

Transforming Our Community Through Education and Research

Rush University Medical Center | Community Benefits Report 2011



Leadership Message



Academic medical centers like Rush provide patient care; educate future doctors, nurses and other care providers; and conduct research pertaining to the causes and prevention of diseases. What varies among academic medical centers is what drives their mission and, therefore, the overall focus of their work. At Rush, our mission is to provide the very best care for our patients.

Our education and research endeavors, community service programs and relationships with other hospitals are dedicated to enhancing excellence in patient care for the diverse communities of the Chicago area now and in the future. Our education and research endeavors are fully integrated with our patient care activities — so many of the physicians, nurses and other clinicians who treat patients at Rush University Medical Center are also faculty members at Rush University and investigators in our research programs.

What does this have to do with community benefits? Everything. With all our efforts directed toward improved patient care — whether in the hospital or in the community — our clinicians are constantly striving to come up with novel treatments for disease and new community-based programs for prevention, as well as other ways to enhance patients' well-being. And an integral part of our singular drive toward enhancing patient care is nurturing a culture of respect and innovation: furthering the field of medicine while treating patients with the same level of care, regardless of their gender, race or ability to pay for services.

Year after year, the same spirit that fosters innovation and respect among researchers, clinicians and students cascades throughout the Medical Center, manifesting itself in the many ways Rush and its employees, faculty and students contribute to the community. The fiscal year that ended June 30, 2010, has been no different. The value of the community benefits provided by Rush was more than \$200 million.

We're proud of our staff's efforts in the community — whether it's volunteering medical services to treat victims of the earthquake that ravaged Haiti in January 2010, volunteering in a local shelter for the homeless or conducting research toward a new drug to treat multiple sclerosis. We invite you to read this publication to learn more.



Larry J. Goodman, MD
Chief executive officer

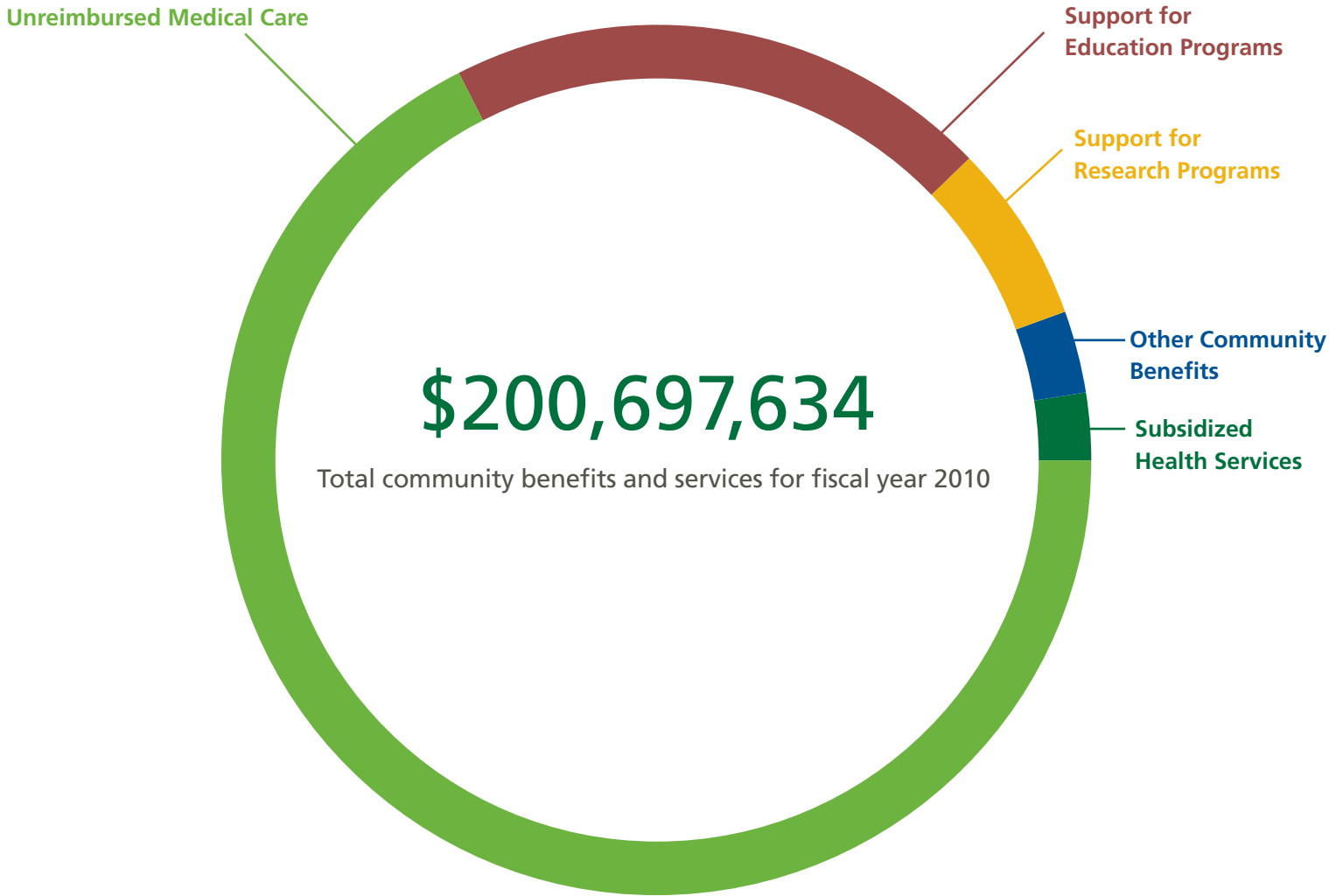
Rush University Medical Center is a not-for-profit health care, education and research institution on Chicago's West Side. We are consistently ranked by *U.S. News & World Report* as one of the top medical centers in the country. The University HealthSystem Consortium, an alliance of approximately 90 percent of the nation's not-for-profit academic medical centers, has consistently awarded Rush the highest possible score for "equity of care" in its annual quality and safety benchmarking study, which measures whether patients receive the same quality of treatment and have the same outcomes regardless of their gender, race or socioeconomic status. Rush's nurses have been awarded Magnet status three times. Rush is the first hospital in Illinois serving adults and children to receive Magnet status — the highest honor of nursing excellence — and the first in Illinois to earn a third four-year designation.

Rush University is also home to one of the nation's top-ranked nursing colleges, as well as graduate programs in allied health and management, and offers more than 64 highly selective residency and fellowship programs in medical and surgical specialties and subspecialties.

Table of Contents

- 2 Our Investment in the Community
- 6 Educating Our Future
Health Care Providers
- 10 Translating Research Into
Better Patient Care
- 14 Joining Forces to Help
the Community
- 18 Mentoring in the Community
- 22 A New Foundation
for Academic Medicine

Our Investment in the Community



Notes

The information in this document is taken from the annual summary report of community benefits prepared for the Illinois attorney general's office. Only a portion of Rush's financial assistance programs meet the definition of "charity care" as defined by the attorney general's office for the annual summary report. Further explanation of terms is available.

