

Hospital growth
on a fast track
to match a city
that won't
slow down

Aurora



The vibrancy of this growing, diverse city is inspiring to everyone — long-time residents and newcomers, alike. New opportunities for prosperity materialize from one day to the next. New neighbors come from far away countries and adjacent counties. New city governments take shape and redraft the course for the community's future. "The Medical Center of Aurora is central to the events that define this city's character," said Sylvia Young, President and CEO, "and we wouldn't want it any other way. We're involved in everything from bond issues to citywide safety initiatives." ♦ Aurora is the third largest city in the state — and still has only 50% of

its land developed. The hospital is the only Level II Trauma Center on the eastern corridor and serves people in communities along I-70 as far as Limon — making it the third busiest ER in the state. "Who knows what challenges Aurora will present to us as a hospital in 10 or 20 years?" Young said. "We do know this: we will constantly improve and expand services at The Medical Center of Aurora to keep pace. Given the changing needs for healthcare in Aurora, we refuse to turn away from our responsibilities to our neighbors."

Beyond the walls

The hospital is at the leading edge of efforts to improve the healthcare of people living all across the eastern suburbs. That means focusing on what happens both within — and beyond — its own walls. Among the most far-reaching successes recently is a change in the way heart attack and stroke emergencies are handled.

Cardiac and neuroscience specialists at Aurora worked hand-in-hand with the Aurora Fire Department paramedic teams, the emergency room staff and the Colorado Heart Institute to shave critical minutes off the time it takes to intervene in life-threatening heart attacks or strokes. Paramedics are charged with diagnosing a heart attack or stroke as soon as they get to the patient, and then alerting emergency department teams so that heart or stroke specialists are ready at the hospital doors for quick, decisive action. The new Stroke Alert program joined the three-year-old Cardiac Alert program in 2003. (Read more about Cardiac Alert and Stroke Alert across HealthONE, page four) "The interaction between Aurora's rescue personnel and our emergency department is the next best thing to our people riding along on every call," said Dr. Gilbert Pineda, Director

of Emergency Medical Services and Trauma. "We've broken down barriers so that everyone — the paramedics in the city, the hospital emergency department, the physicians — works together for the good of our patients. This is how healthcare is supposed to happen."



Dr. Shriram Nene, surgeon, and patient, Don Shaw discuss heart value replacement surgery

Sharing full lives

While some may think of a hospital as just another institution, in Aurora it has become intricately entwined in the lives of the residents. For instance, one Aurora nurse has worked in labor and delivery since the hospital opened 30 years ago — and today is delivering the children of those she delivered years ago.

Babies have always been a big part of life in the hospital. "We deliver more than 3,000 babies a year," Young said. "Parents have services for high-risk pregnancy available, a neonatal intensive care nursery, and experienced OB/GYNs to help wherever there's a need."

But today, science has shown that the moms — and grandmothers — have unique medical needs, too. The hospital responded to the growing population of women in the

community by expanding and concentrating services at the Women's Health Pavilion on the hospital's North Campus. Doctors at the Pavilion are advancing care for women in several areas — from osteoporosis to menopause to cancer. In 2003, the Women's Health Pavilion added one of the most advanced and highly sensitive imaging modes to detect potential breast cancers and guide biopsies.

How do you mend a broken heart?

While the city and surrounding neighborhoods are growing with new families — and babies — Aurora, like the rest of the country, also has a fair share of Baby Boomers. And there's no denying it, Boomers are getting older. In medicine, that means a growing need for specialties such as cardiovascular care.

The Medical Center of Aurora continues to invest in leading-edge technologies in its cardiac center. "We have doctors who are doing breakthrough clinical research in cardiology," said Young. "For example, Dr. Barry Molk is performing gene therapy studies to find ways to re-grow and revascularize heart tissue. Our hospital was also the first in the state to use a drug-eluting stent."

