

HEALTHCARE INDUSTRY AND DESIGN TRENDS

Professionals at the 2011 Fall Healthcare Design Conference share their views on the state of the healthcare industry and facilities trends.

Froedtert & The Medical College of Wisconsin Clinical Cancer Center
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Foreword

Healthcare serves a critically important role in our society by preventing illness, promoting health, and providing world-class treatments. Yet new economic and financial realities are challenging the ability of providers to fulfill this basic mission.

To understand the challenges facing healthcare institutions and their impact on design and construction trends, Mortenson Construction conducted a survey at the Fall 2011 Healthcare Design Conference. More than 300 professionals provided feedback, including healthcare administrators and facilities managers, architects, builders, and suppliers.

We looked to healthcare providers for insights regarding administration and operations and to architects for views on current design practices—and uncovered certain differences in perspective between these parties.

No healthcare institution who took our survey has reduced services to stabilize finances. Rather, providers are streamlining operations and finding innovative ways to efficiently meet the needs of patients. They are also looking to the design, sustainability, and functionality of healthcare facilities to ensure patients receive the best possible care and experience in the most cost-effective fashion.

U.S. healthcare needs continue to grow, and Mortenson will continue to bring ingenuity, industry knowledge, and technical expertise to bear on the challenges that face us. To that end, we are pleased to share with you the following insights and perspectives.



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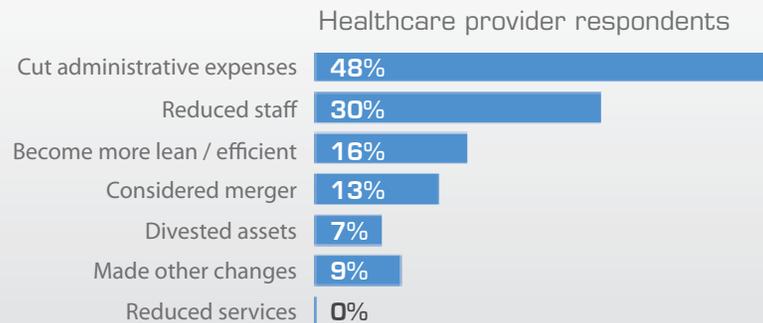
Becoming More Lean

Declining reimbursements, rising costs, and the growing demands for services are taking a financial toll on healthcare institutions.

Nearly half of healthcare provider participants who took our survey said their institutions have cut administrative expenses in response to current fiscal realities, and almost one-third have cut staff.

Over one-third have also utilized other means to improve productivity, reduce waste, and deliver services more efficiently.

How has your healthcare institution responded to the current economic environment?



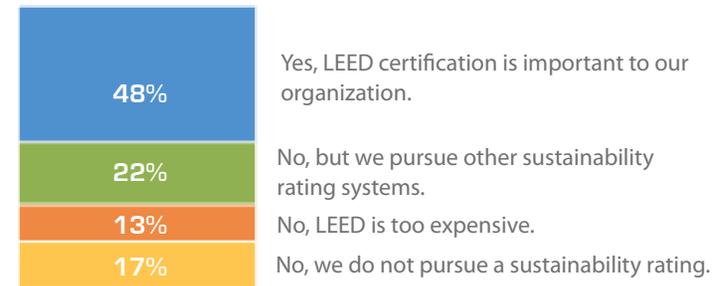
“We have focused on expense reduction, productivity improvement, and waste reduction using a lean strategy.”
– healthcare provider

Healthcare institutions are also taking actions to reduce the amount of energy and resources required in their operations.

70% of healthcare institution respondents said their organizations pursue LEED or other sustainability certifications on new projects.

Does your organization pursue LEED certification when executing major new facilities projects?

Healthcare provider respondents



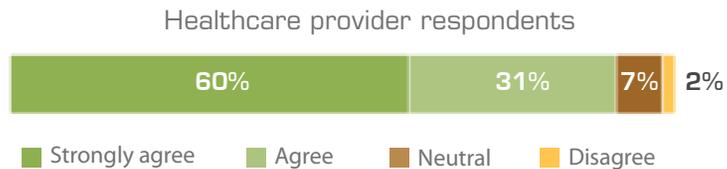
“LEED translates into operational savings. It’s not just a certification.” – healthcare provider

Other respondents mentioned that LEED is the “responsible response” to environmental concerns, and that it enhances their institution’s reputation.

