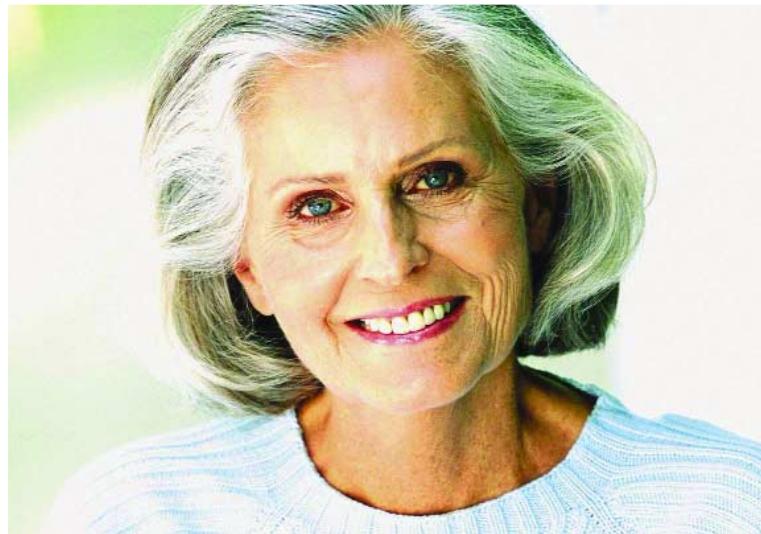


healthfocus

THE LATEST IN HEALTH NEWS & INFORMATION | FALL 2004 | VOLUME 2 | NUMBER 1



[Princeton HealthCare System](#)

Redefining Care.

[University Medical Center at Princeton](#)

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Minimally Invasive Surgery

Including:

- Minimally Invasive Colon Surgery
- Replacing Worn-Out Knees
- Surgical Options for Overcoming Obesity
- Varicose Veins
- Relief from Sinus Infections



Welcome

This issue of Health Focus is devoted to minimally invasive surgery for good reason. It probably represents the most significant development in surgery since the introduction of general anesthesia. Patients who undergo minimally invasive surgery often recover more quickly and with less pain than if they had undergone traditional surgery.



J. Thomas Davidson, MD, FACS
Chairman, Department of Surgery
Princeton HealthCare System

What Is Minimally Invasive Surgery?*

Minimally invasive surgery utilizes small incisions through which cameras and instruments are placed. Once their "tools" are in place within a body cavity — be it the chest, the abdomen or a joint — surgeons perform the operation.

The Advantages

The minimally invasive surgical approach offers several advantages. First, the cosmetic result is almost always superior to that achieved with open surgery. In addition, post-operative discomfort is significantly reduced, often leading to earlier discharge from the hospital and quicker return to normal activity.

The History

Although the concept of minimally invasive surgery dates back several decades, the instrumentation did not achieve a level of sophistication which allowed the widespread introduction of these techniques until the 1980s and then with increasing frequency in the 1990s.

Among the earliest procedures done this way were gynecologic operations (i.e., for ovarian cysts and inspection of the uterus and ovaries) and the trans-urethral procedures employed by

urologists for the removal of bladder tumors and benign prostatic tissue.

One of the most commonly performed minimally invasive procedures done today is the laparoscopic removal of the gall bladder, with approximately 300 of these being done in our hospital each year.

Advanced Surgical Care in Your Community

At the University Medical Center at Princeton and Princeton Surgical Center (our same-day surgical unit), our surgeons in essentially all specialties are utilizing minimally invasive techniques to provide the best possible outcomes for their patients.

The articles in this issue of Health Focus illustrate the wide application of minimally invasive surgery today, but these articles are by no means all inclusive of every procedure being performed. However, they will give you greater insight into the many ways in which our surgeons are employing these exciting and innovative techniques, here in our community, at the University Medical Center at Princeton.

University Medical Center at Princeton Surgical Specialties & Subspecialties

Adult & Pediatric Urology
Aortic Aneurysm
Arthroscopy
Audiology
Avascular Necrosis
Bariatric Surgery
Brain Tumors
Breast Surgery
Breast Surgical Oncology
Cardiac and Thoracic Surgery
Cardiothoracic Surgery
Carotid Surgery
Colon & Rectal Surgery
Cornea and External Diseases
Corneal and Refractive Surgery
Craniofacial Surgery
Endocrine Surgery
Epilepsy & Parkinson Surgery

Facial Plastic Surgery
Female Urology
Foot & Ankle Surgery
Gallbladder Surgery
Gastrointestinal Surgery
General Orthopedics
General Surgery
General Vascular Surgery
Hand & Microsurgery
Head & Neck Cancer
Head and Neck Surgery
Hernia Surgery
Hip and Knee Replacement
Internal Medicine
Knee Arthroscopy
Laparoscopic Surgery
Laparoscopic Urologic Surgery
Mammotome Breast Biopsy

Minimally Invasive Prostate Surgery
Minimally Invasive Spine Surgery
Neuro Oncology
Neurosurgery
Neurophysiologic Monitoring
Oculoplastic & Reconstructive Surgery
Oncologic Surgery
Ophthalmology
Orthopedic Foot and Ankle Surgery
Orthopedic Surgery
Otolaryngology
Otorhinolaryngology
Parathyroid Surgery
Pediatric Ophthalmology
Pediatric Urology

Plastic Surgery
Podiatric Orthopaedics
Podiatric Surgery
Podiatry
Primary Podiatric Medicine
Retina Surgery
Shoulder & Elbow Surgery
Shoulder Surgery
Spinal Disorders
Spine Reconstruction
Spine Surgery
Sports Medicine
Surgical Oncology
Thyroid Surgery
Urology
Urology-Oncology
Varicose Vein Surgery
Vascular Surgery
Vasectomy, No Scalpel

*Essentially, minimally invasive surgery utilizes techniques of surgical access and exposure that significantly reduce trauma to the body compared to traditional incisions, which are designed to provide maximal wide open exposure of the operative site.

Minimally Invasive Colon Surgery

An Effective Treatment Approach for Benign Disease & Large Polyps

Surgeons at the University Medical Center at Princeton are at the forefront of advances in minimally invasive colon surgery that are helping patients recover from diseases of the large intestine more quickly and with significantly less discomfort.

According to J. Thomas Davidson, MD, FACS, Chairman, Department of Surgery, Princeton HealthCare System, a minimally invasive surgical technique called laparoscopic colectomy is particularly effective for treating benign diverticular disease and large benign polyps that cannot be removed through colonoscopy.

Treating Diverticular Disease

About half of the adult population who are 60 to 80 years old and nearly everyone over the age of 80 have diverticulosis, a condition where the small, pea-size pouches that line the colon bulge outward. Sometimes these bulging pouches, called diverticula, become inflamed or infected, and this is known as diverticulitis.

While diverticulosis causes only mild symptoms or even none at all, the symptoms of diverticulitis can become quite severe and uncomfortable. The most common are abdominal pain, tenderness around the left side of the lower abdomen, cramping and constipation. Like any infection, diverticulitis can cause fever, nausea, vomiting and chills. Complications such as perforations or tears of the colon, bleeding and blockages that can require emergency surgery may also set in.

"While in many cases diverticulitis can be managed effectively through dietary changes and antibiotics, there are times when treatment through surgery can bring the patient the greatest relief and should be considered," says Dr. Davidson. "For patients who have ongoing episodes of diverticulitis, we offer them elective surgery in between acute attacks to avoid the necessity for colostomy, which might be required if they should need emergency surgery. Performing the surgery during a quiet interval also increases the likelihood



that the surgery can be completed laparoscopically rather than using open techniques."

Colon Polyps

About 90 percent of colon and rectal cancers start initially as noncancerous polyps. Therefore, early detection of benign polyps and their prompt removal have become key in the fight against colon cancer. According to the American Society of Colon and Rectal Surgeons, the development of polyps is one of the most common conditions affecting the colon and rectum, occurring in 15 to 20 percent of adults.

While most colon polyps can be removed easily during a colonoscopy, larger ones may require surgical removal, says Dr. Davidson.

"Laparoscopic colectomy is often the procedure of choice for removal of large, broad-based polyps, since it is minimally invasive and offers a quick recovery," Dr. Davidson says.

Minimally Invasive Surgery

Through laparoscopic colectomy, surgeons can perform delicate colon surgery by creating only three to four tiny incisions, usually about a centimeter or

less in length, in the patient's abdomen. A laparoscope and surgical instruments are inserted through the incisions, and the surgeon is guided by a magnified view of the patient's internal organs, which appears on a television monitor. The diseased portion of the colon is removed and the two ends of the colon are rejoined together using a sophisticated surgical stapler.

In cases involving removal of larger pieces of tissue, incisions of two to three inches may be required. However, laparoscopic colectomy is still preferable to traditional open intestinal surgery, which is highly invasive, requiring incisions of up to 12 inches in length.

The benefits of minimally invasive colon surgery are numerous:

- ➔ Shorter hospital stay (three to five days instead of five to 10 days following a traditional procedure)
- ➔ Less discomfort
- ➔ Faster return to a solid diet
- ➔ Better cosmetic results
- ➔ Quicker return of bowel function
- ➔ Quicker return to normal activities

According to Dr. Davidson, early studies indicate that laparoscopic colectomy may also be effective for the removal of colon cancer.

"While in the past laparoscopic colectomy was limited to benign conditions, we have started to utilize this as a treatment approach for malignancy in very select cases," says Dr. Davidson.

For assistance with finding a physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.

Special thanks to Henry Davison, Jr., MD, FACS, President of the Medical & Dental Staff, Princeton HealthCare System, for contributing to this article.



