



Engaged Leadership and the Value of Sustainable Health Care

An analysis of current sustainability performance trends and emerging issues

FEBRUARY 2018



ENGAGED LEADERSHIP

EXECUTIVE SUMMARY

In a shifting health care landscape, sustainability programs are a timely investment that can generate significant cost-savings while offering a range of co-benefits. Across the country, hospitals are taking leadership roles in their communities in advocating for more environmentally responsible operations, cleaner energy, healthier and more sustainable food systems, and a smarter supply chain that avoids chemicals of concerns and drives market transformation toward safer products.

Last year, 355 leading hospitals saved more than \$826 million by integrating a myriad of different sustainability initiatives. Individual hospitals saw cost-savings between \$100,000 and more than \$4 million annually from programs that reduce environmental impact while protecting patient, staff, and community health.

Like any important initiative, a sustainability program can not run itself. The most successful hospital sustainability programs feature clear organization-wide goals, key performance indicators, and executive champions. So clear are the benefits of these programs that 57 percent of hospitals have built them into performance objectives for executive leadership. Nearly 70 percent of hospitals report the creation of a strategic sustainability plan to underpin larger organizational goals.

Sustainability programs can also play an important role in supporting other key organizational priorities including workforce engagement, community benefit, and population health. Hospitals that are sustainability leaders are 400 percent more likely to be innovation leaders. More than three in every four hospitals utilized community benefit dollars to promote healthy food access or healthy food systems in their community. The different lens used to identify and assess environmental and human health impacts can be an important differentiator in process improvement efforts — ensuring the organization is not trading one negative impact for another. The most sustainable health care organizations foster an innovative and engaged culture that enables staff across the organization to participate in improving its operations and delivery of care. When combined with deeply engaged leadership, health care organizations can provide better care for their patients and communities, all the while leading society toward a healthy and sustainable future.

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INTRODUCTION

At a time of change and uncertainty, health care sustainability programs can offer a return on investment that clearly aligns with key health care priorities such as cutting the cost of care, driving operational efficiency and quality improvement, supporting population and community health goals, building workforce engagement, and fostering resilience and innovation. This report highlights strategies and tactics leading hospitals are using to deliver the most value from sustainability programs.

Each year, Practice Greenhealth evaluates the data received from its [Environmental Excellence Awards program](#), the nation's premier recognition program for hospitals and health systems committed to environmental stewardship. It analyzes this data to help inform the health care sector about current sustainability performance trends and emerging issues to inform goal setting and strategic planning, as well as to inspire the health care sector to action by demonstrating how leading hospitals are approaching this challenge. This year's data set is comprised of 355 unique health care facilities that participated in Practice Greenhealth's 2017 Environmental Excellence Awards and completed either the Partner Recognition or the Partner for Change Award application.

Data is from the 2016 calendar or fiscal year as reported on the 2017 Environmental Excellence Award applications between November 2016 and March of 2017. The hospitals are widely distributed across the country with some notable gaps in the south and southwest, and range in size from 25-bed critical access hospitals to large elite academic medical centers with more than 1,200 staffed beds.

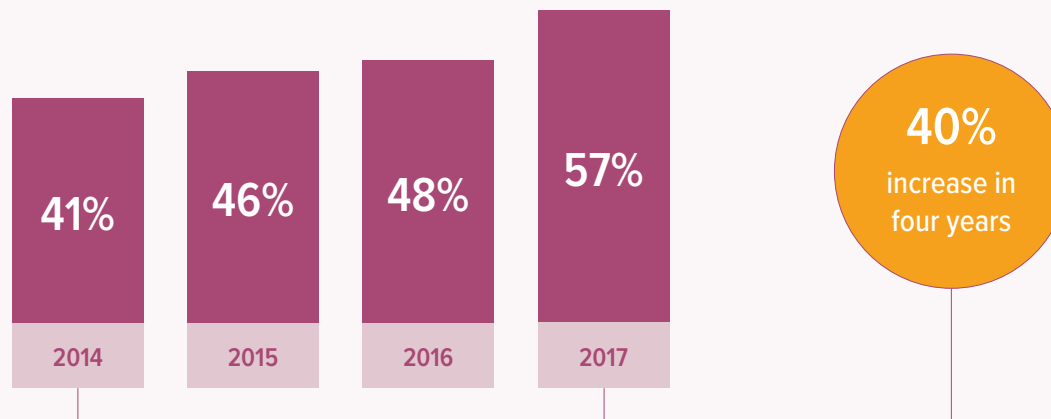


A GROWING IMPERATIVE

Successful hospitals need to be innovative, resilient, and community leaders in creating health beyond the facility's walls. In facilities where health care executives have embraced the role sustainability programming can play in supporting these aims, the data demonstrates a number of key factors that determine success.