Architects strongly support LEED as well. 90% believe a “significant opportunity exists to eliminate waste and reduce energy” and 70% believe LEED “meaningfully improves the energy performance of institutions.” Nonetheless, one-third of architects agreed that “LEED is a buzzword that promotes projects without providing significant resource benefits.” This reflects the skepticism of some in the effectiveness of LEED and highlights the importance of remaining true to LEED goals when executing projects.

Gaining Flexibility and Efficiency

Today's healthcare designs must place heightened priority on flexibility to address market, care delivery, and volume uncertainty.



A full 91% of healthcare provider respondents believe flexible designs are a priority in today's market, with 48% possessing a strong belief.

Over half of healthcare provider respondents (52%) also believe that "uncertainty in the healthcare market has diminished the value of multi-year facilities master planning," underscoring the need for facilities management processes to be flexible as well.

The solid majority of architects (93%) share healthcare provider views regarding the importance of flexibility.

"We need to avoid excessive customization that precludes long-term flexibility." – architect

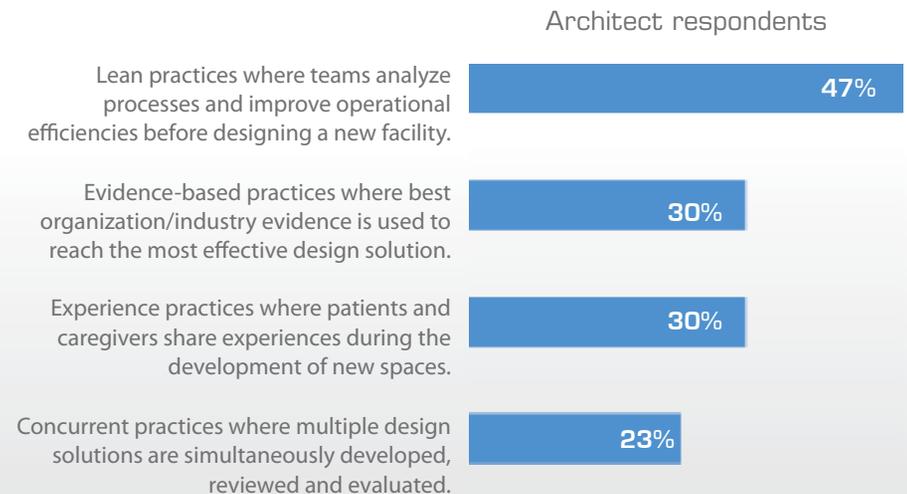
"Build in more functional flexibility." – architect

Both healthcare providers and architects also recognize the importance of fit and efficient healthcare operations.

"We are finding innovative ways to deliver services faster and smarter." – healthcare provider

Nearly half of architects believe practices aimed at improving operational efficiencies will be very prevalent over the next one to two years, exceeding the number who believe other formal design practices will be widespread.

Which of the following design practices will be prevalent over the next one to two years?



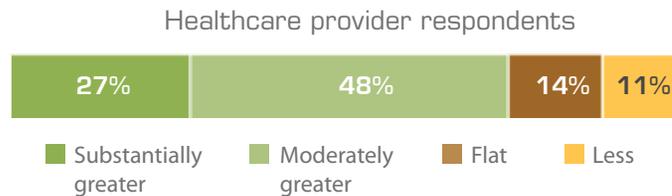
"Make facilities smaller and more practical." – architect