Because participation in community service activities (such as providing free care at homeless shelters) by medical students, physicians and other staff is on a volunteer basis, and because these low-income and homeless populations do not receive "charity care" as defined by the Illinois attorney general, the cost of the time of physicians, students, residents and employees at Rush, and the cost of the care they provide, are not reflected in any of the numbers above.

Unreimbursed Medical Care

Charity care and financial assistance — \$17,472,649

This is the cost to provide services to patients who qualified for charity care or financial assistance under one of Rush's policies. Rush provides free or discounted care for those facing significant financial hardship.

Expected payments not received — \$34,059,308

These are expected payments that were not made for health services that Rush provided. Expected payments are those due to Rush after our discounts to insurers, government payers and patients who are responsible for their own bills. Payments that cannot be collected from patients who fail to provide required information to identify them for financial assistance must be categorized as "bad debt."

Costs not covered by reimbursements for Medicare and Medicaid — \$84,372,178

Medicare and Medicaid payments do not cover all of Rush's costs to provide care to patients covered by these programs. This figure is the additional cost to Rush that is not reimbursed by government-sponsored health care.

\$135,904,135

Support for Education Programs

Rush is committed to providing programs to educate and train the health care workforce of the future, even though not all of the costs of this education are covered by tuition and grants. This is the unreimbursed cost to subsidize the education and training of future physicians, nurses and allied health professionals.

\$40,365,868

Support for Research Programs

In keeping with our mission to provide the best patient care, Rush subsidizes health research that focuses on improving patient care both now and in the future. This is done in concert with private funding and federal grants, which do not cover all the costs of conducting research. This amount reflects what was subsidized solely by Rush.

\$13,808,000

Subsidized Health Services

Rush provides services in response to community needs. Because some of these services operate at a financial loss, they must be subsidized from other revenue sources. These services include pediatric and primary care as well as palliative care, among others. Through this approach, which draws upon the services provided within physician clinics maintained at Rush as well as our community service projects, Rush hopes to reach and help people before emergency department visits are required for crisis and medical treatment.

\$4,827,142

Other Community Benefits

Rush makes direct donations to various community and medical organizations throughout the Chicago area. In addition, Rush maintains a staff of interpreters that makes quality patient care more accessible to Chicago's diverse population, and provides volunteer time and resources for various community service activities, including the Science and Math Excellence Network and the Rush Community Service Initiatives Program (RCSIP).

\$5,792,489

Providing Accessible Health Care

Rush believes quality health care should be accessible to everyone. When people come to Rush, they can rest assured that they will receive the absolute best care — even if they can’t afford to pay for that care. Even though the provision of these medical services is frequently at a financial loss to the institution, this is part of the greater community benefit that Rush is proud to offer.

Among the Top Hospital Providers of Medicaid Days in the State

Inpatient Days for Patients Eligible for Medicaid

1. Saints Mary and Elizabeth Medical Center	92,943
2. University of Illinois Medical Center	63,992
3. Advocate Christ and Hope Children’s Hospitals	59,824
4. The University of Chicago Hospitals	58,480
5. Sinai Health System	57,380
6. Rush University Medical Center	57,012
7. John H. Stroger, Jr. Hospital of Cook County	56,306
8. Saint Francis Medical Center	52,413
9. Northwestern Memorial Hospital	52,099
10. Hartgrove Hospital	42,249

Inpatient Admissions for Patients Eligible for Medicaid

1. Saints Mary and Elizabeth Medical Center	18,214
2. Sinai Health System	14,820
3. Advocate Christ and Hope Children’s Hospitals	11,758
4. Mercy Hospital Medical Center	11,500
5. University of Illinois Medical Center	10,703
6. Northwestern Memorial Hospital	9,906
7. The University of Chicago Hospitals	9,684
8. Swedish Covenant Hospital	9,399
9. John H. Stroger, Jr. Hospital of Cook County	9,289
10. Rush University Medical Center	9,092

Source:

Illinois Department of Healthcare and Family Services, state fiscal year 2009. Includes short-term acute care hospitals.

Financial assistance and eligibility services

The largest part of Rush’s total community benefits was nearly \$136 million in unreimbursed, but much needed, care that Rush provided to its patients. That amount includes free care for patients who notify Rush ahead of time that they cannot pay for services (which is called charity care), care for patients who receive services at Rush but later cannot pay their bills (which is called bad debt) and care for patients whose government insurance does not cover all the costs to Rush to provide those services.

Rush has many financial assistance programs to help patients: For example, Rush provides free care for patients with income levels at or under 300 percent of the federal poverty guidelines, a 70 percent discount to patients whose income is up to four times the federal poverty level, and interest-free payment plans. We also offer a catastrophic policy for patients with large medical bills who would not otherwise qualify for financial assistance. Those patients receive a discount up to 70 percent.

In addition, Rush maintains a patient-eligibility service that focuses on ensuring that patients who do not have insurance receive the coverage they may be entitled to under various federal and state programs. This service also assists patients with obtaining other benefits they may qualify for, such as social security and disability, which help patients well beyond their visits to Rush.

Alleviating a Family's Financial Burden by Providing Follow-up Care

On one emotional day last spring, two life-altering events occurred for Amy and Carl Brown: One that brought great joy and relief, another that would ignite a financial crisis that could have jeopardized their young son's health care if not for Rush University Medical Center's financial assistance program.

The roller-coaster journey began 12 years earlier in Missouri, when doctors diagnosed their 3-day-old son Camden with tetralogy of Fallot — a rare congenital heart defect. Characterized by the body's inability to get blood to the lungs, tetralogy of Fallot causes oxygen-poor blood to flow through the body, often resulting in a bluish tint to the skin. Left untreated, the condition can be fatal, but in recent decades, diagnosis and treatment have improved: Like Camden, most babies undergo open heart surgery to correct the defects soon after birth.

Lifelong, specialized medical care, however, is essential. For Camden, this entailed not one but two open heart surgeries at age 12, each to replace the pulmonary valve. But complications related to the valve continued to arise, necessitating a third replacement. The thought of yet another surgery that same year terrified the Brown family. "We couldn't just keep opening up his chest," Amy says.

A Less Invasive Option

So Amy and Camden piled into the car and made the nine-hour trip from their home in Missouri to Rush. And in April 2009, Camden successfully underwent a procedure that didn't need to be open heart. The procedure involved a new valve device, called Edwards Sapien

“

For Camden, it was always about what he couldn't do. Now it's about what he can do.”

— Amy Brown, Camden's mother

THV, as part of the COMPASSION clinical research trial. Instead of opening the chest, doctors inserted the valve using catheters — long, thin tubes that they threaded up through the groin area.

