

21ST CENTURY INTELLIGENT HEALTH SYSTEM

An Individual-Centered Approach



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Executive Summary

In an Intelligent Health System, the individual is the center of knowledge, decision-making and responsibility for their own health. In many of our healthcare systems, the patient and family continue to be seen as clients not partners; people to whom things are done, not partners in the process. It is our goal to accelerate the transformation of the current health system to a system that is centered on the individual. We believe this change in focus will lead to a healthier society and a health system of more choices at higher quality and lower cost.

The following paper is the work of the Center for Health Transformation's Working Group on Individual-Centered Care. Following an introduction by CHT Founder Newt Gingrich and CEO Nancy Desmond you will experience stories of courage from patients and families intimately involved in the current healthcare system. From cancer to ALS to spinal cord injury, the needs of the patient and their family are similar: respect, information, hope and the latest breakthroughs delivered in a safe and efficient manner. It is our moral responsibility to build a health system that meets these needs.

Next, the components of a 21st Century Intelligent Individual-Centered System are presented. These components are personalized, individual and family-centered, information rich, focus on wellness and prevention, continuum of care, and aligned incentives to achieve quality and meaningful outcomes.

'The World that Works' section presents information from ten of the leading healthcare systems operating in the realm of a 21st Century Intelligent Individual-Centered System. These transformational institutions exemplify the positive impact an individual-centered system has on patient satisfaction, outcomes, cost and quality. Such a system is not just a dream; as the following examples reflect this is a rapidly developing reality.

The paper concludes with recommended strategies for transformation to an individual-centered system.

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We are honored to work with the most transformational leaders in the industry – true pioneers in understanding and building an individual-centered system. In particular, we would like to acknowledge the leadership of Steve Bonner, CEO of *Cancer Treatment Centers of America* and Wayne Sensor, President and CEO of *Alegent Health* for dedicating their time, talent and expertise to lead the Individual-Centered Work Group. In addition, we would like to thank *Guidon Performance Solutions*, *Gundersen Lutheran Health System*, *Henry Ford Health System*, *MCGHealth*, *MinuteClinic*, *Sanford Health*, *SSM Health Care* and *WellStar Health System* all of whom are creating the “World that Works” and are passionate about building a health system that meets the unique needs of the individuals, patients and families they serve.

This initial white paper would not be possible without the leadership and vision of Newt Gingrich and Nancy Desmond and the entire team at the Center for Health Transformation. Special thanks go to Leigh Cox, Rynnie Ross and Michelle Stein for utilizing their unique strengths and talents to make this white paper a reality.

Foreword by Steve Bonner and Wayne Sensor

Whether you are a policymaker, provider or patient, there is no single issue more important than the future of healthcare. From our view as chief executive officers of large metropolitan health systems, we have a choice when it comes to transformation – we can lead or we can follow. We have chosen to lead, which is why we agreed to co-chair the Individual-Centered Care work group.

We know, first hand, how difficult change can be in healthcare. There are seemingly insurmountable challenges in creating a new system of healthcare but we believe in the power of the patient and the hearts of caregivers who truly do want to do the right thing. In our view, the right thing is putting the individual at the center of everything we do.

Whether individuals are coming to us for a check-up or major surgery, each step of the encounter should be seamless, making the healthcare journey easy to navigate. Once individuals and families feel empowered, they are more likely to take control of their health and healthcare which will certainly save lives and money.

As co-chairs of the Individual-Centered Care work group, we are proud to present the first installment in a series of white papers that move us toward the goal of a more personalized 21st Century Intelligent Health System.

We welcome your own insights, comments, questions, concerns and even criticisms in our quest to deepen the dialogue and accelerate this transformation.

Introduction by Newt Gingrich and Nancy Desmond

In an Intelligent Health System, the individual is the center of knowledge, decision-making and responsibility for their own health. Knowledge of health and finances are available in the most accurate, least expensive and most convenient manner possible.

Individuals have accurate, timely, personalized knowledge about their health and treatment options, including information about cost and quality. They have the assurance that their treatment is based on the most up-to-date evidence-based medicine, and there is a focus on preventive care and early intervention. The system encourages and rewards wise healthcare purchasing decisions and offers more choices of higher quality at lower cost.

A key test for any new system is its ability to provide affordable access to quality care for the poorest and sickest among us. The elimination of health disparities must be a critical goal – *no one can be left behind*. A 21st Century Intelligent Health System must provide access to affordable insurance coverage for those currently uninsured.

By creating a 21st Century Intelligent Health System, we can transform the current problem of inadequate health outcomes – combined with steadily rising costs – into two great opportunities:

The system will improve health outcomes, the quality of life, lead to longer lives at lower cost and save individuals, companies, and governments billions of dollars.

It will be the greatest single 21st century source of high-paying jobs and foreign exchange earnings as people across the world discover they want the quality of life, the level of health, and the effectiveness of health care that an American Intelligent Health System will make possible.

The 21st Century Intelligent Health System Model

The following model is one we employ at the Center for Health Transformation to describe the three major components of a 21st Century System: (1) Individual-centered, where the individual must be at the center of the system and have access to the information and incentives needed to make wise decisions; (2) Focused on prevention, wellness and early

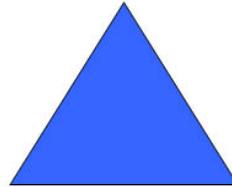
98% believe they have the right to know the cost and quality of the care they are about to receive.



detection; and (3) driven by IT, quality outcomes and best standards of evidence-based care.

21st Century Model of Health and Healthcare Transformation

Individual-Centered – Incentive - Psychology-
Empowerment - Information



Prevention - Early Detection-
Self Management – Best Practices

IT- Quality - Expert
Systems

The Four Boxes of Health Transformation

When people talk about health and healthcare, they often focus on the financial aspect: how are we going to afford it? This is perhaps even more true in our current challenging economy than ever before.

Yet in reality, what we pay for and how much it costs will be very different in a transformed system. While the current system is not sustainable, a 21st Century Intelligent Health System, focused on the individual, is affordable, sustainable and provides a better quality of care. In addition to lower overall cost, it will also create better health and more choices.

To create this new, modern system we have to address four major boxes. The financial box, while it often dominates the conversation, is only one of those boxes. Furthermore, it can only be successfully addressed after we define the other boxes.

A 21st Century Personalized Intelligent Health System with 100% Insurance in a 300 Million-Payor System Requires Transforming 4 Boxes:



In creating a 21st century health system, we must first start with the individual, including their rights and responsibilities within the system.

Second, we need to look at the cultural and societal patterns for a healthy community, including understanding the public policies that need to be in place.

Third, we must address the creation of an effective, efficient and productive health delivery system.

Only once we understand what it is we are paying for, can we decide how to finance the system we want. We believe there is more than enough money to pay for the right system, but the outdated, disconnected system we have inherited is one we cannot afford, neither financially nor in terms of human costs.

On the following pages, you will read about a number of examples where the principles of a 21st Century Individual-Centered Health System are already in place and working. But first, we present three personal stories from three remarkable people. We think these stories will touch your hearts, as they have ours – and will help explain why an individual-centered system is so important.

Part One: Stories of Courage: Patient and Family Perspectives

Ross Mason

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The Accident

My journey began on the evening of August 2nd, 2007 on the Silver Comet Trail, an old railroad line from Atlanta to Birmingham that had been converted to a bike trail. I had been training for the New Zealand IronMan for almost a year. That day, I was training on a new bike when a bee hit my helmet and I started slowing down. It stung me after a few hundred meters and as I pulled back from the aero-position and reached to either side to put on the brakes, I nicked the handle bar with my elbow. Instantly, I went off sideways hugging the ground, with my feet still firmly clipped in, careening into the brush. I crashed into a small tree, right at its base, and broke my neck.



My whole body was numb, I was unable to move, and part of the tree was pressing up against my windpipe so I could not breathe. I tried to use my hands but could not so I pushed the limb away with my forearms to breathe. I thought my legs were in front of me but when I looked down, they were behind me. I realized I was paralyzed, took a deep breath, and prayed.

Information Needs

When I arrived at the hospital, the medical team drilled screws into my skull with a halo attached so they could pull my spine apart – my C7 vertebrae was shattered and C6 had climbed over C5 at impact. While I waited for my vertebrae to separate people were coming in and out and we were laughing and joking. I learned later that my brother took one look at me and almost passed out.

The first night I spent in a room with a gunshot victim and patient with a drug over-dose. I was disorientated from morphine and Percocet. It felt like I was in a dream or a movie and could rewind, go back and make different choices in that split second on the bike that changed my life forever.

As a spinal cord patient, you have very little time or opportunity to educate yourself and evaluate your options. You are in and out of consciousness, taking medication, getting fed, and going to the bathroom all over yourself. There are floods of visitors coming in and out, blood being drawn for constant tests and it is difficult to breathe, swallow, and speak. There are constant decisions to be made with little or no consultation, and no understanding of future ramifications. The patient has no answers, and rarely knows the right questions to ask.

The intervention in the first 48 hours has a huge effect on the patient's outcome. As a spinal cord patient with a high level injury, it is uncertain in the first 24-48 hours whether or not you will survive. I was very fortunate to have family and friends that were supportive, made decisions on my behalf, and helped me do what needed to be done.

My care at the trauma center was excellent. However, I was quickly confronted with decisions that I was not prepared to make.

Most decisions fall on family and friends who do the best they can with limited information and resources. In my case, the insurance company took the position that my injury was a pre-existing condition and refused to make any payments for the first 7 months of my injury. I was able to make enough phone calls to eventually get that changed, but, if I had been an eighteen year old with no relationships in the business community it would have been devastating. I would have had to go from the trauma center, to a rehab hospital, and then to a nursing home.

There are simple things that need to be done, such as turning people and doing their bladder and bowel programs, that, if neglected, can be fatal. In a non-specialized assisted living environment, skin sores quickly develop, which lead to amputations, blood poisoning, and a likely death within 2-3 years.

The danger is not over after intensive care. Patients that are not at a major spinal cord injury center will not have options. The medical staff will not know the latest procedures and treatments. If you are turned improperly and the neck or site of injury is not properly protected, the spinal cord can be compromised at a higher level. A paraplegic can become a quadriplegic, a quad can lose the ability to breathe or eat, and any patient can quickly go into dysreflexic shock and have a stroke as a result of one simple mistake. You are

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-Ross Mason

completely at the mercy of your caregivers. If there is a minor mistake, should you say anything? Will there be devastating repercussions if you complain, if you do not?

Patient Empowerment and Control

Frequent tests, and accidents in bed are just a normal part of spinal cord injury. You quickly realize you have no control over your body.

An injury like mine also causes tremendous temperature issues. It seemed to be freezing cold all the time, my body was constantly shaking and I could not get warm. My blood pressure was always very low and it took weeks to be able to sit up without passing out. I often slurred my words, and it was difficult to formulate coherent thoughts because my brain was not getting enough oxygen.

After ten days in the rehab center ICU, I was moved to the main floor where I also had great doctors. But as in any case such as this, they were all focused on their area of specialty. If you are dealing with a trauma surgeon, that is what they do, if you are dealing with an endocrinologist they do their thing. There seems to be very little communication between specialists and there can be quite substantial differences in the quality of care between individual doctors and nurses.

When you have a spinal cord injury you need to be catheterized every few hours to drain your bladder, if not, dysreflexic shock and brain damage can occur. I can remember having a serious argument with a nurse because my bladder was too full and my blood pressure was spiking. I felt like my blood was boiling. The nurse refused to give me an IC (cath) saying “We just did this two hours ago – we are not going to drain it now.”

Eventually, he took my blood pressure and went to get a bladder scan to see how much urine was in my bladder. It took me about 2 – 2 ½ hours to convince him to drain my bladder. I ended up having over 1600 cc’s and my blood pressure was 220/180. It felt like I had a spit running through my body and I was being roasted over a fire. I was sweating profusely, my skin was crawling and I was very close to going into shock. This could have very easily resulted in a stroke and brain damage.

I was so vulnerable in this situation. I could not get anyone else to hear me or reach any of the buttons to call another nurse with my paralyzed hands. I had to win the argument with this guy or face the consequences. If I had not been persistent to get results he would have said ‘oh, so sorry’, but that would not have mattered much to me if I were drooling and unable to speak for the rest of my life.

I had a number of instances like this, even though I was in one of the best catastrophic care environments in the world, when I caught someone on an off day or they just made a mistake. We all make mistakes, but what if you have to pay for the rest of your life for someone else’s mistake?

This was not the only area where there was poor communication. I would not know for several months that I had a complete injury. My doctors, nurses and therapists knew but no one ever told me. That classification would affect everything – what therapies, equipment and specialists are available to a patient are all effected by this diagnosis. You are either a complete or incomplete injury depending on whether or not you have function or sensation below your injury level based upon the safety pin, q-tip test performed in ICU. No one ever said during my time in the hospital or rehab “you are a complete injury”. In some ways they do not know, and they do not want to say, because this kind of diagnosis is more an art than a science. The doctors do not know what your body is going to do but, all kinds of decisions are made based on this diagnosis.

Traditional therapy for recovery is almost exclusively focused on and directed toward people with incomplete injuries. If you are a complete injury, then you are simply taught how to be disabled.

The Economics of Care

Later, I would discover non-traditional therapies that allowed me to move my fingers, legs, stomach muscles and hips. These treatments cost over \$25,000 per month and are not covered by insurance. At the time, I was already spending \$15,000 per month, also not covered by insurance, on full time nursing care. Recovery from spinal cord injury is a money game and you are often forced to make difficult choices with limited resources.

Also, a patient cannot access limited insurance dollars without the cooperation of a physician. This is also a problem for patients with complete injuries. A friend of mine who is a complete paraplegic recovered the use of her stomach, hips, and legs after selling her second home and all of her wedding jewelry to pay for therapy. When she attempted to get her physician to prescribe leg braces, that her therapist requested so she could begin walking, he refused. He told her that she had a complete injury, her movements were simply muscle spasms, and that she needed to wake up and realize that she was going to be in that chair for the rest of her life. She had no money to pay for leg braces, and without his prescription, would not be able to access her insurance money, unless she found another physician that would agree with her therapist’s diagnosis.

Through the process the focus is not on your long-term health. At each stage, caregivers attempt to stabilize you at each level of care. If you are like me and need 24 hour care, it is very hit or miss. Insurance companies, almost without exception, will not pay for in home

“Don’t ask me to write my ABC’s! Don’t just check off a box. Help me to regain my dignity, to recover spiritually, socially and economically not just physically.”

-Ross Mason

care, home modification, shower chairs, or anything to help the patient regain function. It is really a fight for the first two years, and then they attempt to dump you on the government, through Medicaid or other programs.

It is a very short-term mentality. There are new therapies and surgical options that can restore one or two vertebrae, which also are not covered by insurance. This kind of intervention can result in a huge change in function and cost. It can mean the difference between a patient on a ventilator and feeding tube (\$3.0 MM lifetime cost) and a quadriplegic (\$1.7 MM lifetime cost); or a quadriplegic and a paraplegic (\$1 MM lifetime cost). Also, there are new technologies such as electrical implants that restore bowel, bladder, and sexual function, that are not covered by insurance. The savings on a complete paraplegic for this procedure is over \$500,000 over the course of their lifetime. The cost savings in these examples are dramatic, but the life change, is incalculable.

What is most helpful and meaningful is connecting with people who have been through it. So many people find peace in their new circumstances when they can help others. They are able to find meaning in their injury by providing advice (with the benefit of hindsight), and sharing insights that help patients anticipate future decisions. New patients can then understand how to interact with their insurance company, and doctors, nurses, and therapists to make the right decisions in areas that will affect the rest of their lives. Things as simple as the correct foot brace and hand splint will determine whether or not function can ever be recovered.

This kind of collaboration would also be very helpful in making important financial decisions. For example, most patients have never thought about wheelchairs. Then without warning someone comes in and says “today we are going to go look at wheel chairs.” Patients have no idea what parts of their body will recover. Should a power chair or a manual chair be purchased? The insurance company will only pay for one chair, one time. A power chair costs \$6,000 to \$10,000, and a manual chair, costs \$1500 to \$3000 dollars. The patient thinks “I guess I better get a power chair because it is more expensive, and I can sell it and buy a manual chair if I make a mistake” but has no idea what is really needed. Like so many decisions, it is a hit or miss proposition with critical implications.

My Vision of a Patient-Centered System for Those with Spinal Cord Injuries

We are just on the cusp of major breakthroughs in the science of spinal cord injury. The scientific community needs to collaborate with the clinical and patient communities to drive innovation in areas patients most need. Together they can then communicate these priorities to philanthropic, government and business leaders to more strategically allocate limited resources.

It is also critical for therapists to evaluate, measure and share best practices in their work with complete patients so that outcomes can be determined. The current focus on

incomplete patients makes it impossible to determine whether recovery is occurring naturally, as a result of therapy, or both.

Scientifically evaluating what treatments and therapies are most effective by measuring results on complete patients will also create new strategies for early intervention in the acute phase. This will connect patients and their families to options and resources in a structured, result-oriented manner, and empower them with the best information to make the right choices. Patients will then be classified on the basis of possibilities and capabilities instead of safety pins and q-tips. Research, Rehab and Recovery will be purpose driven.

In rehab, it was so disheartening for me to be given a pen and told to write my ABC's. Give me something meaningful that I can do in the process of my recovery that is uplifting, inspiring, and encouraging. Allow me to help someone else. Let me reach out to a wounded soldier, or help a non-profit in Iraq or Afghanistan that assists widows and orphans. Let me do something that clears land mines, or helps other patients. Let me write a letter to a family of someone who has just been injured to encourage them. Let me learn to write again that way.

Don't ask me to write my ABC's! Don't just check off a box. Help me to regain my dignity, to recover spiritually, socially and economically not just physically. I am planning to work with the Center for Health Transformation and HINRI Translational Labs to address these issues and create a patient-centered, purpose driven solution.

Lori Reilly

Patient and Family Representative and Advocate

Vice President for Policy and Research, Pharmaceutical Research and Manufacturers of America

I have been asked to write my personal story about how I, as a caregiver, have experienced the health care system. Probably not unlike many others in my shoes, my experience with the health care system had been somewhat limited. I have three children, so I am not a stranger to trips to doctors' offices and being in the hospital, but my time spent there was limited and revolved around three very happy moments in my life, the births of my three daughters. While I work in the health care sector, my job is focused on health care policy, which I have since learned is relevant but very different from the real world of actual health care. I, like many others, was thrust into a new role when my role as a caregiver began in earnest - a role that does not come with an owner's manual or a set of instructions. However, after living the past few years, I feel like I have gained a greater appreciation for how our health care system works and how it could work better for

patients and those that care for them.



Barb Wall, Lori Reilly's mother - smiling and holding her granddaughter.

Over the past several years, I have had two family members experience daily interactions with our health care system. For the sake of time, I am focusing on my most recent experiences with my mom which began just two short years ago. My mother has always been an incredibly energetic, go-getter who needed little sleep and was more active than people half her age. She worked a full-time job,

volunteered at church, never forgot to bake anyone she knew their favorite birthday cake on their birthday. She enjoyed life to the fullest, particularly spending time with her grandkids. That is the memory I cling to when I think of my mom.