"More lean. Big is not necessarily better." – architect

Staying Competitive

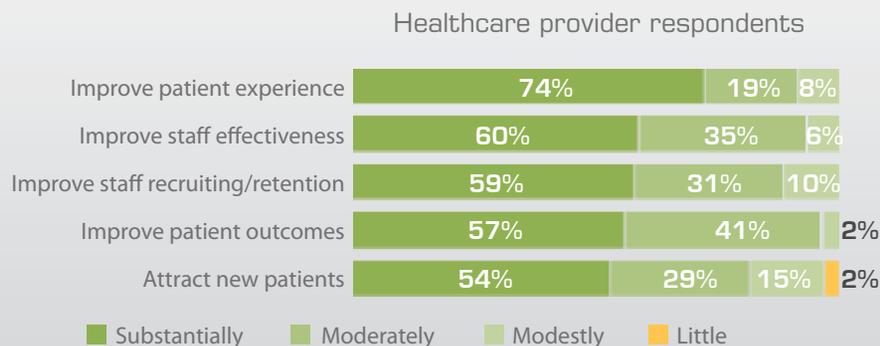
Despite the difficult economy, three in four healthcare institution respondents expect their organization's construction activity will increase over the next 12-24 months, with 27% describing the increase as substantial.

What do you expect your institution's construction activity will be over the next 12-24 months compared to the last 12-24 months?



Healthcare respondents overwhelmingly believe that better facilities will strengthen their institutions.

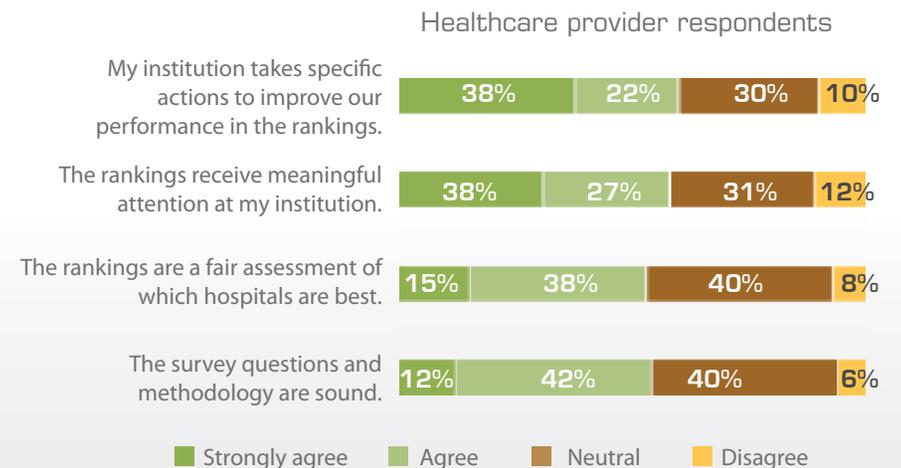
How much does improving facilities and their physical design:



Competition between healthcare institutions also strengthens the quality of care across the industry. *U.S. News & World Report's* "Best Hospitals" rankings play an important role in creating institutional rivalry and galvanizing organizations to improve.

60% of all healthcare provider respondents said their institutions have taken specific actions to improve their performance in *U.S. News & World Report* rankings.

Regarding *U.S. News & World Report's* "Best Hospital" rankings:



Respondents mentioned a wide variety of areas that have received greater focus as a result of the rankings, including improvements in:

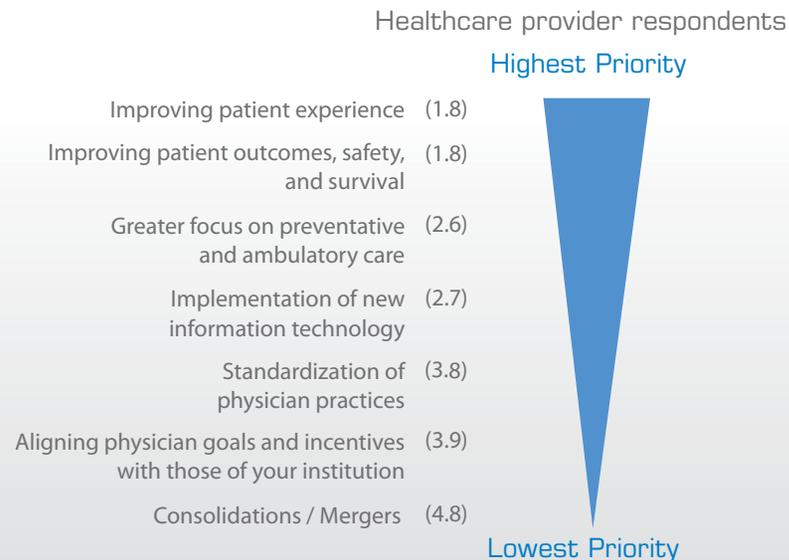
- Long-term care
- Patient experience
- Cleanliness
- Quality of nursing
- The environment for healthcare staff

Improving Experience

Healthcare respondents were shown a list of operational priorities and asked to rank them in terms of importance to their organization.