Leadership engagement plays a critical role in sustainability programming: 90 percent of hospitals in the dataset have an executive champion engaged in their sustainability program. The percent of hospitals with an environmental commitment statement or set of environmental principles codified or approved by senior leadership has grown by 11 percent over the past four years, from 74 to 82 percent of hospitals. Fifty-seven percent of hospitals indicate they have added sustainability measures into performance objectives/evaluations for executive leadership — up 40 percent over the past four years. And the percentage of facilities who have implemented an internal sustainability reporting structure accountable to leadership (82 percent), and who report sustainability measures up to the Board of Directors level (71 percent) has continued to steadily increase.

Percent of facilities that have added sustainability measures into performance objectives/evaluations for leadership staff



Nearly 100 percent of health care institutions utilize green teams or existing committees such as an Environment of Care committee to operationalize their sustainability initiatives — 86 percent reported they have appointed or hired someone to lead this work at the facility level, of which 46 percent are dedicated full-time to sustainability work. This is a 14 percent increase in the past two years, at a time when workforce reductions are simultaneously taking place across the industry. However, this growth is in part reflective of the increased number of Veterans Health Administration facilities reporting, all of whom have a dedicated position for this work in their Green Environmental Management System (GEMS) Coordinators. Of the hospitals that are part of a larger health system, 85 percent indicate the health system has a system-level sustainability leader — 90 percent of which are full-time sustainability roles.

Strong executive engagement is a unifying theme amongst the **Top 25 hospitals** (identified as the best-all around performers on sustainability).

100%

have an executive champion

76%

have added sustainability measures into performance objectives for leadership

88%

have a full time sustainability role at either the hospital or health system level

96%

have a strategic sustainability plan

88%

have public sustainability goals

Conversely, hospitals that do not have an executive champion, a reporting structure, or an oversight committee for this work have limited success with environmental stewardship programs. When the executive team is not fully invested in the sustainability strategy and familiar with its multi-faceted paybacks, programmatic wins are not always recognized. Likewise, without clear evidence of these wins, administrators may consider cutting sustainability staffing in this tight financial environment. The importance of tracking the ROI, payback, and impact of sustainability programs cannot be overstated. Ensuring that these results are put in front of hospital leadership is essential in creating deeper executive engagement.

STRATEGIC PLANNING

The most successful hospital sustainability programs utilize a clear business process to manage goal-setting, project prioritization and oversight, key performance indicators, and return on investment. A growing number of hospitals have strategic sustainability plans in place, accompanied by public, transparent sustainability goals. The percent of hospitals that have created a strategic sustainability plan that aligns with other organizational priorities has grown to 69 percent — an increase of 14 percent over the past four years. The percent of hospitals reporting they have a sustainability program budget to support the work has increased by 46 percent over the past four years — to 65 percent of hospitals.

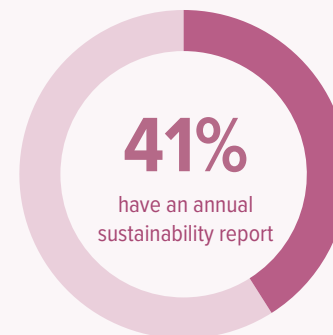
Fifty-eight percent of reporting hospitals (and 88 percent of Top 25 hospitals) indicate they have developed a minimum of three publicly available sustainability goals. Sixty-four percent of hospitals write a publicly available annual report that details environmental stewardship accomplishments at least every two years. Forty-one percent of hospitals in the data set produce a dedicated annual sustainability report, as compared to [82 percent of the S&P \(Fortune\) 500 companies](#).

Yale New Haven Hospital

New Haven, Connecticut

An 1,195 bed teaching hospital, Yale New Haven Hospital reported saving approximately \$2 million by implementing and maintaining sustainable initiatives. Various highlights include: reducing the amount of meat purchased for patient and employee meals, avoiding approximately 35,000 pounds of paper through the hospital's streamlined paper reduction program and saving over 305,000 kWh by installing LED lights.

