The Hospital of the **Future**

The Hospital’s Role in a System-Focused Future
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# Trends and Insights to Consider for Building the Hospital of the Future

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Executive Summary

Hospital of the Future

Nine Lessons for Acute Care Sustainability

1. **Hospital M&A has resulted in asset aggregation without true consolidation.** Effective integration requires replacing existing asset-based service strategy with a service-based asset strategy.

2. **Hospital strategy no longer exclusively dominates health system strategy.** While system assets historically fed acute care, hospitals must now consider and support broader health system ambitions—not be the only part of it.

3. **Increasingly, an “all things to all people” service strategy is no longer viable.** Leaders must renew focus on core inpatient competencies and choose closely aligned partners for non-core services.

4. **Technological and cost pressures are forcing active evaluation of ambulatory service options.** Which services can be moved to day-case are burning health planning questions.

5. **Hospital conversion to ambulatory sites is not without risks.** Doctors and local governments require early and proactive engagement, and communication strategies must stress health system reinvestment in the community.

6. **Selling the core physical plant to third-party investors is the most radical step in “variabilising” fixed costs.** Lease-back transactions provide a significant influx of outside capital, though this option is more suitable for for-profit systems.

7. **Facility design flexibility often requires significant upfront investments, but can reduce long-term operational costs.** Best-in-class organisations invest in flexible design to accommodate volume surges while using existing space efficiently.

8. **Emerging low-cost acute care substitutes represent an intriguing alternative to traditional acute care.** Low-cost acute care substitutes are emerging as a vital component of acute care delivery at substantially lower costs.

9. **Population-specific facility design can alleviate demand pressure if demographics warrant it.** Some providers have attempted to design population-specific services to manage their demand effectively.

Source: Advisory Board interviews and analysis.
The New Focus of Acute Care Cost Control

Current Hospitals Typically Unsuitable for Future Market Demands

Hospital leaders have typically turned to two responses to sustain the inpatient bottom line. The first strategy is passive expectation of continued organic growth of acute care-only demand. Demographic pressures, however, show acute services as one part of the mix of services poly-chronic patients need.

The second, more common response is to aggressively pursue mergers and acquisitions (M&A). Yet, as the data on the right suggests, most systems aggregate without true consolidation. In most instances, provider M&A has led to higher prices without fundamentally reforming the delivery of care.

Responding to the challenge of an overbuilt, outdated and expensive acute care asset requires a concerted focus on reducing costs. In the aftermath of the financial crisis, the industry has already made significant progress in limiting labor and supply cost growth. Banner Health and Scripps Health have led the US industry with remarkable reductions in unwarranted clinical variation. Yet very few institutions have addressed the challenge with greatest savings potential: significant restructuring of an organisation’s fixed costs.

Attaining the Sustainable Acute Care Enterprise

- **High Difficulty**
  - **Fixed Cost Restructuring**
    - Reallocating acute care services across system
    - Rightsizing excess inpatient capacity
  - **Minimising Unwarranted Clinical Variation**
    - Engaging doctors in developing care standards
    - Eliminating quality shortfalls that increase cost per case
  - **Labor and Supply Cost Reduction**
    - Updating labor staffing models
    - Revising strategic sourcing plans

- **Low Savings Potential**

Source: Advisory Board interviews and analysis.
Rewriting Our Strategic Playbook

Asset Strategy Can No Longer Precede Service Strategy

Due to historical reliance on the hospital as the primary focus of health care strategy, changing acute care delivery is an especially difficult challenge. Service lines have typically been designed around filling hospitals. But this asset-based service strategy is not sustainable in a health care market that rewards outcomes based on population health. Organisations will need to shift to a service-based asset strategy. In other words, they must begin with service planning around the enterprise’s business priorities. Only after they have determined which services are necessary can they more appropriately distribute assets.

Best-in-Class Solution: Service-Based Asset Strategy

STEP 1
Determine our organisation’s future business model

STEP 2
Comprehensive service planning

STEP 3
Principled asset reconfiguration

To implement this strategy effectively, organisations will need to first appropriately map acute care services to new market demands. Then, once the right service mix has been determined, systems must reconfigure their assets, which may involve rightsizing or closing facilities. Last, low-cost substitutes for acute care services will need to be found in order to establish appropriate alternatives for acute care that better meet patient needs.