Improving patient experience was rated as the highest operational priority, on par with the central healthcare responsibility of improving patient outcomes, safety, and survival.

Please rank from 1 to 7 the following in terms of priority within your organization over the next 1-2 years



Many healthcare institutions are focused on creating a pleasing experience and environment not only for their patients, but also for patients' loved ones and the caregivers who look after them.

When architects were asked to name the one thing they would change about the design of typical healthcare facilities, more mentioned improving the patient experience and environment than any other area.

"We need to better prove the notion that aesthetically based design affects patient experience and care." – architect

"I would place more emphasis on creating an appropriate experience for patients, families, and staff." – architect

"I would have all private patient rooms." – architect

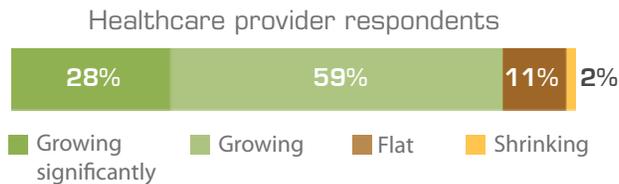
"I would reduce noise. It impacts the stress level of patients more than can be quantified." – architect

Noise is a common issue that can interrupt the rest of patients. The majority of architects recommended the use of absorptive materials to mitigate noise. About half also suggested acoustical designs such as shorter hallways with more turns and private patient rooms. A handful also mentioned operational techniques such as encouraging caregivers to practice voice control and the use of white noise and noiseless paging systems.



Assessing Evidence-Based Design

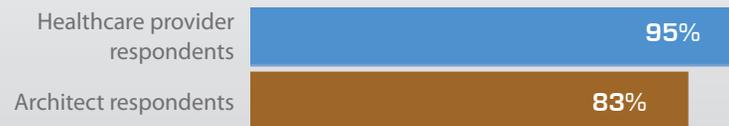
Would you say interest within your organization for Evidence-Based Design (EBD) is:



Evidence-Based Design (EBD) - where best organization and industry evidence is used to design healthcare facilities - is a relatively new practice that continues to grow.

87% of healthcare respondents said EBD popularity was growing within their organization, and half said it is an integral component of their institution's work. Only 3% do not utilize the methodology at all.

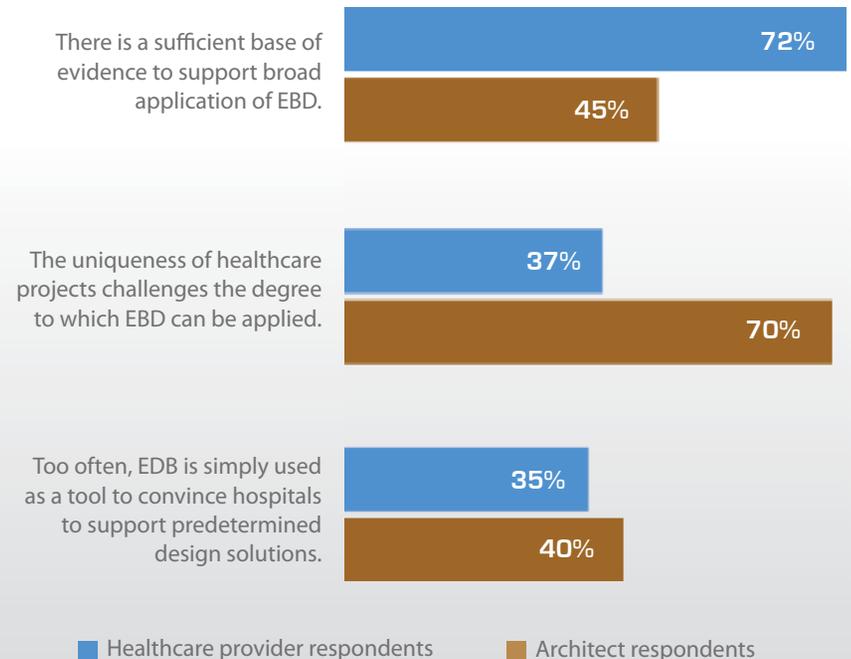
Percent who agree EBD meaningfully improves healthcare quality, safety, and outcomes