Among reporting hospitals



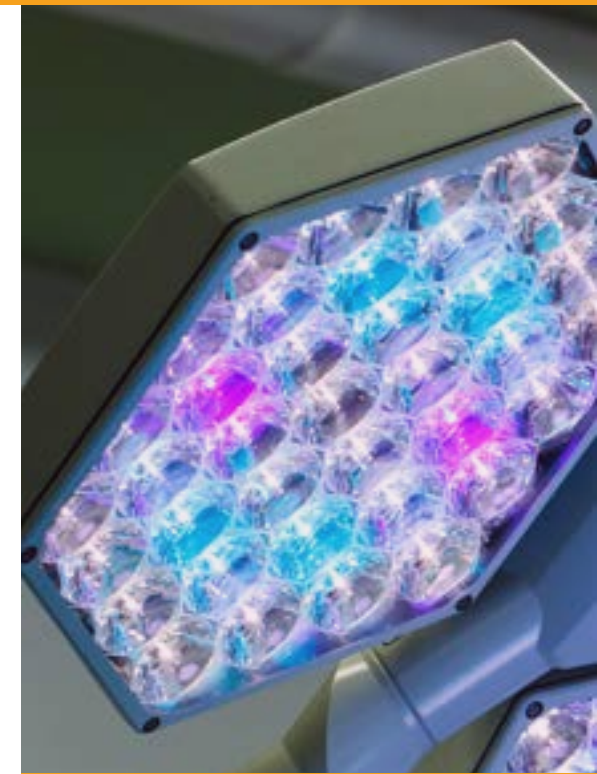
DELIVERING ROI

Hospitals are struggling with the financial burdens of an unstable and changing payor mix, decreasing federal reimbursement, and a sicker population. This has placed incredible financial pressure on most institutions, and yet sustainability programming has demonstrated repeatedly that it can be a significant source of cost-savings while driving other co-benefits.

The individual programmatic savings estimates below demonstrate meaningful cost-reduction opportunities. At the same time, these programs support employee, patient and community health, drive the health care market for safer, healthier products, and tie in tightly with lean and process improvement principles that improve the efficiency and effectiveness of hospital operations.

Sustainability innovation	Median reported cost-savings (annually)
Solid waste recycling	\$2,575
Reusable sharps containers	\$43,343
Solvent reprocessing	\$9,599
Meat reduction	\$50,000
Fluid management systems	\$22,502
Reformulating OR kits	\$23,234
Medical device reprocessing	\$120,597
Reusable sterilization containers	\$13,855
Reusable medical products	\$19,482
HVAC setback in the OR	\$45,398
LED surgical lighting	\$3,329
Energy reduction	\$53,599
Water reduction	\$5,508
Total	\$413,021

These cost-savings opportunities are just a handful of the many innovations hospitals are identifying that drive down cost while reducing environmental impact.



355 hospitals reported more than
\$826.2 million
in combined savings from
environmental programs in 2016.

WORKFORCE ENGAGEMENT

A strong sustainability program can build deeper employee engagement. The [Deloitte 2017 Millennial Survey](#) found that seven in 10 young workers believe their personal values are shared by the organizations for which they work. In its [2016 Employee Engagement Study](#), Cone Communications found that 58 percent of employees consider a company's social and environmental impacts when deciding where to work, 55 percent would choose to work for a socially responsible company even if the salary is less, and 51 percent will not work for a company that does not have strong social or environmental commitments. In terms of retention, 74 percent of employees say their job is more fulfilling when they are provided opportunities to make positive environmental and social impacts at work. In its [Comprehensive Business Case for Sustainability](#), the Harvard Business Review points out that, "firms with greater corporate responsibility performance [can reduce average turnover](#) over time by 25-50 percent. It can also [reduce annual quit rates](#) by 3-3.5 percent, [saving replacement costs](#) up to 90-200 percent of an employee's annual salary for each retained position."