Time

1. Map Acute Care Services to Shifting Market Demand
   Reallocate services across acute care sites to attain scale and reduce duplication

2. Rightsize Fixed Costs
   Remove excess capacity to match future demand projections without endangering margins or community relations

3. Invest in Low-Cost Care Site Alternatives
   Refocus capital spending on assets needed to meet emerging consumer needs and support growth objectives

Source: Advisory Board interviews and analysis.
Map Acute Care Services to Shifting Market Demand

Traditional Health Enterprise Priorities Now Problems

Many health care systems face two problems with their legacy service mix. First, many organisations resemble a confederation of hospital assets rather than a unified enterprise, stemming from a history of expansion through M&A and a lack of effective post-merger integration. Second, most hospital sites continue to be “all things to all people,” offering a complete service portfolio, regardless of the volumes within the communities served or the presence of other assets.

Taken together, these factors have resulted in excessive duplication of clinical services. To address these issues, organisations must accurately map acute care services to the demands of the market. The Global Forum has uncovered four essential steps, each of which contribute an incremental return on investment to the system.

Four Key Components of Effective Service Distribution

This process begins with the establishment of a unified acute care strategy. A lack of cohesion across the enterprise results in a host of problems, most notably intra-system competition between local leaders, doctors, and staff.

A fully integrated strategy helps to avoid this discord. The benefits are clear: decisions benefit the system as a whole, intra-system competition is avoided, and overhead and operational costs are reduced.

Source: Advisory Board interviews and analysis.
1. Unified acute care service distribution strategy

Bring Clear Purpose to Each Site Type

Cleveland Clinic’s Assets Provide Comprehensive Geographic Coverage

After steady growth through M&A over the past 20 years, Cleveland Clinic faced excessive duplication across the system. To solve this issue, it assigned clearly defined roles to each site in the system: hub, hublets, and spokes. The flagship Cleveland Clinic serves as the main high-acuity hub, while the spokes provide ambulatory access to the community.

The typical model of high-acuity hubs and low-acuity spokes, however, did not sufficiently match the needs for Cleveland’s market. Consequently, Cleveland Clinic added “the hublets,” two community hospitals on the east and west side of Cleveland that focus on services needing scale not provided by the spokes, but also not requiring the high-acuity horsepower of the main campus.

Acute Care Service Distribution Plan

**Hub**
- 1,400+ beds
- High-acuity specialties such as cardiac surgery, transplants

**Hublet**
- Sites on east and west side of Cleveland (~500 beds each)
- Includes OB services, cancer center, pain management

**Spokes**
- Includes community hospitals, family health centers, urgent care sites

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Case in Brief: Cleveland Clinic

- Health system headquartered in Cleveland, Ohio
- Nine regional hospitals and 18 family health centers, as well as hospitals, clinics, and offices in Florida, Nevada, Canada, and Abu Dhabi
- Built health system through years of smaller hospital acquisitions in the Northeast Ohio market

Source: Advisory Board interviews and analysis.
Intermountain Healthcare’s entire system works toward a clearly defined goal: “CPI+1%.” Driven by the strategic needs of Intermountain’s health plan, all key strategic decisions are aimed at keeping cost growth at or below consumer inflation plus one percentage point.

Ensuring a zero duplication of assets in the market is a key element of meeting this goal. Each Intermountain facility is classified on a scale of 1 to 7. A level of 1 is typically a single primary care clinic; a 7 describes a full-service hospital with transplant services and a level one trauma unit. Anything from 4 through 7 is a hospital.

The guiding principle behind this site classification is patient access. As shown below, each region is allocated one Level 7 hospital, and 80% of the population must be able to drive to all remaining facilities within 30 minutes. But more importantly, a system-wide allocation of assets and services ensures that each site has a clearly defined role in the broader care delivery system.

**Spectrum of Service Offerings**

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Level 1: Family practice clinic</td>
</tr>
<tr>
<td>2</td>
<td>Level 2: Paediatrics, internal medicine, urgent care</td>
</tr>
<tr>
<td>3</td>
<td>Level 3: Outpatient surgery, advanced imaging</td>
</tr>
<tr>
<td>4</td>
<td>Level 4: General community hospital</td>
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<tr>
<td>5</td>
<td>Level 5: Broader community hospital</td>
</tr>
<tr>
<td>6</td>
<td>Level 6: Tertiary hospital, full-service portfolio, NICU</td>
</tr>
<tr>
<td>7</td>
<td>Level 7: Teaching, transplant, level 1 trauma</td>
</tr>
</tbody>
</table>