Both healthcare providers and architects believe EBD meaningfully improves patient outcomes. However—and perhaps because of their day-to-day closeness to EBD—architects are more likely to see limitations and blemishes in the manner EBD is applied.

70% of architects believe the uniqueness of new projects challenges where EBD can be utilized; 45% do not believe existing evidence supports broad EBD application; and 40% feel EBD is too often used to sell preset designs.

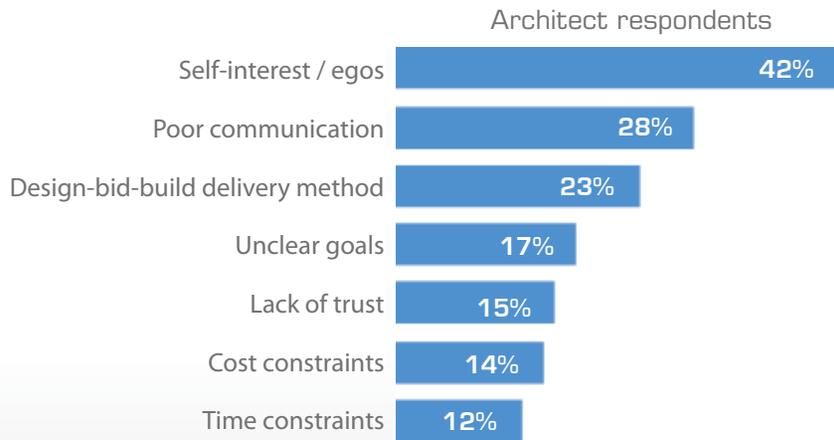
Percent who agreed that:



Playing as a Team

Successful healthcare projects require strong teamwork between healthcare institutions, architects, and contractors. Below are the barriers to teamwork according to architects, and how to fix them.

What are the biggest factors that get in the way of project teams working efficiently and effectively together?



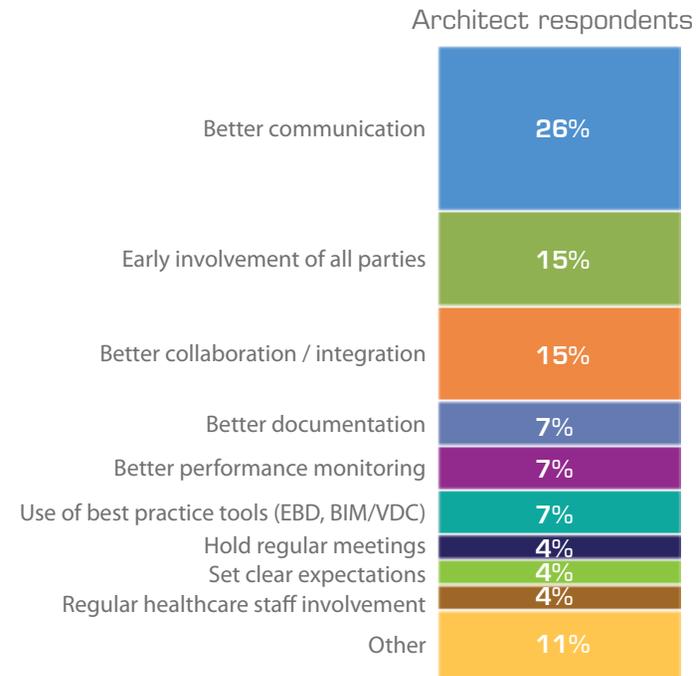
42% of architects said self-interest or ego was a primary factor that impedes effective teamwork.