30 years old and in its prime

The reward for staying quick on your feet is that you aren't left behind. In 2004, The Medical Center of Aurora celebrates three decades of continual advancement to keep pace with this fast-growing community. "Thirty years ago, it was mostly babies and bruises they saw here," Young added. "From those suburban hospital roots to being a metro area Level II Trauma Center, with the most advanced care in cardiology, women's health, microsurgery, and other specialties, this hospital is changing, innovating and playing a part in the renewal of Aurora." ➤

Medical advancements enhance lifestyle

People no longer "just live with" conditions



Dr. Ali Sarram (r) talking with SIDNE, the voice-activated surgical guidance system

Rapidly changing medicine is dramatically altering the day-to-day lives of millions who, until recently, had few options other than to privately suffer from conditions rarely discussed in public — such as incontinence, impotence, prostate or vascular cancer, kidney infections, or bladder problems.

At The Medical Center of Aurora, new treatments, surgical procedures and medical devices have made urology — medicine dealing with the urinary tract and organs — an expanding and much-sought-after specialty.

Men and women who long thought conditions were "something they had to live with" are discovering that help is available — and often without the highly invasive procedures of past decades, said Dr. Ali Sarram, who practices urology and genitourinary surgery at the hospital.

Minimally invasive means minimal discomfort

Thanks to the tools and techniques of minimally invasive surgery, the removal of a kidney, for instance, no longer sidelines patients for an extended period. "We used to make an eight-to-ten-inch-long incision, cutting through layers of muscle," said Dr. Sarram. As a result,

patients had quite a bit of pain, discomfort, and potential long-term complications.

In contrast, the procedure today is performed laparoscopically, with surgical tools inserted through three to five ports in the abdomen of no more than two inches in diameter (for partial removal). "The result is that patients have minimal pain and easier recovery," Dr. Sarram said. Most patients go home within three days and can expect a full return to normal activity in three weeks.

The right tools

What makes these lifestyle-saving advancements possible, Dr. Sarram added, is "The Medical Center of Aurora knows the power of technology and provides what's needed for us to excel." A prime example is SIDNE, a voice-activated system that aids the surgical process. "Our voice commands tell SIDNE to adjust lights, cameras, capture images and bring up X-rays on screen while we're working. If we need to dial out for consultation during a procedure, we can do that, too. Advancements like these make it easier for us to make life better for our patients."



Tracy W. Cannon, M.D.
Urology and Genitourinary
Surgeon

Women find ease from hassle and embarrassment

For generations, women believed that incontinence — an inability to control the bladder — was just an unfortunate part of aging. Incontinence is

due to any number of causes — from infections and injuries, to use of some medications or even weakened muscles from pregnancy. Left untreated, the condition may worsen and at worst, lead to bladder removal. It is a prime reason many women abandon their active lifestyles.

"Millions of women deal with incontinence because they think it's something that just happens as you get older and you have to live with it," said Dr. Tracy Cannon who also practices urology and genitourinary surgery at the hospital. "Although we have medical procedures that can provide quick relief, most women wait a year or two before seeking help. There's no need to live with incontinence, even for a short time."

Although symptoms are common, there are different types of incontinence and "it's often hard to isolate what's causing the problem," she said. Dr. Cannon uses urodynamics, an office procedure that helps diagnose stress or urge incontinence. "With the problem identified, treatment is straightforward."

New procedures and medications are available to control both stress incontinence (triggered by laughing, sneezing, lifting, sports, etc.) and urge incontinence (caused by involuntary contractions of the bladder) — and are making incontinence largely a problem of the past.

Urge incontinence, for example, can be treated with medications, or using a new procedure that injects Botox® — a treatment generally used for wrinkle therapy — into the bladder wall to stop contractions. It works within a day or two and remains effective for up to 18 months. For stress incontinence, Dr. Cannon said, new devices can be installed that automatically close the urethra with certain movements. The success rate: 85%-90%, even after five years.