**Least Intensive Service Portfolio**

**Most Intensive Service Portfolio**

**Case in Brief: Intermountain Healthcare**

- 22-hospital health system headquartered in Salt Lake City, Utah
- Intermountain Medical Group employs 1,100 primary and secondary care doctors
- SelectHealth insurance plan enrolls 750,000 members

**Average Driving Time for 80% of Market Population to Reach Service Offering Levels**

- Level 1–6 minutes
- Level 2–10 minutes
- Level 3–15 minutes
- Level 4–15 minutes
- Level 5–20 minutes
- Level 6–30 minutes
- Level 7–One per region

Source: Advisory Board interviews and analysis.
Clarifying the Systemness Agenda

Key Considerations When Developing an Enterprise-Wide Acute Care Strategy

The mere existence of an acute care strategy does not guarantee its success. An effective plan requires change across the system, including system-based financial incentives for leaders, changes to compensation, and revised staff engagement plans that match system goals.

The Advisory Board has compiled a list of essential questions that organisations redesigning their acute care strategy must answer.

Diagnostic Questions

☑️ Do we have clear definitions of our organisation’s overall goals?

☑️ Have we aligned financial incentives with our business units and assets to meet those goals?

☑️ Does our compensation across the enterprise model match our organisation goals?

☑️ Do our staff understand how their roles contribute to our overall success?

☑️ What is the most effective organisational structure to achieve our goals?

☑️ Which responsibilities will be centralised and which will be left to local governance?

Source: Advisory Board interviews and analysis.
2. Principled service rationalisation

Duplication Begets Unpleasant Side Effects
Inadequate Volumes Threaten Quality

Problems That Result from Duplication
- Intra-system competition
- Decreased operational efficiency
- Inadequate volumes at both sites
- Excess cost
- Unmet consumer needs

Putting together a comprehensive service plan and assigning roles to sites within the system will almost certainly highlight the significant amount of duplication within an organisation or market. In early 2015, Johns Hopkins Medicine, Dartmouth-Hitchcock, and the University of Michigan Health System recognised that sites performing certain procedures at low volumes also had demonstrably lower quality outcomes. As a result, they collectively decided to impose limits on 10 procedures at low-volume sites across their respective systems.

While these three systems focused primarily on the issue of quality, there are a host of problems that can be solved by eliminating unnecessary duplication, ranging from decreased operational efficiency to higher costs per case.

Based on conversations with leaders at a number of hospitals that have successfully reduced service duplication, we have identified two primary models for successfully eliminating unnecessary duplication: consolidation by service line and consolidation by acuity.

Problems Resulting from Duplication
- Intra-system competition
- Decreased operational efficiency
- Inadequate volumes at both sites
- Excess cost
- Unmet consumer needs

Two Methods for rationalisation

Model 1
Consolidate by service line

Model 2
Consolidate by acuity

Consolidation by service lines lends itself to higher quality, improved operational efficiency, and reduced costs. Sometimes, these consolidations can even lead to a specialized site, as Scripps Health discovered. When a Scripps facility needed updating, the system used the change as an opportunity to consolidate multiple cardiac programs into one.

However, the process of consolidation is not limited to simply moving clinical services. Scripps made a concerted effort to keep its doctors on board throughout the process. Site leaders were heavily involved in the transition, staff issues were proactively addressed, and financial incentives were aligned across the staff. Scripps also highlighted extremely visible public unity among the individual site leadership as a linchpin for its success.

Scripps Consolidated Two Cardiac Programs into One

Two programs consolidated following consideration of hospital renewal

Key Elements of Success
- Inclusion of all site leaders in transition plan development
- Proactive redress of clinician problems
- Visible public unity among administrative leadership
- Aligned financial incentives across staff

Case in Brief: Scripps Health

- Four-hospital health system headquartered in San Diego, California
- Cardiac programs at five acute care sites
- Based on long-term strategic planning and service regionalisation, consolidated the two highest volume cardiac programs, with specialised services and research programs integrated at one site
- Implementation included system-wide care line structure employing doctor/administrative co-management to address best practices, resource management

Consolidation resulted in economies of scale and cost savings through reduced waste
Multiple services are best consolidated by acuity. For example, after Yale New Haven Health System acquired Hospital of Saint Raphael in 2012, system leaders recognised the potential danger of redundant or even self-competitive services and disrupted practice patterns, among other challenges.