“Mistrust, competing priorities, poor communications.” – architect

“Egos, differing perspectives, traditional practices that are hard to give up.” – architect

“Rivalry to gain the owner’s attention.” – architect

What enhances design and construction team performance?



“Lots and lots of communication.” – architect

“Integrate all team members early in the process so everyone feels like an integral part of the process.” – architect

“Review, check, check, check, talk, talk, talk....price, then talk again.” – architect



Project Delivery Trends

According to the Design-Build Institute of America, more than 40% of medical facilities are constructed using the design-build delivery method. Integrated project delivery (IPD) is a relatively new method which, like design-build, aims to increase collaboration and integration between parties. Fifty-seven percent of architects who took our survey “only know of IPD as a concept or idea” and less than a quarter have so far participated in an IPD project.

83% of architects reported growing preference for Integrated Project Delivery within healthcare institutions, and 72% reported growing Design-Build preference.

Comments regarding why preference for these methods was growing centered on the idea that design-build and IPD are best suited to meet owner demands for better projects completed faster and for less cost.

“Produce quicker, smarter designs.” – architect

“Provide cost assurance for owners.” – architect

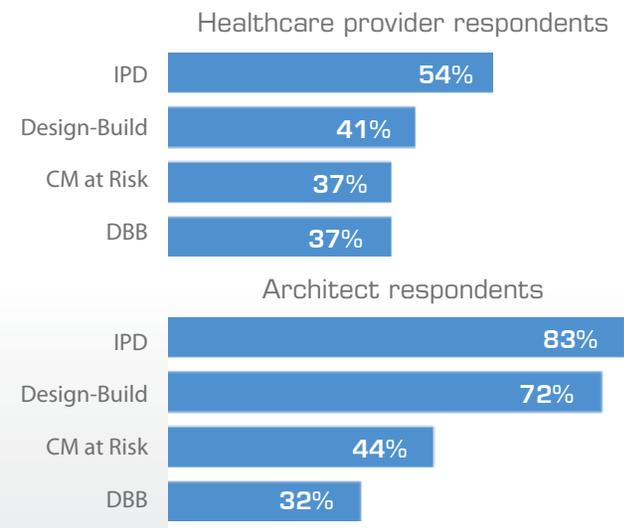
“Provide shared risk and greater accountability.” – architect

“Ensure entities act as partners instead of adversaries.”
– architect

However, a much smaller percentage of healthcare provider respondents believe IPD (54%) or Design-Build (41%) preference is growing.

In fact, the number of healthcare provider respondents reporting growing preference for design-build was only slightly higher than those reporting growing preference for CM at risk or design-bid-build.

Percent who believe delivery method preference within healthcare institutions is growing



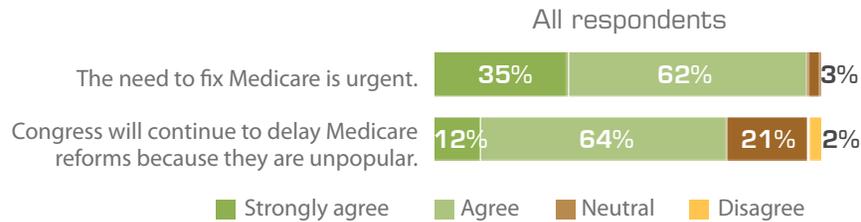
Growing demands placed on healthcare facilities may be driving greater interest in collaborative methods within the architect community. Owners who are less familiar with these methodologies may still need to be educated as to their advantages.

It is unclear even among architects how well received IPD will ultimately be. Among architects who have participated in an IPD project, 62% would recommend the approach on a future project, but 38% would not.