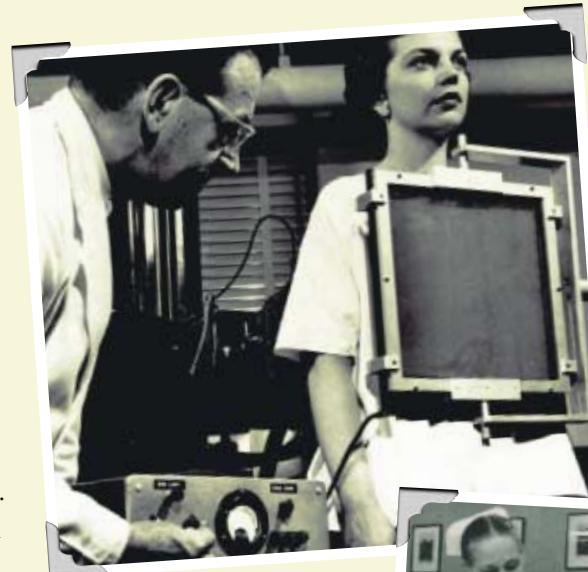
UMCP— From Converted Farmhouse to Teaching Hospital

University Medical Center at Princeton (UMCP) will mark its 85th anniversary in November 2004. Much has changed since its humble beginnings in 1919, when a farmhouse located on five acres on Witherspoon Street was converted into Princeton Hospital, a 22-bed hospital with one operating room and two sun parlors.

Surplus military beds were purchased from the War Department to furnish Princeton Hospital's wards and a handful of private rooms, and patients on the ground floor were transported to the second-floor operating room in a creaky, old elevator equipped with hand pulleys.

In that first year, Princeton Hospital's five physicians provided care to 363 patients, and performed their first major operation—repairing a young boy's fractured skull, the result of being stepped on by a horse. An additional \$15 was added to the hospital's coffers that year when it sold the hay

"Over the years, the hospital has continually shown its readiness to change, to modernize when necessary, and to adapt to changing circumstances and needs," says Dr. Harvey Rothberg.



harvested from the grounds of the former dairy farm.

Eight-five years later, as part of Princeton HealthCare System, UMCP boasts state-of-the-art facilities, and has grown into a 310-bed acute care teaching hospital with a complete range of inpatient, outpatient and emergency services. A University Hospital affiliate of UMDNJ-Robert Wood Johnson Medical School and an affiliate of The

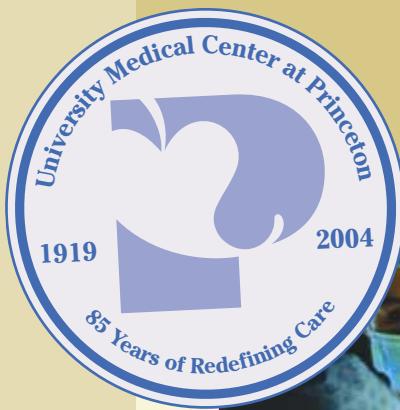
Cancer Institute of New Jersey, UMCP's more than 800 physicians and dentists, accomplished nurses and other healthcare professionals provide patients and their families with an exceptional level of personalized care and comfort. In 2003, the University Medical Center delivered 1,891 babies and handled 35,556 Emergency Department visits.



In celebration of 85 years of community service, UMCP hosted a seminar on stem cell research. The event was sponsored by the Princeton HealthCare System Foundation, and featured Douglas Melton, MD, a noted professor from Harvard University and the Howard Hughes Medical Institute.

A special ceremony was held to dedicate and name the building at 281 Witherspoon Street, on the UMCP campus in honor of the physician who served as the hospital's first president of the Board of Trustees —

Dr. Charles Browne. The Dr. Charles Browne Medical Pavilion recognizes Dr. Browne's commitment to the hospital and the Princeton community, since he served as mayor when the medical facility was established. Anniversary celebrations were held for employees, physicians and volunteers at UMCP and other PHCS units.



In the Numbers

In 2003, there were:

- **1,891 births at University Medical Center at Princeton**
- **35,556 visits to the Emergency Department**
- **15,364 visits to the Outpatient Clinic**



Those attending A November Night, the annual fall gala hosted by The Auxiliary of University Medical Center at Princeton, had the opportunity to view a pictorial exhibit highlighting UMCP's 85 Years of Redefining Care. This year's gala, the Vintners Ball, was held at Bristol-Myers Squibb's corporate headquarters in Lawrenceville.

"Over the years, the hospital has continually shown its readiness to change, to modernize when necessary, and to adapt to changing circumstances and needs," says Dr. Harvey Rothberg, a retired physician who has authored books commemorating the hospital's 50th and 75th anniversaries. Dr. Rothberg has been on the Medical and Dental Staff of PHCS for 44 years.



According to Dr. Rothberg, a number of factors and individuals have been instrumental to the hospital's growth and success. These include University Medical Center at Princeton's strong connection with the community (over 11,000 people attended free health-related lectures last year alone, and the hospital boasts a corps of 1,122 dedicated volunteers); exceptional physicians; committed employees; an emphasis on personalized, quality care; a high percentage of medical and dental staff who are board certified in their specialties; the dedication of The Auxiliary of the University Medical Center at Princeton; and the generous contributions of donors.

For more information about UMCP's 85 years of **Redefining Care**, contact the Marketing & Public Affairs Department at 609.497.4191.

Detecting Breast Cancer & Saving Lives

Minimally Invasive Breast Biopsy Procedures

When a woman learns from her physician that she needs a breast biopsy – a clinical procedure for examining a breast lump or abnormality for cancer – the news is often met with understandable concern about the procedure itself and the potential results.

However, breast biopsies can actually offer women greater reassurance and peace of mind as nearly 80 percent of the breast biopsies performed today do not lead to a diagnosis of breast cancer. When cancer is found, breast biopsy can be a powerful tool for effective treatment.

You Are Not Alone

Of the millions of women who undergo mammograms each year, approximately 700,000 receive an abnormal reading that requires further study through breast biopsy.

When breast biopsy is needed, there are a variety of breast biopsy options for women to consider, says Rachel Dultz, MD, FACS, a board certified surgeon and member of the Medical & Dental Staff at Princeton HealthCare System. These

include new minimally invasive techniques that are currently being performed at University Medical Center at Princeton. They minimize pain and scarring, while promoting a highly accurate diagnosis.

"The minimally invasive technique used for breast biopsies allows us to check abnormalities, microcalcifications or densities that are too small to be seen without the trauma of removing tissue," says Dr. Dultz, who handles cases involving breast surgical oncology at UMCP. She is also the medical director of UMCP's new Breast Health Center, scheduled to open in 2005.

"The technique uses stereotactic guidance [which allows the surgeon to view the procedure] to accurately target the abnormality, then a sterile biopsy needle is inserted into the targeted tissue," says Dr. Dultz. "There is minimal scarring, less pain and recovery time. The procedure takes less than an hour and patients can be up and able to drive themselves home."

Mammotome Breast Biopsy System
At University Medical Center at Princeton, physicians utilize the



Breast biopsy is a life-saving procedure that takes less than an hour. Patients recover quickly and are able to drive themselves home.

Mammotome Breast Biopsy System to make a highly accurate diagnosis of a breast abnormality, avoiding the need for extensive surgery. The system also offers advantages for removing or reducing the size of non-cancerous breast lumps, called fibroadenomas, instead of removal through invasive surgery.

The Mammotome System, which has already been used in more than 1.7 million minimally invasive breast biopsy procedures worldwide, works through the use of imaging methods (ultrasound or X-ray) that can detect breast abnormalities or lumps in their earliest stages. Once pinpointed, the physician then guides a probe into the suspicious area of the breast to collect abnormal tissue, which is analyzed by a lab.

This system offers significant advantages for women and men who need breast biopsy. The incision is 1/4 inch, scarring is nominal and the procedure can be performed on an outpatient basis with immediate recovery. Breast biopsies performed through open surgery require a one to two inch incision, result in more external scarring, take one to two hours to complete and involve a recovery time of several hours.

Saving Lives Through Early Detection & Effective Treatment

When breast cancer is detected, your physician will discuss available treatment options with you.

According to Dr. Dultz, sentinel lymph node biopsy (SLN) is an advanced minimally invasive procedure used by physicians at UMCP to help determine



the most appropriate treatment approach for a patient with breast cancer. In this procedure, the physician injects a radioactive dye around the biopsy area. After a few minutes, an incision is made to find the dye stained lymphatic channel through which the dye travels. By tracing this channel, the physician can identify the sentinel node because it is the first lymph node to be stained by the dye. If this node is "positive" for cancer, then the physician knows that the cancer is spreading and can recommend a more aggressive treatment. The procedure spares many patients more extensive surgery that involves the removal of all lymph nodes, minimizing discomfort, recovery time and the potential for post-operative complications.

Fortunately, the vast majority of women who undergo breast biopsy can expect a cancer-free diagnosis. For those who do

have breast cancer, early detection through breast biopsy and more effective study through sentinel node biopsy can offer life-saving results. According to statistics from the American Cancer Society, when detected early, the five-year survival rate for breast cancer is as high as 95 percent.

For assistance with finding a physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.

Quick Fact:
University Medical Center at Princeton is the first hospital in Mercer County to receive accreditation from the American College of Radiology to perform stereotactic breast biopsy.



University Medical Center at Princeton

Breast Health Center

Redefining Care.