As added impetus for women who are embarrassed to seek help, Dr. Cannon pointed out, "The cost of dealing with incontinence over the years is so much more expensive than the treatment. Women can now save their money — and get out and enjoy it." ➤

®Botox is a registered trademark of Allergan, Inc.



Tammy Blake (l) and Dr. Jill Vecchio have first-hand personal experience testing new diagnostic equipment

MRI-Guided Breast Biopsy First in State

It was to be a simple test. New equipment was under evaluation at the North Campus of The Medical Center of Aurora; they just needed a subject to practice the breast imaging technique.

Employee and mammographer Tammy Blake, RMT, volunteered for the advanced magnetic resonance imaging (MRI) scan. Wouldn't you know it, she said, "We ended up seeing something by chance."

Blake was fortunate — she works at The Women's Pavilion at the North Campus. The Women's Pavilion was designed so that women who need testing for a variety of health conditions, and typically must seek these services in many different locations, could find comprehensive care at one convenient center. In addition to tests for osteoporosis, heart disease or digestive problems, the Pavilion houses a full range of breast services.

The new MRI adds another dimension of services for women who may have smaller or uncommon breast cancers. Dr. Jill Vecchio, Director of Radiology explained, "MRI in breast examinations is the most sensitive imaging method for detecting breast cancer, and it aids in performing the biopsy." Certainly, the more common mammograms and ultrasound are good tools for detection in most cases. And ultrasound or stereotactic methods are generally used for biopsies. "But

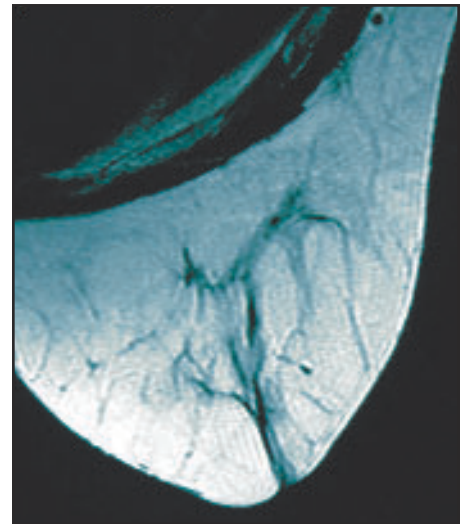
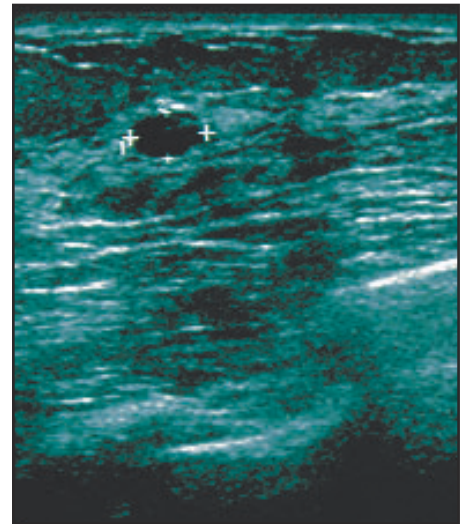
MRI is an important option for those abnormalities that are harder to see."

MRI scans and MRI-guided biopsies are excellent choices if women meet certain criteria. "An MRI is warranted if we're looking for an implant rupture," said Dr. Vecchio. "Also, for a patient with a new diagnosis of cancer, the MRI has the sensitivity to reveal additional cancerous tissue that might not be seen by ultrasound."

Other candidates for MRI breast imaging are women with a strong family history of breast cancer or who have a known breast cancer gene.

"I was excited to be the first."

You won't hear that very often in the context of a breast biopsy. "I knew Dr. Vecchio was going to take care of me and I knew what to expect," Tammy said. "I'm part of the team here. I definitely believe in the doctors." Dr. Vecchio performed the first MRI-guided breast biopsy using this equipment in Colorado on Tammy. "Thankfully," Dr. Vecchio said, "hers proved to be a fairly common benign cyst change."