Government Program Concerns

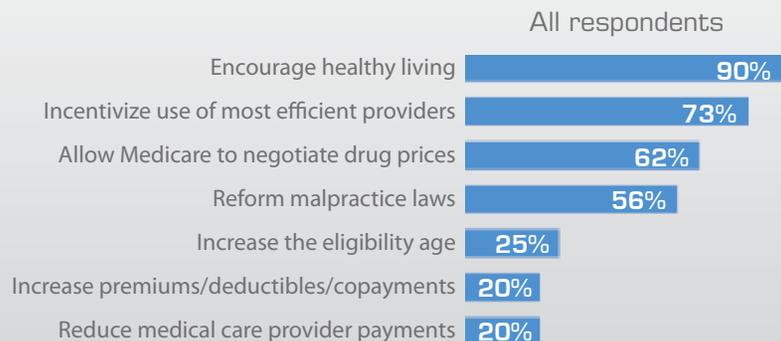
Perhaps the greatest threat to the healthcare industry is the viability of Medicare, which accounts for approximately 40% of hospital revenue.

Nearly all respondents who took our survey believe there is an urgent need to fix Medicare, but only a handful believe changes are forthcoming.



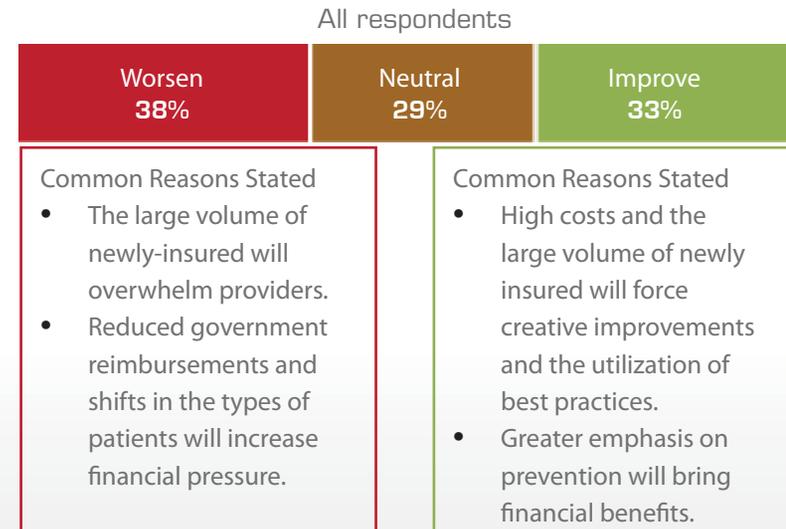
While respondents support reforms that encourage better lifestyle and healthcare choices, there is less support for actions that increase financial burdens on consumers or providers. The unpopularity of these actions challenges efforts to effectively reform Medicare.

Where should Medicare reforms be primarily focused?



Respondents are also unsure national healthcare reform legislation will provide a cure to healthcare financial woes. Ninety percent believe some, if not all, of the legislation will eventually come into effect, and most believe the legislation is at least a step in the right direction. However, respondents were split regarding the financial impact on healthcare providers.

What will happen to the financial condition of healthcare providers if national reform legislation comes into substantial effect?

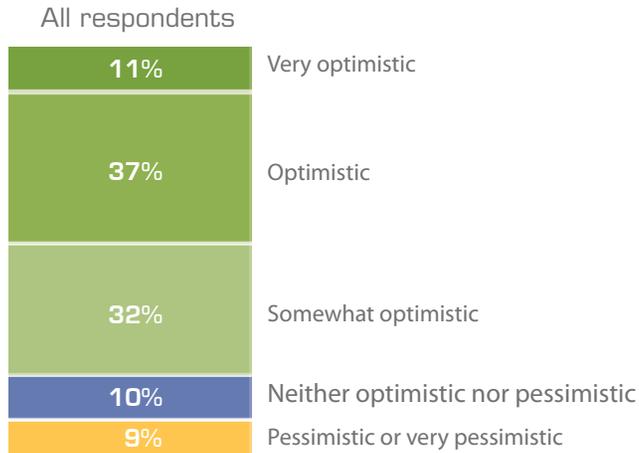


Split in their opinions regarding the impact of healthcare legislation, respondents also were split in their support for the legislation.

Sixty percent of respondents support the new legislation. Of the 40% who do not, many believe government is getting too involved in health-care and citizens shouldn't be required to purchase health insurance.