The percent of hospitals that inquire about sustainability on their annual employee engagement surveys has increased by 53 percent over the past four years — with more than a quarter of hospitals now asking the question and 44 percent of the Top 25 hospitals collecting this information each year. Leading hospitals are using a variety of ways to engage and educate staff about organizational sustainability initiatives, including an internal webpage for staff (84 percent), newsletters (66 percent), poster campaigns (62 percent), and e-learning modules (47 percent). Sustainability programs can help build a more engaged workforce where staff can directly see the impact of their work, innovation, and volunteerism — all while benefiting the organization's bottom line and supporting healthier communities.

MEMBER FOCUS

Cleveland Clinic

Cleveland, Ohio

In an effort to reduce the environmental impact of the operating room, Cleveland Clinic reported saving \$4.3 million in 2016 at its main campus alone. Innovative programs in the OR included a physician-led education and re-training program for red bag waste minimization, a reusable canister fluid management system, a setback program for both its HVAC and its waste anesthetic scavenging systems, and a strong medical device reprocessing initiative. At the health system level, Cleveland Clinic saved more than \$7.5 million in 2016 through its Greening the Operating Room work.



ALIGNING ORGANIZATIONAL PRIORITIES

Sustainability programs support and align with a range of different critical health care priorities. The focus on sustainability was born out of recognition that the built environment and the products/processes utilized within and by health care can impact health. As hospitals across the country broaden their definition of health, this work is an important factor in creating healthier communities. Likewise, the spotlight on increasing operational efficiency and driving innovation offers opportunity for sustainability programming to shine.

Community benefit

Not-for-profit hospitals have a mandatory requirement to give back to the community — or provide community benefit — in exchange for their tax-exempt status. Much of this community benefit is delivered in the form of uncompensated care. The IRS requirement that tax-exempt hospitals perform community health needs assessments every three years has begun [a national dialogue about community benefit and the role the environment and climate can play in impacting human health](#). What people have historically thought of as “environmental programs” have demonstrated significant health co-benefits. Leading hospitals and health systems are diversifying their community benefit strategies, and are reaching deeper into their communities in an effort to affect the social and environmental determinants of health that can drive disease.

Eighty-five percent of hospitals indicated they utilized community benefit dollars to promote healthy food access or healthy food systems in their community. Sixty-three percent of non-profit health care facilities report some portion of their sustainability initiatives within their Community Benefit Report to the IRS. Seventy-two percent of hospitals report they educate the community on environmental topics, and the percent of facilities working with city government or local organizations to promote sustainable programs locally or plan local events grew to 69 percent. Community events included prescription drug take-back days, a mobile food pantry for veterans in need, support for healthier transportation options during Bike-to-Work week, community electronics recycling and confidential paper shredding, and farmer’s markets where participants could utilize SNAP dollars to access fresh produce in food deserts.

Population health

The U.S Office of Disease Prevention and Health Promotion’s Healthy People 2020 initiative [frames the connection between population health and the environment](#), stating: “Humans interact with the environment constantly. These interactions affect quality of life, years of healthy life lived, and health disparities...Poor environmental quality has its greatest impact on people whose health status is already at risk. Therefore, environmental health must address the societal and environmental factors that increase the likelihood of exposure and disease.” This is a particularly important consideration for those for whom the primary determinant of health may not be able to be addressed clinically without behavioral, lifestyle, economic, or environmental changes.



Memorial Sloan Kettering Cancer Center

New York, New York

The prestigious cancer center in New York City reported more than \$3.3 million in cost-savings in 2016 from a range of initiatives including HVAC setback and controls upgrades, computer power management and LED lighting, OR kit reformulation, and internal reuse and materials donation.

The University of Wisconsin Population Health Institute's County Health Rankings Model (2012) illustrates the relative range of factors that influence health and health outcomes. Environmental quality and the built environment is an important component of that risk profile. Health behaviors — including diet — account for 30 percent of the impact. Leading hospitals are connecting the dots — and implementing programs that not only reduce environmental impact and bottom line, but simultaneously promote better community health.



Hospitals are linking community-based air pollution to their own choices about energy use or transportation — both major contributors to particulate matter emissions that have been shown to trigger childhood asthma, respiratory symptoms, hospital and ED admissions, and pulmonary function decrements.

70 percent of hospitals have a strategic plan to reduce energy use, 48 percent generate or purchase clean, renewable energy, and 36 percent offer their employees vouchers or subsidies for public transportation in an effort to reduce the health impacts of transportation.