Ultrasound (top) vs. MRI (bottom)

Advances in diagnostic technology mean more options in medical treatment for physicians and patients. Testing decisions on breast abnormalities can even be based on patient history and prediagnosis.

FAST FACTS

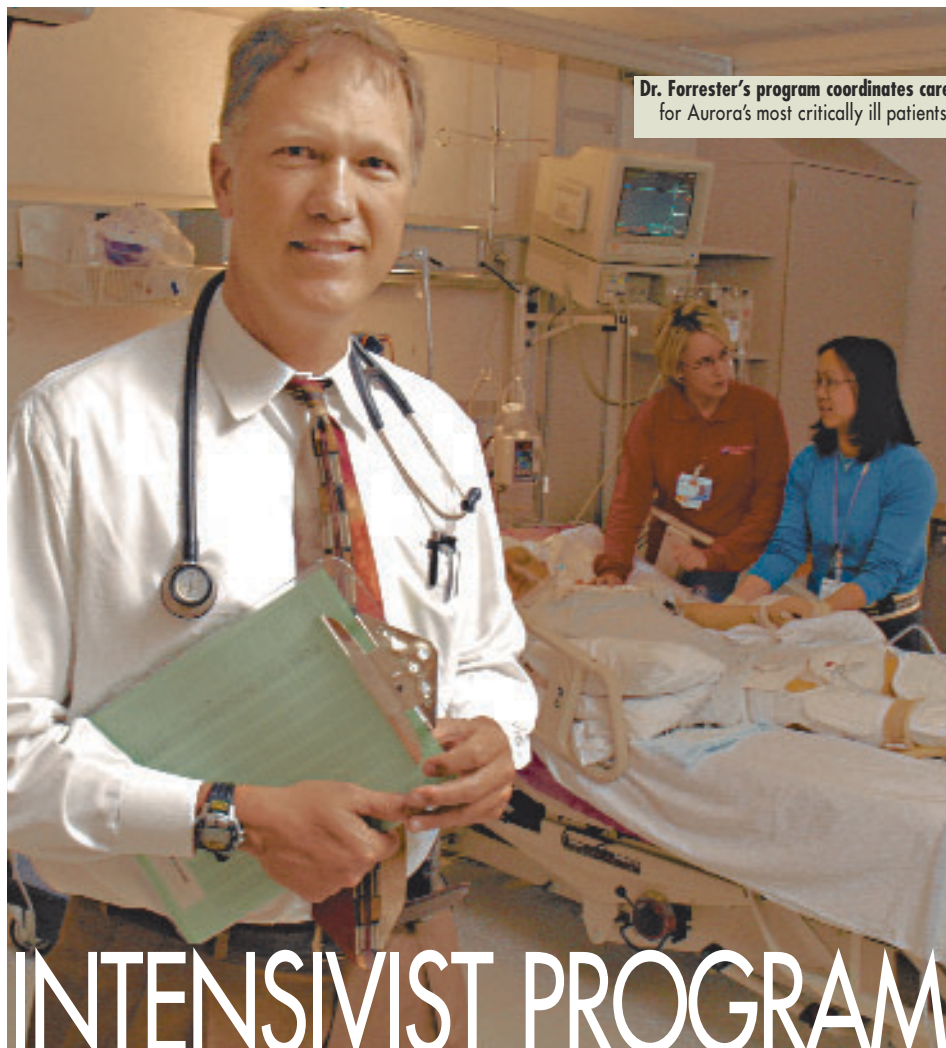
AURORA'S SENIOR EXECUTIVE TEAM

Sylvia Young...President & Chief Executive Officer
 Mary BerriganChief Operating Officer
 Carol GregoryChief Nursing Officer
 Kathy Yeager.....Human Resources Director

2003 Total People Cared For: 192,767

2003 Total Community Benefit: \$66,905,187

Affiliated Physicians	1,168
Number of Employees	1,594
Licensed Beds.....	346
ER Visits	79,979
Observation Visits	1,517
Outpatient Surgeries	9,311
Outpatient Visits (all other).....	82,386
Inpatient Admissions	192,767



Dr. Forrester's program coordinates care for Aurora's most critically ill patients.