“Every reoperation increases a patient's risk of infection, illness and death; it is a gift to have minimally invasive ways such as this to treat patients like Camden,” says Ziyad M. Hijazi, MD, MPH, director of the Rush Center for Congenital and Structural Heart Disease.

Continuing Access to Care

Amy's happiness about the procedure was soon dampened: On the very same day Hijazi implanted the new valve, Amy's husband lost his job. This and other financial hardships would leave Camden uninsured for the much-needed follow-up visits at six months and one year to ensure that his new valve continued to function as it should. So while the long drive to Rush didn't faze Amy, her family's financial situation and its impact on her son's health did. How could they ensure that Camden received the same level of quality, specialized care during his follow-up?

This concerned Hijazi's staff as well: Intensive, daylong follow-up visits involved advanced testing, including echocardiography as well as MRIs and computed tomography. Upon hearing of the Browns' troubles, Mary Heitschmidt, APN, RN, a nurse at the center, told Amy about Rush's financial



assistance program, which helps cover the medical costs of patients who meet eligibility requirements. The family met the qualifications, relieving not only some of the financial burden but a significant amount of stress.

Though still struggling to regain their financial footing in the midst of the recession, the Browns couldn't be more pleased with Camden's progress over the past year. While sports were never an option for Camden due to health concerns, Hijazi gave him the thumbs up to play football. "For Camden, it was always about what he couldn't do," Amy says. "Now it's about what he can do."



Educating Our Future Health Care Providers

At Rush, the training of physicians, nurses and allied health workers is an integral part of our dedication to the advancement of health care. Students at Rush University are the health care providers of tomorrow. And Rush's commitment to hands-on, community-based clinical service allows students to apply their knowledge, gain new insight and make a difference in the lives of others.

Rush's practitioner-teacher model for education and research gives students the opportunity to learn from world-renowned instructors who practice what they teach — in an environment that fosters research and discovery in providing the best possible patient care. Though student participation in community outreach programs is strictly voluntary and they do not receive academic credit for their involvement, roughly 90 percent of Rush Medical College students volunteer in at least one activity.

Our nation faces alarming shortages of dedicated, well-educated health care professionals at a time when aging baby boomers are creating a rising demand for health care. Rush is committed to providing programs to educate the health care workforce of the future, even though not all of the costs of this education are covered by tuition and grants. In fiscal year 2010, Rush provided more than \$40 million in unreimbursed costs to subsidize the education and training of future physicians, nurses and allied health professionals at Rush Medical College, the Rush University College of Nursing, the Graduate College at Rush University and the College of Health Sciences at Rush University.

Rush is committed to continuing to subsidize education programs to provide highly trained physicians, nurses and allied health professionals, not only to Rush, but to the larger health care community. As part of that commitment, Rush has helped create and advance the following programs that allow students to serve the community as they learn.

Rush is committed to continuing to subsidize education programs to provide highly trained physicians, nurses and allied health professionals, not only to Rush, but to the larger health care community. As part of that commitment, Rush has helped create and advance programs that allow students to serve the community as they learn.

RU Caring

RU Caring is a program that brings together students from all areas of Rush University, including medical, nursing, audiology and occupational therapy students. RU Caring provides them with the opportunity to develop and perfect their clinical, interpersonal and leadership skills while helping the community.

In April 2010, Rush Medical College sponsored the Student National Medical Association (SNMA) 2010 annual conference in Chicago. In conjunction with the weeklong conference, Rush held a community service event called Cease the Silence, Stop the Violence, in which it partnered with SNMA, Chicago Public Schools (CPS) and Malcolm X College. The event centered around a town hall meeting with panelists representing CPS, the Chicago Police Department and various other groups speaking on the topic of making our schools safer. In addition, student leaders organized interactive workshops to help the children and their parents learn how they can help prevent violence in schools.

27

number of clinical and nonclinical community service programs administered through the Rush Community Service Initiatives Program

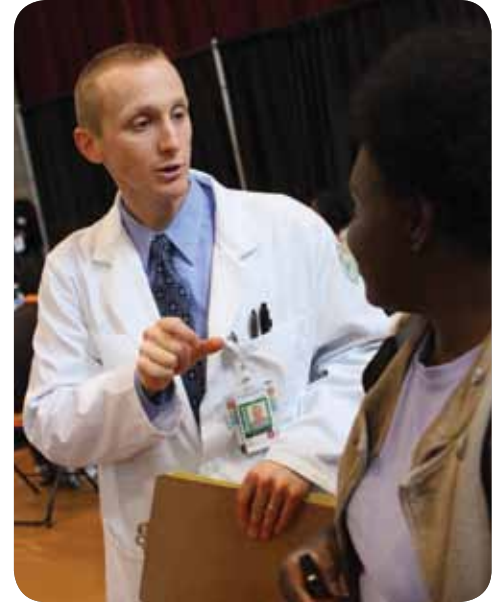
\$40 million

unreimbursed cost to subsidize the education and training of future physicians, nurses and allied health professionals

Rush Community Service Initiatives Program

Rush has developed programs to expose students to the many public health disparities in the Chicago area, while also providing valuable health services to disadvantaged communities. The Rush Community Service Initiatives Program (RCSIP) is a network of ongoing

community service programs — some of which are detailed later in this report — in which Rush medical students volunteer with attending physicians from Rush. The hope is that students exposed to diverse populations will become more culturally competent as providers, which will serve them well as physicians.



RU Caring is a program that brings together students from all areas of Rush University, including medical, nursing, audiology and occupational therapy students. RU Caring provides them with the opportunity to develop and perfect their clinical, interpersonal and leadership skills while helping the community.

90%

percentage of Rush Medical College students who volunteer in at least one community service activity



Rush Student Provides Hands-On Education in Food and Nutrition

It's a sunny Wednesday afternoon, and Rush medical student Vivian Leung is gathering a group of second through eighth graders around the thriving vegetable garden she helped them plant a few months earlier. Under her direction, the 4-foot-by-12-foot plot transforms their schoolyard into an open-air classroom.

"Who remembers what this is?" she asks, pointing toward a robust patch of green leaves. "Aru-? Arugu-?"

"Arugula!" a boy answers, setting in motion one of many after-school lessons Leung has led as part of her yearlong effort to increase the students' appreciation and understanding of fresh, healthy food.

Planting the Seeds

Last spring, with funding from the Albert Schweitzer Fellowship, Leung conceived, planned and began running what she calls "the edible schoolyard program" at King Elementary, a public school on Chicago's West Side.

She learned about the fellowship from another Rush medical student and proposed the project to King staff with assistance from Sharon Gates, director for multicultural affairs and community outreach at Rush.

Fellow Rush students helped Leung construct the garden, which she visits once a week to discuss, tend, harvest, prepare and eat the vegetables with rotating groups of 15 to 20 children. In the process, Leung breaks down obstacles to healthy eating that plague many Chicago communities.

