nurse McLaren Greater Lansing



How can we improve performance throughout a large, diverse health care system?



By making sure all our information systems speak the same language.


LISA ZAJAC, RN, MSN, ANP-BC, OCN Quality, Education & Informatics Specialist Karmanos Cancer Institute

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McLaren Health Care cannot advance "systemness" without a "system." For the past several years, we've worked hard to craft our systems to meet that need.

Effective health care requires many things mostly people with the knowledge, tools and commitment to perform the many minor and major miracles of healing.

But it also demands facilities, medications, supplies, good procedures, scheduling, billing, administration ... and all of these don't just spontaneously fall together. McLaren Health Care, with over a dozen major hospitals, hundreds of ambulatory locations and 22,000 employees, requires a robust IT platform to keep everything running smoothly, to sharpen our quality edge, and discover new efficiencies.

Data has been a crucial raw material of modern health care for a long time, but with McLaren's growth strategy, this has proven both a plus and minus. Hospitals, clinics, labs and physician practices have long needed data management capabilities, and many developed their own structures. Some of these IT systems were good, some less so, and some were customized to specific needs. As McLaren Health Care has acquired hospitals and practices over the years, it has also acquired their "legacy" IT systems.

And that is where the problem arises. "We've been taking different practices from the subsidiaries and trying to move to standard workflows," says Ron Strachan, McLaren Health Care chief information officer. Each individual system had different systems that couldn't talk to each other, and generally hobbled any attempt at overall McLaren data integration. McLaren's "Paragon" electronic health record system proved limited in dealing with a diverse and widespread system such as ours.

Thus the decision in 2015 for a system-wide "clean sheet of paper" approach to remaking our electronic health records, human resources and administrative system capabilities. We call this initiative "One McLaren," our electronic effort to provide true "systemness."

Our first step on this journey is implementing electronic medical record and care management systems from Cerner Corporation. Building Cerner's impressive patient management software into our networks, rolling it out as the standard for all McLaren facilities throughout the state, and assuring that everyone in our system is trained to use it well is a major challenge. A major milestone of 2016 was the completion of "Future State Validation," Cerner's initial run-through with our 20 department leaders. Going into 2017, we plan to launch our testing and training protocols.

If this sounds like a great deal of effort, it is. However, the payoff will be worth it. Cerner software is a proven health care industry leader, already connecting over 18,000 facilities worldwide, and offering the depth to integrate McLaren needs from electronic medical records, to medications and pharmacy, to laboratory services, to admissions and discharges. With everyone throughout the McLaren system "reading off the same playbook" — and having immediate, constantly updated access — quality improves, while waste and costs go down.

But this is only phase one of our system-wide One McLaren project. The next step is just as crucial to improving quality and cutting waste. Applications from PeopleSoft, an Oracle company, will allow us to gather all the administrative functions that a complex enterprise like McLaren Health Care demands under a common platform. Human relations, payroll, financial management, supply chain ... all of these will gain new efficiencies through the PeopleSoft programs, and see improved workflow and systemness.



For example, when a department at McLaren needs to make a purchase, PeopleSoft will allow it to immediately order from a pre-approved vendor list, offering the best pricing and quality. Last February saw the PeopleSoft project kickoff, beginning with a focus on finance and supply chain systems.

Many people may not associate health care with data, networks and IT, but in McLaren's view of the health care world, they've become as crucial as antibiotics in delivering quality care.

One McLaren as a Health Care Tool

The One McLaren/Cerner data platform is intended to save lives, improve quality and help improve care throughout McLaren. But we've all heard of (and maybe even experienced) tech marvels that didn't live up to their promises. How is McLaren working to assure that our Cerner project not only manages the data well, but meets the quality demands of our medical staff? By making those who deliver care an integral part of the Cerner implementation project. Leaders from all of our major departments have been hands-on with Cerner developments since last year. "I've been involved so physicians have a voice," says Dr. Ron Shaheen, a McLaren Medical Group family practitioner and physician lead for the project. Among McLaren's physicians, "there's excitement about it. We want to get the word out on how Cerner is going to standardize systems to benefit both McLaren and our patients."

Late 2016 saw "road shows" begin at the various McLaren facilities to acquaint physicians with the Cerner platform, take questions, and build a two-way communication structure. For 2017, shaping a network of One McLaren physician "champions" throughout our facilities is in the works, as is a technical newsletter for staff and online information resources. "We face a logistic challenge with a system spread all over the state, so we can't limit ourselves to any single form of communication," notes Shaheen. Indeed, this two-way communication approach to implementation brings its own benefits, says Lisa Zajac, nurse practitioner with Karmanos Cancer Institute and nursing lead for the One McLaren transition. "I started meeting with nursing staff across McLaren and learned that all our hospitals were more similar than we thought. Everyone was a bit worried about how nursing would be standardized, and, as we developed protocols, we found that we were already much the same."