Unfortunately, that memory began to change about two years ago. My mother began experiencing some unsettling symptoms. At first, we noticed that when she spoke, her speech was slurred slightly. It was so slight that I didn't pay much attention at first. After

weeks of hearing it more frequently, my mom asked me if I had noticed her speech was slurred. I acknowledged that I had in fact noticed and helped convince my mom she needed to be checked out by a neurologist. My first thought was that my mother was having (or had) a stroke. The neurologist ran a series of test – CT scans, MRIs, blood work, etc. and concluded that it could be some small, almost undetectable strokes. The scans had not shown any major damage and she had no other symptoms at the time. Tests for MS and other neurological conditions came back negative. As months progressed, we started noticing other symptoms – she would occasionally lose her balance, her speech became even more slurred and the muscles in her neck grew weaker. After a visit to my home in Virginia, I implored my mother to get a second opinion. It was clear that there was something more serious going on.

A friend put us in touch with a neurologist at a medical center. I was pleased to learn that the neurologist worked as part of a larger team of experts – a physical therapist, occupational therapist, social worker, etc. – in a very coordinated fashion. When we arrived at the first appointment, the plan was to meet with the neurologist and then meet his team. Based on the diagnosis, they would consult and develop a plan for my mom’s care that was coordinated. In the health care policy world I live in we talk a lot about coordinated care. I had never seen it work in action and I was impressed to see that it can happen and when it does happen, the patient is better served for it. I appreciated the fact that the health care workers knew each other, talked about my mom’s care to each other and had access to the same tests.

The day of my mom’s appointment was stressful. My brother-in-law had passed away two days prior and the family was in mourning. My mom was nervous, understanding that whatever she had was getting more serious. As she went back to meet with the doctor, she insisted on going alone. About a half hour later, the doctor called my brother and I back. My mother was lying on the floor. She had passed out. Likely due to the news her doctor had given her. She had been diagnosed with ALS, or Lou Gehrig’s disease.

According to the doctor, she had likely had the disease for a few years. My mother has what is known as bulbar-onset of ALS, a form of the disease that attacks your ability to speak, eat and breathe before it works its way to your arms and legs. The doctor summoned an ambulance and she was transported to a nearby hospital and admitted. I spent time explaining to the doctor in the ER and the nurses what had happened. She was visited by a series of doctors, including residents and interns.

Since ALS is a rare disorder, many people, even health care practitioners, are not familiar with the disease and if they are, have not seen someone with bulbar-onset. They are used to seeing ALS patients in wheelchairs, unable to walk or move their hands. My mom at this time, and still today, is able to walk and use her arms. Doctors at the hospital began questioning her diagnosis. They started running a series of tests, including EKGs and more

blood work. I begged the doctors and nurses to call the neurologist; he could confirm what I had told them. She was just diagnosed with ALS, she is upset and hadn't eaten that morning and passed out. I felt helpless, as if they didn't believe me. I understand the need to rule out other potential ailments, but I was also upset that my mother was getting put through even more tests when she just wanted to go home.

I learned very quickly at this initial hospital visit that every patient needs an advocate. They need someone who is willing to ask questions and demand answers. I have the utmost respect for those who serve us in the medical profession. I have met the finest of people who love doing what they do and approach their jobs with care and compassion. At the same time, as a patient and as a loved one to a patient, the experience of being admitted to the hospital is a scary one. You don't always understand why they are doing what they are doing. People have a tendency to talk shorthand and use terminology that is not familiar to lay people.

Thankfully, my mother had several months of relatively normal living. She continued working, going to church and doing the things she loved doing. This past November, things began to deteriorate and my mother was hospitalized on Thanksgiving for six weeks. While I firmly believe that hospital staff by and large do the best job they possibly can, things can (and do) slip through the cracks. My mom was blessed to have good caring nurses. These nurses were not only good to my mom, but they made our time with her more comfortable. Thankfully, my sister is a nurse practitioner and actually understood the medical terminology and which questions to ask. Had she not been involved, I am pretty confident none of us would have even known what to ask.

At times I am pretty sure we annoyed the hospital staff by asking a lot of questions and having them explain why they were doing certain tests (and not doing others). What I think is often not realized is that most patients and their caregivers have no idea what is going on, what tests should be run, what certain medical terms mean, etc. So, it would be helpful to have someone explain that to us, in terms we understand and can relate to.

Any caregiver hopes that their loved one gets better. That is not always possible. But what is possible is good, thoughtful care. In the same town my mom was cared for, my brother-in-law also received care and later died. While my time observing his care was much shorter, I did have time to notice the large size rooms, meals that loved ones could order at bedside and that were delivered to the room, valet service at the front entrance, the smell

"I think the strength of our health care system today is the men and women who devote their lives to making people better and for those that cannot be made better, making the ends of their life as comfortable and peaceful as possible."

-Lori Reilly

of cookies, not medicine, in the hallway. An environment that exerted happiness from the greeter at the front door, to the nurse providing care, people seemed happy in their environment and in the job they were doing and it showed.

While no miracles were performed at this hospital the day my brother-in-law died, I know the experience for my sister and others were better for the environment and care she and her husband received. It doesn't always take big things to change our health care system. It often is the smaller things that matter most to people. I have learned that what helped me navigate the system better and have a better experience were things like care coordination, a welcoming environment in the hospital (including large rooms, comfortable surroundings, hotel-like amenities) and nurses and doctors who actually explained what was happening in terms I could understand and provide ample opportunity to ask questions and receive thoughtful answers. For patients, I still think one of the most valuable things you can have is a good advocate, a loved one or caregiver who is willing to sit and ask the questions you can't bear to ask or don't even know to ask.

I think the strength of our health care system today is the men and women who devote their lives to making people better and for those that cannot be made better, making the ends of their life as comfortable and peaceful as possible. My wish for my mom is just that – as she lives out the days of her life, I hope that she is cared for in a way that is respectful and caring and if by some miracle, she gets better, I will happily take that too.

Lynette Bisconti

Patient and Family Representative and Advocate

President, Gateway for Cancer Research

My name is Lynette Bisconti and my story starts ten years ago, when just three weeks after learning I was pregnant, I was diagnosed with breast cancer. No one could have been prepared for the tempest of emotions I was about to face. The joy of pregnancy and the hopefulness of birth, combined with the threat of mortality that comes with a cancer diagnosis were overwhelming to say the least. Where would I start? What did the future hold for me? How would cancer treatment affect my baby? And how would it affect my husband and my family?

But, in those early days, instinctively, I knew that the biggest difference in my ability to survive cancer had nothing to do with a drug or surgery. It had nothing to do with doctors. It had nothing to do with cancer or my pregnancy. It all started with me. And while I knew it all started with me, I quickly discovered that

in today's healthcare system, no one else thought it started with me. Thus began my journey to find patient centered and individualized care.

To beat cancer, save my baby and have a quality of life on par with what I had before cancer, I needed to be actively involved in decisions about my medical care. These were my life and health goals – individual to me – and I needed my care team to understand what I valued most and demand they be heard and respected during my cancer treatment.

I wanted to identify and consider every possible option that would help me achieve my goals. I wanted a care team that listened to my needs, took time to answer my questions, offered me all of my treatment options, and treated me like a person. I wanted a team that would give me as much information as possible so that I could make informed decisions. This was my life. These were my decisions. I was not about to be a bystander.

Unfortunately, my expectations were neither shared nor understood and usually ignored.

Finding a hospital, doctor and support team that would provide treatment on these terms was very difficult. I encountered a healthcare system determined to manage me. It was impersonal when I needed personal. Every step of the way, I resisted being treated as if I were a body on a conveyor belt. I refused to be just another nameless cancer diagnosis, moving through the sterile world of a provider-centered health system. Nor was I willing to accept that surgery, radiation and chemotherapy (while important) were the limit to cancer treatment.

“Our opportunity to create real change begins with laying a foundation of patient empowerment.”

-Lynette Bisconti

During my journey, I sought a total of eight medical opinions, not because I was in denial, but because each of my first six opinions treated me as if I were part of a protocol. Many of the doctors and hospitals had tremendous reputations. But their reputations couldn't cure my cancer and help me deliver my child. It would require creativity, innovation, communication and respect.

My options, however, were limited and ignored what was important to me. At first I was told to terminate my pregnancy. Then I was told that the heavy doses of chemotherapy, steroids and anti nausea medication would either kill my baby or cause severe brain damage. Each doctor, each treatment experience was more demoralizing than the last. I wasn't being given all of my treatment options. No one was willing to offer creative treatment options to help me achieve my goals. The clinical cookbook never seemed to change.

The more challenges I faced, the more determined I became. I was going to find an organization that would provide treatment on my terms and do everything possible to help me attain my health and life goals. I wanted to be a partner with my physician. I wanted integrative care because it offered me ways in which I could help myself and my baby survive. I wanted to be treated as a living, breathing human being with dignity and respect, not like a breast with cancer.

I found that partnership with Cancer Treatment Centers of America (CTCA). My relationship with CTCA meant everyone knew my name, the names of my family members and truly cared about me and my well-being.

I encountered doctors with humility, who understood they couldn't cure cancer, yet told me the truth and gave me all of my treatment options. Together we focused on what could happen, instead of hopelessly surrendering to statistics.

My doctor was part of a care team that met regularly to discuss a truly integrated care plan for me. They spent as much time with me as I needed to answer any and all questions and calm my fears. Educating me was as important as treating me. Using nutrition,



supplements and mind-body medicine, I learned how to put myself first and care for me – an important step in healing.

CTCA became my advocate for all aspects of care. To keep my focus on healing, they assumed the stress of coordinating the many facets of cancer care. All my appointments were coordinated. Diagnostics, labs, infusion, everything was coordinated seamlessly. I didn't have to wait a week or more for test results, I received them on the same day. If I had a concern, it was heard and appropriate action was taken – usually by the next day.

As my partner, they helped managed my health insurance. They made sure my family's interests and needs were well represented. They understood that the less stress I dealt with, the easier it was for me to heal.

Today, I am a wife, a mother and an eleven year breast cancer survivor. For all the right reasons, I am happy to say I am no longer a patient at Cancer Treatment Centers of America. They helped me achieve my goals. My son is thriving. But, they helped me learn far more about myself than I'd ever imagine.

Cancer is a disease that can take complete control of your life. It takes control physically, mentally, financially; every part of your life including your family is affected. My journey taught me that I am in control of my life and health goals. Not only did CTCA give me control, but they gave me back my hope.

I have had the privilege of speaking to hundreds of patients, many who never knew they could take control and advocate for themselves. Most simply don't know how to begin to do it. My message: take control, it may save your life.

It's unfortunate that only through an extreme disease like cancer do we learn these lessons. We are healthy most of our lives. We don't plan on getting sick – not even the flu. When we do get sick, we apathetically accept the impersonal qualities of our healthcare system. We are trained to have low expectations for care.

We all agree that our current healthcare system is painfully broken and that real change is vital to the future success of medicine in the United States. Our opportunity to create real change begins with individualizing our approach to care. That means aligning the expectations of patients with how services are organized and delivered.

I believe the only way to treat and heal individuals and treat and heal our healthcare system starts with patient-centered medicine. Patient-empowered, patient-centered, individual-centered what ever you want to call it needs to be the foundation for our healthcare delivery system. If we do not address this most basic and in my opinion, primary issue, we will not address the most pressing issue facing healthcare today.

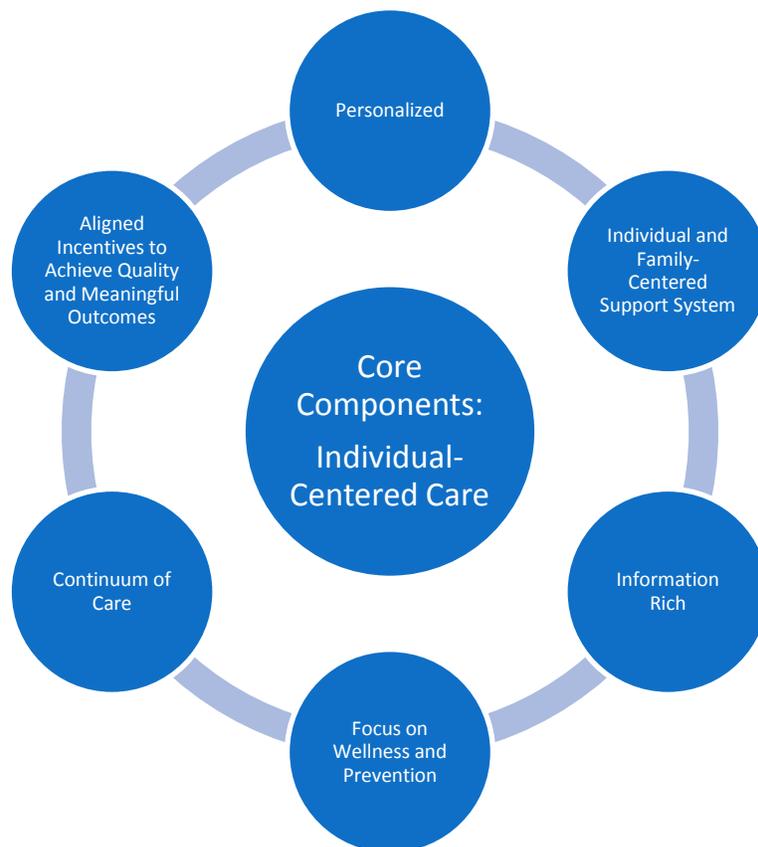
Repairing our healthcare system is long overdue. No question about it. But we should not allow a rush for change to overshadow what patients and their families value. There is no point to expanding access to a health system that has neglected what patients value for decades. Patients need to be at the table. All kinds of patients need to be at the table. Passive users. Acute care users. Chronic users. Parents of children. Caregivers. Their views must be the center of discussion. To decide what to offer your customer without asking them what they need or value will doom any business. Why should we expect any different from our healthcare system?



Part Two: Core Components Essential to Individual-Centered Care

As co-leaders of the Center for Health Transformation's Individual-Centered Care work group, Steve Bonner, CEO of Cancer Treatment Centers of America and Wayne Sensor, President and CEO of Alegen Health worked collaboratively to discuss and establish the essential core components of Individual-Centered Care. Guided by Ron Wince, CEO and President of Guidon Performance Solutions, the following core components were identified as necessities to creating a true Individual-Centered 21st Century Intelligent Health System:

- ⦿ Personalized
- ⦿ Individual and Family-Centered Support System
- ⦿ Information Rich
- ⦿ Focus on Wellness and Prevention
- ⦿ Continuum of Care
- ⦿ Aligned Incentives to Achieve Quality and Meaningful Outcomes



A Personalized Health System

Guiding Principles

A 21st Century Intelligent Health System offers a personalized approach that puts the patient at the center of the system.

- ◉ *Personalized medical history, genetics, preference environment and treatment compliance should be utilized to improve decision making and preventative opportunities.*
- ◉ *Depersonalized information should feed into data sets to determine best treatment and care options for the individual.*
- ◉ *Personalized information should impact everything from preventive care to appropriate testing to drug selection and diet choices, as well as the type of treatment, interaction, activities, meals and social opportunities.*

As futurist Alvin Toffler predicted decades ago, we are living in an era of mass customization. New technologies and discoveries have made it possible, in many areas of life, for us to have greater customization without greater cost.

A personalized system will offer the opportunity for dramatically better health for everyone by ensuring that the right person receives the right treatment at the right time. Prevention, detection and treatment will increasingly be based on very specific aspects of the individual's make-up. A one-size-fits-all approach will become increasingly unacceptable.

Rights and Responsibilities in a Personalized System

In a 21st Century Intelligent Health System individuals have certain rights, including the right to know cost and quality information, as well as the right to be assured that their providers are practicing the best standards of care for their particular needs. But they also have responsibilities.

First, individuals are expected to be informed and to use that information to make wise decisions. It will be futile for us to provide information about cost and quality and about the best individual treatment for a given person, if people don't use it to make intelligent decisions.

Second, individuals have a personal responsibility to engage in (and encourage their children or family to engage in) healthy behaviors, related to both nutrition and exercise, that are proven to prevent illnesses and complications. If they are at risk of or develop a

chronic illness, they are expected to learn and follow best standards of care to avoid costly complications.

Prevention, early detection, and good self-management are part of the 21st century focus on health, as opposed to healthcare. While others can develop the tools and provide the lessons, individuals must apply them to their own lives.

Third, individuals are expected to help pay for their care. Everyone should be required to have coverage. Those whose incomes are very low should receive vouchers or tax credits to help them buy insurance. Those who oppose the concept of insurance should be required to post a bond to cover costs. Allowing individuals to pass their health costs on to others reinforces the attitude that it's not their problem and adds to the irresponsible, unhealthy behaviors that are bankrupting the current system.

It's important to note that the word personalized starts with "person" – not only should providers focus on the person as an individual, but the individual must also be willing to leverage that information in order to make wise and healthy decisions.

The "Whole" Person in a Personalized System

Personalized health is about more than genetics and molecular medicine, which is why, for our purposes, we use the term personalized health rather than personalized medicine.

While personalized medicine broadly represents the promise of delivering more effective, efficient medical care through genomics and other science that probes an individual's make-up at the molecular level, personalized health addresses not only medicine, but also social, spiritual and mental health.

Cancer Treatment Centers of America (CTCA) focuses on the whole-person impact of cancer and how the cancer experience affects people physically and emotionally, as well as spiritually. Recognizing that faith often helps carry people through difficult times, spiritual support is part of the personalized experience CTCA offers to cancer patients.

A growing number of hospitals have been implementing concierge services for patients, borrowed from the hotel industry. USC University Hospital, for example, has a concierge desk which helps patients and their families with everything from booking hotels or long-term housing, transportation to and from airports, car rentals, business services, and personal care services like spa and hairdressing appointments.

Preferring to have patients that are happy and well-nourished, many hospitals have hired fine chefs and allow patients to order from a menu - minus, of course, food that is restricted from their diets.

All of these are examples of how hospitals are personalizing their services, often in ways that exceed medicine per se.

Individual and Family-Centered Support System

Guiding Principles

A 21st Century Intelligent Health System creates an environment that recognizes family members and others who support the patient as an integral part of a patient's healthcare.

- ◉ *Individual and family support should be respected, included and supported by the healthcare system.*
- ◉ *Resources should be provided to encourage individual and family empowerment and development.*
- ◉ *Needs of the patient's family and caregiver should be considered as part of the patient's overall health care experience.*

An individual-centered healthcare system focuses on the individual and their support system, not the providers. The orientation of this type of system necessitates that the individual and their family and others who support them play an active part in many aspects of care and are recognized as an active member of the healthcare team.

Too often the patient and family enter a healthcare system feeling like an outsider. Kept out of the loop of care and treatment decisions, left waiting for random visits from the physician team for information, trying to balance home and work responsibilities, as the patient and family enter one of the most stressful times of their lives.

The delivery of services is occurring more often in an ambulatory surgery center setting. Patients are being discharged still groggy from anesthesia; with the decrease in length of stay in hospitals resulting in patients discharged to home requiring increased levels of care;

48% of patients believe that their family and friends were kept informed about their condition and treatment.

Source: Gallup

and with the increased occurrence of chronic diseases, the family is often called upon to take a more active role in the healthcare of their loved one. Often acting as a direct care giver, the family and others who support the patient have the same needs for information and support as the patient.

We believe that the patient and their family are integral parts of the healthcare system and their integration into the healthcare team greatly impacts the outcomes of treatment.

52% of the patients believe that the hospital staff treated them as a person and not just a medical condition.