INTENSIVIST PROGRAM

Hospital emphasizes training, standards in treating Aurora's critical-care patients

Many people have never even heard the word "intensivist," much less have an idea of what one would do. That's going to change in the next few years, as more hospitals add these specially trained physicians, predicted Dr. Joe Forrester, founder of the Intensivist Program at The Medical Center of Aurora. "In the most basic sense, we are generalists for the sickest patients in the hospital. After a patient is stabilized in the emergency room and admitted to the intensive care unit (ICU), an intensivist coordinates all activities involved in that patient's care."

Beyond the traditional, extensive training that all physicians undergo, another year or two are required to treat critically ill people in an intensive care setting. "In this team of seven intensivists, most of us are triple qualified — internal medicine, pulmonary and critical care," Dr. Forrester said. "Our training means that the right care gets to the right patient at the right time."

At The Medical Center of Aurora, an intensivist is on site 24/7 for evaluation of new ICU

patients as well as those in other units who suddenly get worse. "Intensivists visit every assigned patient at least twice a day to check on the progress of therapies and care," he added. "My vision for creating this program was to offer ICU patients the latest and best therapies available."

When newer is better

The Intensivist Program marked its first full year in 2003. It formed on the heels of a 2002 study in *The Journal of the American Medical Association (JAMA)* that found staffing the nation's ICUs with intensivists could reduce death rates by 30% and save an extra 162,000 lives each year. Specifically, use of intensivists led to significant reductions in ICU and hospital mortality, complication rates and length of stay. Yet, the *JAMA* article said, fewer than 10% of all hospitals use intensivists.

Dr. Forrester said, "Aurora has taken the leading role in the community in recognizing that intensivists make a difference in the care that's delivered in the ICU. It's unique." ➡



A FEW YEARS FROM "NO OPTION"

When Don Shaw was told that he needed mitral valve surgery, the 53-year-old triathlete was stunned. A congenital defect was the culprit, Don learned. "My grandfather was in his late fifties when he was diagnosed with a weak heart. In 1949, his only option was to take it easy. He did something that stressed his heart, had an attack and died."

Don was told that within five years, his condition would be so bad, surgery would no longer have been an option. "Because of modern medicine, I was able to get mine fixed."

When new surgeon Dr. Shriram Nene joined The Medical Center of Aurora Cardiovascular Services last year, he added an intense focus on mitral valve repair, a highly specialized and growing type of heart surgery.

The mitral valve controls blood flow with its own set of gates or flaps that swing open to let blood flow from the heart's left atrium to the left ventricle. Then the flaps should neatly close again. In some cases, the valve flaps cannot close properly and allow blood to leak back toward the upper chamber, called regurgitation. This was Don's case. In rare cases, significant leakage can cause heart failure and require surgery. Until recent years, surgeons primarily replaced valves in an open-heart procedure using mechanical manmade devices, or grafting using human tissue or pig or cow tissue.

Today, new techniques allow surgeons to repair the patient's own valve

Don's heart valve was repaired in a 7.5-hour-long, very involved operation. "I had the best surgeons, cardiologists, nurses you could ever imagine," he said, "absolutely first-class care."

Just two months after Don's diagnosis, his wife passed away from a stroke. Don, his family and friends, established the SMH Foundation in her name. Don said, "You can't stay the same. You can either grow or be diminished."



"The Medical Center of Aurora and HealthONE are critical to our community. They have a terrific team that cares for thousands of our citizens each day." - Aurora Mayor Ed Tauer

280,000 PEOPLE AND GROWING...RAPIDLY

The Medical Center of Aurora has a community partner that actually is a community — the City of Aurora. As Colorado's third-largest city grows, and the hospital expands to keep pace, the partners continue to invest considerable time and effort into combining resources for the benefit of all.