Compassionate care and comprehensive treatment within one easy-to-access, state-of-the-art facility

- ➔ Education
- ➔ Preventive Strategies
- ➔ Detection & Risk Assessments
- ➔ Coordination of Care

State-of-the-art Technologies & Procedures

- ➔ Mammography
- ➔ Computerized Tomography (CT)
- ➔ Magnetic Resonance Imaging (MRI)
- ➔ Breast Ultrasound
- ➔ Minimally Invasive Breast Biopsy

Opening in 2005!



Surgical Options for Overcoming Obesity

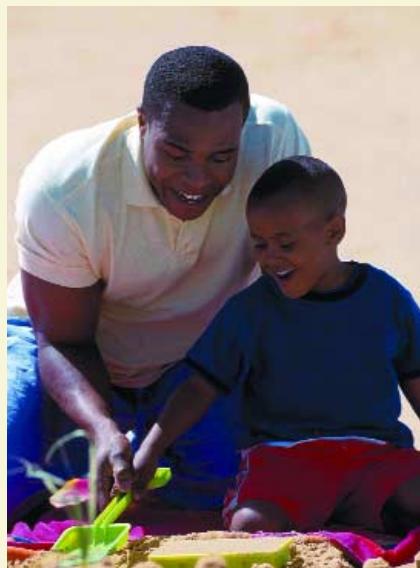
Today, approximately 97 million Americans, or more than one-third of the adult population, are obese. Of those, 5 to 10 million suffer from morbid obesity – a debilitating and chronic disease generally characterized by being 100 pounds or more over one's ideal body weight.

Morbid obesity is considered a serious health risk that may shorten an individual's life expectancy and limit his or her ability to engage in life's activities. Due to a variety of factors including genetics, environment (such as where you work and live), metabolism, eating disorders and medical conditions, traditional forms of weight loss – dieting, behavior modification and exercise – have been ineffective at helping morbidly obese individuals achieve and sustain weight loss. In fact, according to the National Institutes of Health, more than 90 percent of all people who participate in non-surgical weight loss programs will regain their weight within one year.

Bariatric surgery, which has captured national attention for helping formerly obese celebrities lose weight, has emerged as a successful option for overcoming obesity. The surgery also offers promise for helping patients recover from some of the most damaging health effects of being overweight such as diabetes, high blood pressure and infertility.

While bariatric surgery is considered a major surgery, there are minimally invasive procedures that offer the benefits of less discomfort, fewer wound

complications, a shorter hospital stay, quicker recovery and reduced scarring, says Robert E. Brolin, MD, FACS, a board certified surgeon and Medical Director of the Bariatric Surgery Program at University Medical Center at Princeton. These include laparoscopic gastric bypass and laparoscopic stomach banding. University Medical Center at Princeton is the first hospital in Mercer County to offer patients both of these surgical alternatives.



Laparoscopic Gastric Bypass Surgery

Laparoscopic gastric bypass is a short, but complex procedure that is performed by

skilled, specially trained surgeons. It can be performed at a relatively low risk and has an excellent long-term weight loss track record, Dr. Brolin says.

"The preferred method by many patients is the laparoscopic approach, and among surgeons who perform both types of procedures, most choose laparoscopic except in unusual circumstances," says Dr. Brolin.

The objective of bariatric surgery is to help patients lose up to 75 percent of their excess weight, Dr. Brolin says.

Surgeons at UMCP perform laparoscopic gastric bypass using five or six tiny incisions instead of one large one. By using a laparoscope (a thin, flexible fiberoptic instrument) and surgical instruments that are inserted into the abdomen through the incisions, surgeons have a better view of the surgery site. During the procedure, the surgeon staples the stomach to create a stomach pouch and the remainder of the stomach is stapled shut. The small intestine is divided so that a portion connects directly to the stomach pouch, helping to bypass calorie absorption. The other end is reconnected to the intestine.

Patients usually have a much shorter length of hospital stay (usually two nights), less post-operative pain, reduced risk of hernias and infections, and less scarring. In open surgery, the hospital stay is five to seven days.

Laparoscopic Stomach Banding

Laparoscopic stomach banding is an alternative to laparoscopic gastric bypass for those who are concerned about cutting and stapling of the stomach or the intestines. In this procedure, an adjustable band is surgically placed around the patient's stomach.

The band is tightened to create a smaller stomach pouch that restricts what a patient can consume while giving them the feeling of being comfortably full after eating small amounts of food. Much like a belt, the band can be adjusted to suit each individual's needs and weight loss goals. The band is removable.

The procedure is low risk and requires only an overnight hospital stay. Typically, patients can expect to lose up to 40 percent to 50 percent of their excess weight. While these results are promising, gastric bypass is considered the gold standard for weight loss. Gastric bypass patients can expect to lose as much as 65 percent to 75 percent of their excess weight.



Making a Decision

The decision to undergo bariatric surgery and the procedure that is selected are highly personal choices that should be made after speaking with family physicians, loved ones and friends and after developing an understanding of the risks and benefits of surgery. Those who

have had the procedure have reported remarkable improvements in their quality of life, social interactions, psychological well-being, employment opportunities and economic condition.

No matter which procedure a patient

may select, Dr. Brolin advises candidates that bariatric surgery is considered a tool to help them achieve their weight loss goals. In addition to a skilled surgical team, UMCP offers a continuum of health and wellness services to support individuals who have had bariatric surgery by helping them with lifelong weight management. These include nutritional guidance, counseling, fitness programs, lifestyles programming and support groups.

For more information about the Bariatric Surgery Program, call 609.430.7761.

Free Community Education Events

OVERCOMING OBESITY: Today's Surgical Options for Weight Loss

Thursday, January 13, 2005
6 to 8 p.m.

Hyatt Regency-Princeton, NJ

Saturday, January 22, 2005
1 to 3 p.m.
Ramada Inn
Toms River, NJ

Saturday, March 12, 2005
1 to 3 p.m.
Conference Rooms A & B
University Medical Center at Princeton, Princeton, NJ

Registration required. For more information or to register, call the Princeton HealthCare System Community Education & Outreach Program at 609.497.4480 or visit our online community education calendar at www.princetonhcs.org.

Obesity-Related Health Conditions

Bariatric surgery has proven to be effective in the battle against these obesity-related health conditions:

- ➔ Type 2 diabetes
- ➔ Osteoarthritis of weight-bearing joints
- ➔ Depression
- ➔ Urinary stress incontinence
- ➔ Gastroesophageal reflux (GERD)/heartburn
- ➔ High blood pressure/heart disease
- ➔ Sleep apnea/respiratory problems
- ➔ Infertility
- ➔ Menstrual irregularities

Replacing Worn-Out Knees

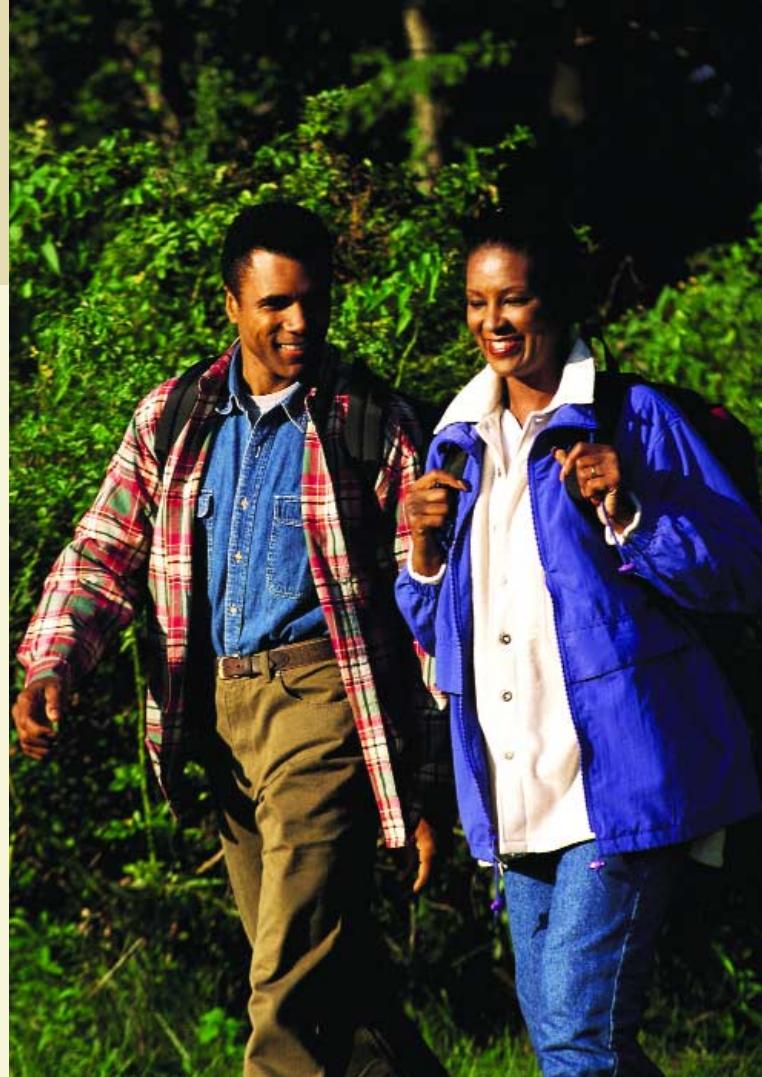
Our knees wear out for a variety of reasons – arthritis, injuries, and the typical wear and tear from life's activities.

The knee is a complex joint that not only bends but also must rotate in three different dimensions as we twist, pivot and run through our lives. The knee is also the largest joint in the body and when it wears out, it can lead to significant lifestyle challenges. Activities that once seemed effortless like walking, driving, getting up from a chair, and climbing stairs can become overwhelming challenges. A simple trip to the mall can become a painful experience, and as a consequence, quality of life can diminish dramatically.