Optimism for the Future

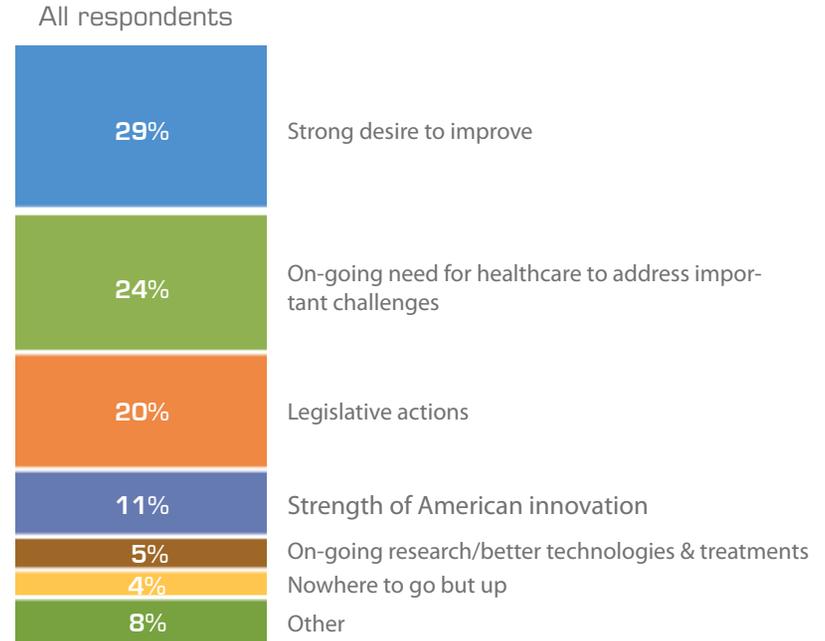
When you think of the future of healthcare in America, are you:



Despite financial challenges and regulatory uncertainties, participants are optimistic for the future of healthcare and confident that they and their healthcare colleagues will rise to meet industry challenges.

Reasons given for optimism fell into four primary areas. Twenty-nine percent talked about the strong desire within the industry to improve. Another 24% were confident that growing U.S. healthcare needs—such as the need to care for an aging population and address rising obesity—would compel the industry to take positive actions. Others expressed optimism that federal government policy changes would ultimately strengthen the industry, while others felt American innovation would propel the industry forward.

Why are you optimistic about the future of healthcare in America?



“Because of the changes taking place, we are at a crossroads and have the opportunity to move forward in a new and exciting direction.” – architect

“The vast majority of those who endeavor to be healthcare providers do so because they are motivated and stimulated by the challenges inherent to the system.”
– doctor and interior architect

“There are too many unknowns, but I still hold out hope.”
– supplier

Mortenson is Listening



We sincerely thank the professionals who offered their time to participate in this study. Input from studies like this and from active listening to customers and business partners in day-to-day dialogue form the basis for the strategic direction of Mortenson Construction. Our aim is to be in lockstep with our customers and partners, resulting in a construction experience that's second-to-none.

In today's difficult economy, we are continually examining our construction processes with an eye to reducing waste and improving efficiencies. We are also inviting our customers to tap our knowledge of capital markets and our development expertise to explore creative financing solutions and turn-key development alternatives. We are dedicated to working in an open and integrated manner with all of our business partners and customers.

We welcome the opportunity to share more with you about Mortenson's healthcare expertise, delivery methods and unique capabilities to provide world-class quality, innovation, and service to our customers.

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Mortenson has completed more than 850 healthcare projects. Whether a project is very large, very small, or somewhere in between, we bring the same ingenuity and expertise to each and every project.

A U.S.-based, family-owned business since 1954, Mortenson Construction is a leading builder in North America and one of the only domestic builders with capabilities in Asia. With services in general contracting, construction management, design-build, EPC/BOP, and project development, Mortenson is capable of delivering projects of any scope and size, in North America and abroad.

From top of the line healthcare facilities, cutting-edge stadiums and state-of-the-art LEED-certified mission critical projects to some of the most innovative renewable energy projects on the planet, Mortenson is building structures and facilities for the advancement of modern society. With offices across the U.S. and in Canada and China, Mortenson is a global company poised to continue *building what's next.*

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