Source: Gallup

Importance of the Patient's Social Network

Several organizations are leading the way in providing patient- and family-centered care that recognizes family members and others who support the patient as integral part of the healthcare system. These organizations serve as models of transformation. Many of the leading organizations are children's hospitals, institutions that have long recognized the value of including parents and other family members in the care team.

An institution that serves as a model of patient- and family-centered care is the Medical College of Georgia in Augusta, Georgia. Since 1996 this institution has strived to create a system focused on the patient and their family. In 2003, the Department of Neurosurgery embraced the institution-wide patient- and family-centered care plan. Included in the implementation plan was the creation of a neuroscience inpatient and intensive care unit with input from patients, families, nursing staff and physicians. All rooms were equipped with couches and fold out beds which allowed the family to remain with their loved one during hospitalization and for visiting hours to be eliminated. The plan also included a multidisciplinary approach to patient care which resulted in a therapeutic plan and discharge plan discussed at regular intervals with the patient and their family. The implementation of the patient- and family-centered care plan has increased the number of patients cared for in the department, decreased the cost of hospitalization, and improved the quality of care.¹ Medication errors decreased by 62 percent.²

Support of the family also includes paying attention to their need for nutrition, exercise, sleep, and physical and psychological support as they spend long hours at the hospital. For example, providing healthy food choices and extended hours in the cafeteria would help maintain nutrition. Taking the need of sleeping arrangements for family members into consideration when designing patient rooms is critical. Providing family members access to the internet, on-site exercise facilities, and activities to decrease stress such as seated massage are also ways to support the family.

Providing a system that truly supports the patient and family and recognizes them as an integral part of the care team requires cultural change. This is not an easy task, however you will read about ten institutions that have made these types of transformations in Part Three entitled "The World that Works."

¹ Rahimi, SY "Patient- and Family-Centered Care Initiative: Implementation at the Medical College of Georgia," *American Association of Neurological Surgeons Bulletin*, Vol. 15, No. 3, 2006, pp 12 -16.

² Sodomka, P; Scott, HH; Lambert AM; and Meeks, BD. "Patient and Family Centered Care in an Academic Medical Center: Informatics, Partnership, and Future Visions." In *Nursing and Informatics for the 21st Century*, by Charlotte A. Weaver, RN, PhD, Editor, Connie W. Delaney, FAAN, PhD, RN, Editor, Mr. Patrick Weber, RN, MA, Editor, Ms. Robyn Carr, RGON, Editor; HIMSS Publication, 2006. pp 504.

Information Rich

Guiding Principles

A 21st Century Intelligent Health System provides patients with the appropriate tools and information they need and value to make informed decisions.

- ◉ *Definitions should be established to determine what information patients and caregivers need and value to assist in making meaningful decisions.*
- ◉ *Information should be presented in attractive, timely and actionable formats to support decision making.*
- ◉ *Information should be made available in a manner conducive to the patient's learning style and preferred method of communication, and delivered through the patient's medium of choice.*

Each of the components of the individual centered 21st Century Intelligent Healthcare System implies an information richness to empower and engage every health care consumer which will, in turn, move the market to a much more efficient, higher quality level. Too often, in healthcare today, information is fragmented, complex, available in limited forms and sometimes even inaccurate. Most of today's information is designed for payors, providers, intermediaries and the government, and is virtually useless to the patient who wants to make intelligent decisions. This reality creates inefficiencies and frustrations as well as safety concerns and errors for patients, families and healthcare providers.

This component focuses on the patient's needs and preferences for information and provides a broad description of the ideal state along with some current examples where progress is being made in creating an information rich environment for patients.

Patient information needs in health care are far reaching. Patients need information about their specific condition, about the best treatment options, about the cost and quality of the treatments, about how others have coped with side effects or setbacks, and about their insurance coverage and requirements for treatments. Families of patients often need this same information plus additional information about how to best support the patient and their specific needs.

48% of patients believe that nurses provide sufficient explanations about medications, procedures and routines.

Source: Gallup

Patient information needs also vary widely in breadth and depth depending on the patient and the condition or situation. For example, some patients are frightened when receiving an initial diagnosis. Descriptions of being overwhelmed by clinical jargon are common. Others are motivated to find out every detail of their condition. Still others are at a loss as to how to coordinate the various physician visits, tests, or procedures they need when facing a complex diagnosis. WellStar Health System's STAT clinic which is profiled in Part Three has instituted protocols where multi-disciplined clinicians involved in the development of a patient's care treatment plan for certain cancer diagnosis' are present at the same time in one location where they meet with the patient and their family. In addition, the STAT clinic protocols allow patients to receive information regarding their entire care treatment plan at one time and to ask any questions and raise any concerns. An information rich environment will require a drastic and fundamental shift in the way patient information is created and delivered by health care providers.

Central to the guiding principle of an information rich environment is the control and customization of information based on the patient desires. Following are some examples of where the patient is in charge of his or her health information and can access and utilize it according to their desired level of engagement.

Personal Health Record

In an information rich environment, the patient will have real-time, direct access to their health history and medical status. One way to achieve this is through the use of a personal health record (PHR). Typically, a personal health record allows the patient to organize a complete record of their medical history. Ideally, it also gives the patient the ability to track and customize wellness initiatives such as exercise and diet. The patient is able to control and determine who receives this information and to coordinate or authorize its distribution as needed. This control engages and empowers the patient to make wise health decisions. It further provides an avenue to insure integration of critical information across various health care providers decreasing inefficiencies and medical errors. PHR also helps patients engage their families in behaviors to promote healthy living and help manage chronic illnesses, thus avoiding complications.

Microsoft HealthVault™, for example, is a personal health record tool available to patients. The patient is able to organize their health information in one place and controls what data and with whom it is shared. HealthVault™ utilizes an open platform and encourages patients, healthcare providers, pharmacies, employers and health plans to share data in mutually beneficial ways. With the individual at the center and in control, the personal health record is one tool or method to facilitate and create an information rich environment. Wider adoption and utilization of such tools by all entities in the health care equation would greatly enhance the evolution of an information rich environment.

Medical Business Associates, as another example, has developed “Personal Healthcare Portfolio” which includes not only the patient’s clinical history, but also wellness and financial information. They will soon launch the web based version *eportFolia*.

Social Technologies

Social tools and technology are also empowering for the patient, delivering information customized to personal appetites and preferences. As individuals in a 21st Century Health System, we are expected to be informed and have a responsibility to engage in healthy behaviors and manage our own health; most of us want help sorting through all of the data or options. Additionally, relationships and the experiences of others we trust often influence and drive how we make decisions. Social technologies provide avenues to gain information and form meaningful relationships to support decision making on specific health and wellness concerns.

Social technologies include blogs, social networks, and online community forums. Healthcare organizations such as Memorial Sloan-Kettering Cancer Center, Mayo Clinic, Cancer Treatment Centers of America and others have begun engaging with patients utilizing these types of social technologies. There is tremendous opportunity to enhance and further the use of these technologies to customize patient information.

In many respects, patients are ahead of health care providers in their comfort with and use of these social technologies. The internet site EmpowHer.com launched by Michelle King Robson is an example of a patient creating and designing an interactive health advocacy online community, which can be accessed on numerous levels depending on individual preferences. A visitor to this site is invited to ask a question, share their story or simply access health information.

It is important to note that patients do need to discern the source and validity of information accessed through the internet and various social technologies. However, more and more patients are accessing these channels for information which further supports the need and opportunity for health care providers to fully engage in these methods of communication.

In conclusion, the creation of an information rich environment will demand ongoing innovation in the way information is delivered to patients. The patient’s needs and preferences must be addressed if patients are to be in control and responsible for making wise health care decisions.

Focus on Wellness and Prevention

Guiding Principles

A 21st Century Intelligent Health System focuses on health, wellness and prevention.

- ◉ *Focus should be on keeping people healthy and preventing avoidable diseases and acute episodes.*
- ◉ *Priorities should include prevention, early detection and optimal health management.*
- ◉ *In order to continuously and effectively promote wellness and prevention, convenience and ease of access to healthcare for patients should be taken into consideration.*

A 21st Century Intelligent Health System must focus on health not just healthcare. Keeping people healthy and preventing avoidable diseases and acute episodes is the only way to fulfill the promise of better health at lower cost for all Americans.

Our current acute-care focused system, which expends most of its resources on treating people after they become acutely ill, has proven to be unsustainable, in terms of both financial and human costs.

The priorities of a modern health system must include prevention, early detection and optimal health management. At the same time, the modern health system must be convenient and available, so that wellness, prevention and health management prevail.

Prevention: Nutrition, Activity and Attitude

The least expensive and most successful way to prevent many diseases and illnesses is through healthy living, including nutrition, activity and attitude.

A recent study by the Milken Foundation reported that a reorientation toward prevention could avert 40 million cases of seven chronic diseases – cancers, diabetes, heart disease, hypertension, stroke, mental disorders and pulmonary conditions – in the year 2023. That would reduce anticipated treatment expenses associated with the seven diseases and improve productivity by \$1.1 trillion.³

³ Ross DeVol and Armen Bedroussian, “An Unhealthy America, The Economic Burden of Chronic Disease,” The Milken Institute, 2007.

Heart disease, the leading cause of death for both men and women in the United States, accounted for nearly 900,000 deaths every year. In 2005, heart disease was projected to cost \$393 billion.⁴

Yet, heart disease and its complications can be prevented. Among people with heart disease, studies have shown that lowering cholesterol and high blood pressure can reduce the risk of dying of heart disease, having a non-fatal heart attack, and needing heart bypass surgery or angioplasty. Furthermore, for people without heart disease, studies have shown that lowering high blood cholesterol and high blood pressure can reduce the risk of developing heart disease in the first place.

The increased incidence of diabetes is another example of the impact of a healthcare system focused on acute care and not prevention. Type 2 diabetes can be prevented. According to Frank Vinicor of the CDC, “Recent studies have shown that people with pre-diabetes can successfully prevent or delay the onset of diabetes by losing 5 to 7 percent of their body weight. This can be accomplished through thirty minutes or more of physical activity most days of the week and by following a low-calorie, low-fat plan, including a diet rich in whole grains and fruits and vegetables.”

Early Detection

We live in a time of dramatic breakthroughs in science and technology, which are creating new opportunities almost daily to prevent or delay the onset, the progression and the severity of many diseases and conditions.

The Human Genome Project has resulted in a growing ability to administer genetic tests that can reveal an individual’s predisposition to a variety of illnesses, including breast cancer, cystic fibrosis, and Alzheimer’s, among others. DeCode, one of the first companies to provide such testing, is able to analyze a swab of your saliva and alert you to your predisposition for certain diseases, allowing you to take steps to lessen your vulnerability to the disease – and to detect it at its earliest stages, where often it can more easily be controlled or cured.

Meanwhile, according to Wired Magazine, combining genetics and biomarker breakthroughs with improved imaging technology has created dramatic capabilities to detect (and therefore treat) diseases at their earliest onset, where survival chances are much higher than with cancers detected later.

⁴ American College of Cardiology. “Statement for the Record of the House Appropriations Subcommittee on Labor, Health and Human Services Regarding Fiscal Year 2007 Funding for Cardiovascular Research and Public Health Education,” American College of Cardiology, 2006.

Optimal Health Management

We should think in terms of managing health, as opposed to managing diseases. This is true not only for the healthy but also for those who are diagnosed with an illness. This includes preventing secondary conditions by keeping people as healthy as they can be during all stages of an illness, not just treating acute episodes.

For example, for people who have developed diabetes, complications can be prevented through control of blood glucose, blood pressure, and blood lipids and by receiving other preventive care practices such as eye exams and foot checks. In fact, every percentage point drop in the results of the A1C blood test (used to measure a person's average blood sugar level over two to three months) reduces the risk of microvascular complications (eye, kidney, and nerve diseases) by 40 percent.⁵

Due to advancement and innovation in the pharmaceutical industry, many diseases were considered severely disabling or even fatal just a decade ago have been contained and even prevented. Drugs for arthritis have helped those who were once crippled to regain active lives; other drugs have helped those who were institutionalized to live in the community; and still others have controlled blood pressure in order to prevent deadly or disabling strokes or heart attacks.

⁵ Centers for Disease Control and Prevention. National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2007. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2008.

Continuum of Care

Guiding Principles

A 21st Century Intelligent Health System facilitates seamless transitions through all levels of care.

- *Information should be shared among stakeholders and providers, saving time and money.*
- *The patient and/or caregiver should participate in all decisions about their care, but is not expected to be the coordinator of care/information.*
- *Access points of care should include providers, non-traditional/health/wellness, virtual and patients/families.*

Surrounded by challenges and opportunities to offer patients better care, there is clearly a need for a non-traditional solution – one that emphasizes coordinated, integrated, patient-centered care across a continuum of access points. The broad network approach provides care outside of the traditional hospital setting and manages patient information at each site. This necessary shift in organizational structure will completely change the flow of operations and will eliminate the current system, often described as redundant, fragmented and time-consuming.

Keeping in mind the important heritage and traditions of institutions, the new structure is about creating a truly patient-centered environment. Creating a new patient experience, blending the best of all cultures into a new culture focused completely and uniformly on patients.

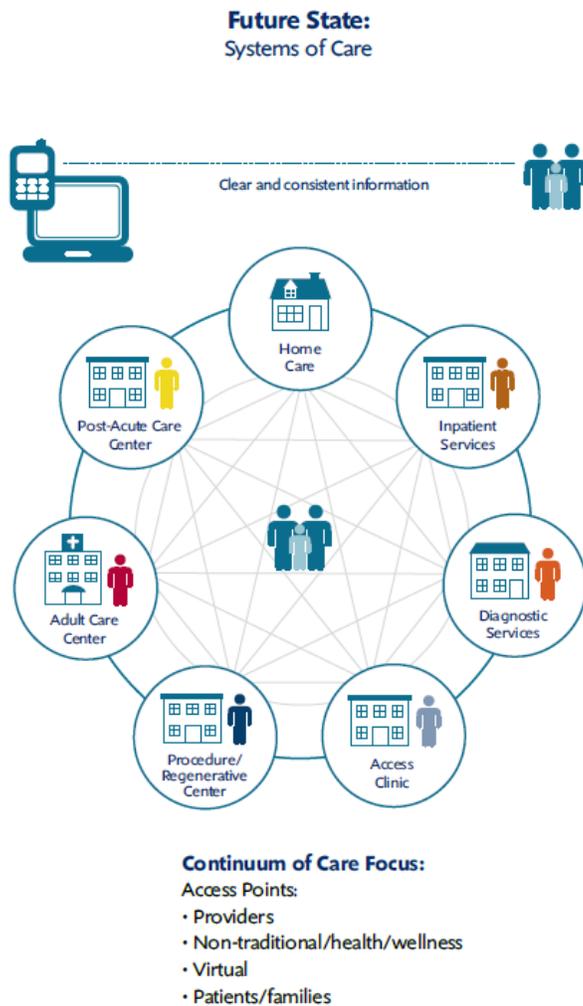
As a model of organizing, financing and delivering clinical services, integrated care is designed to maximize communication, collaboration and patient outcomes within and between access points. Integrated care, along with a consistent and efficient process that helps care givers identify, respond and reassess the care needs of a patient together as a seamless team across systems of care means providing the right service in the right setting. With an emphasis on prevention, health, wellness and evidence-based diagnostics and therapeutics, the patient experience is maximized to its full potential, which creates engaged patient, families, providers and employees.

42% of patients believe that staff members communicate effectively with one another about their treatment.

Source: Gallup

Alegent Health recently announced a complete restructuring of their organization that would offer integrated healthcare across a broad continuum of services. Leadership of the

organization will now include individuals responsible for the operational aspects of care, along with physicians and nurses who will be responsible for the clinical aspects of care. As illustrated in the chart below, together, these leaders will have accountabilities much broader than a single hospital.



Effective care coordination refers to provision of health care services for an individual patient in an organized and accountable care management setting.

Additionally, care coordination refers to a health care system where reimbursement is aligned with an organized delivery of care guided by evidence-based protocols and measureable advances in the health status of a patient. This concept is discussed in further detail in the next core component, “Aligned Incentives to Achieve Quality and Meaningful Outcomes”.

Aligned Incentives to Achieve Quality and Meaningful Outcomes

Guiding Principles

A 21st Century Intelligent Health System aligns incentives and encourages engagement between patients, providers, payors and employers.

- ◉ *Providers should be incentivized to manage the health and healthcare in partnership with each individual patient.*
- ◉ *Providers should be paid based on results and appropriate outcomes.*
- ◉ *Both patients and providers should be rewarded for their joint successes in attaining meaningful, individualized clinical targets.*

A 21st Century Intelligent Health System must focus on better quality care and meaningful outcomes in order to support higher quality of life and improved health for every individual and patient. Putting individuals at the center of the system requires that they be given the incentives, the information, and the power to make wise choices about their health. However, the 20th century system we inherited is absurdly secretive and complex and one in which individuals seldom have information about cost or quality, have no financial incentives for wise consumption and generally have decisions made for them rather than choosing for themselves.

Currently our reimbursement system rewards the providers on a transaction basis regardless of outcomes or results. Quality and patient-centered care is irrelevant to payment. The current volume-based reimbursement system does not distinguish between disintegrated and integrated models of health care delivery and financial incentives are the same regardless of quality of care provided or outcomes achieved. As a result, the patient's quality of life suffers, and the costs of disintegrated care places inordinate stress and cost on the entire health care system.

A results-based payment system goes beyond clinical protocols by balancing the structure, process and outcomes. Payment is linked to actual, appropriate outcomes and incorporates care coordination, quality, outcomes, and the patient's role in the health care process. Requirements for a results-based payment system include outcomes measurement tools across all disease states, refinement and integration of quality indicators and risk-adjustment factors, improved, interoperable means for collecting and reporting de-identified data and that all stakeholders become "outcome-focused" instead of "cost-focused".

Successful implementation of coordinated care processes is highly dependent upon adequate reimbursement for time and effort spent on coordination, on development of patient plans, and on follow-up monitoring. In this regard, new proposals are being advanced that advocate per-patient payments to those health care entities that provided coordinated, well-organized primary care as the first level of comprehensive care.

The World that Works

Alegent Health

Wayne Sensor

President and Chief Executive Officer



Editors' Introduction: Alegent Health is the largest not-for-profit, faith-based healthcare system in Nebraska and southwestern Iowa with nine acute care hospitals, more than 100 sites of service, over 1,300 physicians on its medical staff and 9,000 employees. Alegent Health is ranked first in the country in quality and patient satisfaction according to the Network for Regional Healthcare Improvement (NRHI). This outstanding achievement reflects the relentless commitment to the highest standard of patient care in the industry and its dedication to building a system that places the patient and their families at the center of what they do. Four years ago, Alegent set out to revolutionize patient care by openly reporting their quality scores and costs, building cost and quality tools for patients to make wise decisions, providing powerful information and health education courses for patients and their families, providing convenient and appropriate access to care and building a robust health information technology system. As one of the larger employers in their community and state, Alegent has achieved remarkable health and cost outcomes for their employees by incentivizing wellness and prevention and rewarding healthy behaviors.



As lawmakers debate healthcare reform on Capitol Hill – proposing new policies and programs – we must make sure we do not forget the power of the patient. Over the past few decades, consumers have grown accustomed to getting exactly what they need and want. Just as Burger King told us decades ago that you could “Have it your way,” or as iPods opened the door for us to assemble the music we want to hear, when and where we want to hear it – the healthcare industry must also find a way to help our patients get exactly what they need, on their own terms.