An Oasis in a Food Desert

Less than one mile away from the Rush campus, King stands in the middle of a food desert — an area, usually composed of lower-income communities, whose residents have limited access to



As medical students we really want to go out and develop our people-to-people skills, and the clinics and community service opportunities at Rush allow us to do that. From the very first month of school, Rush really encourages students to get involved in changing our communities for the better."

— Vivian Leung, Rush medical student

grocery stores or other retailers that sell healthy, affordable food. Leaving their inhabitants little choice but to buy food at gas stations and convenience shops, these areas foster unhealthy diets that can lead to diabetes, heart disease and obesity-related metabolic disease.

Troubled by the link between the food deserts around Rush and the diseases she studies and observes in patients, Leung transformed King into an oasis. "One of the most economical ways to prevent these diseases is access to affordable, healthy food," she says.

She gives students that access — they have grown lettuce, cabbage, radishes, carrots and herbs — and supplements it with lessons on topics ranging from the importance of vitamins to the role of earthworms in soil fertilization. Eating plays an important role in many of these lessons: After identifying the arugula, the students picked their own leaves to examine, smell and, finally, taste.

Future Growth

Leung's focus on healthy eating doesn't end in the garden. "Child nutrition is a big issue for me, and in almost every pediatric patient exchange I discuss what the child is eating and how much physical exercise they're getting," says Leung,



who volunteers at free clinics across Chicago and might specialize in pediatrics. When she leaves to begin her clinical training, she hopes to enlist another Rush student or employee to oversee the garden — and she doesn't think she'll have much trouble.

"As medical students we really want to go out and develop our people-to-people skills, and the clinics and community service opportunities at Rush allow us to do that," Leung says. "From the very first month of school, Rush really encourages students to get involved in changing our communities for the better."



Translating Research Into Better Patient Care

Rush is helping to shape the future of medicine by researching new ways to prevent, diagnose and treat illness. Researchers in the lab and clinicians at the patient bedside share information and observations. They also collaborate to bring improvements swiftly to patient care — a process known as translational research.

Translational research at Rush has led to significant advances in patient care throughout the years, such as the development of a new drug for treating patients with multiple sclerosis.

Research and clinical teams at Rush use their studies to directly help patients. Researchers at Rush understand that significant improvements in public health will require ways to identify more diseases before people show symptoms. At Rush, clinicians are studying large, distinct populations over long periods of time to identify patterns among the groups that give us a better understanding of the causes of health conditions and ways to alleviate them. Among those research endeavors is the Study of Women's Health Across the Nation (SWAN), which tracks the midlife experiences of women (see study on Page 12).

In recognition of research's importance to the health and well-being of the community, Rush provided \$13.8 million during fiscal year 2010 to support unreimbursed expenses to maintain these activities. The following is just a small sampling of research conducted at Rush throughout the fiscal year.

Potential Melanoma Vaccine

Rush is leading a nationwide phase III research study to determine whether a promising vaccine for advanced melanoma can effectively treat the deadly skin cancer.



Very few treatment options exist for patients with advanced melanoma. None of them are satisfactory."

— Howard Kaufman, MD, director of the Rush University Cancer Center

The vaccine being tested, OncoVEX, includes a reprogrammed virus that has been converted into a cancer-fighting agent that attacks tumor cells while leaving healthy cells undamaged. The vaccine is injected directly into cancerous lesions. An earlier trial of the drug involving 50 patients had promising results, showing a response rate of 26 percent. Eight patients recovered completely, and four patients showed a partial response. Conventional treatment, including chemotherapy and immunological drugs, have a response rate of 15 percent at best, according to Howard Kaufman, MD, director of the Rush University Cancer Center and principal investigator for the research study.

The phase III trial will enroll 430 patients at centers across the United States. As with the previous trial, the vaccine will be injected directly into tumors every two weeks for up to 24 treatments. Patients will be tracked for two years after the first dose is received. "Very few treatment options exist for patients with advanced melanoma," Kaufman says. "None of them are satisfactory, which is why we are so excited about the results."



\$13.8 million

amount spent to support unreimbursed expenses and to maintain research activities

Clinical Benefit of Multiple Sclerosis Drug Discovered

Thanks to research at Rush, patients with multiple sclerosis (MS) have a new treatment option. Based on nearly 40 years of research, Rush discovered the clinical benefits of the drug dalfampridine, which was approved by the Food and Drug Administration (FDA) in January 2010.

Dalfampridine is the first therapy for multiple sclerosis that can be taken orally, and it is also the first FDA-approved therapy to treat impaired walking — a debilitating symptom of the disease that limits patients' ability to accomplish basic tasks of daily living.

With MS, the protective myelin sheath that wraps around nerve fibers in the brain and spinal cord is damaged, essentially causing a short circuit of the normal electrical pulses. In the 1960s, Floyd Davis, MD, then a neurologist-in-training and later a physician at Rush, discovered that lower body temperature — even fractions of a degree — enabled the electrical pulse to continue its travel along the nerve fibers.

Davis conducted a series of studies over the next two decades to understand what was behind this noticeable improvement in symptoms. He then looked for a compound that could mimic some of the effects of lower body temperature and learned of dalfampridine, which was being used in Bulgaria to help patients recover from anesthesia-induced paralysis more quickly.

Dusan Stefoski, MD, director of the Rush Multiple Sclerosis Center, joined Davis' research team in 1978. In a small

study in 1983, they found that MS patients with impaired motor function and vision were able to walk and see better after a single intravenous dose of dalfampridine. Though the drug has been approved specifically to treat impaired walking, studies have shown it relieves other symptoms as well and works for all forms of MS.

Increase in Visceral Fat During Menopause Linked to Changes in Hormone Balance

Research at Rush has helped women and their clinicians learn more about women's midlife experiences to provide them with better health care. The Study of Women's Health Across the Nation is a multicenter, multiethnic, community-based study designed to characterize the biological, symptomatic and psychosocial changes that occur during the menopausal transition and the effects of these changes on women's health during and after the transition.

A study published in August 2009 found that the change in hormone levels that occurs during menopause can cause the accumulation of visceral fat, which is a significant risk factor for cardiovascular disease. Visceral fat surrounds internal organs around the waistline. It is a source of inflammation that contributes to premature atherosclerosis and elevates the risk of acute coronary syndrome. The study showed that a woman's age, race or risk for cardiovascular disease did not correlate significantly with the amount of visceral fat.

Researchers believe visceral fat can be reduced with regular physical activity and reduction in stress. To test this hypothesis, Rush received a \$7.5 million grant from the National Heart, Lung

and Blood Institute aimed at developing measures to reduce visceral fat in midlife women living on Chicago's South Side.

Flat and Flexible Footwear Can Protect Against Osteoarthritis

According to a study by researchers at Rush, flat, flexible footwear can help protect your knees against osteoarthritis. The study, which was published online in the journal *Arthritis Care & Research*, found that footwear with flexible soles actually causes less stress on the knees than rigid clogs or even special walking shoes. And that's important because a higher-than-normal load — or amount of force — on the knee joints during walking is a key factor in the development of osteoarthritis, affecting both the severity and progression of the disease.