Nurses and cleaning professionals have some of the highest rates of work-related asthma — much of it preventable by making smarter choices around cleaning chemicals and disinfectants.

Eighty percent of hospitals have initiated the transition to third-party certified green cleaning chemicals, 86 and 85 percent of hospitals respectively, have moved to automated versus manual disinfection processes for medical instrumentation and eliminated the use of the cold sterilant glutaraldehyde — all of which reduce the risk of work-related asthma.

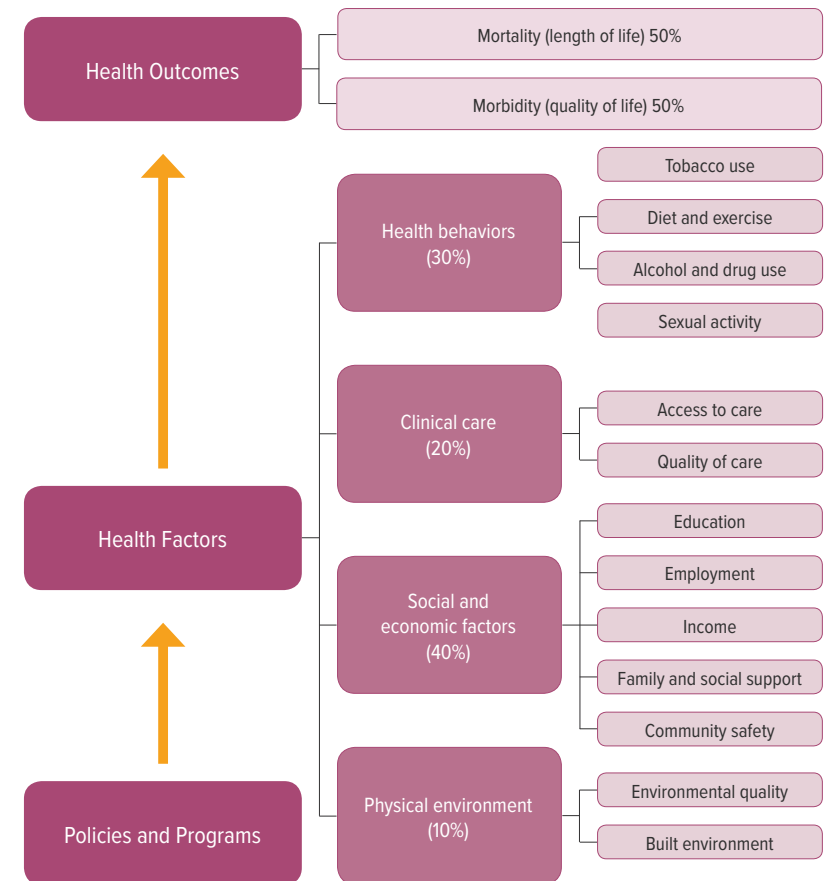


And at the same time that livestock production is a major contributor to the methane surge driving manmade climate change, there is also a clear clinical understanding that reducing red meat in the diet can decrease the risk of colorectal cancer.

Fifty-seven percent of hospitals reported they are finding ways to reduce the amount of meat served per meal and 47 percent are working to increase access to healthier foods for patients, employees and the community through farmer's markets and other strategies.

Population health management and environmental health have innumerable synergies and can be addressed in tandem by smart, innovative health care organizations — resulting in healthier communities.

County Health Rankings model, 2012



Source: University of Wisconsin Population Health Institute. County Health Rankings 2013. Accessible at www.countyhealthrankings.org.

Process improvement

Many health care organizations are internally applying process improvement techniques to help them bring down the cost and increase the efficiency and effectiveness of care. A commitment to sustainability can enable a culture of problem solvers that support process improvement.

Like lean, sustainability is focused on improving operational processes by identifying, reducing, and eliminating negative or harmful impacts, or waste (muda). Bringing a sustainability subject matter expert to the table in applying lean principles can deepen the range of opportunities through process improvement. At the same time, sustainability expertise can also inform lean process improvement and prevent the redesigned process from inadvertently causing more harm in the name of efficiency.

Innovation

Deeper engagement around sustainability also leads to innovation. Sustainability leaders are 400 percent more likely than average to be innovation leaders. And Deloitte in its [2013 report](#) insist that the relationship is causal, not just correlation, stating: “Sustainability’s ability to spark innovation can be harnessed, and it can be incorporated into organizations’ innovation processes.”