"A city's ability to grow and prosper can be traced directly to its core strengths, and quality healthcare is certainly among those. When families and businesses consider their future in Aurora, the excellence of our Medical Center is an important influence to attracting them and making them want to stay," said Aurora Mayor Ed Tauer.

Kim Stuart, Communications Director in the City Manager's Office, has first-hand experience in seeing how the hospital and city work together. "Our long-standing relationship involves constant contact with the hospital. Their participation extends from the city, to the chamber, to the schools—things that impact the entire community," said Kim. "The hospital has been very generous in helping sponsor events such as the Kid's Spree, which drew over 30,000 people. They've donated bicycle helmets to kids and helped support the ballot initiative to build the interchange at I-225 and Alameda, too."

Fast response that's also the most effective.

The partnership goes well beyond community events and politics — as a mutually beneficial

relationship that also focuses on saving lives. The Aurora Fire Department is the only one in the state of Colorado that is nationally accredited. Considering that 80% of the Fire Department's calls are medical in nature, people in Aurora are fortunate to have excellent care in the field that's complemented by their community's leading medical institution.

The City and the hospital also have initiated a program that is becoming a national model. "Together with The Medical Center of Aurora, we pioneered the Cardiac Alert program that is now being used throughout the Denver area and spreading across the county," said Matt Jepkes, EMT-P, a captain with the city-operated Aurora

Fire Department. The city committed to putting mobile equipment in ambulances and the hospital provided advanced training for paramedics to use in the field. "The result is that acute MI (heart attack) patients are now in the lab for interventional care in one-third less time."

For this important work with the hospital, Rural Metro Ambulance, Colorado Heart Institute, and the Aurora Fire Department were honored as a HealthONE community partner for 2002.

The success of Cardiac Alert also led to a similar, time-critical program for stroke patients. The initiative has seen about 12 stroke patients a month. All in all, Jepkes said, the partnership "has been right on target."

THE MEDICAL CENTER OF AURORA generously gave to the following in 2003:

GIVING BACK TO THE COMMUNITY		
9Health Fair	Bennett Fire Protection	Community Education
A Little Love	Center for Personality	DIA Business Partnership
American Heart Association	Central CO AHEC	Field Elementary School
Aurora Chamber of Commerce	Children's Advocacy	High Five Plans
Aurora Economic Development	City of Aurora/Kids	Kaleidoscope Aurora
Aurora ED Foundation	Colorado State Federation of Police	Pike's Peak Hospice
Aurora Mental Health	Colorado Ballet	Sable Altura Fire Protection
Aurora Rotary Club	Colorado Perinatal	Sable Elementary
Aurora Symphony Orchestra	Colorado SIDS	Women's Health Fair
Aurora Vistas	Community College of Aurora	Women's Vision Foundation

Neighborhood Medical Plaza Heads Big League Advances

Nancy Zercher chose a minimally invasive approach to hip replacement. Her surgeon, Dr. Craig Loucks (right) and Dr. Robert Greenhow perform a myriad of orthopedic procedures using new technologies and techniques that decrease trauma to the body and speed recovery.

Centennial

HOW DO YOU CUT RECOVERY TIME FROM SURGERY? SIMPLE—JUST DON'T CUT (AS MUCH).

Centennial Medical Plaza earned its reputation for its no-wait, full-scale emergency department that, for nearly two decades, was the only one serving residents between Colorado Springs and southeast metro Denver. As the southeast metro area evolved from sweeping vacant fields to vibrant neighborhoods, their local medical plaza also forged new status — as a Center for Minimally Invasive Surgery. ♦ “With the new center, we offer gynecological, orthopedic, abdominal, hand and neurosurgery using the latest procedures. And the new ophthalmologic procedure, Refractive Lens Exchange, not only corrects vision, it prevents the need for eventual cataract surgery,” said Julie Taylor,

Chief Operating Officer. “So, we give our neighbors comprehensive services like a big hospital, but in a smaller and more personal setting.”