In the study, flat, flexible and lightweight walking shoes seemed to mimic the mechanics of walking barefoot. In fact, the force on the knee was roughly the same whether the subject wore flip-flops or went barefoot. With clogs and stability shoes (athletic shoes specifically designed to control and neutralize the stride of a person with an unstable gait), conventionally believed to provide appropriate cushioning and support, the force on the knees was up to 15 percent higher than with flat walking shoes or bare feet.

Clinical Teamwork in Action: Responding to Discrepancies in Health Outcomes

Since the 1990s, most women in Chicago facing a breast cancer diagnosis have had reason to be optimistic. Why not all?



Because black women in Chicago with a breast cancer diagnosis are more than twice as likely to die than white women. This difference isn't because of genetic factors — sadly, it is entirely due to controllable differences: in the mammography services black women receive, in their follow-up care and in the treatment they receive when a cancer diagnosis has been made.

Researchers discovered that as of 1980, black and white women in Chicago died from breast cancer at roughly the same rates. But as significant strides in breast cancer research led to improved treatments and greatly increased survivorship for white women with breast cancer in Chicago, black women were left behind. By 2007, the death rate from breast cancer for black women was 62 percent higher than for white women.

Applying Research to Improve Patient Care

“Chicago’s health outcome disparity problem is a civic disgrace,” says David Ansell, MD, MPH, chief medical officer for Rush University Medical Center and one of the lead researchers responsible for the initial data, which was produced in concert with the Sinai Health Institute. “The challenge to all of us in Chicago is not to dwell on the past or these facts; the challenge is how to fix the problem going forward.”

Fortunately, the response to this deplorable disparity in health outcomes has been immediate and dramatic. Shortly after the initial data were published in 2006, a group of advocates, researchers and clinicians — including Ansell and other clinicians from Rush — formed what is now known as the Metropolitan Chicago Breast Cancer Task Force to examine the data and issues contributing to this disparity.

Chicago’s legacy of racial disparity in breast cancer mortality can be overcome. The answer: quality breast care for all.”

— David Ansell, MD, MPH, chief medical officer for Rush University Medical Center

The swift and citywide response is a testament to the power of clinical research and its ability to change lives in the community. By 2010, 70 percent of the health care institutions that provide mammography and cancer treatment in the Chicago area, including Rush, had joined the task force’s efforts to examine and resolve quality care issues.

Navigating Quality Care

As part of these quality care improvement initiatives, Rush recently hired a breast health navigator, Shama Shrestha, RN, in response to data findings that black women receive mammograms at significantly lower rates than white women. During the first year, Shrestha will focus on decreasing no-show rates, discouraging women from delaying or interrupting treatment, and increasing patients’ comfort level in the hospital environment.

As president of the Metropolitan Chicago Breast Cancer Task Force and a member of the steering committee for the Chicago Breast Cancer Quality Consortium (a project of the task force), Ansell believes in the power of translational research. Through working together to first identify the problems and then address them, academic researchers and clinicians have the ability to transform the practice of medicine in a way that elevates care for everyone. “Chicago’s legacy of racial disparity in breast cancer mortality can be overcome,” Ansell says. “The answer: quality breast care for all.”



Joining Forces to Help the Community



Everyone at Rush — from students to physicians to support staff — contributes to an institutional culture that fosters dedication to the health care needs of Chicago’s underserved populations. It is a spirit of service and philanthropy that resonates throughout the Medical Center. In fact, students often select Rush University specifically for the opportunity to volunteer. Rush students and staff are integral to the services of the following programs.

2,810

number of patients who received physical exams and much-needed medications at the Clinic at Franciscan House of Mary & Joseph

8,886

number of teens from 16 Chicago-area high schools who received free educational presentations from the Rush Adolescent Family Center

450

number of homeless children and adolescents who received free health care services from the Kids-Shelter Health Improvement Project

The Clinic at Franciscan House of Mary & Joseph

2715 W. Harrison St.

Located on Chicago’s West Side, this shelter provides a meal, a shower and a safe place to sleep for up to 235 men and 35 women each night, making it one of the larger overnight shelters in Chicago. Staffed weekly by students and physicians from Rush, the clinic at Franciscan House of Mary & Joseph is the major source of medical care for many of the shelter’s residents. In fiscal year 2010, 480 volunteers provided triage and physical exams, obtained medical histories and distributed medications to 2,810 patients at the clinic.

The CommunityHealth Clinic

2611 W. Chicago Ave.

At this not-for-profit volunteer organization located 10 minutes north of the Medical Center, members of the community who cannot afford or are ineligible for medical insurance receive free preventive and primary health

care services. One evening each week, students and physicians from Rush volunteer to provide services ranging from routine physical exams and immunizations to a full laboratory and pharmacy. In fiscal year 2010, medical students and physician volunteers from Rush evaluated 960 patients.

Freedom Center (Formerly Pilsen Homeless Health Services)

1515 W. Monroe St.

Rush medical students, led by an attending physician from Rush, provide free health care for men, women and children in the Near West Side community. Co-founded by a primary care physician at Rush, this free clinic opened in 1994 to serve the unmet health care needs of Pilsen, a predominantly Mexican immigrant community. The clinic now serves a wider range of people. In fiscal year 2010, 384 people received services at the Freedom Center.

Haymarket Center

932 W. Washington Blvd.

Rush has partnered with the Haymarket Center — a not-for-profit organization that aids people in their recovery from chemical dependency — to provide physical examinations and distribution of medication. In fiscal year 2010, volunteers from Rush assisted 120 people.

Kids-Shelter Health Improvement Project

Nine homeless facilities on the West and South Sides

A medical outreach team travels to nine homeless facilities on the West and South Sides of Chicago to provide initial free health care services to homeless children and adolescents. The team includes an attending pediatrician from Rush, medical students from Rush, and pediatric resident physicians from Rush Medical College and John H. Stroger, Jr. Hospital of Cook County. Follow-up care is provided as needed at Rush. In fiscal year 2010, 450 patients were seen through the program.

Rush Adolescent Family Center

On the Rush campus

The Rush Adolescent Family Center provides prenatal care, gynecologic care, contraceptive services, sexually transmitted disease testing and treatment, and community education to Chicago-area teens and young adults, ages 12 to 23 years. All services are provided regardless of ability to pay for care. Staff regularly travel off-site to Chicago-area high schools and middle schools to provide these services. They also enroll pregnant uninsured patients into the state's AllKids program, which provides Medicaid coverage for their prenatal care, while uninsured patients who are not pregnant have their services

completely funded through the clinic. Although the center draws patients from more than 97 Chicago-area ZIP codes, the majority of patients served reside on Chicago's West Side. Program staff also provide free prenatal education classes to pregnant teens and their partners within the center.