But "much the same" is still not good enough. Zajac and the rest of the One McLaren team have been busy designing standardized protocols and best practices using national guidelines, Joint Commission standards, and evidence-based practices.

Helping motivate the process are the ways nursing staff are discovering that Cerner technology can make their jobs easier and more effective. "There are things that Cerner does that Paragon can't," notes Zajac. As one example, protocols require nursing staff to reassess a patient's pain level 60 minutes after giving pain medication. "To do this pain assessment, we won't have to click through multiple screens every time. With Cerner, the assessment will be linked to a task that will open the reassessment form." The application will also allow care staff to instantly view charts and graphs showing patient levels, such as for insulin and glucose. These are continuously updated as a background function. Such summaries "show an instant snapshot for the patient," and enable far more responsive monitoring of care.

And if something should go wrong with this new technology? The Cerner program even provides a robust "downtime" function in case the system goes down, allowing review of the last records compiled while repairs are underway.

The end result of the One McLaren initiative will be capabilities that transform data usage throughout McLaren Health Care. Rather than a diverse mix of incompatible platforms that add time, expense and uncertainty to health care, McLaren will gain a transparent, accessible system-wide platform. Data will not only be easily captured and compiled, it can be readily analyzed to reveal care improvements, cost savings, and new efficiencies. "When I started as a nurse, back in 1997, we didn't have a lot of data on computers," recalls Zajac. Now, "we can use them to assure that care standards are being met, and to enhance health care decisions."

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EMILY WIECHMANN, RN, BSN *Quality/Education Coordinator McLaren Homecare Group* Ingle Physical Color

CHANDAN GUPTE Vice President of Clinical Excellence and Research McLaren Health Care



How can a health care system make itself a magnet for talent and industry attention?



By focusing on what we don't already know about health care.

Health care systems nurture a positive reputation in many ways. The ratings of care quality are one important factor. Physicians value aligning with hospitals that offer a growth-oriented, positive environment for care. These are among the factors that help McLaren Health Care attract top medical professionals.

Another factor that appeals to practitioners, both in the U.S. and internationally, is a health system's reputation for research. If a system is known for supporting and attracting innovative research work, the benefits are impressive and self-reinforcing. Top doctors want to work there, and current staff have greater reason to stay. Not only will they gain better opportunities to conduct research, but they know that new treatments and procedures will be there first. Pharma and medical device companies also seek the system out for conducting research trials. They can be assured this system handles demanding research protocols effectively. And these trends build on themselves — a reputation for drawing top research physicians attracts even more of these health care leaders, and drug and device makers feel the same magnetic effect.

McLaren Health Care launched a system-wide plan to centralize and expand its research capabilities several years ago, and 2016 saw the needed structures and systems taking shape. A world-class medical research program must implement a complex, tightly audited network of patient protections and best practices. A milestone in this process came this year with the work of our Research Advisory Board (RAB). The RAB is an independent body that reports directly to McLaren Chief Medical Officer Dr. Mike McKenna. It "provides strategic guidelines for an integrated research program," says Dr. Hesham Gayar, chair of the RAB. While McLaren has had a goal of gathering all its research efforts under one roof since 2014, the board is only now realizing this dream by "creating a process and structure to centralize and standardize the research process."

The past year has also seen progress in the other structures needed for McLaren's research programs to build a national reputation. A Protocol Review Committee is now monitoring

research protocols throughout the system, and an Institutional Review Board assures that rigid patient protections are in place.

As with other integration of best practices at McLaren Health Care, an initial step was modeling a central research structure for one program, and then using that as a prototype for other areas. "Our first goal was to build cardiovascular research as the prototype, and we have achieved it," says Gayar.

This included such technical milestones as establishing research software infrastructure, and designating a system-wide "principal investigator" process. The latter empowers one researcher with system-wide authority for a research project. It further gives "our providers more opportunities to participate in research, and allows industry better access to our researchers."

Success with the cardiovascular research structure has encouraged the next step, using it as a template for expansion into neuroscience research. Dr. Aniel Majjhoo, a McLaren interventional neurologist, is leading this effort. An organizational meeting for neuroscience staff was held in December 2016.

As a result of these efforts, "in the past year we've been able to grow our research programs in terms of number of studies, enrollments, and greater involvement by [McLaren] subsidiaries," says Chandan Gupte, who heads the research program. Already, she notes, McLaren research overall "is in the top five in the nation for accruals," that is, the number of research participants.