Nearly four years ago, Alegent Health began an effort to connect more directly with the people we serve by beginning a conversation with business leaders in our community, who purchase a great deal of healthcare on behalf of their employees. I'll never forget a defining moment for me personally and more broadly for Alegent Health. I was meeting with then-Chairman and CEO of Union Pacific Railroad, Dick Davidson, to discuss the reasons for the high cost of healthcare. As I professed that Alegent Health would be a leader in helping to pioneer new ways to make healthcare higher quality, more cost effective and more convenient for people, Mr. Davidson asked a piercing question.

“So, what are you doing with your own employees to help them take more control of their health and healthcare?” he said.

I was speechless. It was the last question I expected, but the first question that we at Alegent Health, as the largest employer in Nebraska's private sector, should have asked of ourselves. After all, who better to pioneer health care solutions than a community-based health care provider? At that moment, our vision for the future became crystal clear: it would be a future fueled by the passion to fix what is broken with healthcare rather than have it fixed for us.

After that meeting, our leadership was quick to begin working on new consumer-driven health care options for our own employees. Following an extensive educational effort, employees were given a choice of a health savings account (HSA), health reimbursement account (HRA) or the same PPO offered the year before. Expectations were modest that first year; we hoped 30 to 50 percent of our employees would opt for one of the consumer-directed plans. Instead, the workforce dove right in with 79 percent choosing to participate in an HSA or HRA.

Four years later, that number has reached new heights. As of January 2009, 94 percent of eligible employees had chosen consumer-driven health plans, which is the beginning not the end of our story. We also implemented financial incentives to encourage employees to lose excess weight and stop smoking. The strategy worked. The Alegent Health workforce has lost a collective 13,000 pounds and more than 500 employees have either stopped smoking or are currently enrolled in the organization's cessation programs. The incentives paid out in the



Sybil, an Alegent Health employee, lost more than 60 pounds and earned incentives in the process.

first year alone amounted to roughly a half a million dollars – the cost savings, which will prove to be significant over the course of the next 20 years, pales in comparison to our employees who are now leading healthier, happier lives.

The dramatic results from Alegent Health’s “petri dish” of sorts, support our belief that the best and fastest way to improve value and address broader issues within the health care industry is to give consumers more information and greater control over how they spend their healthcare dollars. We have found three key components to engaging consumers in their healthcare: tools, access and incentives.

Tools

Quality Reports

Today, consumers have access to incredible amounts of information to make their buying decisions. From Consumer Reports to online reviews, people can know a great deal about the products they intend to purchase, and are able to use the value equation: cost plus quality equals value. Everywhere, that is, except in healthcare. What other good or service in this country do you purchase that you don’t know how good it is and you don’t know what it costs? And healthcare decisions are among the most important decisions we will ever make.

To empower our consumers, we placed a full-page ad in the local newspapers in September 2005, and, using a composite scoring methodology, we shared our clinical quality performance in the care of heart attacks, heart failure and pneumonia. We compared each of our hospitals and the overall system scores to a regional average.

Interestingly, Alegent Health didn’t have the highest score in every category, which led to difficult conversations with our staff and physicians. Try explaining to your employees and your doctors that you are actually going to pay to put scores in the newspaper that don’t position you as the best. It takes courage; but it was the right thing to do.

It was one of several strategies that became the foundation for the Alegent Health strategic plan called the Quality Revolution. At its core, the plan was built on a vision to develop the processes needed to both measurably enrich the lives of patients and the community and achieve world-class leadership for the organization.

Since that first advertisement, our quality scores have soared. We have grown the number of indicators on which we report to 40 – now openly telling consumers how Alegent Health performs in clinical and surgical areas as well as our stroke accreditation program.

In June 2008, the reporting reaped its largest reward to date. The Network for Regional Healthcare Improvement recognized Alegant Health as the nation's leader in quality and

QUALITY HEALTH SYSTEM RANKINGS

Name	Location	Overall Rank
ALEAGENT HEALTH	OMAHA, NE	1
Mayo Foundation	Rochester, MN	2
Memorial Healthcare System	Hollywood, FL	3
Partners HealthCare System	Boston, MA	4
Baylor Health Care System	Dallas, TX	5

Source: Network for Regional Healthcare Improvement

patient care. The Mayo Clinic of Minnesota finished second. That same month, Alegant Health announced that its hospitals were also named top performers in a Centers for Medicare and

Medicaid Services Premier Healthcare Alliance pay-for-performance project. The recognition has provided our hospitals with \$800,000 in quality incentive payments over the last three years.

My Cost

Even as the Quality Revolution started to facilitate consumer engagement, it quickly became apparent that we were only providing the quality half of the healthcare value equation. To truly equip consumers with the information needed to make the best healthcare decisions, we needed to take consumer cost transparency off of the "too hard" pile.

Over the last 40 years, our industry has managed to create a pricing system in which there are virtually hundreds of prices for the same procedure. Combine that with the fact that traditional insurance models have taken away a consumer's discretion over how their healthcare dollars are spent. They also have undercut the motivation for both patients and providers to focus on quality measurements and cost comparisons. All of these factors are painting a pretty dire picture of a situation in which it is virtually impossible for front-line hospital workers to have a meaningful conversation with patients about "price."

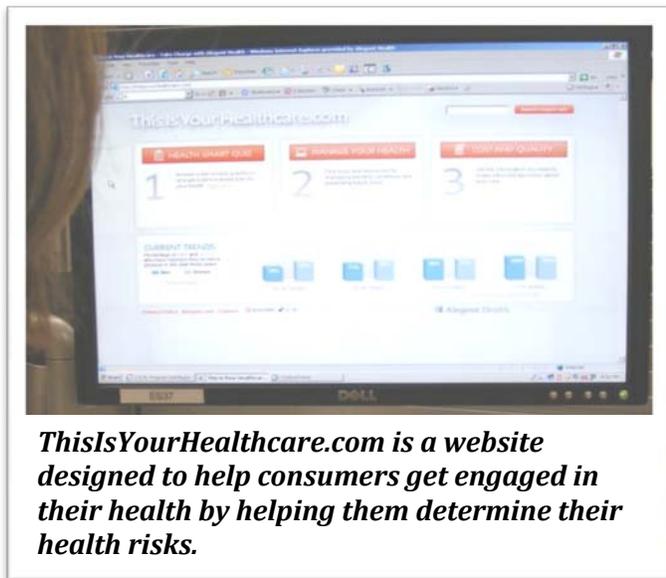
Thankfully that mentality is slowly beginning to change. In January 2007, Alegant Health signaled a new direction in healthcare when we introduced My Cost, a patent-pending online estimating tool. Unlike other estimating tools that display a list price for a select group of procedures, My Cost generates personally relevant information that takes into account a patient's personal insurance plan and coverage choices. The tool then produces a cost estimate for nearly 500 medical treatments and procedures offered at Alegant Health as well as a consumer's projected out-of-pocket expenses. My Cost also helps the uninsured consumer by first calculating the self-pay price for these same procedures, and then by determining if they qualify for financial assistance.

In the two years since we launched My Cost, consumers have used the online tool to generate more than 53,000 personal cost estimates and, in the process, have helped themselves and their families make better healthcare decisions.

Patient Education

With both cost and quality information, consumers can confidently make their own value judgments about the healthcare they need. But all of the pricing estimates and quality information in the world is not enough to motivate everyone to take charge of their health. That is why we, at Alegant Health, take an active role in teaching our patients and communities how to lead healthier lives. Not only do staff members provide pertinent education materials every time a patient is discharged from an Alegant Health hospital, but we also offer more than 100 health-related classes to the community. Exercise groups, weight management and smoking cessation programs, new parent classes and support groups are only a few of the classes offered at little to no charge – making it even easier for patients and their families to take charge of their health.

In fact, we've just launched a very public effort to help people to take control of their health and healthcare through a unique online site: ThisIsYourHealthcare.Com. By asking people to take three simple steps – know their health risks, manage their chronic health conditions and use information to make good healthcare purchasing decisions, we are making it easier for people to take charge of their most important asset: their health.



ThisIsYourHealthcare.com is a website designed to help consumers get engaged in their health by helping them determine their health risks.

Access

Today's families are busier than ever. Parents rush to drop their children off at school then race to work – only to do it all in reverse 10 hours later. If healthcare providers want a place in these families' frantic lives, they must be innovative in developing new ways for patients to reach them. There will always be a need for full-service hospitals, but successful providers must start thinking like the consumer to find new access points that offer convenient, cost-effective care.

Quick Care

Alegent Health Quick Care is one of those new access points. Strategically placed in grocery



stores across the Omaha/Council Bluffs area, our six Quick Care clinics have expanded Alegent Health's high-quality care to consumers – making it convenient to be healthy. Staffed by highly trained physician assistants and supervised by Alegent Health clinic physicians, these outlets provide patient services ranging from health screenings and immunizations to treatment of common illnesses such as strep

throat, mononucleosis and ear infections. After diagnosis or screening, necessary follow-up care can be coordinated with the patient's primary care physician.

Open nights and weekends, these clinics are not only close to home, they offer patients an alternative to the more expensive emergency room visit. Convenience is key. You don't have to make an appointment – just show up and sign in. If there is a wait, we provide you with a pager and allow you to do some quick shopping while you pass the time. Our patients love Quick Care. It's fast, convenient and, with the cost of services clearly posted, they know exactly what they are going to pay.

Express Care

Express Care clinics in the southeast and southwest parts of town ensure that families have a place to go with more urgent needs. These clinics can treat a variety of medical problems ranging from sprains and strains to pneumonia. Pediatric Express care, located adjacent to the Emergency Department at one of our full-service metropolitan hospitals specializes in helping children through injuries and illnesses. If a child needs more extensive testing, they are in a safe place to get it. If a child needs admitted – we have a bed waiting for them.

Complete Sleep & More

We are also deploying a retail strategy to introduce healthcare solutions to the community. Alegent Health Complete Sleep & More, the system's first storefront, features a line of innovative products designed to help customers get a better night's sleep. Products range from pillows to clinical treatments, and its conveniently located steps from physicians' offices, who can recommend products there for people who face sleep issues.

Incentives

Convenience alone is not enough of an enticement to get consumers to take control of their healthcare. Americans love incentives. They motivate us, and they shape our behavior. It's time we think creatively about incentives to help motivate people to get in the game of their healthcare.

At Alegen Health, we have worked to educate employees about the power of prevention. We know that money spent on staying well is a much more efficient use of healthcare dollars than acute care for patients whose illnesses were preventable.

There are two important constructs in our consumer-driven plans. First, preventive care is free. And second, through an innovative "Healthy Rewards" program, we pay people to make positive changes in their lifestyles, or to better manage their chronic conditions.

Incentive payouts totaled more than half-a-million dollars in the first year alone. A closer look shows:

- Those who completed an online health assessment were paid \$100 each for a total of \$292,100.
- 398 plan participants completed the free smoking cessation programs and received \$21,800 in incentives.
- \$152,900 went to employees who signed on for a one-on-one health coaching program to manage chronic conditions such as asthma, diabetes and heart disease.
- Weight management programs attracted 670 participants, who lost a combined total of 6,500 pounds and received \$35,900 in incentives.

We believed our consumer-driven healthcare plans would improve lives and result in a cost savings – what we didn't expect was the phenomenal level of success. In 2006, our healthcare costs were 4 percent less than expected – giving us the opportunity to return \$700,000 of that savings to employees who participate in our health benefit plans. Over the past three years, the escalation in our healthcare costs have slowed to an average of 6 percent each year compared to the 8 to 10 percent growth for most employers.

Clearly, our move to consumer-driven healthcare proved to be a win-win for both the organization and our employees – so long as the workforce remains engaged in their healthcare decisions. As a result, we are now immersed in a major internal and external health engagement campaign.

Environment

As we work to carry that same kind of success to our consumers, we know that the tools, unique access points and incentives may not always be enough. World-class hospitals and

clinics must also provide a patient-centered atmosphere designed to maximize healing as well as the reliability of safe and secure information technology.

Our Mission, to provide high-quality care for the body, mind and spirit of every person, calls us to constantly monitor patients' ever-changing needs, preferences and expectations to see where we can enhance their care. By investing \$350 million in our facilities, services and new innovations we are planning for the future that growing communities need, want and expect. We are making tremendous progress in our journey to becoming a world-class leader in healthcare.



A beam topping marks a new phase of construction on a \$149 million project at Alegent Health Bergan Mercy Medical Center in Omaha.

That investment reflects our commitment to developing the best care for the next generation of patients. We have construction going on at all of our Omaha metropolitan hospitals – but this expansive “Generation Patient” project is about more than bricks and mortar. It is about doing what is right for our customers.

Involving the “family” in the care process

At the center of every treatment plan is the patient. We recognize that physicians and nurses aren't the only healers in the healthcare equation. An increasing number of medical and social researchers report that love and intimacy as well as connection and community contributes to the healing process. That is why we encourage families to play a part in their loved one's care. We opened up visiting hours to 24 hours a day so that families can stay an hour or all night if that is what it takes to help the patient heal.

Spiritual support

As a faith-based healthcare system, we believe in the spiritual component of healing. Our faith is at the heart of all we do. It is how we are able to create a compassionate environment where the body, mind and spirit can work together to rest, and ultimately to heal. While science and medicine heal the body – it is faith that feeds the soul, restores the power of hope and fuels our belief that miracles do indeed happen. We believe in the power

of prayer and are not ashamed to admit it. In fact, we embrace it asking patients as they register a series of questions like:

- Have you experienced any recent loss or life change?
- Is spiritual or religious care important to you during this hospital stay?
- Do you have a source of spiritual support?

These questions equip our dedicated pastoral care staff to better serve each patient the way they want and need to be served. As a result, we don't make patients ask for pastoral care, we guarantee it. Chaplains take part in interdisciplinary rounds. Not only does this keep faith at the center of the care process, but it keeps the chaplains aware of any life changes or losses that may signal a patient needs their comfort and expertise.

Technology

New technology is bringing a greater sense of security to all Alegant Health patients and their families. When we opened our newest hospital in 2004, it was all-digital, full-service and one of the first paperless hospitals in the nation – a prototype for the “hospital of the future.” At the new emergency department, bedside staff could retrieve vital patient information using wireless communications. In addition, all patient records are available at the touch of a button. Even x-rays are kept electronically and digitally saved in your file for later use.

Electronic health records

Five years later, and all five of our metropolitan campuses are collecting data as electronic health records. When we first announced our plans to move to paperless records, many people – including patients – expressed fear over the safety of such technology. They were concerned it would jeopardize personal information and violate federal record-keeping laws. However, thanks to new technologies, Alegant Health is able to secure the electronic information, maintain confidentiality and remain HIPAA compliant. Best of all, digital records can be securely sent online if other providers are involved in a patient's care or if they want a second opinion.

With improvements in electronic health records, healthcare systems across the country are rushing to improve the safety and reliability of their digital information. Alegant Health will soon stand at the forefront of that technology. A 50,000 square foot, Tier IV data center, built to withstand 250 mile per hour winds, will open in fall 2009 on one of our hospital campuses.

If an F5 tornado hits or a rolling blackout leaves the city in the dark, the data center will keep all of our hospitals and offices running at full power. It will also provide more reliable access to patient records. Whether dozens of victims are rushed to us following a violent

storm or if a mother is simply seeking help for her little boy who broke his leg – the data center will ensure Alegant Health’s skilled physicians and nurses have access to any patient’s medical records at a moments notice.

Motion C5® Mobile Clinical Assistant

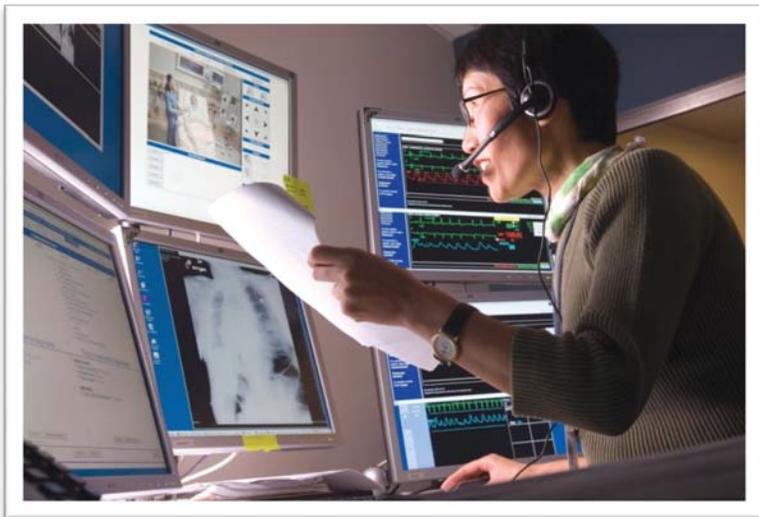
All of this technology can never take the place of hands-on patient care. Our commitment to healing the body, mind and spirit of every person means part of what we do will always remain “low-tech.” But, at less than five pounds each, one of the most innovative pieces of technology we have put to use is making each “low-tech” interaction more meaningful.

Developed on extensive research and with active participation from thousands of clinicians including nurses at Alegant Health, the Motion C5 Mobile Clinical Assistant enables our front line workers to more effectively perform their jobs on the move. Not only can our nurses access schedules and electronic health records at any time, they also rely on the tablet to administer medications, record clinical notes and take pictures with the easy-to-use tablet.

More than any other piece of technology, the C5 motion tablet allows us to live up to our commitment of providing world-class care to each and every one of our patients. A pilot study resulted in impressive findings, including safer and more reliable patient care and more productive and satisfied nurses.

eFocus Monitoring

While our doctors and nurses serve as the front line of defense for our patients, the most critically ill now benefit from an additional layer of vigilance: eFocus. Alegant Health has partnered with industry leader, VISICU, to implement its eICU® program. Trained physicians and critical care nurses can monitor the ICU patients from an off-site location. The eFocus Monitoring Center is staffed 24 hours a day by a multidisciplinary critical care team to assist bedside caregivers in the diagnosis, treatment and management of trauma and critically ill patients. Hospital equipment provides the ICU with a patient’s vital signs while secure video-conferencing equipment enables live interaction between the eFocus team and bedside caregivers. Critical care workers staffing the ICU can then monitor procedures, direct



treatment and immediately alert ICU personnel when a patient's condition shows even the slightest change. As our eFocus operations director explains, "It's like *OnStar* for nurses. They can push the button and we can answer and then help give them any resources or references we may have."

In Conclusion

At Alegent Health, we have proven, I believe, that if you empower consumers with the information, tools and incentives, they can AND DO make informed decisions that improve their health and lower costs. While we've made great strides, there is much work to be done to create the engagement necessary to truly function as a patient-centered healthcare system.

And, I also believe that if you are mindful about the environment you create – from the surroundings you build to the technology you leverage to the way in which you design the patient experience, you can become a patient-centered hospital of the 21st Century.

The way we weather the economic storm that is bearing down on healthcare is to put the consumer in the center of the equation. We must learn from companies who already give customers what they want – on their own terms. Burger King may have been ahead of the game in the 1970s when it boldly told customers to, "have it your way," but the message still rings true today. I believe consumers can and should be the drivers of their healthcare. It should no longer be something that is passively done to you, but instead be something proactively done with you. We need to shift the paradigm of healthcare to well care – only then will costs come down. I admit, it's a huge change but it comes with incredible possibilities to improve people's lives, and save our nation's healthcare system.