In fiscal year 2010, the center provided 4,641 medical clinic visits to 1,068 patients, as well as 2,927 clinic visits to 235 pregnant teens and young adults in need of prenatal care. Nearly all of those visits were covered by Medicaid. The center also provided 1,714 clinic visits to 845 sexually active teens and young adults who were in need of gynecologic and contraceptive services. Of the 1,714 contraceptive services visits, 56 percent were free and 44 percent were funded through Medicaid. In addition, program staff conducted 235 free community

education presentations involving 8,886 teens in 16 Chicago-area high schools, middle schools and community service programs.

Rush Adolescent Clinic

Evergreen Park, Ill.

The Rush Adolescent Clinic provides gynecologic care; contraception; family planning counseling; sexually transmitted disease testing and treatment; sexually transmitted disease and HIV risk assessment; pregnancy testing; counseling and referrals; and community outreach education. The clinic, which primarily serves southwestern Chicago and its neighboring suburbs, has been operating since 1991. The Rush Adolescent Clinic provided 1,591 medical care visits to teens and young adults in fiscal year 2010. During the year, 637 of these patients received free care through the program, with more than 98 percent



of the patients reporting incomes at or below the federal poverty level. Clinic staff also provided community health education in several area high schools and colleges.

School-Based Health Centers

2245 W. Jackson Blvd. (Crane);
730 N. Pulaski Road (Orr)

The Rush University College of Nursing operates school-based health centers through the Chicago Public Schools at Richard T. Crane Technical Preparatory Common School and at Rezin Orr Community Academy High School. The Crane and Orr health centers increase adolescents' access to quality health care and provide medical services on school grounds, thereby helping students spend more time in school and less time out sick. More than 95 percent of Crane and Orr students are enrolled in the health centers. The health centers provide comprehensive services, including risk assessments, health education, acute and chronic care, family planning, school and sports physicals, laboratory services and immunization services. The centers also provide assistance with enrollment in programs such as KidCare and Women, Infants and Children. During fiscal year 2010, nurses and students from Rush provided 1,775 clinic visits at Crane, serving 551 students. At Orr, there were 1,170 visits, serving 619 students.

20/20

Various locations throughout the city

20/20's mission is to provide free vision services to underserved populations. Student volunteers from Rush screen adults and children for eye diseases, such as glaucoma, cataracts, amblyopia and strabismus. In fiscal year 2010, 1,000 people benefited from this program.

Urban City Church (Formerly Door of Hope)

153 W. Garfield Blvd.

At this Washington Park mission, Rush medical students evaluate individuals and provide basic care for problems such as athlete's foot, headaches and colds. Students also administer influenza vaccines during flu season. In fiscal year 2010, the program served 210 people.

Wellness Program With the Chicago Department of Family and Support Services

2102 W. Ogden Ave.;
1767 E. 79th St.;
6117 S. Kedzie Ave.

The Wellness Program With the Chicago Department on Aging has primarily served minority older adults since 1985. Advanced-practice nurses, dietitians and pharmacists from Rush provide health information and care for older adults at three Chicago senior centers, one of which is only four blocks from Rush. These clinicians conduct tests of blood pressure, bone density, glucose, diabetes and prostate-specific antigen, or PSA, levels. During fiscal year 2010, 3,565 older adults received health screenings.

384

number of people who received free health care at the Freedom Center

2,945

number of clinical visits provided to adolescents by clinician volunteers at school-based health centers

1,000

number of people who benefited from free vision services provided by the 20/20 program

3,565

number of older adults who received health screenings from the Wellness Program With the Chicago Department of Family and Support Services



We have a team of students, faculty and staff working across disciplines to bring the best care to patients and the community — especially in the community surrounding Rush. Giving back is part of our culture.”

— Sharon Gates, director for multicultural affairs
and community outreach for Rush University

Mentoring in the Community



At Rush, we believe that a community is only as strong as its youngest members. That's why staff and students at Rush invest their time in a myriad of community-based programs to help at-risk children and adolescents. The following programs are designed to help motivate kids to reach their academic potential, introduce them to new skills, and get them on the right path for a lifetime of good health and emotional well-being.

252

number of children who received tutoring at the Chicago Christian Industrial League

120

number of teen mothers who received education to support their pregnancies from the Maternal Advocates Program

250

number of students who received tutoring or other assistance at Casa Juan Diego Tutoring

BUDDIES Program

On the Rush campus

The BUDDIES program matches Rush medical student volunteers with chronically ill children. Students do not administer any medical care or advice but rather act as mentors, advocates and, most important, friends. In the last fiscal year, 100 pediatric patients were helped by this program.

Casa Juan Diego Tutoring

2020 S. Blue Island Ave.

Casa Juan Diego is a youth center located in the nearby Pilsen neighborhood. Sponsored by St. Pius Catholic Church, the center provides Latino youth, ages 5 to 17, with academic, recreational and religious activities. Rush students volunteer to perform interactive, hands-on science experiments with groups of young children to encourage their interest in science. In addition, medical students assist older children with their homework or English language skills.

During fiscal year 2010, 250 students received tutoring or other assistance services.

Chicago Christian Industrial League (CCIL) Tutoring Program

2750 W. Roosevelt Road

Volunteers through the RU Caring program tutor children from the Near West Side in math, science and reading at CCIL. In fiscal year 2010, the program reached 252 students.

Community Education and Outreach

1 N. Ogden Ave.

Rush medical students tutor and mentor the children who attend the after-school program at the Salvation Army's Temple Corp. In fiscal year 2010, Community Education and Outreach helped 150 students further their scholastic goals.

A Day in the Life of Rush University

On the Rush campus

Rush Medical College holds an annual event that invites high school students from throughout Chicago to experience an interdisciplinary approach to medicine. Participants manage fictitious patients throughout the hospital, including in the anatomy lab, emergency department, operating room and recovery area. During fiscal year 2010, this program exposed 80 students to the many facets of being a physician at an academic medical center.

Health Educators

Various schools on the West Side

Medical student volunteers visit elementary and middle schools in nearby Chicago communities to teach kids about sexual and reproductive health, nutrition, hygiene, puberty and substance abuse. Volunteers teach at least one session each academic year. Each one-hour session covers age-appropriate topics for students who range from third to eighth grade. This program reached 300 children over the course of the last fiscal year.

Healthifying the Refugee Transition Program

4753 N. Broadway St.

The program was created to provide health- and medicine-based workshops that focus on such topics as hygiene, nutrition and learning English to help educate refugee children and help them transition to life in America. In fiscal year 2010, Rush volunteers affected the lives of 180 children.

Major Adams Tutoring Program (Formerly Henry Horner Tutoring Program)

2022 W. Washington Blvd.

The Major Adams Academy serves children who live in the surrounding Henry Horner housing development, close to Rush and the United Center. Rush medical students are assisting students from first to ninth grade who attend Major Adams with homework and other academic activities. In fiscal year 2010, 50 students received tutoring through this program.