Remedies for arthritis of the knee run the gamut from medications, therapies and exercise to pain control, bracing, injections and ultimately, surgery for a severely degenerated joint. The American Academy of Orthopaedic Surgeons estimates that more than 300,000 people in America will undergo knee replacement surgery this year. At University Medical Center at Princeton alone, more than 500 joint replacement procedures will be completed by the end of 2004.

According to W. Thomas Gutowski, MD, AAOS, Chief of Orthopedic Surgery at Princeton HealthCare System and a board certified orthopedic surgeon, there has been a notable increase in the number of people who are seeking joint replacement.

"People are no longer willing to compromise their lifestyle by using canes, crutches or dramatically shrinking their activity level," Dr. Gutowski says. "While non-surgical options and alternatives always remain open to any patient, many individuals now feel that the potential benefit of a much less painful, freely moving, and exercise-tolerant joint replacement is a better alternative than they did in the past. Essentially, they are no longer willing to live with the consequence of a severely arthritic knee and turn to more innovative knee replacement surgery to overcome this disability."



When Is Surgery Necessary?

According to Dr. Gutowski, partial or total knee replacement is only considered when arthritis or degenerative joint diseases have failed to respond to traditional treatments like anti-inflammatory medication, injections, physical therapy, glucosamine supplementation and other alternative means of treatment.

"For patients who live with constant pain or reduced mobility, *minimally invasive knee replacement surgery offers them an excellent option to relieve their suffering and help them regain mobility and strength as quickly as possible,*" says Dr. Gutowski.

Knee replacement surgery, either partial or full, involves resurfacing the worn out, damaged cartilage occupying the deteriorated surfaces of the knee. This damaged cartilage is removed as thin slivers of degenerated bone, and replaced with metal and plastic components shaped smoothly and

reproducing the patient's own intrinsic anatomy. The very end of the femur (the large bone in the thigh), the upper portion of the tibia (the large bone between the knee and the foot), and the back side of the patella (the knee cap), all typically receive new surfaces so that when the patient walks and bends his or her knee, the previously grinding arthritic surfaces have been removed and are now resurfaced.

In the past, orthopedic surgeons typically used an incision of 10 inches or greater to gain access to the joint and replace the knee. Over the past two years, surgeons at

University Medical Center at Princeton have championed minimally invasive knee replacement techniques which employ much shorter incisions, operations which spare the quadriceps muscle, and on occasion, use computer-guided technologies to aide in making more accurate bone cuts.

In doing so, says Dr. Gutowski, "Our patients have experienced diminished pain following surgery and more rapid restoration of motion, flexibility and strength. They also tend to get back to their lives more quickly."

Not all patients are candidates for minimally invasive techniques. For instance, a patient who has had multiple prior operations may have far too much scar tissue to employ these more innovative techniques. Nevertheless, Dr. Gutowski says all patients are carefully evaluated on initial screening, and in the majority of cases, these more innovative, minimally invasive surgeries can be done.

"We can reduce the incision from 10 inches to 4 1/2 to 5 inches for full knee replacement and to about 3 1/2 inches for the partial knee replacement surgery in most cases," says Dr. Gutowski. "At University Medical Center, we have been working very hard over the last several years to ensure that the quality of our knee replacement surgery continues to be world class."

For assistance with finding a surgeon or physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.



Orthopedic Care Among State's Top 10

University Medical Center at Princeton has been recognized for clinical excellence in orthopedics, according to a recent study released by HealthGrades, the nation's leading healthcare quality company.

HealthGrades has named University Medical Center at Princeton the **top-rated provider of overall orthopedic care and joint replacement surgery in the Trenton Area.** Because of the exceptional quality of our care, University Medical Center at Princeton has also been ranked among the **top 10 hospitals in New Jersey for overall orthopedic care and joint replacement surgery.**

communityfocus

Health Education Calendar Nov.~Dec. '04

Programs are free and registration is required unless otherwise noted. Please register online at www.princetonhcs.org/calendar.html or call 609.497.4480 (unless another number is indicated).

LOCATIONS

Directions available online at www.princetonhcs.org

University Medical Center at Princeton
253 Witherspoon Street
Princeton, NJ 08540

Princeton Fitness & Wellness Center
Princeton North Shopping Center
1225 State Road
Princeton, NJ 08540

CURRENT PROGRAMS

Psychotherapy: Options & Benefits

TUES. November 30 (7 - 8:30 p.m.)
Princeton Fitness & Wellness Center

Although mental health professionals and consumers continue to battle against the societal stigma commonly associated with psychotherapy, this talk-based method of treatment is becoming more widely accepted as treatment for many psychiatric disorders and an alternative to medication. Steven I. Resnick, MD, board certified in psychiatry, will lead this informative and interactive lecture and provide information about psychotherapy options and their benefits to help you or a loved one make an informed decision about treatment.

Aarogya Mela: An Indian American Health Fair

SAT. December 4 (10 a.m. - 1 p.m.)
Chinmaya Mission
95 Cranbury Neck Road, Cranbury
No registration required.

Specifically designed to address the special health needs of the Indian American community, this fair will include screenings, children's activities and door prizes. Chair massages will be available. Meet professionals from Princeton HealthCare System. FREE screenings include:

Blood Pressure • Cholesterol • Glaucoma • Depression

Accurate Diagnosis of Epilepsy in Older Adults

THURS. December 9 (2 – 3 p.m.)
Princeton Fitness & Wellness Center

Join us for this informative discussion with John W. Vester, MD, Chief of Neurology, University Medical Center at Princeton, who will review the symptoms of epilepsy, the criteria used to diagnose this disorder and treatment options. Dr. Vester is board certified in neurology and electrodiagnostic medicine.

CPR AND FIRST AID

Call 609.497.4119 or visit www.princetonhcs.org/calendar.html to register for CPR and first aid classes.

Pediatric CPR for Family & Friends
BLS for Healthcare Providers - Recertification
BLS for Healthcare Providers - Full Course
Heartsaver Adult & Pediatric CPR



CHILDBIRTH AND FAMILY

Call 609.497.4119 or visit www.princetonhcs.org/calendar.html to register for childbirth and family classes.

Prenatal Breastfeeding Class
Breastfeeding Support Group
Baby Care
Bright Beginnings
Maternity Tours
Childbirth Preparation
Accelerated Childbirth Preparation
Childbirth Preparation Review
Living With Your Infant - Part 1 (Birth to 4 months)
Sibling Class
Car Seat Safety Checks



EVENTS FOR SENIORS

WEST WINDSOR TOWNSHIP

First Friday Health Screenings
Body Fat Analysis
FRI. December 3 (1 - 2:30 p.m.)
West Windsor Senior Center
271 Clarksville Rd., Princeton Jct.
Please call 609.799.9068



K. HOVNANIAN'S FOUR SEASONS AT HISTORIC CRANBURY

Princeton HealthCare System and K. Hovnanian Homes have joined together to bring timely health information to the residents of K. Hovnanian's® Four Seasons at Historic Cranbury and its neighbors. All programs take place in the clubhouse in the community. For information, call 609.497.4480.

Maintaining Strength and Agility: Prevention of Musculoskeletal Injuries

TUES. December 14 (1:30 - 3 p.m.)
K. Hovnanian's Four Seasons at Historic Cranbury, Clubhouse
1 Labaw Drive, Cranbury

Richard Levandowski, MD, board certified in sports medicine and family practice, will offer recommendations for keeping a well-toned musculoskeletal system and avoiding common injuries. In this interactive presentation, Dr. Levandowski will answer questions about the musculoskeletal system, including those about arthritis and osteoporosis.

MONROE TOWNSHIP

Princeton HealthCare System is pleased to offer educational seminars and screenings to seniors residing in Monroe Township.

For more information, contact the Monroe Township Office on Aging - Senior Center at 732.521.6111 or visit us online at www.princetonhcs.org/calendar.html.

Advances in Parathyroid Surgery

Many people have never heard of parathyroid disease, but it is common — affecting over 100,000 U.S. adults. Its early symptoms — feeling tired, achy, depressed and irritable — are often mistaken for other problems.

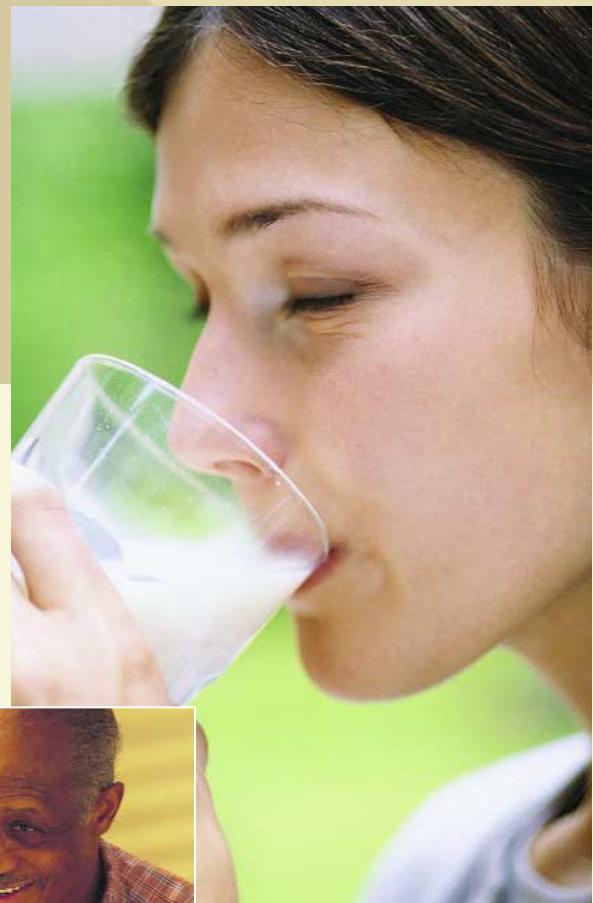
Untreated, parathyroid disease, also known as hyperparathyroidism, can lead to much more serious problems, such as high blood pressure, osteoporosis, kidney stones, peptic ulcers and pancreatitis, says Steven P. Kahn, MD, FACS, a board certified surgeon and Chief of General Surgery at Princeton HealthCare System.