The World that Works

Cancer Treatment Centers of America

The Model that Works: Patients Partnering with their Care Team

Steve Bonner

Chief Executive Officer



Editors' Introduction: *With facilities in Arizona, Illinois, Oklahoma, Pennsylvania and Washington, Cancer Treatment Centers of America (CTCA) is a leader in providing integrative and compassionate care to help its patients overcome cancer. In particular, every patient meets with a multidisciplinary team of experienced cancer professionals to receive a personalized treatment plan. This plan includes a powerful combination of advanced conventional treatments to fight cancer and supportive complementary medicine therapies to improve quality of life throughout treatment. The average patient at CTCA travels 514 miles one way to access care. They have built and deployed a call center that is available to patients, families and caregivers to answer any questions they have 24 hours a day, 365 days a year. CTCA is completely committed to patient satisfaction and has adopted a "patient as partner" philosophy which improves the care experience and the outcomes of the patients, has enhanced turnaround times and helps to build a supportive relationship with CTCA in the future.*



Stories like those from Ross, Lori and Lynette should inspire all health care providers to draw more closely to their patients, to understand their needs, and to deliver those needs at the highest level in a new health care industry that works. Even as this white paper is published, our nation struggles with a system for health care that does not work, as it is too expensive and far short of the consumers' needs and expectations. The consumer is disenfranchised, but expects to be a partner in deciding about their care.

The "patient as partner" concept was hard-wired as a cultural fundamental at CTCA from its very beginning. The impetus for creating CTCA was its founder's experience as his mother died of bladder cancer in the 1980s. During her battle with cancer, she discovered

a promising array of hopeful therapies, but encountered insurmountable obstacles as providers refused to listen to her concerns and resisted her suggested innovations based on issues that were important to the government, healthcare providers, and bureaucratic processes designed to serve those audiences, rather than the compelling life and death needs of a cancer patient. Her experience was the antithesis of a partnership.

As Mary Brown Stephenson lost her life, her son committed to creating a cancer treatment organization that embraces the patients as full partners in their therapy and offers relentless opportunities

"What we teach our folks is that no matter who you are or where you are, if you encounter a patient, the question you ask yourself is, 'If this were my mother what would I want to do for her at this point in time?' and then deliver it."

-Steve Bonner, Cancer Treatment Centers of America

for the patients to express and pursue their opinions and needs. The CTCA style of care is branded "The Mother Standard," which simply empowers every CTCA Stakeholder to deliver the experience they would want for Mom, or another loved one, in every "Moment of Truth" interaction with every patient.

This partnership begins from the very first contact by a patient or caregiver with CTCA. Specifically, no physician, employer, government, or insurance company tells the patient to go to CTCA. Rather, every single patient at CTCA refers themselves to the organization. The self-referral generally begins with a patient's reaction to a CTCA commercial, or to information obtained on the web, or by word of mouth from a trusted source. Almost 4 million unique visitors now visit the CTCA website at www.cancercenter.com each year, often patients taking control of their own care, seeking innovative options, and demonstrating the will to travel to get the best care. The average patient at CTCA travels 514 miles one way to access this style of care.

CTCA, even in those remote initial contacts, reflects its focus on the patient. There are 55 CTCA Oncology Information Specialists ("OIS") available to talk on the phones and to chat on the web with patients and their caregivers. These human contacts are available 24 hours a day 365 days a year. CTCA does not use an automated phone answering system. Thus a concerned, stressed patient can pick up the phone or send an email message at 3:00 a.m. on New Year's Day and find a real live person to pick up the phone by the third ring.

Conversations with OIS are meant to empower patients with information about their options; about the care available at CTCA, and also to help patients discover what they want to include in the design of their care plan. OIS fosters hope and prepares patients to make decisions that are best for them, even if they choose to seek care from someone other than CTCA.

The next step in building the partnership occurs as interested patients and caregivers consider visiting CTCA for an evaluation. The OIS guide a complete review of the insurance relationships on behalf of the patient. The OIS communicate with insurance companies in order to determine the financial implications of patients considering CTCA as their care partner. In addition, CTCA provides extensive support and assistance to help patients and caregivers travel to one of the four CTCA regional centers. Since the average patient travels over 500 miles one way to come to CTCA, its assistance in making airline reservations, hotel reservations, and ground transportation arrangements (subject to Medicare limitations) all help to lift the burden of travel from the shoulders of the cancer patient.

As prospective patients arrive at CTCA for an initial evaluation and visit, they enter an inviting lobby where they are greeted by a concierge who welcomes them by name, and escorts them to their first care contact. Over a three-day period, CTCA conducts a complete, sophisticated evaluation, all under one roof. It also offers comprehensive information and education for patients and their caregivers about the array of services and methods that may be available to comprise their care. This element of partnership compresses the conventional weeks that it often takes to get all diagnostic work done, evaluations completed and reports back to the patient, into a two- to three-day period.



At the end of the three days, a partnership summit is held with the patient, including all caregivers they would like to have involved, as well as the lead oncologist, a Care Manager and other experts as needed, to discuss in detail the patients' diagnoses and the array of options available to them for treatment. The patients and their caregiver network then decide whether or not they want to obtain care at CTCA, and if so, which of the options they

would like to implement. Each patient is provided a unique and tailored care plan, which is also communicated to their insurance company. To the fullest extent possible, CTCA clears away reimbursement issues prior to commencement of care.

CTCA provides new patients a “care quarterback” for their CTCA team, generally a medical oncologist, as well as a care manager who will guide their process, not only when the patient is on site for care, but also when the patient may be at home between care episodes.

CTCA has also created a series of processes that are designed to encourage all patients to provide ongoing feedback about their care experience. These processes include:

- Daily Patient Loyalty Surveys that are conducted throughout each hospital, surveying about 60 percent of the patient population on a monthly basis. Results of these surveys are provided to the operating areas on a daily basis and are also summarized and reported to the Board of Directors at each meeting. These surveys also include the Bain and Company Net Promoter Score methodology that consistently reflects Net Promoter Scores among CTCA patient partners in the 90 percent range. The average hospital NPS score is 55 percent.
- Weekly patient and caregiver focus groups are also conducted in each hospital. These are attended by senior members of the administrative team. Minutes of these conversations are taken, and also reported to the board at each meeting. More importantly, action items are documented and followed up on immediately.
- CTCA also never starts one of its board meetings without having a patient kick off the meeting with a summary of their CTCA experience, which includes questioning by the board members as to what CTCA can do to improve the patient’s experience, as well as the experience of other patients that the attending patient may have talked to during their care.
- Patients are also included in architectural design and improvement processes as CTCA continues to refine its delivery infrastructure, expanding current centers and adding new ones. CTCA centers seek to present an architectural feel that is more like a fine hotel or a home away from home, and patient insights are essential to that objective.
- CTCA also conducts extensive research on patient outcomes, measuring both length of life and quality of life compared to nationally available data. This information has been published in peer-reviewed medical journals and is also being vetted by external reviewers and presented on CTCA web site.
- In April, 2008, CTCA went live with an electronic health record system that covers every single therapeutic function from medical oncology to radiation oncology

surgery, nutrition, naturopathy, and so on. This provides the platform for a patient portal and a portable care record for CTCA patients in the future.

- CTCA has developed a robust commitment to LEAN Thinking and Six Sigma process improvement. CTCA has a master black belt, several black belts, and other levels of belted leaders on its team. It has over 400 stakeholders (employees) who are A3 certified. This team has reengineered many processes across CTCA in recent years, driving millions of dollars of “muda” or waste out of the organization, thus improving the total cost of care as well as the quality of care.
- The patient as partner philosophy has also greatly enhanced focus on turnaround times at CTCA – that is the time from beginning a patient care process to the time delivery to the patient is completed. Many organizations measure turnaround times ending with delivery to the attending physician, which of course does not measure value to the patient. In addition, many turnaround times measure average results, trended over time, which obscures outliers which can be the most troublesome for the patients. CTCA tracks and reports all service delivery events, including the most dramatic outliers, leading to further improvement efforts.



The “patient as partner” style of care provides many benefits. First, it improves the care experience and the outcomes of the patients. The adult psyche can be stressed by a lack of control, and high levels of stress impair the immune system, which is so important to cancer patients’ healing process. Giving the patients control lightens the burden on the immune system, which in turn should enhance the healing process in a disease like cancer.

The “patient as partner” also builds a very supportive relationship with CTCA. The patients are clear and open about their need and expectations, allowing for delivery of service to meet or exceed those expectations. When there are service problems, the patients know CTCA wants to hear about them and will work to recover from all failures; patients are also very receptive to the CTCA repair efforts. CTCA has almost no malpractice cost across the enterprise, reflecting the partnership support, and the extensive array of opportunities for patients to surface issues and achieve satisfactory resolution, without resorting to lawyers and litigation.

“We never have a board meeting without starting off with a patient talking to the board about his or her experience and about what we can do, in his or her view, to make CTCA better.”

-Steve Bonner, Cancer Treatment Centers of America

Patients who feel like partners are also inclined to become strong ambassadors for CTCA, wanting to tell others about the high quality of care they have received. They experience the Mother Standard of care; they believe in their role as partner and want to offer similar opportunities to other cancer patients.

In summary, the “patient as partner” style works for the patient; it works for CTCA and all of its stakeholders; and it works for caregivers. It improves care, takes waste out of the system, and thus reduces costs. It also energizes patients, caregivers and staff across CTCA. It simply works!

The World that Works

Guidon: The Alzheimer's Patient Experience

Ron Wince

President and Chief Executive Officer



Editors' Introduction: *America is battling an epidemic that is devastating families across the country and draining family resources and state and federal healthcare budgets. Today, one in eight Americans over the age of 65 – 5.2 million people – suffer from Alzheimer's disease. Projections show that as our population ages, the number of Alzheimer's cases could triple in little more than a generation, with as many as 16 million Americans suffering from the disease by 2050. In July 2008, Guidon Performance Solutions, in conjunction with the Banner Alzheimer's Institute in Phoenix, Arizona, set out to evaluate and document the end-to-end Alzheimer patient health care process. The team, which was led by Dr. Pierre Tariot from Banner Health, used tools from Lean Six Sigma and applied them to the care delivery system to identify gaps in continuum of active care, explore drivers of cost in acute, primary care and other settings and to look closely at how patients and their caregivers traveled through the system from pre-diagnosis to the end of life. While the goal should be nothing short of curing Alzheimer's, the team recommended some clear patient and family centric-strategies that can be deployed immediately that will reduce the inefficiencies in the system as well as empower the individuals, families and care providers with the resources, access and tools they need to fight this debilitating disease.*



Evaluating Alzheimer's Patient Care

In July 2008, Guidon Performance Solutions, in conjunction with the Banner Alzheimer's Institute in Phoenix, Arizona, set out to evaluate and document the end-to-end Alzheimer patient health care process. The team, which was led by Dr. Pierre Tariot from Banner Health, sought to document and analyze the current care delivery system, identify gaps in continuum of active care, explore drivers of cost in acute, primary care and other settings and to look closely at how patients and their caregivers traveled through the system from pre-diagnosis to the end of life.

Using tools from Lean Six Sigma to document and analyze the process, the team was charged with tracing the flow of a patient and caregiver and examining the current quality, cost and outcome drivers of the existing care process. The group also closely examined local, state and federal policies for reimbursement for chronic illnesses, such as Alzheimer's disease, and gaps where policies do not exist. And last, the team was to identify opportunities to reduce costs and improve the overall quality of care for Alzheimer's patients and their caregivers.

Finally, by comparing the current standards of care and protocols to the actual end-to-end process the team sought to create an action plan to address its findings and to achieve an agreed upon set of results for improving the system.

Mapping the Current State

Using Guidon's Patient Care Delivery Mapping process, the team set out to identify all of the actions and touch-points that a patient experiences from recognition of symptoms and diagnosis to end of life. The team mapped every action – both value-creating and wasteful – that is present or required to bring the patient through the entire care cycle. Utilizing key process and performance data about the existing system, the team reviewed two end-to-end “flows”:

- First, the information or requests that are customer driven, traveling “upstream” from the patient
- Second, the information/requests that are external of the customer and that travel “downstream” to the patient

This qualitative process helped create a visual representation of the care cycle well beyond a functional level. It helped the team examine more than just wasteful processes, but also helped identify the sources of waste and inefficiencies. Finally, the value stream map showed the relationship or links between information and the physical flow of information to identify breakdowns or inconsistencies.

Issues with the Current Care System – A Typical Patient Experience

As a result of the diagnostic process, a variety of issues were identified with the current state. The issues were grouped into four major themes:

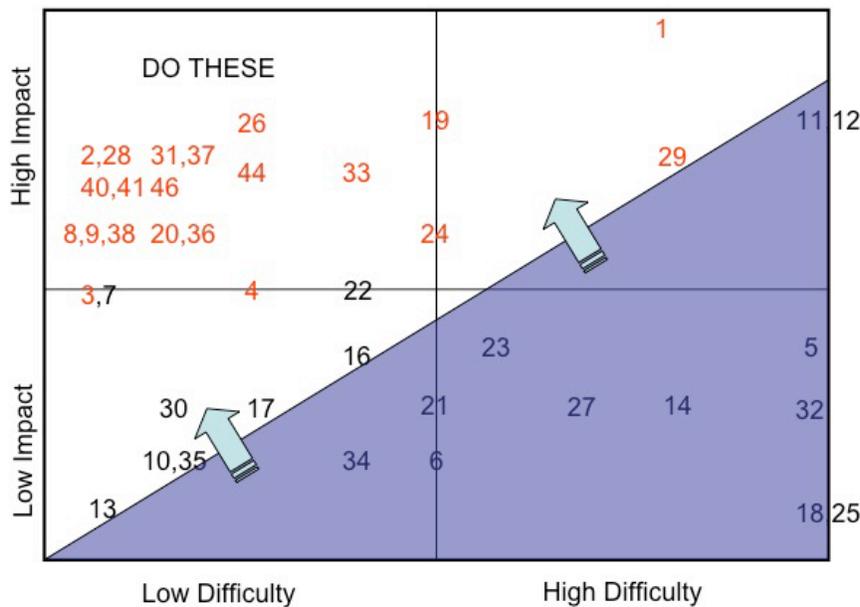
1. The lack of awareness of the disease amongst the medical community and the general public;
2. The absence of standard procedures for diagnosing and referring the patient for long-term care and treatment;

3. The need to improve communications across the continuum of care, as well as between providers, payers and policy makers; and,
4. The need to address gaps that exist in the reimbursement policies at the federal, state and local level.

From a financial standpoint, the group identified the overall misalignment of financial incentives across the entire value stream and acknowledged a substantial breakdown of the Medicare system when it comes to treating Alzheimer’s patients. Not only is the care extremely expensive for patients, but also for the federal government. According to *The 2008 Alzheimer’s Disease Facts and Figures Report*, published by the Alzheimer’s Association, Medicare beneficiaries age 65 and older, on average, paid for 37 percent of their nursing home care out-of-pocket in 2002. Further, because of the rising costs and the fact that most insurance companies will not cover social services such as in-home care (\$77,745/year*) or assisted living (\$35,628/year*), many eventually required support through governmental sources, primarily Medicaid. As a result, direct care for people with Alzheimer’s disease cost the U.S. more than \$50 billion a year.⁶

Identifying Solutions

Reviewing the existing value stream, the team set out to brainstorm ideas to effectively improve the process for the patient and to establish a standard of care across the entire value stream. Using an impact/difficulty assessment, solutions were prioritized to identify those that fell within the high-impact, low-difficulty quadrant.



⁶ 2007 costs for long-term care according to Alzheimer’s Association.

Creating Universal Awareness

Recognizing the lack of consistent information exchange and communication flow, one of the first recommended strategies the team identified was to create a public awareness program to educate stakeholders, address the inconsistency of care and hopefully remove the stigma of the disease. By creating universal awareness of the disease and by establishing a communications plan to bring the disease and the patient care process to the forefront, everything from the diagnosis, to the patient's ability to navigate the system could be improved.

As part of this awareness program, the team identified the inherent need to establish a comprehensive online presence – one centralized site which could be a repository and resource for everyone from patients to caregivers to medical professionals. Again, this pivotal, online presence will help establish a consistency with the information that is available about the disease and can establish a focal point for compiling information about the disease and options for care.

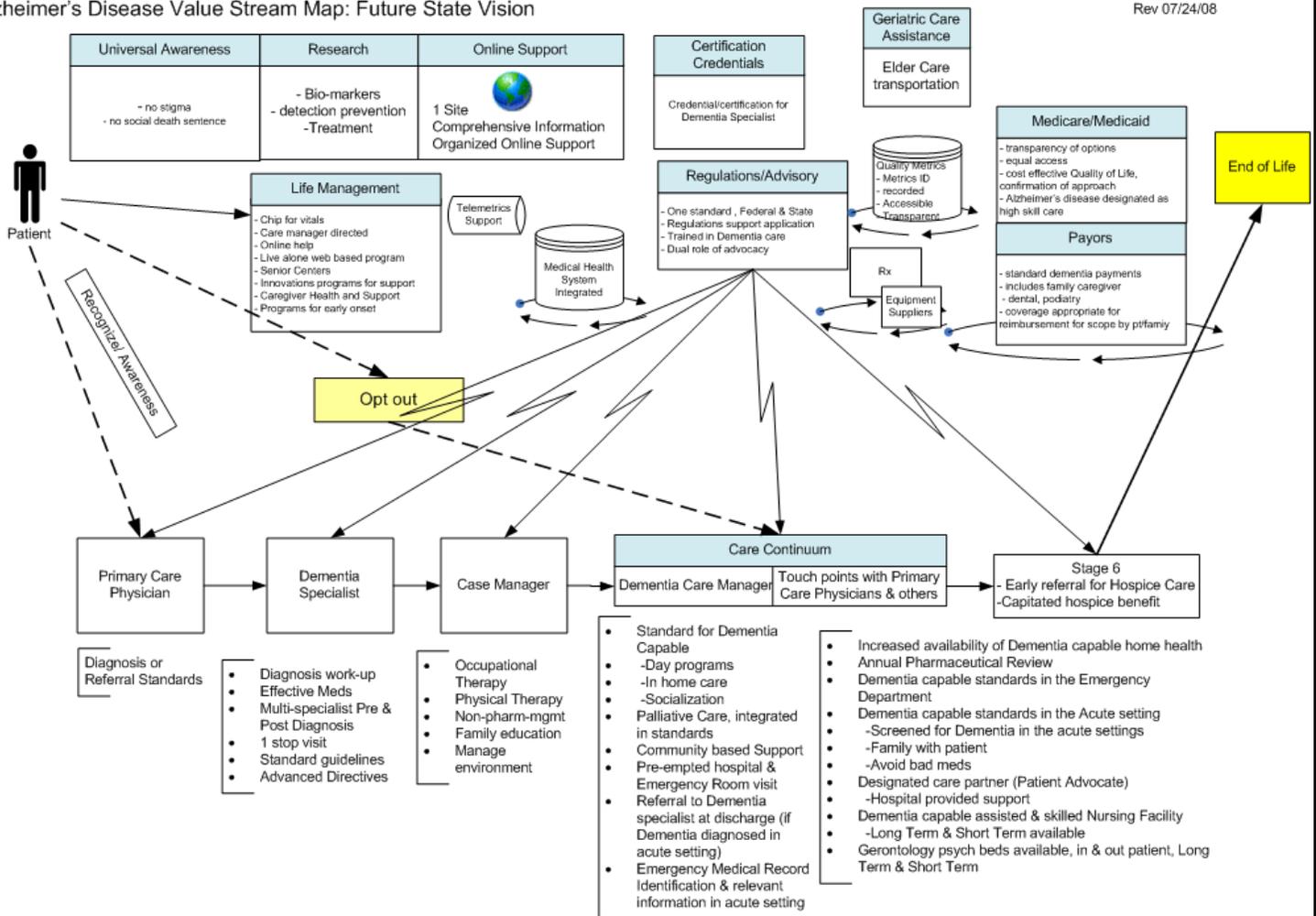
Patient Advocate

Second, perhaps one of the most crucial solutions identified was to establish a patient “advocate” or care partner to help shepherd the patient and their family through the care process following diagnosis and achieve active care management. This individual would be assigned to act as a single-point of service for the patient, assisting with everything from family education to determining long-term care options. Further, this individual would help the patient navigate everything associated with their overall healthcare, beyond just the treatment of Alzheimer's or dementia.