Marah's Health Education Program

1456 W. Oakdale Ave.

A housing program affiliated with Deborah's Place (an organization that provides housing for women), Marah's is an organization similarly dedicated to moving women out of homelessness and into permanent housing. Students involved in the Marah's Health

Education Program present to women who use the organization's services a range of health education seminars, including seminars on diabetes and mental, cardiovascular, breast, pelvic and gastrointestinal health. In fiscal year 2010, 125 women benefited from this initiative.

Maternal Advocates Program

1321 S. Paulina St.

In this program, Rush medical student volunteers work with teens attending the Simpson Academy for Young Women, a Chicago public school solely for teen mothers. Young mothers-to-be come from throughout the city to attend the school, and volunteers from Rush provide them with health education to support their pregnancies. During the last fiscal year, 120 mothers received education through the Maternal Advocates Program.



Pipeline Programs

On the Rush campus

Through Pipeline Programs, Rush medical students reach out to children and youths in Chicago Public Schools in the hopes of exciting them about careers in health care. Participants tour the Medical Center and visit the simulation lab, where they learn how to assess a sick patient, and the anatomy lab, where they see the effects on the organs of smoking, drugs and alcohol. In fiscal year 2010, 1,000 students citywide participated in the programs.

Red Ribbon Friends (Formerly the Pediatrics AIDS – Big Sib Program)

Various locations throughout the city

In conjunction with Children’s Memorial Hospital, this program matches medical students as big brothers and sisters with children affected directly or indirectly by HIV. Rather than focusing on learning technical skills, this program concentrates on helping students learn the interpersonal skills needed to be a good doctor. In fiscal year 2010, 30 pediatric patients participated in Red Ribbon Friends.

Science and Math Excellence (SAME) Network

West and Southwest Sides of Chicago

Operated through Rush’s Department of Community Affairs, the SAME Network is a community service enterprise that was developed in response to the science, math and reading test scores in public schools surrounding Rush on the West and Southwest Sides of Chicago.

Formed in 1990, the SAME Network was designed to create interest and improve proficiency in science and math. By providing scientific equipment, teacher training and a variety of hands-on experiences, the SAME Network offers these students the same opportunities to learn math and science as students from more affluent areas have. Since its launch in 1990, the SAME Network has grown to a collaboration between Rush and 34 elementary schools, 11 high schools, many local businesses and several other educational organizations. In fiscal year 2010, 2,030 children, teens and educators benefited from the SAME Network’s services.

The following are just a few of the SAME Network programs:

The **Educator Program** provides professional development workshops for teachers, giving them an opportunity to gain new skills in science, math and technology. SAME Network teachers also receive coaching and mentoring. During fiscal year 2010, 619 educators participated in this program.

The **High School Internship Program** offers a variety of hands-on internship experiences at Rush to high school students interested in pursuing education in math, science and technology fields. Upon graduation from high school, these students are eligible to transition into the SAME Network’s College Internship Program. In fiscal year 2010, 18 students participated in this program.

The **Preschool Program** provides science labs and materials appropriate for young children, creating a stimulating environment for guiding children in the development of science, math and literacy skills. The program currently operates in 28 public and private schools. The SAME Network also offers workshops to the parents of children participating in the Preschool Program to encourage early parental involvement, which is crucial for children to be successful in school. During fiscal year 2010, the program reached 635 preschool children.

1,000

number of students who learned more about careers in health care through Pipeline Programs

30

number of children — affected directly or indirectly by HIV — matched with medical students serving as big brothers and sisters through Red Ribbon Friends

2,030

number of children, teens and educators who benefited from services provided by the Science and Math Excellence (SAME) Network

Internships Open Doors to Knowledge and Opportunity

Many high school students spend their summers hanging out at the beach or pool. Ashley Powell spent her last two summer vacations in a laboratory, wearing a crisp white coat instead of a bathing suit.

That's because Powell is among the approximately 120 minority students from Chicago high schools who, over the past 25 years, have participated in the research internship program offered by the Department of Biochemistry at Rush University Medical Center.

Making Science Accessible

It began when department chairperson Klaus Kuettner, PhD, now retired, received a call from a biology teacher at Kenwood Academy in Hyde Park about a gifted student who was interested in research. She had interned at Abbott Laboratories; but after enduring the lengthy commute, she wanted an internship opportunity closer to her South Side home.

Kuettner sought out Thomas Schmid, PhD, now an associate professor in Rush's biochemistry department. "He suggested creating a program: The idea would be to provide opportunities for minority students who are underrepresented in the sciences and are proficient in math and science," says Schmid, who brought the Kenwood Academy student into his lab as the department's first minority intern.

The program has since grown to include four to eight students each summer. Students apply for and receive the seven-week paid internships based on academic merit. After a week of training, each intern works fulltime



You get a closer look at the nature of science, and you learn how to work in a lab, work with others and be professional about science. Most high school students don't get that kind of opportunity."

— Ashley Powell, former Rush intern

with a biochemistry faculty member in a lab dedicated to ongoing research. The interns' salaries are funded with grant money from the National Institutes of Health, and Rush donates the considerable staff time needed to train the interns and supervise their work, as well as provides the lab facilities and equipment they use.

Experience for a Lifetime

Beyond providing summer jobs, the program develops students' science skills and improves their college admission chances. Powell credits her internships with helping her gain admission to Northwestern University, where she's currently a freshman. "You get a closer look at the nature of science, and you learn how to work in a lab, work with others and be professional about science," she says. "Most high school students don't get that kind of opportunity."

The department also invites high school teachers to spend their summers at Rush learning about new technology and techniques, which they can pass on to their students. "It's a great way for Rush to share scientific discovery, and it energizes both teachers and students to learn new things," says Schmid.



The staff finds reward in nurturing students' passion for science. Hee-Jeong Im-Sampen, PhD, an associate professor in the departments of biochemistry, internal medicine and orthopedic surgery, has hosted interns in her lab. "If high school students feel medical research is important and interesting, they can grow to be research scientists or research physicians," she says. "Part of our mission as educators is to help them realize those dreams."



A New Foundation for Academic Medicine

Like our mission, the Rush Transformation, a 10-year, \$1 billion investment, is focused on one goal: providing the best quality of care for our patients. The campus transformation will enable all components of Rush — our clinical care, research, education and community service endeavors — to implement new models of care that will truly transform the future of medicine. The entire campus will be improved, contributing to an even more vibrant Near West Side neighborhood.

A 14-floor inpatient hospital that will open in January 2012 is the centerpiece of the Rush Transformation, which involves new facilities, renovations and technology designed to improve outcomes and benefit our community, and beyond. The new hospital will include one of the most advanced imaging centers in the country to better diagnose and treat patients, offering everything from 3-D whole-body scans to analysis of a single cell. It will transform the practice of health care and allow translational research to prosper by giving clinicians access to new technology.