The four pea-sized parathyroid glands are located behind the thyroid gland in the neck. Their job is to secrete parathyroid hormone to regulate the levels of calcium in your blood and bones, help absorb calcium from the foods you eat and help prevent the loss of too much calcium in your urine. When these glands become diseased, they produce excess levels of calcium. This is usually detected in laboratory tests.

Removal Is Safer, Easier

Surgery to remove the diseased parathyroid glands is the standard treatment for parathyroid disease, since medication rarely compensates for the hormone irregularity. In the last three years, surgeons at University Medical Center at Princeton have adopted significant advances in parathyroid removal that make the procedure safer and minimally invasive for the patient, says Dr. Kahn.

In about 88 percent of patients with parathyroid disease, only one of the four parathyroid glands needs to be removed. To guide the surgeon, a scan of the parathyroid is taken prior to surgery. The scan can help the surgeon to determine whether a patient has a single abnormal gland or whether all the glands are enlarged and require examination.



"Just four years ago, we had to make a relatively large incision to determine which gland needed to be removed," says Dr.

Kahn. "Because of new scanning techniques, we can now make that determination before surgery and avoid the exploratory work that required large incisions in the gland area of the neck."

As a result, the surgery is relatively fast, taking only about an hour and 30 minutes to complete. The procedure presents less risk to the patient's nerves, and the level of discomfort experienced by patients is so low that in most cases, only Tylenol or aspirin is needed to control pain post-operatively. Most patients can go home after one day in the hospital.

"We like to keep our patients overnight just to monitor them and measure their calcium levels," says Dr. Kahn. "Although no surgery has a zero risk, this one comes very close."

For assistance with finding a physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.

Varicose Veins

Now You See Them, Now You Don't

As a school teacher, Amy Kramer of East Windsor literally has to be on her toes most of the day, but, as a longtime sufferer of varicose veins, being on her feet all day was causing her considerable discomfort.

"I used to come home from school and have throbbing in my legs," Amy recalls. "I would have to elevate them. They felt heavy and itchy and there were other annoying symptoms."

Those days are gone now, Amy reports, thanks to an incredible new and relatively painless procedure being performed at University Medical Center at Princeton. VNUS Closure is an innovative minimally invasive treatment to help patients overcome the pain, swelling, discoloration and unsightly appearance of varicose veins.

Chronic venous disease of the legs is a common condition that affects people of all races, especially women and senior adults. More than 25 million people suffer from varicose veins, which are caused by a condition known as venous reflux.

"The veins in your legs contain a series of valves that keeps the blood flowing in the correct direction," says Kenneth A. Goldman, MD, FACS, a board certified vascular surgeon and member of the Medical & Dental Staff of Princeton HealthCare System.

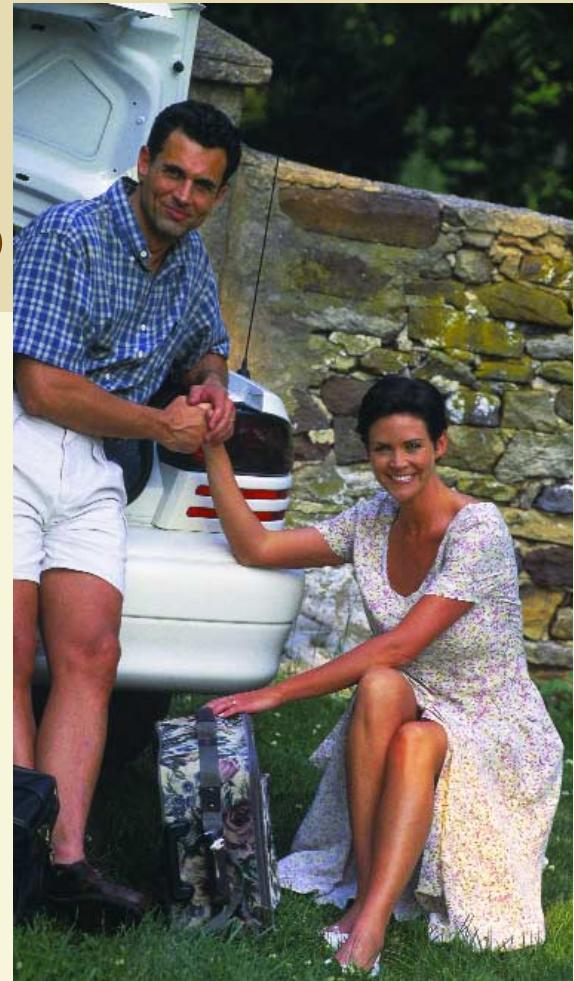
"When the valves in the veins become damaged, blood can pool in your legs and lead to venous reflux and varicose veins."

Remarkable Outcomes

According to Dr. Goldman, VNUS Closure has proven to be a highly effective alternative to traditional vein stripping for the treatment of venous reflux and varicose veins.

"The VNUS Closure technique is quite remarkable," Dr. Goldman observes. "Instead of stripping the veins as we have done in the past, we can simply close the vein using a radiofrequency catheter."

VNUS Closure is performed as an outpatient procedure, and local or regional anesthesia is used to numb the treatment area. A special catheter is then inserted into the vein through a small opening, usually a single needle stick. The Closure delivers radiofrequency energy to the vein wall, causing it to heat, collapse and seal shut. Once the diseased vein is sealed, blood flow becomes rerouted to healthy veins. The catheter is removed, a bandage is placed over the



insertion site and the leg is wrapped for a day or so to aid in the healing process. Patients return home the same day within several hours of having the procedure.

The VNUS Closure procedure is much less painful and less invasive than vein stripping. With this procedure, the surgeon makes an incision in the groin and ties off the veins. A stripper tool is then used to pull the diseased vein out of the leg through a second incision made just above the calf.

University Medical Center at Princeton is the first hospital in Mercer County to offer the breakthrough VNUS Closure procedure as an alternative to vein stripping.

"One of the most exciting aspects of the VNUS Closure technique is that it

"One of the most exciting aspects of the VNUS Closure technique is that it is outpatient surgery with a short recovery period for the patient," says Dr. Goldman. "There is minimal if any bruising, swelling or scarring, and patients are usually up and about resuming their normal activities within a day or two."



Before Treatment



After Treatment



is outpatient surgery with a short recovery period for the patient," says Dr. Goldman. "There is minimal if any bruising, swelling or scarring, and patients are usually up and about resuming their normal activities within a day or two. The closure technique offers great cosmetic results that are as effective as vein stripping in delaying the reappearance of varicose veins."

Life-Changing Results

For Amy, VNUS Closure has changed her life.

"I feel great. My legs feel so much better. I didn't realize how much they were bothering me until I had this procedure done. I can walk long distances, and I don't have any discomfort at all," Amy says. "I have not been able to wear shorts for years, and finally, I'm not embarrassed to wear them in public."

Amy highly recommends the procedure to anyone who is suffering from varicose veins. "I tell everyone about it, because I'm so proud of the results. They were incredible," Amy says.

For assistance with finding a surgeon or physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.

Learn More About VNUS Closure

Varicose Veins – Now You See Them, Now You Don't

A Free Community Education Event
Hosted by Princeton HealthCare System
Community Education & Outreach Program

**Tuesday, January 11, 2005
6 to 6:30 p.m.**

(with screenings to follow)
Princeton Fitness & Wellness Center
Princeton North Shopping Center
1225 State Road, Princeton
Guest Speaker: Kenneth A. Goldman,
MD, FACS

Please wear or bring shorts to change into if you would like a screening.

Pre-registration is required.
Call 609.497.4480 or
visit www.princetonhcs.org for more information.



Finding Relief From GERD

If you have persistent heartburn, you might be one of the seven million Americans — according to the U.S. Department of Health and Human Services — that have gastroesophageal reflux disease or GERD as it is commonly known.

Recognizing the Symptoms of GERD

GERD is a chronic condition characterized by its life-altering impact on the individuals who suffer from it. GERD can interrupt sleep, limit activities and greatly restrict food choices. Painful acid indigestion is the most common symptom of GERD. This usually feels like a burning pain in the upper stomach that can extend to the throat and neck. At times, the only symptoms manifested might be vocal cord polyps or asthma. The pain, when it occurs, can range from mild to debilitating.

GERD occurs when the valve between the esophagus and the stomach (called the lower esophageal sphincter) malfunctions. Typically, this valve opens to allow food to pass into the stomach and closes to stop stomach acids and food from returning to the esophagus. If the valve is abnormally weak, this one-way flow can be disrupted allowing the stomach's contents to flow back up and exposing the sensitive lining of the esophagus to strong digestive acids. GERD can cause inflammation, irritation and ulceration of the esophagus. In extreme cases, pre-cancerous changes of the esophagus can occur.