Standards and Metrics

Thirdly, the team identified the significant need to establish a national set of standards and metrics for the entire patient care value stream. From diagnosis to referral to continuum of care, the team recommended establishing a set of industry-wide standards to ensure the proper care and transition of the patient through the value stream. Further, the team recommended regulations be established from a federal standpoint to measure the effectiveness of newly instituted standards and protocols to ensure the system is continually seeking efficiencies and identifying improvements.

These solutions, in conjunction with a myriad of other high-impact recommendations were then used to establish a new, proposed patient value stream that was more patient-centered and addressed the breakdown of communication across the various patient-touch points. This new value stream was created as an ideal scenario, providing the team, the industry, and all those involved in the patient care process with a base line goal and blueprint to work towards for improving the system.



A Vision for the Future

Even as this white paper is being completed, scientific and medical breakthroughs continue to advance rapidly in addressing the devastating effects of Alzheimer's disease. However, as we acknowledge these medical and scientific successes, it is important that we remember the purpose of health and healthcare – the wellness and well being of the person.

The Banner Alzheimer's Institute, led by Dr. Tariot, has set out to raise awareness of the breakdown in the current system and generate mindshare in the need to move toward a more patient-centered process of care for Alzheimer's patients. Additionally, organizations like the Alzheimer's Association and the Center for Health Transformation (CHT) are engaging thought-leaders in conversations about how we create a healthcare system that works for the patient.

To advance this mission, CHT is coordinating and facilitating the work of the Alzheimer's Study Group (ASG) co-chaired by Newt Gingrich, Founder of CHT and former Speaker of the House and Bob Kerrey, President of The New School and former governor and U.S. Senator from Nebraska. The ASG's core mission is to assess the adequacy of the country's current

An Individual-Centered Approach

efforts to combat Alzheimer's and recommend strategies to accelerate progress toward defeating this terrible disease.

The ASG was launched in July 2007 with strong bi-partisan congressional support as well as the support of the Alzheimer's Association and other key stakeholders. The ASG will release its findings and recommendations in March 2009, drawing in part on lessons learned from this analysis.

Dr. Tariot notes: "Knowing the improved quality of life that can be achieved by empowering the patient, it is critical that we establish a system that allows patients and their caregivers to actively manage their treatment so that an improved process can be experienced at all stages of the disease."

The World that Works

Gundersen Lutheran Health System

Self-Management Support at Gundersen Lutheran

Jeff Thompson, M.D.

Chief Executive Officer



Editors' Introduction: *Gundersen Lutheran Health System, headquartered in La Crosse, Wisconsin, is a physician-led, not-for-profit, integrated healthcare system serving western Wisconsin, northeastern Iowa and southeastern Minnesota. Supported by a staff of over 6,000, Gundersen Lutheran is one of the nation's largest multi-specialty group medical practices and a major teaching hospital. In addition, the health system provides a broad range of primary, specialty and emergency services. Gundersen Lutheran has been nationally recognized by HealthGrades as being among the nation's top five percent of hospitals, and for the past 12 years, Gundersen Lutheran has been named a Top 100 organization 14 times. Gundersen Lutheran's core strategies include its strong medical-administrative partnership at every level, allowing for a focus on best practices that promote superior quality and service. Their approach to patient-centered medicine elevates healthcare for their entire community, creating a strong foundation for the future.*



With the high prevalence of chronic illness, healthcare is becoming less of a medical cure and more about long-term condition management. Patients with chronic illness and their families have to manage their condition from day to day in order to preserve healthy lives. Self-management involves three different kinds of tasks: to take care of the illness, to carry out normal activities and to manage emotional changes (Corbin & Strauss, 1998). This self-management often involves understanding and following intricate medical regimens and planning and following through with lifestyle changes, such as weight loss, stress reduction or increasing exercise. Self-management is inevitable but can be quite complex and challenging.

Self-management support is designed to help patients understand chronic illness by developing strategies to improve their health-related behaviors and clinical outcomes. Self-management support is more than patient education: the goal evolves from teaching information about a specific disease, to teaching skills to solve patient-identified problems; from relying on knowledge to create behavior change, to building confidence to yield better outcomes; from compliance to self-efficacy.

Developing a Self-management Support Program

In order to implement self-management support at Gundersen Lutheran, a team from the Gundersen Lutheran - Onalaska Clinic family medicine department participated in the New Health Partnerships Virtual Community for 18 months—a learning collaborative sponsored by the Institute for Healthcare Improvement (IHI), the Institute for Family Centered Care and a grant from the Robert Wood Johnson Foundation.

Based on the Chronic Care Model (Bodenheimer, Wagner, 2002), improvements were aimed at the six elements of the model, which include self-management support, delivery system design, decision support, clinical information systems, healthcare organization and community resources. Changes were guided by using Model for Improvement methodology throughout the collaborative and by a change package developed by IHI. Changes were tested using Plan-Do-Study-Act cycles, which were implemented and spread throughout the department. Two patient advisors participated in the team to help incorporate the perspectives of patients in all changes tested. The initial focus of the improvement was on hypertension with a plan to spread to additional chronic diseases.

“The self-management program helped me take ownership of my hypertension, and my action plan has had wonderful results. People think there’s not much that can be done and they just have to live with their chronic health condition, but this new way of care made me realize you don’t. You can take ownership of your health through the self-management partnership.”

***-Evelyn Pertzsch
Gundersen Lutheran Self-Management
Program Participant and Patient Advisor***

Redesigning the Delivery System

Traditional medical office practice relies primarily on physicians to interact with patients and to manage ailments and treatments, educate, motivate and assure compliance. But physicians are constrained by time and struggle to complete all that is required within the current office practice design, which is mostly organized around acute care. For Gundersen Lutheran, delivery system redesign was necessary to achieve excellent chronic illness care by involving non-physicians in the care of patients.

At Onalaska Family Medicine, a patient with hypertension is now offered self-management support when visiting with his or her physician. The physician discusses the importance of self-management to the patient and encourages him or her to agree to a visit with the nurse. If the patient is agreeable, the nurse is called in and spends approximately 30 minutes with the patient. Families are also encouraged to participate in the process.

Building the Nurse-Patient Relationship

The nurse starts by building a relationship with the patient, using reflective listening, demonstrating empathy and monitoring non-verbal communication. Patients' needs, values and beliefs are explored using open-ended inquiry. The patient is asked about his or her agenda, expectations and goals for the visit. By engaging the patient in the visit and respecting his or her priorities, the patient is more likely to plan lifestyle modifications. The nurse explores the conviction of the patient by asking the patient's view regarding the importance of taking action to address a self-management or behavior-change goal. Confidence of the patient is also explored. Patients are asked to rate both conviction and confidence on a scale of 1 to 10.

When sharing information about a disease, the nurse communicates at a level the patient understands. Patient education material is available through Gundersen Lutheran's electronic medical record and is written at a sixth grade reading level. Nurses also use the "Ask-Tell- Ask" technique when providing information. First the nurse asks about knowledge and asks permission to provide information. Second, the nurse provides information or advice that is personalized and linked to needs and values. Third, the nurse asks for understanding (Teach Back).

Setting Collaborative Goals and Problem Solving

One of the most important steps in self-management support is collaborative goal setting. By eliciting a patient's choice for goals, success is much more likely since many patients are relying on their internal motivation for change. At this stage the nurse offers a menu of options and discusses preferences. For example, the menu for hypertension is entitled "Ten



Things You Can Do to Prevent and Control High Blood Pressure.” Using motivational interviewing, the nurse explores and responds to ambivalence and elicits and responds to change talk that reflects patient desire, ability, and reasons or needs to change. Conviction and confidence are reassessed, and the nurse supports the patient’s choice of goals or encourages him or her to choose another goal if conviction or confidence is rated low.

After collaboratively setting the goal, the patient and nurse start creating an action plan which is characterized by being SMART (specific, measurable, achievable, realistic and time framed). The patient would specify what, when, how often, how long, where, with whom and how he or she would achieve the plan. The aim is to define small achievable and realistic steps for success which in turn will build self-efficacy. Confidence is reassessed and the action plan adjusted until the confidence is rated a seven or higher by the patient.

Exploring barriers, building skills and problem-solving is covered subsequently in the visit. The nurse asks about current experience and confidence applying skills, teaches skills and provides the opportunity to practice care. Barriers to accomplish the action plan are explored, and solutions are identified. Strategies for tracking progress and a plan for lapses are discussed. Tools, resources, programs and classes are offered to the patient as well as a link to community resources and programs.

Sustaining Behavior Changes to Improve Clinical Outcomes

The last important element of the nurse visit is arranging follow-up by specifying the modality (e.g., visits, meetings, phone, e-mail), time and the team member who will be in contact. During the follow-up, slips are reframed as opportunities to learn and positive support is provided, hence promoting a continuous learning cycle. The goal, action plan, confidence, conviction, barriers and follow-up plan are documented in Gundersen Lutheran’s electronic medical record which allows any healthcare provider to view the patient’s goals and action plan.

In addition to the individual self-management support visit, a group visit, “Healthy Actions,” was also initiated in Onalaska Family Medicine. Two visits are offered every month, one during the lunch hour and one in the evening. The same steps take place in the group setting in addition to peer interactions and support, which has proven to be very effective in behavior change.

Self-management support visits have been provided to more than 120 patients in the Onalaska Family Medicine department for the past 18 months. Clinical outcome measures have improved as well as patient satisfaction. Because the program has shown to be effective in the Onalaska Family Medicine department, it is now being implemented in two Internal Medicine departments, with the goal of spreading the program to all primary care departments in the future. The goal is to incorporate this model of care using existing Gundersen Lutheran staff.

The World that Works

Henry Ford Health System

Gerard van Grinsven

President and Chief Executive Officer, Henry Ford West Bloomfield Hospital



Editors' Introduction: *Henry Ford Health System is a non-profit, seven-hospital network with 1,787 beds and 27 outpatient medical centers located throughout southeast Michigan and is one of the nation's leading comprehensive, integrated health systems. It provides financing and health care delivery, including acute, specialty, primary and preventive care services backed by excellence in research and education. Founded in 1915 by auto pioneer Henry Ford, it is committed to improving the health and well-being of a diverse community. Patients are active partners at Henry Ford and the results are reflected in Henry Ford Health System being named one of the inaugural winners of the National Health System Patient Safety Leadership Award for driving the cultural shift necessary to create safer, more transparent environments for patients. In March 2009, the new Henry Ford West Bloomfield Hospital opened, continuing Henry Ford Health System's patient-centered approach to care.*



At Henry Ford, our patients and their families are active partners in creating safety. From holding our caregivers accountable for hand washing, to assisting in the design and launch of our system's No Harm Campaign (modeled after the Institute for Healthcare Improvement's 5 Million Lives Campaign), we encourage patients and their families to take an active role in the care they receive. In addition, our health system shares safety outcomes with the public on our website. Updated quarterly, the site shows the system's hospital-acquired infection rate, mortality rates and other metrics related to safety, as well as providing patient education resources and free videos.

Henry Ford Health System has experienced a significant reduction in mortality rates at all of its hospitals, and Henry Ford Hospital, the flagship, consistently ranks among the lowest in severity adjusted mortality rates. Contributing to this is our philosophy of engaging

patients and families to play a role in their own safety. Patient rooms include a poster encouraging patients to do a number of simple things to improve safety including asking anyone who enters the room to wash their hands. In addition, our health system was one of the first in the country to use its website to display quality results as a way to provide transparency to the people we serve. An internal website allows executives and employees to continuously track the system's goals and performance, which the Board reviews on a regular basis. Henry Ford has experienced a reduction in adverse safety events, including hospital acquired infections as a result of documented adherence to scientifically proven actions.

At Henry Ford West Bloomfield Hospital, providing the highest quality, safest care to our patients is our top priority. Part of that means collaborating with patients and families to improve quality, safety, and the overall health care experience. In fact, the concepts of patient and family-centered care are being integrated into all of our processes for delivering care at the new hospital to ensure we deliver an experience that puts the patients and their families at the center of everything we do. For example, we ask our patients to participate in all decisions about their treatment, including asking questions if they have doubts or concerns and notifying the nurse or doctor if something doesn't seem quite right. Here are a few more examples of patient and family-centered designs and initiatives planned for Henry Ford West Bloomfield Hospital:



The new Henry Ford West Bloomfield Hospital, designed with patients and their families in mind, resembles a northern Michigan Lodge, creating a warm and inviting environment for visitors.

- Every patient room has a place for a family member to stay overnight – with no visiting hour restrictions (unless medically necessary). These “smart” rooms have wireless Internet and flat-panel televisions to access programming, including educational materials about wellness and specific illnesses. Furthermore, patients are able to control many features of the rooms from their beds and order healthy meals 24 hours a day, seven days a week.
- Patients have input on their food and dress so they maintain both their dignity and self-identity.
- Patient and family members participate in rounds so they are involved in the design of their health care processes and services.
- We embrace a non-punitive working environment where employees are rewarded for speaking up and being vigilant when it comes to patient safety.
- Our staff is always willing to review medical records with the patient and their family, with a health care provider available to answer questions.

By incorporating these and other patient- and family-centered approaches to care, we are creating a patient experience like no other. Delivering high-quality, safe, compassionate care, and memorable experiences to our patients and their families starts with making everything we do circle around them.

Henry Ford West Bloomfield Hospital is also a destination where people can come when they are healthy to learn about and participate in a wealth of activities and immerse themselves in new healthy ways of living. Innovative offerings around wellness and improved quality of life include:

- A state-of-the-art wellness center, Vita, offering treatments such as acupuncture, therapeutic massage, yoga classes, relaxation classes and more.
- Henry’s, a restaurant run by renowned local chef Matt Prentice, offers healthy, tasty food to employees, patients, their families and the communities we serve.
- A partnership with Schoolcraft College has created the first culinary learning institute for health care in the world.
- A 90-seat Demonstration Kitchen offering healthy cooking classes for members of the community as well as patients with specific illnesses like diabetes and cancer.

- Partnerships with local organic farms committed to healthy, tasty produce and sustainable agriculture.
- An on-site greenhouse for patients to use as therapy that will provide fresh produce for the restaurant.
- A “main street” retail area focused on products that promote wellness and environmental responsibility.



The new hospital's Main Street retail area includes The Live Well Shoppe, which offers products that promote healthy and eco friendly lifestyles.

By combining these innovative features around wellness and service with the high quality, safe care Henry Ford Health System is known for, the new Henry Ford West Bloomfield Hospital is truly putting the patient and their family at the center of everything we do.

The World that Works

MCGHealth

Pat Sodomka, FACHE

Director of the Medical College of Georgia Center for Patient-and Family-Centered Care and Senior Vice President for Patient and Family-Centered Care for MCG Health, Inc.



Editors' Introduction: *MCGHealth, the clinical enterprise of the Medical College of Georgia, in Augusta, Georgia includes a 478-bed adult hospital, an Ambulatory Care Center with over 80 outpatient clinics, a Specialized Care Center housing a 13-county regional trauma center and a 154-bed Children's Medical Center. MCGHealth is among the top 100 hospitals in the nation in patient safety and quality of care according to the "Thomson 100 Top Hospitals® National Benchmarks for Success." A pioneer in patient- and family-centered care, MCGHealth serves as an example of the positive impact this collaborative model can have on both the quality and the cost of care.*



The transformation of MCGHealth's organizational culture began in 1993, during discussions about the development of a new children's hospital. At that same time, a group of pediatric nurses suggested that we consider a new approach to the delivery of inpatient pediatric services – family-centered care.

An assessment revealed that the care delivered, while excellent in many ways, reflected the needs of the providers and did not adequately respond to patients' and families' needs and concerns. At this point, the hospital made a commitment to family-centered care for the pediatric units. Since that time, MCGHealth has systematically integrated patients' and families' perspectives and involvement into all areas of operation.

We believe that families are an extension of the patient, not an imposition. At MCGHealth, we find that the more involved a patient and family are in the care, the more we improve quality, increase safety and boost patient and family satisfaction. We don't have visitors, we have families who are an integral part of the health care team.

Patient- and family-centered care is an approach to the planning, delivery, and evaluation of health care that is governed by collaborative partnerships among health care providers, patients and families. What is difficult to appreciate is that, for the most part, today's health systems do not foster collaboration among patients, families, and caregivers.

We strive to incorporate the four principles developed by the Institute for Family-Centered Care and reflected in the American Hospital Association Toolkit for Leadership:

- We treat patients and families with dignity and respect.
- We provide clear, comprehensive information in ways that are useful and empowering.
- We create opportunities for patients and families to participate in ways that enhance their control and independence.
- We ensure that collaboration is inherent in our policies, programs, education, and delivery of care.

"The patient understands the system from start to finish and can shine a light on the whole process. No one else sees the entire process. We are humbled by the fact that the patient knows more about the system than we do."

-Pat Sodomka

Patient- and family-centered care is radically different from the traditional model of care in several ways:

[1] Strengths. The traditional model of care places emphasis on restricting patients and families. In contrast, the patient- and family-centered model emphasizes the strengths that patients and families can bring to the healing process. After all, patients and families are the experts in their lives. They are the keepers of valuable information that the caregivers must learn in order to take a personal and individualized approach to health care. Their knowledge and information can enhance diagnoses and treatment, and can decrease the probability of errors and unnecessary care.

[2] Collaboration. Control is the foundation of the traditional model. Collaboration is the bedrock of the patient and family model.

[3] Partnership. The traditional model calls for patients and families to give blind obedience to the expertise of paternalistic health care professionals. The patient- and family-centered model calls for an equal partnership. The patients and families are viewed as essential allies and treated as true partners.

[4] Flexibility. As you move from a traditional model of health care to a patient- and family-centered model, you realize that the health care system can flex in many unexpected ways. Restrictive visiting hours go away. Patients and families can exercise choices in how things are done to enhance their control, such as a husband and wife holding hands during painful procedures.



Nettie Engels, a patient advisor who also serves as family faculty in the medical school, meets with students.

Over 250 patients and families serve as advisors throughout MCGHealth from the care unit to the board room. The single most important guideline for involving families and patients in any advisory role is to believe that their participation is essential to the design and delivery of optimum care and services. Without sustained patient participation in all aspects of policy and program development and evaluation, we, as health care providers, fail to respond to the real needs and concerns of those our systems are intended to serve.

Patient- and family-centered care is much more than a nice gesture. It can have a considerable impact on bottom-line issues. This model of care provides a framework and strategies for achieving quality and safety goals, enhancing market share, lowering costs, and strengthening staff satisfaction.