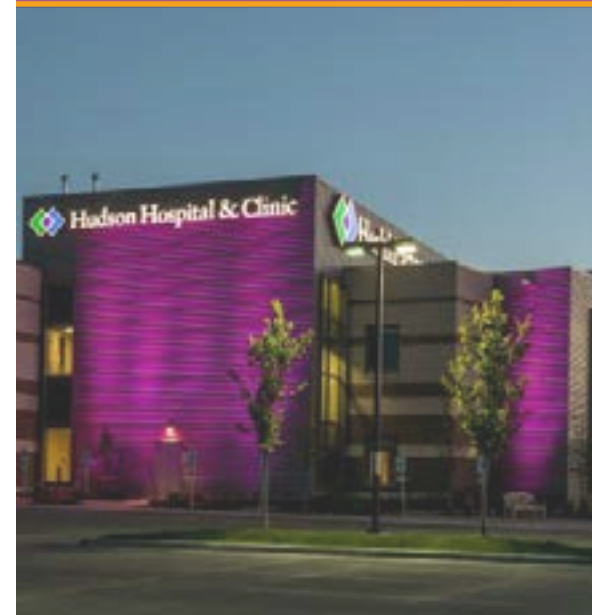
PROVIDING VALUE

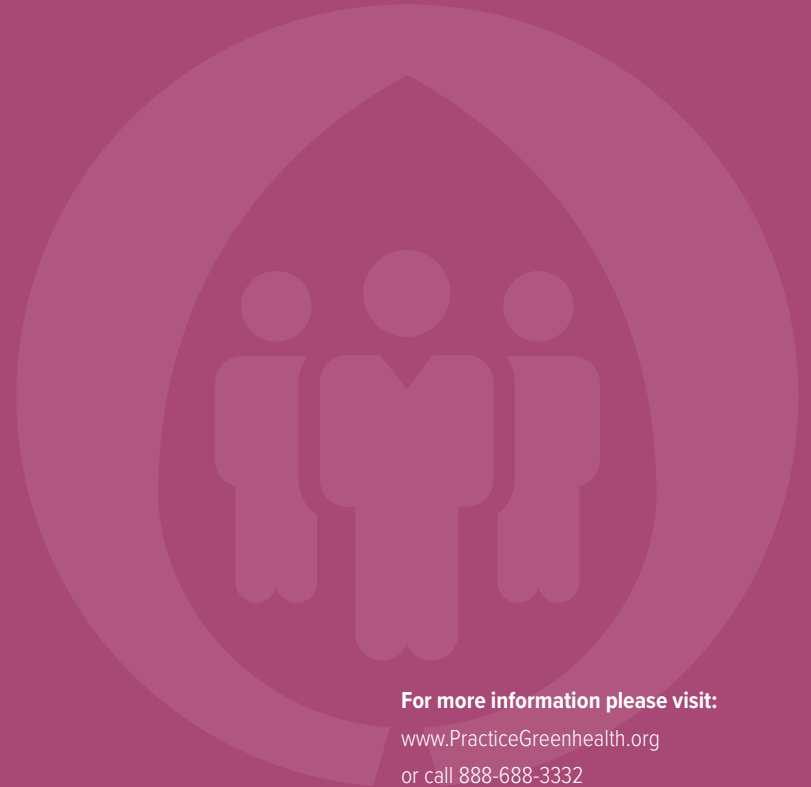
Health care executives have the daunting task of identifying key priorities for their institutions in a changing health care landscape. Sustainability programs can offer significant value and support other mission-centric organizational goals. Data from leading hospitals provides clarifying insight on how health care institutions are structuring sustainability programs to create internal synergies and garner a strong return on investment. Deeper organizational investment in sustainability initiatives makes strategic sense for innovative institutions that are committed to moving toward a more expansive definition of health.

Hudson Hospital

Hudson, Wisconsin

A 25-bed critical access hospital, Hudson Hospital reported \$86,105 in savings last year on a range of programs including enhancing vegetable-based meals while reducing its purchase of meat, using lean process improvement to remove unnecessary supplies from OR kits, and utilizing a reusable canister fluid management system in its three operating rooms.





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