According to Henry Davison Jr., MD, FACS, a board certified surgeon and President of the Medical & Dental Staff

of Princeton HealthCare System, GERD is treated progressively. Patients are first advised about dietary and lifestyle changes that can help control the condition. These include reducing smoking and avoiding foods and beverages that contribute to GERD, such as chocolate, peppermint, fried and fatty foods and alcohol. Standard treatment for GERD also includes medications such as antacids, H₂ blockers and proton pump inhibitors.

However, for some patients these measures aren't enough, leaving those with severe chronic heartburn and their physicians to consider the benefits of surgery, Dr. Davison says. Fortunately, a minimally invasive surgical procedure being performed at University Medical Center at Princeton is offering individuals with GERD that is unresponsive to medication new hope for finding relief.

New Surgery Techniques Offer Relief

Surgeons at UMCP perform laparoscopic surgery for GERD using the guidance of a miniature telescope and video camera to repair the lower esophageal valve as an alternative to the traditional "open" surgery, which required a large abdominal incision. With the minimally invasive procedure, surgeons make five small punctures for inserting the laparoscope and other surgical instruments. The surgeons

repair the lower esophageal valve through these tiny punctures using the video monitor image provided by the laparoscope to guide them. The goal of the surgery is to restore the functioning of the weak valve and the natural barrier between the stomach and the esophagus by wrapping part of the stomach around the lower esophagus. This prevents the backflow of stomach acids into the esophagus.

Because a larger incision is avoided, most patients are able to get out of bed and walk shortly after surgery. Patients usually return home after a one- to two-day hospital stay and can resume normal activities within two weeks following surgery. Patients having open surgery typically spend five days in the hospital and need a month to completely recover from this more invasive procedure.

According to Dr. Davison, the ultimate outcome of surgery for GERD is to help the patient return to a symptom free, healthy lifestyle and eliminate the need for medications.

For assistance with finding a surgeon or physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.

Revolutionary Surgery Key to Fighting Kidney Disease

A breakthrough surgical procedure now available at University Medical Center at Princeton is helping patients to win the fight against kidney disease. Currently, more than eight million Americans are afflicted with kidney disease including kidney cancer.

"Kidney function is critical to life. When all or a portion of a kidney becomes diseased or infected, surgical intervention may be required to preserve function," says Alexander P. Vukasin, MD, Chief of Urology, Princeton HealthCare System. "A nephrectomy is a surgical procedure to remove a diseased kidney or part of one. We can now perform this surgery laparoscopically."

Surgeons at University Medical Center at Princeton are among the few in Central New Jersey to perform minimally invasive nephrectomy, a revolutionary technique.

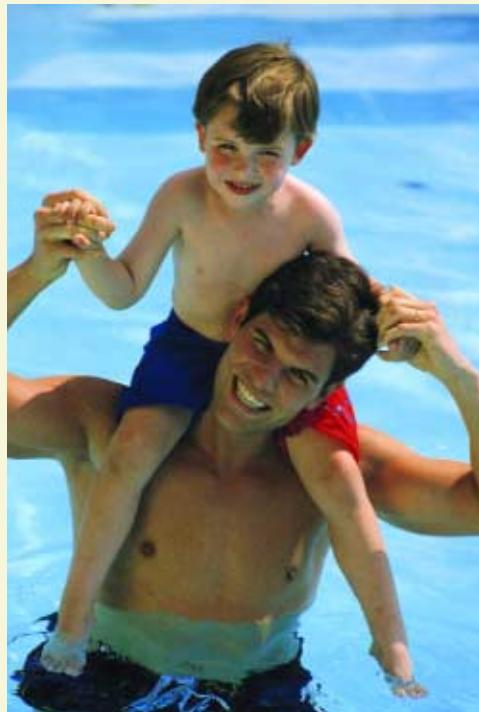
Easier Removal With Successful Outcomes

The kidneys are organs about the size of a fist that filter the blood and control the level of certain chemicals in the blood like hydrogen, sodium, potassium and phosphate. They also eliminate waste in the form of urine.

In the past, the procedure for kidney removal was traumatic.

"We used to make an eight to 10-inch incision in the abdomen or flank, and often had to remove a rib to do this surgery. Now we can work through a few small ports around the belly button, or below the bikini line," says Dr. Vukasin, who is board certified in urology.

As with other minimally invasive procedures, only several small incisions are required. The surgeon inserts a flexible instrument called a laparoscope that helps him or her to visualize the kidney through magnified images that are displayed on television monitors in the operating room. Guided by this technology and using advanced surgical instruments, the surgeon is able to perform kidney removal with considerably less trauma to the patient. The surgeon



frees the kidney from attached blood vessels and either draws the kidney out through another small opening or carefully fragments the diseased kidney into small pieces for removal. The surgery usually takes between two and four hours to complete.

Nephrectomies are most often performed to treat patients with cancer of the kidney, including renal cell carcinoma or transitional cell carcinoma, serious kidney infections, severe stone disease, long-term obstruction and other kidney dysfunctions. For patients who have had kidney surgery in the past or have a large kidney tumor, traditional surgery may be necessary.

Studies indicate that the minimally invasive procedure is just as effective as traditional open surgery at eradicating kidney cancer. Patients who have had a kidney removed by laparoscopic, minimally invasive surgery had virtually the same five-year, cancer-free survival rate and recurrence rate as those who underwent open surgery.

"The five-year survival rate for patients having minimally invasive nephrectomies is excellent – greater than 90 percent," says Dr. Vukasin.

Back Home in Two Days

"With the laparoscopic nephrectomy, our patients are out of the hospital within two days and back to work in several weeks," says Dr. Vukasin. "There's much less pain, fewer days in the hospital, and a much quicker return to normal activities than with the open nephrectomy."

For assistance with finding a physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.



Princeton Surgical Center

Recuperate Safely & Comfortably at Home

Princeton Surgical Center — Princeton HealthCare System's outpatient surgical unit — is dedicated to providing patients with extraordinary care in a relaxed, personal atmosphere. The Surgical Center is designed to provide same-day surgical care for patients who can recuperate safely and comfortably at home.

The newly renovated center, which features four state-of-the-art operating rooms and a minor procedures room, is located on the campus of University Medical Center at Princeton, a full-service teaching hospital and a University Hospital Affiliate of the University of Medicine and Dentistry of New Jersey – Robert Wood Johnson Medical School.

A Commitment to Comfort, Care, Confidentiality

Princeton Surgical Center is dedicated to making the outpatient surgery experience pleasant for patients and their families.

The completely renovated waiting room and reception area were designed with one thing in mind — the comfort of our patients, their families and friends.

In addition, a new, private Physician/Patient Consult Room (used exclusively for pre-operative interviews) allows patients to talk openly with their physicians while protecting their confidentiality and privacy.

Progressive Outpatient Care, Advanced Technology

As more patients choose outpatient surgical procedures, Princeton Surgical Center works to lead the way in advanced, minimally invasive procedures, such as arthroscopic surgery on the knee, shoulder, ankle and wrist; breast biopsy; cataract extraction; ear, nose and throat procedures; plastic surgery; and wisdom teeth extraction.

The Federated Ambulatory Surgery Association (FASA) estimates that over seven million procedures are performed at

ambulatory surgery centers each year. According to FASA, more people are choosing to have their surgeries at ambulatory surgical centers because they offer a high level of professionalism and safety, convenient scheduling and value.

For the past 18 years, Princeton HealthCare System has provided outpatient surgery through Princeton Surgical Center, a dedicated same-day surgical unit, says Administrative Director James Demetriades. Princeton Surgical Center was the first ambulatory surgical center in Mercer County. The center opened its doors in 1986 and since then has been providing same-day surgical care for patients who recuperate at home.

"We are committed to serving the healthcare needs of our community by combining skilled surgical care with sophisticated technologies and a safe, personal atmosphere," Demetriades says.

Exceptional Care From an Extraordinary Team

Princeton Surgical Center is staffed by an experienced team of professionals selected for their expertise in caring for patients undergoing outpatient surgery.

Supervised by a Medical Director, our team includes board certified anesthesiologists, board certified pediatric anesthesiologists, and nurses who hold special certification. "We strive to make each patient's experience a positive one," Demetriades

says. "We have an exceptional team of board certified surgeons and anesthesiologists. Our registered nurses are also highly skilled holding certifications in such key areas as cardiac life support, pediatric advance life support, post-anesthesia and ambulatory peri-anesthesia."

The Surgical Center maintains a high nurse-to-patient ratio, and all staff members are skilled in the latest surgical procedures and use state-of-the-art medical equipment.

Accreditation & Top Quality Ratings

The center's dedication to excellence has been recognized by the Joint Commission on Accreditation of Healthcare Organizations. Princeton Surgical Center also maintains consistently high patient satisfaction scores and quality ratings, as reported by Press Ganey Associates, the healthcare industry's leading performance measurement and improvement firm. If you need same-day surgery talk to your doctor about Princeton Surgical Center.

For more information, contact Princeton Surgical Center at 609.497.4380.

Procedures Performed at Princeton Surgical Center

- ➔ Cosmetic Surgeries
- ➔ Dental Surgeries
- ➔ Ear, Nose and Throat (ENT) Surgeries
- ➔ Eye Surgeries
- ➔ General Surgeries
- ➔ Gynecologic Surgeries
- ➔ Orthopedic Surgeries
- ➔ Pain Management

Hysterectomy: The Latest Procedure

The most common reason for hysterectomy is heavy or painful menstrual bleeding. If medications or minor surgery are not effective in relieving these symptoms, a hysterectomy can be the best way to return to normal life again. About 700,000 women have a hysterectomy done every year in the United States.