Established in 1985, Centennial Medical Plaza — affiliated with The Medical Center of Aurora — operates a range of services typically found in a hospital setting: emergency department with specialized pediatric emergency care; outpatient surgeries; orthopedics; sports medicine and rehabilitation; chest pain center; diagnostic and imaging services; radiology; laboratory testing; pharmacy; travel care; sleep lab; and occupational medicine.

“Our patients get a great combination — the convenience of cutting edge, outpatient procedures, with the reassurance of knowing that excellent, on-site care is available if they have to stay longer,” Taylor said.

“I decided it was time to be forward-thinking and try something new.”

For Nancy Zercher, choosing minimally invasive hip replacement at Centennial Medical Plaza meant the choice between a six-month recovery versus just a few weeks.

“Traditional hip replacement involves a 10-inch incision and taking muscles and tendons off the bone. There’s considerable pain, a hospital stay of five days plus extensive rehabilitation,” said Dr. Craig Loucks, orthopedic surgeon, who performed Nancy’s surgery. New procedures use two small incisions, each measuring about 1.5 inches. “The same replacement parts are put in, but with much less trauma to the body.”

FAST FACTS

CENTENNIAL'S SENIOR EXECUTIVE TEAM

Sylvia YoungPresident & Chief Executive Officer
Julie TaylorChief Operating Officer

2003 Total People Cared For: 55,282

2003 Total Community Benefit: \$3,804,725

Affiliated Physicians1,168
Number of Employees130
Outpatient Visits (all other)26,452



Centennial minimally invasive surgery patients stand by their surgeons days after surgery. Kerrie Workman (above) and Mary Anne Klingler (right with Dr. Waliser) were back to work shortly after hysterectomy surgeries.

Walking the day after hip surgery

“With the aid of a walker, I was back on my feet the day after surgery,” said Nancy. “I went home two days later and the following day we had friends to dinner to help with all the food people had brought over.” Less than three months later, she and her husband left for a European vacation. That’s mobility.

Dr. Robert Greenhow, an orthopedic surgeon, practices at the Centennial Center for Minimally Invasive Surgery specializing in orthopedic sports injuries. Though he and Dr. Loucks are support directors for the Colorado Storm soccer league, Dr. Greenhow stressed, “we see amateur athletes of all ages, from children through adults — with plenty of weekend warriors.”

And, at Centennial, minimally invasive procedures take on MVP status when it comes to lessening pain, shortening rehab and getting back into the game fast.

Back to normal in 1/8th the time

Gynecological procedures using minimally invasive surgeries can also lessen recovery time,



said Dr. Thomas Waliser, a gynecologist and Director of Centennial’s Center for Minimally Invasive Surgery. “Many gynecologic procedures can now be performed using small scopes rather than an open abdominal incision.”

Mary Anne Klingler of Highlands Ranch had a partial hysterectomy that, just a few years ago, would have required a six-to-eight-inch incision to remove the uterus and cervix. That traditionally meant three to five days in the hospital, pain medication for about two weeks, up to eight weeks off work and three-to-six months for full recovery.

“I had afternoon surgery and I was up and around that evening and I went home the next day,” said Mary Anne. “The nurses at Centennial were fabulous and recovery was almost like nothing happened.”

Dr. Waliser said her experience is not uncommon, nor an exaggeration. “With a minimally invasive procedure, there are four small incisions. The patient is usually back to work in two weeks with complete recovery in three weeks.”

Kerrie Workman of Centennial also had a minimally invasive partial hysterectomy. She was back at her desk at work in three days. Where to go for the procedure? It was simple. “We’ve been coming here for years with the kids,” she said. “Looking to Centennial was an easy decision.”