In 2004, patient advisors were an integral part of the planning and design for a new adult neuroscience unit at MCGHealth. After the conversion of this unit to the philosophy of patient- and family-centered, patient satisfaction improved significantly, the staff vacancy rate dropped from 7.5 percent to zero and nurses are waiting for openings to occur on this unit. In addition, our length of stay for neurosurgery patients was cut in half and our discharges increased by 15.5 percent. Importantly, medication errors decreased by 62 percent.

The patient understands the system from start to finish and can shine a light on the whole process. No one else sees the entire process. We are humbled by the fact that the patient knows more about the system than we do.

The World that Works

MinuteClinic

Jeff Peterson

Director of Public Affairs



Editors' Introduction: Minneapolis-based MinuteClinic is a subsidiary of CVS Caremark Corporation, the largest provider of prescriptions in the nation. MinuteClinic launched the first retail health care centers in the United States in 2000 and is the first provider to establish a national presence with more than 500 locations across the country in 25 states. By creating a health care delivery model that responds to consumer demand, MinuteClinic makes access to high-quality medical treatment easier for more Americans. A recognized leader in the patient-centric health care movement, MinuteClinic consistently brings innovation to the marketplace and sets new standards for clinical quality that exceed the national guidelines established for store-based clinics by the American Medical Association (AMA) and the American Academy of Family Physicians (AAFP). MinuteClinic is the first and only retail health care provider to receive accreditation from The Joint Commission. MinuteClinic has seen over three million patients since inception, with greater than 95% customer satisfaction.



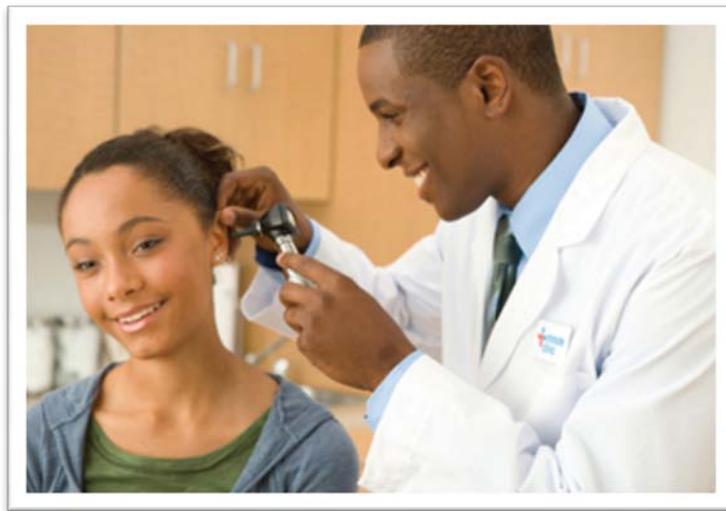
MinuteClinic health care centers are staffed by board-certified family nurse practitioners and physician assistants who are trained to diagnose, treat and write prescriptions, when clinically appropriate, for common family illnesses, such as strep throat and ear, eye, sinus, bladder and bronchial infections. The clinic's services are designed to complement rather than replace primary care providers. Patient assessments and treatment follow nationally established clinical practice guidelines from the Institute for Clinical Systems Improvement, American Academy of Family Physicians (AAFP) and the American Academy of Pediatrics. These guidelines are embedded in MinuteClinic's electronic medical records system (EMR). Nurse practitioners use a software program to generate educational material, an invoice and a prescription, when clinically appropriate, for the patient at the

conclusion of each visit. A diagnostic record is automatically mailed to the office of the patient's primary care provider.

A key focus for MinuteClinic over the last three years has been e-health connectivity. MinuteClinic began implementing e-prescribing in June 2007, and now issues e-scripts in every state in which it is permitted. In line with MinuteClinic's policy of generic medication promotion as a cost saving measure for patients, the EMR allows nurse practitioners to search for pharmaceuticals by brand name and provides the generic alternatives. The software then checks for drug-drug and drug-allergy warnings to ensure the greatest level of safety.

Because the MinuteClinic e-prescribing application has been certified by SureScripts, the nurse practitioner is then able to transmit the e-prescription to a pharmacy of the patient's choice using the SureScripts Pharmacy Health Information Exchange.

MinuteClinic also integrated with Microsoft HealthVault™, mentioned earlier in the 'Information Rich' component, and *Google Health*. This level of integration allows patients to maintain a fully integrated, personal health record.



The World that Works

Sanford Health

Sanford Health Children's Hospital – Castle of Care

Kelby Krabbenhoft

President and Chief Executive Officer



Editors' Information: Sanford Health, an integrated network of over 400 providers with more than 180 healthcare facilities is headquartered in Sioux Falls, South Dakota. Sanford Health had the unique opportunity to build a free standing children's hospital, opening their doors in March 2009. In every phase of design and construction of the Castle of Care, Sanford Health engaged patients, families, community groups, providers and administrators. Unique patient-centered approaches include eliminating "waiting rooms" and building "Welcome Centers". These "Welcome Centers" are tailored to the unique clinical needs of the children and are filled with games and artwork to help provide context for the different aspects of care the child is receiving. Sanford Health is committed to research that will show the impact of this powerful patient-centered environment and delivery process on morbidity and mortality; administrative, physiologic and psychosocial outcomes.



The Dream

Prior to 2004, adding a Children's Hospital to Sanford® Health (then the Sioux Valley Health System) in Sioux Falls, South Dakota was only a dream. Thousands of children received high quality care each year at Sanford Children's, but the environment was not ideal. Services were adapted to fit into existing spaces initially designed for adult use. Even with excellent clinical care and programming, it was increasingly evident that the environment presented an obstacle to providing the optimal care experience important to the medical, developmental, psychological, and social well-being of children and their families.

Thanks to the generous spirit of Mr. T. Denny Sanford, and many other donors, this dream has now become a reality. Sanford Children’s Hospital – the Castle of Care is a place designed specifically for the care of children; a place where families do not feel like visitors because care is centered around children and their families; and ultimately it is a place where children can grow and flourish despite their complex medical needs.

Fulfilling the Dream

Because hospitals are complex, diverse, and highly regulated organizations, developing a new facility requires input from a variety of key stakeholders. In addition to incorporating the child and family’s experience into the design process, which was critical to the success of the project, other key stakeholders were brought together to form the design team. It was important to listen, to understand, and to incorporate the needs and perspectives of all constituents into the vision.

Five teams were assembled to provide input for the design of the Children’s Hospital, and each team developed areas of focus from their unique perspective.

Core Support Team	Youth Advisory Council	Family Advisory Council	Department Leaders	Children's Clinic Leaders
<ul style="list-style-type: none"> •Align the project to the mission of Sanford Health "Dedicated to the Work of Healing" •Integrate the impact of the children's facility with the overall campus site and master plan •Design the children's facility to be the gateway to all children's services •Connect the new children's services with the main hospital 	<ul style="list-style-type: none"> •Connection to the outdoors •Food •Privacy •Age appropriate activities 	<ul style="list-style-type: none"> •Patient room layout •Environment •Connectivity •Admissions •Safety/Security 	<ul style="list-style-type: none"> •Staffing needs •Seperation of patient and service traffic •Retail pharmacy •Radiology •Connectivity 	<ul style="list-style-type: none"> •Potential clinic services •Connectivity to hospital •Patient centerdness •Physical layout •Future growth

2006 – Boekelheide Neonatal Intensive Care Unit

The Boekelheide NICU was the first phase of Sanford Children’s Hospital. The unit design was based upon the latest research related to developmentally appropriate care for neonates; safety and security recommendations; and family-centered care concepts. Evidence-based design features, which create almost a “womb-like” environment are not only more comfortable for neonates, but are also crucial for normal brain and physical development. The décor of the unit uniquely combines a whimsical children’s theme of seasons with the developmentally appropriate considerations for minimizing exposure of light and sound for this fragile population. Phones do not ring, lighting can be adjusted to meet the needs of the baby, and privacy can be afforded to developing families.



The 58 Bed NICU features 45 private family suites designed to care for the entire family. This family centered care environment contains suites that accommodate single, twin, and triplet births so that a family can remain together during their baby’s entire hospital stay. For the parents’ comfort and convenience, each suite contains a sofa that converts to a bed, a lockable wardrobe, refrigerator, telephone with voicemail, and a desk with internet access. Laundry and restroom facilities with showers are located within the unit so that family members can refresh themselves. This private and serene environment is ideally suited for parents to partner with their baby’s health care team members as parents learn to care for their baby who may have been born extremely early or with complications.

While the individual family suites provide privacy for the baby and his/her family, the Family Welcome Center serves as a central meeting space where families can interact and

develop informal support groups with other NICU family members. The Family Welcome Center is equipped with a kitchenette for families to prepare and share meals. Each morning families gather in the kitchen area to share continental breakfast and stories from their previous night's experiences. The center also contains a play area with a tree house, computer games, and sibling support area. Here siblings can play with each other, spend time with members of the child-life team, and view their new baby brother or sister on the web-cam. Computers are present in this area for families to stay connected with other individuals through e-mail and the Caring-Bridge web-site. Former families remain a part of the NICU experience by sharing photos, which are displayed on the graduate monitor, and by returning for the annual NICU graduate party.

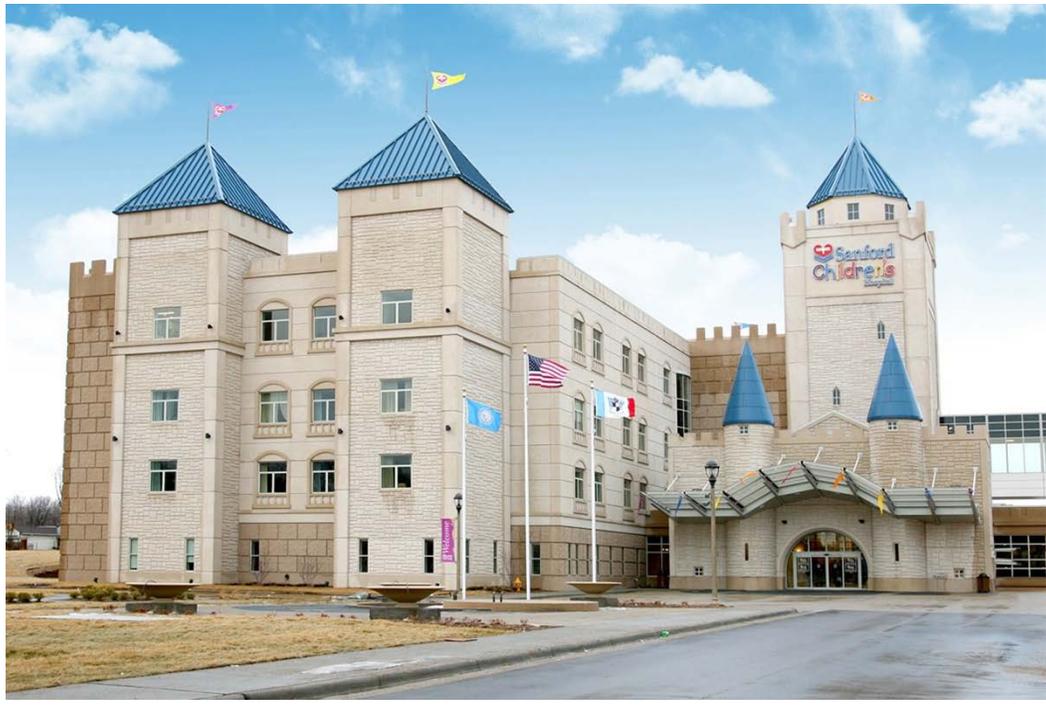
A team, led by Sanford Neonatologist Dr. Dennis Stevens, is conducting a long-term research study related to the impact of the Boekelheide NICU environment on babies, families, and their health care providers. Thirty two parameters are being evaluated in six categories:

- Morbidity and mortality
- Financial/administrative
- Physiologic
- Psychosocial
- Neurodevelopmental
- Environmental

Early data demonstrates neonates in this unit are exposed to significantly reduced ambient noise and light, effecting a trend toward reduced levels of apnea/bradycardia, improved weight gain, and increased hours of sleep in a 24 hour period. The results of this research are helping to shape the future of design of environments for this population.

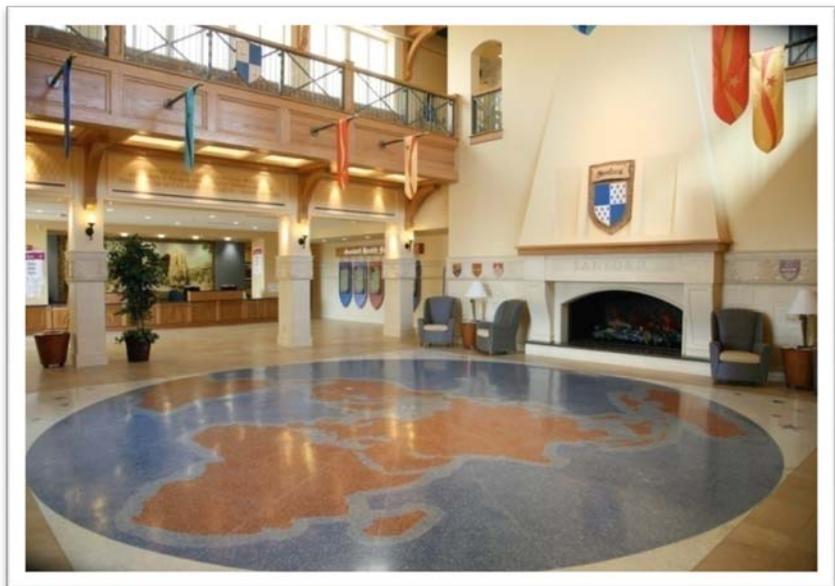
2009 – A Castle of Care

Designing a clinical space that is warm and inviting, projects comfort, confidence, hope, healing and strength, is child and family friendly, and that is functional for care providers presents a unique challenge. As the team focused on defining the needs of the larger region and the properties of a healing environment that would fulfill those needs, the Sanford Children's Hospital castle design emerged as the ideal vehicle to meet that challenge. A castle is a large, strong house where kings and lords once lived. A castle can be a place of community, safety, education, culture, healing and hope. Castles appeal to all ages, and engender feelings of joy, enchantment, laughter, imagination and dreams.



Driving past an expansive lawn to the Castle gate, children, families and visitors know they've come to a very special place from the moment they arrive at Sanford Children's.

The Carlson Great Hall was designed to be a wonderful gathering place for all who enter the Castle of Care. The heraldry and colorful flags that frame the expansive fireplace and hearth provide colorful and warm distractions. A single registration desk makes wayfinding to Clinic or Hospital services simple and convenient. Wall murals, hand painted by local artists, adorn the walls along hallways and in Welcome Centers (formerly known as Waiting Rooms). Contained within these murals are fanciful South Dakota indigenous animals, which are featured in the "The Legend of Sanford Castle" a children's story book that patients of the Castle receive.



Children who are receiving radiology services travel to the lower level via an elevator that is adorned with playful murals. The theme of the lower level is the Deep Blue Waters. All murals on this level are based upon the concept of lakes and rivers. Similar to other areas of the hospital, special hidden messages, glow in the dark features, and other unique drawings that assist in distracting children undergoing procedures are woven into the murals. Unique to the radiology department is one of the first in the nation low-dose 64-slice CT scanners, which reduces the amount of radiation exposure for children by 30 to 40%.

Sanford Children's Specialty Clinic and Infusion Center is located on the ground floor, otherwise known as the Rushing River Valley. This area was designed to be a little more stimulating than the hospital environment, with interactive toys and distracters woven into the décor. Patient exam rooms are standardized throughout the Clinic, which allows flexibility in use, eliminates wasted time for providers in searching for supplies, and makes stocking the rooms much more efficient. Lean concepts and tools were used to smooth process flow for patients and families, and to ensure a functional and efficient work flow for staff and providers.

Four separate Welcome Centers in the Clinic were defined to best serve the needs of well children, ill and potentially contagious children, immunocompromised children, and children with developmental challenges. Wayfinding is optimized through the creative use of color, symbols, and animals. This unique approach is especially beneficial for the diverse cultures that the Castle serves. For example, the cardiology hallway has a red color scheme with a fanciful frog sculpture wearing a jester hat located on the wall at the end of the hallway. Located on the floor at the opposite end of the hallway, a jester hat is repeated as part of the floor's artwork to assist with wayfinding.

The Child Life team designed a "game" to empower the children who are seen in the clinic. As the families register, they are directed to the appropriate Welcome Center. From there, a nurse hands the patient a card, instructing them to find the jester hat (or other unique wayfinding hat) to take them to their hallway. Next it will instruct the child to a specific weigh station, and then direct them to the appropriate exam room based on a unique icon at the room.

Children who are patients and their families are provided with opportunities for privacy or interaction at every opportunity – this is particularly evident within the Schoeneman Outpatient Infusion Center where private family centered spaces are adjacent to shared play areas. The infusion bays are adorned with inspirational words and peaceful nature scenes on the walls. The colors are restful and calming – consistent with promoting a healing environment. A family pantry provides nutritional support for patients and family members.

A unique feature of the Castle's first floor is the balcony overlooking the Carlson Great Hall. This area serves multiple purposes and creates gathering spaces where a sense of community and familiarity can occur. At one end of this area is the Becky and Dave Nelson Royal Balcony with uniquely designed oversized royal chairs for patients and visitors. Nearby, a storybook room provides a space for storytelling and play. This element of the healing environment creates a destination for children and parents that is away from the activities of the patient environment. Hospitalized children may participate in or watch community and hospital sponsored events and performances in the Carlson Great Hall from the balcony. For children too ill to leave the unit, events can be broadcast from the Carlson Great Hall into the patient rooms.

The first, second, and third floors contain distinct patient care areas, which are supported by a central family space. The family support spaces provide amenities similar to those found in the NICU, including a business center, kitchenette, a child's play area and a family room area. Families and patients had extensive input into the design and use of these areas. Whether the family wants to get together to play a board game, or to eat together as a family, in the Castle of Care, the family center is a place for the family to be a family.

Care was taken in color selection, art and layout to alleviate fears, bring families to the center of care, and allow the children to retain as much control as possible in this environment. Care giver spaces are designed to allow nurses to spend as much time as possible at the bedside and to remain visible enough to patients and families to provide comfort.

Each floor is designed around a unique nature-based theme that can be found in the Castle storybook. The first floor is the Wide Windy Prairie; the second floor is the Land of Nez; and the third floor, the Enchanted Forest. To help stimulate a child's imagination and to assist with normalizing the hospital environment, special features have been incorporated in all design elements of the floor. Some examples include treasure boxes with fanciful sculptured objects for imaginative viewing, and open frames in the patient rooms where children can display their own artwork or a favorite picture created by local art students. Zoo-TV provides a direct video feed to Sanford Children's Hospital, giving children the option to watch the animals play at the Great Plains Zoo whenever they'd like.

Every aspect of the child and family has been included in the design of the Castle including considerations for their spiritual well-being. Located on the second floor, is a beautifully appointed interfaith chapel, which features a ceiling that mimics the night sky.

Those who designed Sanford Children's Hospital never forgot this is first and foremost a place of healing. The unique design of Sanford Children's Hospital is based upon both the science and the art that creates a healing environment. It is the place where every child and family who enters the facility is immediately reassured that they are in the right place,

and where the environment comforts and puts them at ease. Focused on family-centered care, it is the place where lives are touched in extraordinary ways. It is the place that fulfills the dream that every child deserves a Children's Hospital.