Traditionally, more than 80 percent of hysterectomies are performed through an abdominal incision, usually a "bikini cut" across the lower abdomen or an "up and down" incision that runs from the area above the pubic hair up to the bellybutton. These full incisions can be painful, require a three to five day hospital stay, and result in six to eight weeks of recovery time. Fortunately, a new minimally invasive procedure is offering women a viable option to the traditional hysterectomy.

Minimally invasive hysterectomy, also called laparoscopic hysterectomy, enables women to avoid a lot of the discomfort and scarring caused by traditional "open" hysterectomy. Dr. Luc Lemmerling, board certified obstetrician/gynecologist at

The typical patient returns home within 24 hours and can resume normal activities within several days,

University Medical Center at Princeton (UMCP), along with his associates, Jeffrey Hoffman, MD, and William Besser, MD, have been performing these minimally invasive procedures at University Medical Center for the last four years. Dr. Lemmerling, when explaining the procedure, is excited to point out how this procedure can truly improve the quality of life of his patients. He notes, "Because the patient's bowels are not exposed to the air and are not packed away, recovery is spectacular."

While the patient is under general or regional (spinal or epidural) anesthesia, the surgeon places a telescope (called a laparoscope) through the belly button and works looking at a video monitor. This scope actually makes it possible to view the area more easily than during an open

procedure. Four 1/4 inch punctures are made around the abdomen, and operative instruments are introduced through these small incisions. The uterus is removed in pieces through the belly button with the use of a tool called a "morcellator" that works like a miniature food processor that shaves off strips of the uterine tissue. This tool allows the surgeon to remove fairly large tumors through a tiny cut.

A tremendous benefit of this technique is that it allows for preservation of the cervix. The cervix helps hold together muscles and ligaments that attach to the urinary bladder, the vagina, and the rectum. By preserving the cervix, this may help to prevent the pelvic organs from falling down later in life, reduce urinary incontinence, and although not proven by medical studies yet, may preserve normal sexual satisfaction. Also, because less cutting and tissue manipulation is involved, the chance of

damaging other internal organs such as the bladder is reduced.

The typical patient returns home within 24 hours and can resume normal activities within several days, although she should not lift anything within the first 10 days after the procedure. One patient of Dr. Lemmerling, Marjorie, is happy to share her experience, citing it as one of the most important health decisions she had made in her life: "I had fibroids for several years that continued to grow in number, size, and inconvenience. In fact, sporadic bleeding eventually led to hemorrhaging and I was becoming anemic. At this point, Dr. Lemmerling, whom I trust implicitly, recommended that I have a hysterectomy. He removed multiple tumors, one the size of a five-month-old pregnancy, and he did

this through four tiny incisions. I stayed overnight at University Medical Center at Princeton, my first hospital stay ever, and was impressed by how comfortable it was and how efficient and pleasant the staff were. Although I was sore, the nurses encouraged me and helped me walk to the bathroom that same evening. By the next morning, I was walking the halls unassisted and was discharged that day. While getting in and out of a sitting or prone position was painful for several days, I had resumed all my normal activities and was back to work within 10 days. It has been over a year now since I had the laparoscopic hysterectomy and I feel great."

This procedure does not induce menopause, unless the ovaries are removed as well. Other surgeries can be done the same way and even at the same time (including removal of ovarian cysts, scar tissue, endometriosis, and uterine fibroid tumors), virtually regardless of size.

Notes Dr. Lemmerling, "We have found that minimally invasive hysterectomy is safer than regular hysterectomy when done by experienced surgeons. Most people can go home the next morning. We have even had some women go home the same day and do fine! Most women go back to work within two to three weeks. This surgery requires special equipment and physician training, and while it is not appropriate for patients who have too much scar tissue which can block the view through the laparoscope, I urge women to discuss this hysterectomy option with their doctors."

This article originally appeared in The Princeton Packet on October 1, 2004. Reprinted with permission from Packet Publications.



Surgery Plays a Critical Role in the Ongoing Fight Against Lung Cancer

Lung cancer remains the leading cause of cancer deaths among men and women in the United States today, according to the American Lung Association.

However, with early and effective treatment, the chances for overcoming this disease are much greater. Early-stage lung cancer can be cured with surgery in 75 percent of the cases, observes Luis D. Berrizbeitia, MD, FACS, FCCP, a thoracic surgeon with the Medical & Dental Staff of Princeton HealthCare System.

To help in the fight against lung cancer, surgeons at University Medical Center at Princeton are at the forefront of advanced minimally invasive surgical techniques that are critical to removing lung malignancies while enhancing the patient's recovery by reducing trauma, blood loss and pain, says Dr. Berrizbeitia, who is board certified in surgery and thoracic and cardiac surgery.

The Video Assisted Thorascopic Surgery (VATS) Advantage

At University Medical Center at Princeton, surgeons perform video assisted thorascopic surgery (VATS) to remove lung tumors. During the procedure, between one and four small



incisions are made on the chest for the insertion of surgical instruments and a thoracoscope, a special camera of about 10 to 12 millimeters in diameter. The scope enables surgeons to view a two-dimensional video image of the thorax (chest cavity) on video monitors for more accurate and precise removal of a malignancy.

"This minimally invasive surgery was first done years ago using basically a tube and a magnifying glass," says Dr. Berrizbeitia.

"As technology evolved we were able to attach a tiny TV camera to the optical device, making viewing and exploration more flexible."

One of the major advantages of VATS is that it can replace the traditional thoracotomy, which involved significant pain and scarring for patients requiring lung surgery. Traditional thoracic surgery of this type most often required an open incision up to 15 centimeters in length. The procedure could take up to five hours and require a four to five day stay in the hospital.

The minimally invasive surgery available at UMCP, according to Dr. Berrizbeitia, reduces surgery time and minimizes a patient's recovery period.

The scope enables surgeons to view a two-dimensional video image of the thorax (chest cavity) on video monitors for more accurate and precise removal of a malignancy.

Video assisted thorascopic surgery is most often used on patients with tumors or malignancies. A biopsy and exploration can generally be performed using these increasingly small cameras as well. Patients with other lung diseases, such as emphysema, chronic obstructive pulmonary disease or fibrotic lung disease, who typically were not considered candidates for surgery, can now have the operation successfully with less post-operative pain and complications.

For assistance with finding a physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.

Cancer Management at UMCP

As a Clinical Research Affiliate of The Cancer Institute of New Jersey with accreditation from the American College of Surgeons Commission on Cancer, University Medical Center at Princeton is committed to providing patients in our Cancer Program with outstanding clinical care and exceptional personal caring. Patients can expect individualized treatment from a multidisciplinary team of experts who are involved in all aspects of their care. UMCP combines highly personal attention with state-of-the-art technologies and a full continuum of health and wellness resources to support cancer patients throughout their care and recovery. For more information about UMCP's Cancer Program, call 609.497.4475.



Sinus Surgery

Nearly 37 million people suffer from sinus infections each year.

Those who have had sinus infections know the misery they can cause. Sinusitis can cause headaches, facial pain and stuffy, drippy noses. In many cases, sinus infections are the result of nasal irritations or swelling caused by colds or allergies and nasal obstructions like polyps or deviated septums.

Fortunately, antibiotics are often enough to successfully treat a sinus infection. While otolaryngologists (head and neck surgeons) usually advocate the use of antibiotics to alleviate most chronic sinus infections, there are times when surgery is warranted, says David Goldfarb, DO, Chief, Section of Otolaryngology, University Medical Center at Princeton.

Surgery is most often prescribed for patients who suffer from chronic sinusitis and the infection does not respond to antibiotics, lingering for days, weeks or even months. Chronic sinusitis is caused by factors such as resistant bacteria, spreading of the infection into the bone, or development of fungal or yeast infections in response to antibiotic treatment.

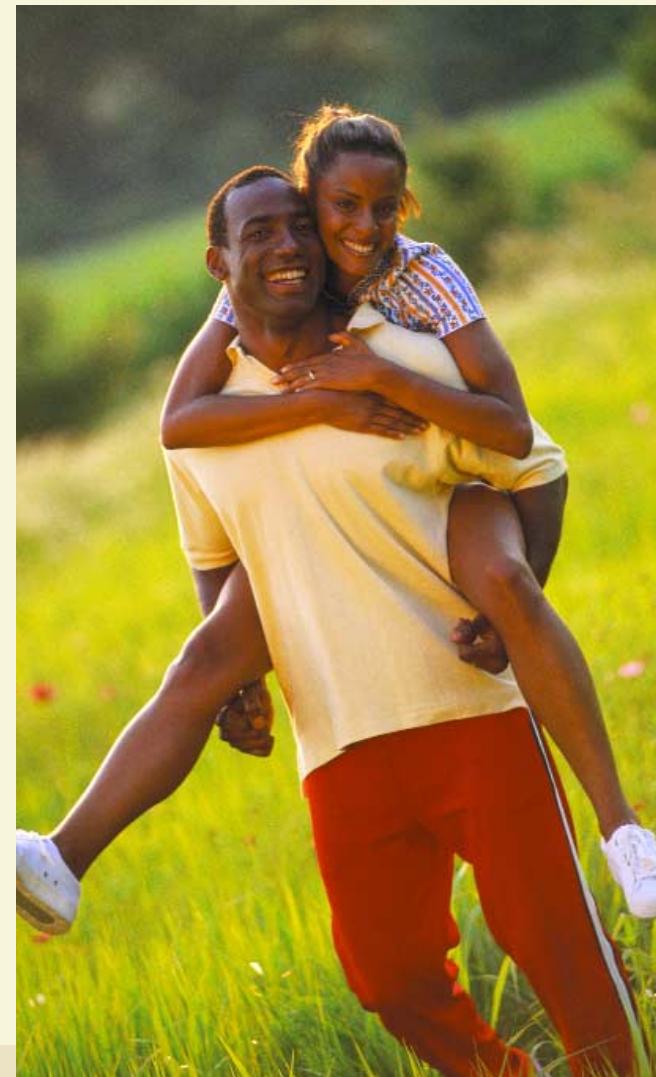
There is encouraging news for those with chronic sinusitis who need surgery. With new minimally invasive technologies available at the University Medical Center at Princeton, the procedure has become more precise, safer and in most cases the patient returns home the same day, says Dr. Goldfarb.