The entire building was designed with open spaces to encourage teamwork between clinicians and to give students areas in which they can meet with faculty to enhance their educational experience.

Teamwork and strategic use of space will also hold true in the hospital's interventional platform, which puts diagnostic testing, treatment and recovery areas all within a short distance of each other, resulting in enhanced collaboration between specialists at Rush, patients and their families. The interventional platform also will have larger operating rooms capable of accommodating the specialized equipment and numerous personnel needed for the most complex procedures. In total, the interventional platform will occupy three consecutive floors in the new hospital.

The ground floor of the new hospital will house the only emergency preparedness center of its kind in the

The new hospital includes a bioterrorism response center that will bring an unprecedented level of readiness to the Chicago area in the event of immediate and widespread emergencies. And at double the size of our current emergency department, it will enable us to handle more patient visits from the surrounding community.

nation, the McCormick Foundation Center for Advanced Emergency Response. It includes a bioterrorism response center that will bring an unprecedented level of readiness to the Chicago area in the event of immediate and widespread emergencies. And at double the size of our current emergency department, it will enable us to handle more patient visits from the surrounding community.

Emergencies involving high-risk newborns and their mothers will be handled in a new, expanded neonatal intensive care unit (NICU), the only one with individual rooms for each infant and the infant's family. With the labor and delivery areas located immediately next to the NICU, newborns in medical distress can be put in the hands of intensive care specialists within seconds after delivery. The ability to respond quickly during the first critical minutes of an infant's life helps ensure the best possible care.

Building a More Accessible and Environmentally Friendly Campus

The design for the new hospital follows many of the same environmental and accessibility guidelines used for facilities

that have already been realized as part of the transformation. Rush opened a five-story outpatient orthopedic ambulatory building in November 2009 and an outpatient cancer center in January 2011, both of which allow Rush to care for more patients while providing an atmosphere and accommodations that enhance care.

The entire Rush Transformation incorporates universal design standards to ensure everyone can easily access Rush. In fact, Rush has exceeded code requirements in many instances, striving for solutions that accommodate the needs of people with and without disabilities. Universal design is an approach that aims to make facilities accessible to everyone, to the greatest extent possible. That standard includes

38%

percentage of Rush Transformation workers who are minorities or women, or both, exceeding our contracting goals

more wheelchair-accessible space, Braille signs, and technology in patient rooms that will assist the hearing and visually impaired, among other designs to increase inclusiveness.

A great deal of thought was also put into making the new facilities friendly to the environment. The Rush University Cancer Center and the Orthopedic Building pay special attention to environmental efficiency — recycled concrete, steel and wallboard were used during construction, and materials came from manufacturers within 500 miles of Chicago to reduce fuel and emissions.

These and other environmental innovations led to the Orthopedic Building being awarded gold Leadership in Energy and Environmental Design (LEED) certification from the U.S. Green Building Council, a not-for-profit organization that awards LEED certification to buildings with high environmental standards. Rush is also seeking LEED certification for the new cancer center and the new hospital, both of which incorporate many of the same environmentally sustainable features.

Contributions From the Community

In keeping with our desire to employ a diverse, community-based work force, Rush has been recruiting minority construction workers who live in our surrounding neighborhoods. Nearly 27 percent of the transformation contractors and 38 percent of the workers are composed of minorities or women, or both, exceeding our contracting goals.

As part of these efforts, Rush has hired a full-time liaison to focus on community outreach efforts, which entail working with various agencies to create a system of training, technical assistance, support and development of a successful screening process of potential community applicants for referral to Rush hiring managers. Community recruitment garnered much success at Rush's third annual job fair at Malcolm X College in fiscal year 2010.

In addition to recruiting applicants at a variety of job fairs and a community health fair, recruiters from Rush met with faith leaders in the area, along with other local organizations, to spread the word about available work for qualified candidates. Further demonstrating its goal of working with local residents, Rush has written into its contractor agreements that each contractor will hire an appropriate number of community residents full time.

As part of a long-standing commitment to its community, Rush is utilizing the skills of workers who are ethnically diverse and drawn partly from the surrounding neighborhoods. Rush's contracting goals for the campus transformation call for at least 5 percent of the work to be done by residents of the neighborhoods immediately surrounding Rush.



Recruitment Program Helps Form Foundation for Growth

Diversity is integral to the success of an academic medical center such as Rush. Fresh perspectives and ideas help create fresh solutions.

For its transformation project, Rush has embraced that ideal in its recruitment of a strong work force. As part of a long-standing commitment to its community, Rush is utilizing the skills of workers who are ethnically diverse and drawn partly from the surrounding neighborhoods. Rush's contracting goals for the campus transformation call for participation that is at least 25 percent minority and 5 percent female and for at least 5 percent of the work to be done by residents of the neighborhoods immediately surrounding Rush. The Medical Center, though, has exceeded its expectations. Thirty-eight percent of the workers are minorities or women, or both.

Embracing Opportunity

Construction workers such as Marquis Clemons have been recruited in an effort to attract residents of the surrounding community to the project.

"I really appreciate the opportunity I've been given," Clemons says. "There are kids sitting in school learning about this in a classroom, but on the job, I'm learning things they can't teach you in school."

Clemons was working as a seasonal window installer during the day and a security officer at night, but he always had aspirations to do more and build



The opportunity to work on this transformation project has changed me a lot. It's allowed me to support my family and has helped me find out what I want to do with my life. This program that Rush is involved in — it was a blessing to me."

— Marquis Clemons, concrete project engineer for the Rush Transformation

a career for himself. After meeting Walter Burnett Jr., the 27th ward alderman, and hearing about the Rush Transformation, he enrolled in a program at Dawson Technical Institute — part of Kennedy-King College on the South Side of Chicago — to obtain the skills needed to work on construction projects. Clemons was hired and has been working on the new hospital construction since its 2008 ground breaking. Clemons, now a concrete project engineer, has had a hand in calculating and executing every concrete pour in the 14-story new hospital building.

"The opportunity to work on this transformation project has changed me a lot," Clemons says. "It's allowed me to support my family and has helped me find out what I want to do with my life. This program that Rush is involved in — it was a blessing to me."



Together, the approximately 300 on-site construction workers are building more than new structures that will house the latest technology. They're helping create something truly extraordinary: a medical center with a fresh approach to the delivery of health care, and a new foundation for academic medicine to flourish on our campus, in our community, in Chicago — and beyond.

For more information about programs and services at Rush and for an electronic version of this report, visit www.rush.edu.





Rush is a not-for-profit health care, education and research enterprise comprising Rush University Medical Center, Rush University, Rush Oak Park Hospital and Rush Health.

PLEASE NOTE: All physicians featured in this publication are on the medical faculty of Rush University Medical Center. Some of the physicians are in private practice and, as independent practitioners, are not agents or employees of Rush University Medical Center.