McLaren Health Care's system-wide approach to research is also delivering on the promise of building greater attention and respect from physicians and the medical industry. "We're being approached by more pharma companies on research, and we have opened the door for any of our physicians to be a principal investigator," Gayar observes. "We have great potential. Physicians who have interest and skill want to be part of the process, and we are becoming a physician recruiting magnet." 🔨

GLENDA CROSS, RN, MSN, MBA Director of Patient Care Services McLaren Greater Lansing



How is a health system like a university?



Both are places where learning never ends.

wet hysician Group Abhirar Deol, MD Department of Oncology

BARBARA ANN ARMANOS CANCER CENTER Detroit Medical Center

ABHINAV DEOL, MD Associate Professor of Oncology Wayne State University Bone Marrow Transplant and Hematology Oncology Karmanos Cancer Institute

Hospitals are valuable healing institutions in our communities, but they also serve another vital role — as learning institutions.

Medical education and residency programs are integral to physician training and have long been central to the mission of McLaren Health Care. But in the McLaren system, education is "not just for residents, but for all associates and employees," says Dr. Robert Flora, named as McLaren Health Care's first Chief Academic Officer (CAO) in late 2016.

Indeed, education in the broadest sense holds an important part in achieving system-wide excellence. "Here, everybody teaches and everybody learns," Flora notes. Continuing medical education, human resources training and orientation, shaping and sharing best practices ... all are important.

However, up until now, this wide curriculum of education needs has been dispersed throughout the McLaren Health Care system. As new subsidiaries joined the McLaren family, their residency and other training programs have generally continued to run independently. This lack of "systemness" means gaps, inefficiencies and lost opportunities. A new "CAO" is the first step in a plan to coordinate all these efforts. "This is in line with what McLaren is trying to do overall," says Flora. "To centralize and standardize our education."

For example, McLaren Health Care currently has over 450 residents spread over five of its campuses, but with little synchronization among the programs. "There is a lot of expertise at each campus, and it's important to share that." A systematic approach to residency plans will give residents broader exposure at a variety of facilities, and also improve the facilities' staffing depth.

While an integrated, upgraded approach to education and training at McLaren improves care, Flora notes that it's also a necessity for



Dr. Robert Flora, Chief Academic Officer, McLaren Health Care

changing demands of health care. "In 2013, new standards for resident training came out as part of making health care more of an intraprofessional work environment." The old approach to training doctors viewed them as captains of a ship, commanding all around them. Now, "physicians learn to be more the leader of a team," training to work alongside nursing, pharmacists, and others involved in the delivery of care.

New rules on learning standards for medical residents are also shaking up education at McLaren. The Accreditation Council for Graduate Medical Education (ACGME) is adopting a single graduate medical education system that includes osteopathic residents. This will require new training and certification standards for the McLaren system, where "about 65 percent of our residents are osteopathic," says Flora.

CHRISTINE SANSOM, RN, MSN Chief Nursing Officer McLaren Port Huron

ADDIE DENNIS Oncology Care Associate, Hematology/Bone Marrow Transplant Karmanos Cancer Institute



"HERE, EVERYBODY TEACHES AND EVERYBODY LEARNS," FLORA NOTES. CONTINUING MEDICAL EDUCATION, HUMAN RESOURCES TRAINING AND ORIENTATION, SHAPING AND SHARING BEST PRACTICES ... ALL ARE IMPORTANT. ACGME is also toughening certification standards for residency programs, which means hospitals face a new, intense regimen of clinical learning environment review (CLER) on-site inspections. The CLER visits are being phased in by ACGME and focus on patient safety; health care quality; care transitions; supervision; clinical experience and education; fatigue management and mitigation; and professionalism. "We'll face a CLER review every 18 to 24 months and need to make sure all campuses are up to standards," says Flora. As with other McLaren Health Care quality measures, one subsidiary is developing a best-practice model for

CLER residency requirements (in this case, McLaren Flint), which will later be rolled out to other locations.

While Flora has faced a busy start to his chief academic officer role, he finds McLaren Health Care is "already pretty far ahead of the curve" on education. As noted, an ongoing priority will be the "system" integration of training — "we need to become more organized and centralized." But another is to make resident training part of an overall physician retention program. "When we train doctors, we want them to stay at McLaren."

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BY THE NUMBERS

Discharges								. 101,136
Observations								27,024
ER Visits								. 424,678
Surgeries								99,736
Births								6,194
Ambulatory Visits								3,600,041
Home Care Visits								. 193,302

Hospice Days
Licensed Beds
Days of Inpatient Care
Community Benefit \$260,650,487
Employees
Contracted Providers
Annual Payroll
Net Revenue
*in thousands

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