State-of-the-art System Offers Greater Precision and Outcomes

University Medical Center at Princeton has remained at the leading edge of advances in sinus surgery technologies since the 1990s.

According to Dr. Goldfarb, the University Medical Center recently acquired the newest generation InstaTrak stereotactic

guidance system, further enhancing the results of endoscopic sinus surgery. The system is used in conjunction with a preoperative CAT scan and an electromagnetic headset which is placed on the patient. The patient wears the headset during the CAT scan and surgery. During the surgery, the headset automatically aligns the computerized images with the patient's anatomy. Working together, these highly sophisticated technologies support greater surgical precision by allowing surgeons to see a three-dimensional working area of the inside



With new minimally invasive technologies available at the University Medical Center at Princeton, the procedure has become more precise, safer and in most cases the patient returns home the same day

structure of the sinus passage on a video screen.

"I still enter the sinus cavities through the nasal passage using an endoscope, but I'm no longer limited to a frontal view," says Dr. Goldfarb. "That way we can safely remove more of the infected tissue as

opposed to traditional endoscopic surgery and improve the outcome."

The surgery lasts from one to three hours and is performed under general or local anesthesia. Generally, patients return home the same day. The state-of-the-art guidance system is also used for removing certain types of brain tumors, such as pituitary tumors.

For assistance with finding a physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.

Cosmetic Surgery

Innovative Techniques Enhance Appearance While Minimizing Recovery

When individuals choose to have cosmetic surgery, the results can improve self-esteem, enhance a sense of blending well with others, and create an overall feeling that their external appearance matches how they feel internally. Last year, more than 850,000 cosmetic surgical procedures were performed in the United States, according to the American Academy of Cosmetic Surgery.

Cosmetic surgery is, at its core, about making patients feel better about themselves, says Marc A. Drimmer, MD, FACS, Chief of Plastic and Reconstructive Surgery at Princeton HealthCare System. Dr. Drimmer is a board certified plastic surgeon.

Like many other forms of surgery, minimally invasive techniques and innovations in technology and surgical instruments have helped to make cosmetic surgery safer while easing each patient's recovery and enhancing personal success, says Dr. Drimmer. The result of minimally invasive cosmetic surgery is nearly an immediate improvement in appearance and a fast return to work and normal activities.

University Medical Center at Princeton currently offers a multitude of innovative, minimally invasive cosmetic procedures, which are performed by surgeons on an outpatient basis.

Endoscopic Forehead Lift

The procedure eliminates frown lines, raises the eyebrows, lifts the upper eyelids and tightens the forehead, reversing the signs of aging. Four very small incisions are made behind the hairline. The forehead is raised and held in place by a small, triangular endotine clip. The procedure takes between 45 minutes and an hour. Recovery is one week.

Mid-face Lift

The procedure raises the mid-face region. Many younger patients who wish to obtain a more youthful appearance select a mid-face lift rather than a traditional face lift which is much more invasive requiring incisions in front of and behind the ear. The procedure takes an hour to an hour and a half.

Recovery is one week.



Neck Lift

The procedure tightens the neck and removes unwanted fatty deposits. The small incision can be made behind the ear. The platysma muscle which runs on either side of the midline of the neck is then tightened with sutures to give the neck a tighter look and feel. The surgery lasts between 45 minutes and one hour. Recovery is seven to 10 days.

Liposuction

Minimally invasive liposuction can be performed on the neck, arms, breasts, back, abdomen, flanks, hips, thighs, knees and even the lower leg. The procedure takes between 45 minutes and two hours, depending on the focus of the surgery. The contouring procedure generally requires two or three very small incisions. Recovery time varies based upon the area of focus.

Endoscopically Assisted Augmentation

The minimally invasive procedure for breast enhancement allows for the smallest of incisions. The implant is folded. Upon placement underneath the pectoral muscle, it is filled with saline. The procedure is generally performed on an outpatient basis. Recovery is four to five days.

Selecting a Cosmetic Surgeon

Choosing a qualified surgeon is an important component of ensuring the safety and success of a cosmetic procedure. Marc A. Drimmer, MD, FACS, Chief of Plastic and Reconstructive Surgery at Princeton HealthCare System recommends the following:

- Check the surgeon's experience and board certification.
- Request before and after photographs. The photographs can give you some indication of past successes (though each patient is different and exact results cannot be guaranteed).
- Make sure you are comfortable with the personal rapport between you and the surgeon.



Minimally Invasive Abdominoplasty

The procedure is generally performed to repair damaged abdominal muscles in women after childbirth. The rectus muscles, which are together in normal sized adults and form what is commonly referred to as the "six-pack," split apart during pregnancy. Through this minimally invasive procedure, the rectus muscles are repaired. Once the healing power of the body has worked, women regain their pre-pregnancy form. Some patients may even see an improvement.

The procedure takes approximately 45 minutes to an hour and a half. Most patients are up and walking the next day. The procedure can be performed on an outpatient basis; however, in some cases a physician will ask the patient to stay overnight as an added precaution.

For assistance with finding a physician, visit Princeton HealthCare System's online Physician Directory at www.princetonhcs.org or call 609.497.4197.



Easing the Transition to Home

continued from back page

Princeton HealthCare System Medical Equipment

Princeton HealthCare System Medical Equipment is dedicated to meeting the home health needs of children, adults and caregivers by providing a full range of specialized medical equipment combined with knowledgeable in-home support. Most items can be rented or purchased.

Quality equipment includes mobility devices, such as crutches, walkers, wheelchairs and scooters, as well as home respiratory products, such as personal and portable oxygen systems and nebulizers. In addition, the program offers traditional medical equipment such as hospital beds, lift chairs, bathroom safety products and breast pumps.

"We're extremely focused on addressing our patients' needs whether they require equipment to assist with their post-surgical recovery or need more long-term support for a medical condition," says Charles Eppelsheimer, Director, Princeton HealthCare System Medical Equipment. "Our highly trained team works closely with physicians, home care providers and others to ensure each individual receives the medical equipment they need, exactly when they need it."

PHCS Medical Equipment offers in-home support, follow up and 24-hour emergency assistance. For more information, call 609.844.0221.

CLARIFICATION The spring 2004 edition of Health Focus reported on the availability of 24-hour, on-call emergency neurosurgery coverage in the Emergency Department of University Medical Center at Princeton. These services include emergency neurosurgery for cases of acute spinal cord compression and intracranial hemorrhage, including stroke if surgical intervention is required, and other medical/neurological conditions that require surgical intervention. These procedures are performed by the state's leading board certified and fellowship trained neurosurgeons.

While UMCP is proud to provide this level of care to patients, we wish to clarify to our readers that University Medical Center at Princeton is not a state-designated regional trauma center. Care for cases involving traumatic head injury is properly provided by state-designated regional trauma centers.



Easing the Transition to Home

Even though minimally invasive surgical procedures offer the promise of a quicker recovery, each individual is different in how they respond to surgery. Care or assistance can further ease a patient's transition to home and help them resume life's activities more smoothly. Princeton HealthCare System offers a full continuum of care that is highly personalized to suit each patient's post-surgical needs.

Princeton Caregivers

A program of Princeton HomeCare Services, Princeton Caregivers provides a full range of in-home support from skilled nursing care to assistance with doing the housework. A dedicated and compassionate team of professionals is on-call 24 hours each day, seven days a week. The team includes registered and licensed practical nurses, certified home health aids, homemakers and live-in companions. Services are available on an hourly basis.

"Registered nurses visit each client to conduct a personal assessment of the individual's needs," says Barbara Yost, Executive Director, Princeton HomeCare Services. "This approach, combined with our commitment to working closely with patients, loved ones and personal physicians, helps us determine the most appropriate professional staff to help as well as the number of hours of care that are needed each day."

Additional services provide by Princeton HomeCare Services include traditional homecare support, hospice care, inpatient hospice care and Lifeline, a personal, push-button emergency response system.

For more information about Princeton Caregivers, call 609.497.4957.

Outpatient Rehabilitation

The Outpatient Rehabilitation Program at University Medical Center at Princeton offers comprehensive services that include assistance with

recovering from orthopedic surgery and injuries. The program has a network of convenient service sites in Princeton and surrounding communities such as Cranbury/Monroe, Montgomery and Pennington. Sites provide advanced therapies and state-of-the-art equipment promoting integration of therapeutic exercises on kinetic equipment.

"Our program is very comprehensive and focuses on achieving functional results. We help patients regain their strength and vital functions following surgery," says Carol Keyes, Acting Director, Outpatient Rehabilitation.

Care is provided for both adults and children by highly skilled therapists including those with special credentials in physical, occupational and speech therapies; acupuncture; lymphedema management; athletic training; and ergonomics.

The program also offers care for medical conditions and disease recovery such as stroke, arthritis, trauma, Parkinson's disease, carpal tunnel syndrome and Multiple Sclerosis.

For more information, call 609.497.3045.

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Princeton HealthCare System 253 Witherspoon St. | Princeton, NJ 08540 | 1.866.460.4PRN

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253 Witherspoon Street | Princeton, NJ 08540

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