The World that Works

SSM Health Care

Dixie Platt

Senior Vice President, Mission and External Relations



Editors' Introduction: *SSM Health Care, based in St. Louis, Missouri, operates 20 acute-care hospitals and two nursing homes in the states of Wisconsin, Illinois, Missouri and Oklahoma. With more than 24,000 employees, 5,000 physicians and 5,000 volunteers, it was the first healthcare recipient of the Malcolm Baldrige National Quality Award and the first large health system to go tobacco-free inside and out. SSM is also currently undertaking a \$391 million transformation from paper medical records to an electronic health record (EHR). The new EHR allows caregivers to access patient information at any time, from anywhere in all of its hospitals. From innovative HIT systems, to process improvements, to new building renovations and constructions, SSM Health Care is quickly becoming a pioneer 21st century health system.*



In 1872, five religious sisters from Germany established themselves in St. Louis, Mo., and founded a healthcare ministry, known today as SSM Health Care. St. Louis was in the midst of a devastating small-pox epidemic, and those founding sisters were committed to care for people, regardless of their ability to pay.

Of course, the 21st century has arrived and care at SSM Health Care has changed in many ways that surely would astound those founding sisters. When we at SSM Health Care became the first healthcare organization to win the *Malcolm Baldrige National Quality Award*, it was because what we do is aligned with our mission to provide exceptional care to our patients. We refine those processes by constantly seeking feedback from patients through surveys and rounding. SSM Health Care also continues to use the *Baldrige* process and to apply for other quality awards because the feedback is invaluable in improving the delivery of care. In total, our hospitals have earned more than 30 state quality awards.

We have always believed that patients deserve the best care we can provide, and these days, they are rightfully demanding more. Today, we provide patients with post-discharge follow-up calls, free wireless service, room-service meals and valet parking. Our hospitals in St. Louis offer “navigators” who guide our patients through treatment.

Consider:

- SSM’s \$391 million transformation from paper medical records to an electronic health record. In 2008, five of our 20 hospitals launched an EHR and are providing caregivers nearly instant and secure access to patient information at any time, from anywhere. The roll-out will continue in 2009, and more and more of our patients can expect safer, faster, more convenient care when they visit any SSM Health Care hospital. "The long-term benefits of the electronic health record will be recognized at every level of SSM Health Care and, most importantly, by every patient who visits one of our hospitals," says Tom Langston, SSM Health Care, Chief Information Officer. We look forward to the day that patients will be able to access their health-care records at any hospital they visit nationwide.
- We have made ourselves more accessible to patients in Oklahoma City, where we operated the first hospital in the Oklahoma Territory, by opening YourCARE clinics in four suburban grocery stores. One of our facilities, St. Anthony Hospital, operates the clinics, which are staffed by family nurse practitioners and are open seven days a week to treat minor injuries and illnesses, offer cholesterol screenings, eye exams, blood draws, health assessments and education. At the headquarters of the Chesapeake Energy Corp., in Oklahoma City, St. Anthony operates a clinic with one physician and a dentist, who provide care to Chesapeake employees and their families. The hospital also runs a smaller clinic for employees of American Fidelity Assurance Co.
- Five years ago, SSM Health Care became the largest health system in the nation to go tobacco-free inside and out to create healthier environments for patients. In 2007, we spent more than \$2.9 million educating our communities about such healthcare issues as diabetes, healthy eating and exercise. Within the same year, SSM Health Care and its employees recycled more than 6.6 million pounds of paper, cardboard, aluminum and steel cans, glass and plastic, and we eliminated the use of bottled water for the sake of the environment. SSM Health Care took these important steps because we cannot apply the most advanced medical technology to cure illnesses and then send patients home to an unhealthy environment. Our environmental efforts mirror a commitment to non-violence by our sponsoring congregation, the Franciscan Sisters of Mary, who vow to “respect, appreciate and live in harmony with creation and direct our actions to preserve the earth.”

Given our mission to provide exceptional healthcare to our patients, you can imagine our excitement when a rare opportunity presented itself to transform the healthcare experience from the ground up.

A True Healing Environment

On March 30, 2009, the 154-bed SSM St. Clare Health Center will open in Fenton, Missouri. St. Clare will be a replacement hospital for SSM St. Joseph Hospital of Kirkwood, MO and will be the first new hospital constructed by SSM Health Care in more than 20 years.



A new hospital presented a unique opportunity to realize SSM Health Care's mission: Through our exceptional health care services, we reveal the healing presence of God. In a "Declaration of Innovation" written in 2005 for the new hospital, employees and physicians alike were challenged "to act courageously, to be boldly creative, and to leave our biases, assumptions and old habits behind."

Employees and physicians took the charge to heart. They learned from others, including such cutting-edge design consultants as IDEO and visited other hospitals to see what was working and what was not.

Over several months, a vision for patient rooms evolved from tape marks on the floor to a Styrofoam model to elegant architectural renderings to prototypical "mock ups" with input from physicians, nurses, patients and community members. Patient safety, quality,

convenience and comfort are really at the forefront of St. Clare's design. From its structure to the processes for providing patient care, the hospital has been built from the ground up to achieve a new level of care – care that is more effective and more efficient.

Quality by Design

It would be easy to be impressed by the structural features of St. Clare. Its patient rooms have floor-to-ceiling windows, and its walls are covered with color and warmth, rather than hospital-white paint. Its corridors are quiet with wide berths.

Yet St. Clare's beauty is more than skin deep.

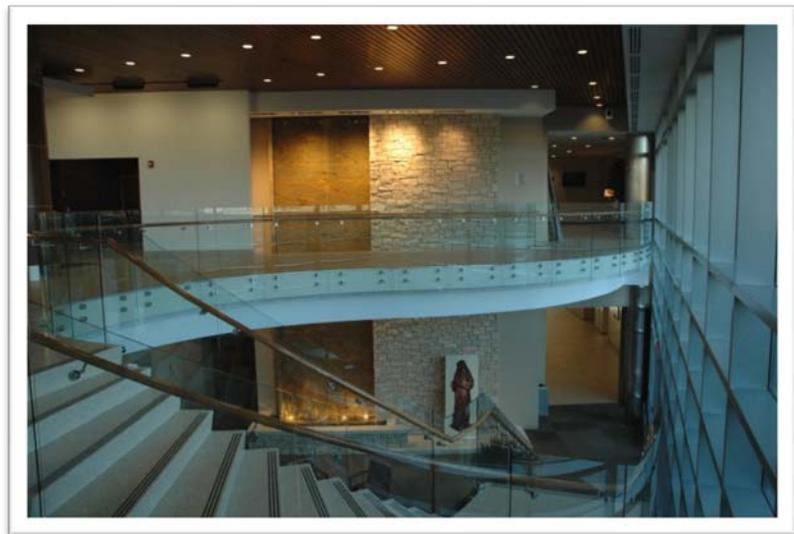
All patient rooms are private, which will reduce the risk of hospital-acquired infections. Decentralized nursing pods, as opposed to larger nursing stations, place caregivers closer to patients and increase nurse response times.

Electronic health records at St. Clare, whether at the bedside or in physician offices, will provide secure, instant access to patient information. Clinicians have access to information to make correct care decisions. Patient's wristbands will have a bar-code corresponding to medication labels.

Even the views from patient rooms were engineered with patient healing in mind. The views and in-room sleeping accommodations for family members – partners on the care team - will comfort patients and accelerate their healing. Patient rooms are configured consistently so that staff and patients are always familiar with their surroundings, thereby reducing the chance for errors by caregivers and falls by patients. Patients will control their environment by managing the temperature and lighting of their rooms.

The hospital's layout incorporates four distinct patient-care zones including emergency, outpatient services, inpatient care and surgical/specialty areas. Each has a separate entrance and parking so that patients can easily find their way and conveniently access the care they need.

“The design is focused on creating a healing, human-centered environment that responds thoughtfully to how patients and their family members actually use and interact with a



hospital,” says Robert Porter, St. Clare project director and regional vice president for strategy and business development for SSM Health Care – St. Louis.

Quality Care through Providers, Processes

The new hospital’s planners did not stop with the building’s design.

A building can help support healing but its competent and compassionate caregivers, state-of-the-art technology and successful care processes are essential.

Process improvement teams, composed of dozens of hospital staff members, looked at care from the point of view of the patient in six areas: concierge, distribution, inpatient-care, delivery, patient passport, support processes and surgical services. They deconstructed old processes and created new ones. Redundant steps that added time but not value to the patient care experience were dropped. A pilot unit was used as the incubator for hatching ideas and testing them.

“We asked these teams to dream big and be radical in their approach,” says Sherry Hausmann, hospital president. “We didn’t want to just tweak our current processes. The new hospital has challenged each of us not to accept the status quo.”

Team members walked in the shoes of patients, counting their footsteps as they were handed off from one clinical staff member to another. They tracked how often patients were asked for the same information in different departments and streamlined processes by bringing care to patients through point-of-care testing rather than asking patients to move to different departments. They made processes consistent so that patients would know what to expect.

In the end, the emergency services team reduced its door-to-doctor wait time by 20 minutes, eliminating steps by more than half. The outpatient care delivery team even projected it could eliminate 17,000 annual hours of patient waiting. A new job category was created, and now a patient care specialist will shepherd patients through their healthcare experience.

“We have this great new building designed to make everything run smoothly,” says Mary Barnicle, director of senior services and a member of the out-patient care delivery team. “Now we are examining step-by-step how we do things so patients will walk out of St. Clare and say, ‘Wow! That was a wonderful experience for being in a hospital.’”

SSM Health Care believes in bringing exceptional care to patients, whether it’s by providing light-infused rooms, by storing medications securely in patient rooms for quick access by caregivers, or by locating rails from the patient’s bed to the bathroom. It’s about creating an environment that supports healing and deemphasizes illness.

From the ground up, everything about St. Clare, from its design to its processes, relates to patients and their care.

“We’ve designed the hospital around the patient’s experience,” says Porter. “If you’re going to optimize a patient’s health, you cannot use a ‘one size fits all’ approach.”

Our founding sisters, who went from home to home caring for patients, would have appreciated our 21st century approach.

The World that Works

WellStar Health System

William Mayfield, M.D.

Chief Surgical Officer



Editors' Introduction: *The vision of WellStar Health System is to deliver world-class healthcare. As a health system comprised of five premier hospitals in the Northwest suburbs of Atlanta, Georgia, 11,000 employees and the largest non-academic Physicians Group in the State, WellStar Health System has become one of the largest, not-for-profit healthcare systems in the Southeast. WellStar's commitment to innovation has been acknowledged with the following awards and honors: Top 100 Integrated Healthcare Network, National Voluntary Hospital Association (VHA) Award for Clinical Excellence, Georgia Hospital Association (GHA) Patient Safety Award for System Wide Reduction in Health Care Associated Infections, designation as a Company That Cares and a Working Mother 100 Best Organization. At WellStar, relationships matter. WellStar employees feel they are part of a family of dedicated healthcare professionals committed to improving the health of the citizens within the communities we serve. WellStar believes in a future free of cancer and knows that belief is contingent on many things. Patient focused care, continual knowledge, cutting-edge technology and unyielding support are just some of the cornerstones that have been used in building the WellStar Cancer Program. The STAT Clinic illustrates the positive effect a patient-centered collaborative model of care can have on quality and cost of care as well as time to diagnosis and treatment of the cancer patient.*



More than 80 years ago, the American College of Surgeons set the worldwide standard for cancer treatment. The key principle they identified was multidisciplinary care. This is the foundation of WellStar's Specialty Teams And Treatments Cancer Clinic, or STAT Clinic. The STAT Clinic was created to fight cancer fast, with less waiting and worrying by the patient. The STAT Clinic represents a trifecta for the practice of medicine and the

treatment of cancer. It provides better quality, improved patient satisfaction, and is cost effective.

The STAT Clinic is a patient centered concept where the physicians come to the patient at the same time in the same place. It is not a series of independent physicians housed in a common office complex. Fundamentally, a higher level of care is delivered to patients when there is immediate and contemporaneous collaboration between medical disciplines. Every practitioner that sees a patient in the presence of other peer practitioners is able to yield a slightly different perspective in the context of the entire patient. The team collaborates to develop a treatment plan resulting in a groundbreaking reduction in wait time that allows the treatment plan to begin in days, not weeks.

Since its inception in 2005, the WellStar STAT Clinic has seen over 750 patients and has decreased the average wait time from diagnosis to treatment from a community norm of 56 days to 13 days. To illustrate, let's look at a typical thoracic cancer patient's progression from diagnosis to treatment.

Typical Community Standard of Care from a Patient's View:

The patient is faced with an abnormal chest X-Ray during a visit in their Primary Care Physician's office. The patient is then referred to a Pulmonologist. Ten days of anxious waiting and worrying go by until the appointment with the Pulmonologist finally occurs. The Pulmonologist orders a second X-Ray and a CT Scan. The patient is then seen again by the Pulmonologist seven days later. The mass is deemed suspicious and the patient is referred to a Medical Oncologist. Another seven days or more filled with worry and anxiety go by. The Medical Oncologist needs a biopsy and sends the patient back to the Pulmonologist for a Bronchoscopy and Lung Function test. Another agonizing seven days or more go by. The Patient then goes back to the Medical Oncologist who refers the patient to the Thoracic Surgeon. Another long seven days or more go by. The Thoracic Surgeon orders a Pet Scan and the patient is finally scheduled for surgery or chemotherapy a week or so later, another seven days or more. The typical community standard of care results in up to 90 days and a community average of 56 days from diagnosis to treatment.

WellStar STAT Clinic from a Patient's View

The Primary Care Physician immediately contacts the STAT Clinic regarding the patient's abnormal chest X-Ray. The Nurse Navigator reviews the preliminary clinical information with one of the STAT Clinic physicians. CT Scan and Lung Function tests are ordered. The Nurse Navigator works with the patient to coordinate these tests and is available to the patient throughout the entire process. The Nurse Navigator facilitates the coordination of care for the patient and is available to answer any questions or concerns the patient may have. The patient is seen in the STAT Clinic within three days. The previously ordered tests are completed prior to the patient's initial STAT Clinic visit, often on the morning of

an afternoon STAT Clinic visit. The Pulmonologist, Medical Oncologist and Thoracic Surgeon all review the test results together. At this point, any required additional tests are ordered and coordinated by the Nurse Navigator. The Care Treatment Plan is then developed collaboratively by the practitioners. The patient is seen again one week later by all practitioners in one place at the same time where the Care Treatment Plan is reviewed and discussed. Surgery or chemotherapy is then started within three days.

The value from the STAT Clinic Model is significant. First and foremost, it results in a higher level of care and coordination for the patient due to the multidisciplinary approach and streamlined processes. Second, it results in lower costs and a reduction in duplicate or unnecessary tests. Third, it results in a significant reduction in the time from diagnosis to treatment. This yields not only better patient outcomes but significant reductions in patient and family stress. It also drastically reduces the time that patients and families are away from work and other obligations that are halted with a cancer diagnosis.

Finally, the STAT Clinic is the conduit for a more seamless continuum of care. For example, WellStar currently conducts community lung screens through the STAT Clinic as well as smoking cessation programs and clinical research activities. WellStar is in the process of applying the STAT Clinic model to colon and rectal cancer, melanoma, breast cancer and genitourinary (GU) cancers. The WellStar Health System STAT Clinic is a concept that has potential to be greatly expanded in the developing model of a patient-centered 21st Century Intelligent Health System.

Part Four: Recommendations for Creating a 21st Century Individual-Centered Health System

Health system leaders committed to creating an individual-centered health system should consider the following:

- ◉ Adopt an electronic health record, providing the patient with a personal health record.
- ◉ Develop a method to mine data to determine best practices.
- ◉ Utilize technology and social networking to deliver information to the patient when, how and where they want it.
- ◉ Require that your information system is interoperable.
- ◉ Assure that data is shared among services and that the patient is not required to re-enter information when seeing multiple providers in your health system.
- ◉ Implement a system that rewards outcomes.
- ◉ Ensure that providers and patients both get incentives for achieving goals.
- ◉ Provide Wellness and Health Management for people with chronic disease, not just acute care. Chronic conditions are the leading cause of illness, disability, and death in the United States today.
- ◉ Begin in the community and work your way back to the hospital. Going where people are will be increasingly important in a system focused on prevention. This involves forming partnerships with churches, barber shops, employers, local pharmacies and stores such as Walmart.
- ◉ Look at the whole picture and work with multi-stakeholder groups. Traditionally, the public debate over containing healthcare costs is framed in terms of medical services. But preventing acute episodes, including people with chronic conditions, requires a host of non-medical services; including transportation, housing modifications, etc.
- ◉ Think in terms of an electronic hub and spokes not bricks and mortar as you plan for the system of the future. Being able to monitor and reach a patient outside the hospital setting, including in his or her home, workplace or school can improve health and prevent avoidable acute episodes.
- ◉ Maximize HIT. In particular, cell phones, broadband networks, telemedicine capabilities, etc. offer a host of opportunities for serving individuals outside the hospital setting.

- ◉ Start early. Prenatal care and pediatrics are key areas where prevention can prevent the development of costly illnesses and diseases.
- ◉ Consider the hospital as an employer not just a service provider. Hospitals are often among the largest employers in a community. Implement programs and incentives within your workforce that encourage healthy behavior and early screening, hospitals can save money internally while adding healthy citizens to the community.
- ◉ Be on the look-out for breakthroughs and discoveries both inside and outside the health industry that could be applied to improve the hospital system.
- ◉ Concentrate on ways to ensure that the patient has the information, support and education needed to stay healthy once they leave the hospital.
- ◉ Develop patient and family advisors in your health system and begin the transition to having them serve on all hospital committees from the care unit to the boardroom.
- ◉ Work within a collaboration to help define policies and solutions that will be key to creating a sustainable system of better health. See www.healthtransformation.net for more details.

"What worries me most about the healthcare system is that we, from within the industry, won't seize the opportunity to be transformational leaders and we'll wait for somebody else to figure out how to fix healthcare. There is an incredible commitment to this honorable profession right within our industry, but time is ticking. We built a healthcare system that is not sustainable. How much are we willing to spend on healthcare, particularly for an ineffective and inefficient system? And the time to act is now. So, my challenge to my colleagues in the industry is be bold, be innovative, take some steps. It's ours to save."

-Wayne Sensor, CEO, Alegent Health

We challenge you to begin your journey now.

Signs of a 21st Century Individual-Centered Health System

- ◉ No restriction on visiting hours
- ◉ Accommodation for family members
- ◉ Patient and family advisors on all committees
- ◉ Patient and family advisor sign off on all construction projects
- ◉ Executive Chef and high quality healthy culinary offerings and nutritional support
- ◉ Spiritual support
- ◉ Fitness and exercise support for patients, family members and employees
- ◉ Wellness support for patients, family members and employees
- ◉ Electronic Health Records
- ◉ Portable Patient Health Records
- ◉ Remote delivery of care, information and services
- ◉ Wireless internet access
- ◉ Valet parking
- ◉ Concierge services
- ◉ LEAN Thinking and Six Sigma applications to take time and cost out of processes
- ◉ Measurement and publication of outcomes data
- ◉ Measurement and publication of turnaround times
- ◉ A culture of viewing the patient and family as members of the healthcare team