To avoid these consequences, Yale adhered to a strict policy of zero duplication of services. The only services provided at both campuses were ones whose volume growth had spurred the acquisition in the first place.

Clinical Campus Configuration of Yale-New Haven Hospital
Service Allocation Post-acquisition of Hospital of Saint Raphael

York Street Campus
- Children’s hospital
- High-risk obstetrics
- Major trauma
- Transplant
- Cardiac surgery

Both Campuses
- Behavioral health
- Emergency services
- General medicine
- Heart & vascular
- Neurosciences
- Oncology
- Urology
- Women’s services

St. Raphael Campus
- New musculoskeletal center
- Low-risk, high amenities obstetrics
- Specialty geriatrics care
- Specialty GI surgery
- Neurovascular
- Medical heart failure

Case in Brief: Yale New Haven Health System
- Three-hospital system headquartered in New Haven, Connecticut
- Yale-New Haven Hospital is teaching hospital for Yale School of Medicine
- After acquisition of Hospital of Saint Raphael, Yale-New Haven Hospital now fifth largest hospital in the country, with 1,541 beds

Source: Advisory Board interviews and analysis.
Four Essential Elements of Service Rationalisation

A Principled Approach to Eliminating Duplication

Clear and deliberate execution is crucial to implementing any model of service rationalisation. Yale New Haven’s acquisition of Saint Raphael demonstrates one of the best examples of a principled process. Leaders attributed their success at service rationalisation to these four essential elements:

1. **Purposeful planning**
   When planning for redistribution, organisations must clarify the top priorities for their rationalisation of services. Throughout Yale’s assimilation of Saint Raphael, it maintained two principles: first, a zero-tolerance policy for duplication across both sites, and second, a data-driven approach to determining the right site of care for their service portfolio. These goals then helped shape the specific strategies supporting those goals. For example, leadership of the integration process was assigned to the president of the flagship hospital rather than someone at the system level.

2. **Staged timeline**
   The process of eliminating duplication must also follow a clearly defined schedule, allowing for timely execution of key tasks. Yale’s timeline for the Saint Raphael acquisition was divided into three stages: rationalisation planning, pre-acquisition implementation, and the first 100 days after acquisition. For instance, the transition of 3,400+ employees to the flagship hospital, assigning responsibilities for closing services, and creating a central dashboard for tracking organisational progress and staff changes had to be completed before the acquisition. This then allowed the post-acquisition process to focus on normalising policies between the two facilities and rationalising services between campuses.

3. **Staff transitions**
   Yale made the seamless transition of staff a key priority during the integration. Collaborative workshops solicited input from staff on potential integration issues, service closure duties were delegated to service line leaders, and an employee tracker matched existing staff with future roles. To manage these changes, Yale created a centralized dashboard to track deadlines and progress on these organisational goals.

4. **Doctor engagement**
   Doctor support is the bedrock of effective service rationalisation. To convince its doctors of the benefits of consolidation, Yale showed doctors hard, quantitative evidence and also offered them some significant benefits. New investments were made at Saint Raphael, such as renovated facilities, improved equipment, and new centers of excellence. All doctors at Saint Raphael were also offered membership to the Yale-New Haven Hospital staff.

Source: Advisory Board interviews and analysis.
Protecting Access Post-rationalisation

Cooperative Affiliations Critical for Patients

Even as service rationalisation stabilises the core business, health systems must continue to protect service access for their patients. To do that, organisations must first determine the most appropriate services on which to partner. For example, leaders at the Greater Baltimore Medical Center (GBMC) knew that success in the competitive imaging market would require significant financial investments. GBMC decided to spend capital on enhancing core acute services instead of expanding beyond their traditional strengths. Consequently, it built a successful joint venture with the largest radiology doctor group and are considering expansions to other services.

Two Different Partnership Strategies

Partner with doctors

Ancillaries

Core services

High-acuity services

Partner with other systems

Such partnerships can also be completed with high-acuity services. Bronson and Lakeland Medical Centers in Michigan partnered to provide TAVR\(^1\) services to both of their markets. Both organisations work together to decide if the patient is eligible for the procedure, with the TAVR being ultimately performed in Bronson’s OR with Lakeland doctors attending. Without this partnership, both systems would have been unable to attain the volumes to meet CMS thresholds on their own.

Criteria for Service Divestment

- Low margin
- Commodity business
- Not directly related to population health or strategic goals
- No longer attaining a pricing advantage over freestanding competition
- High capital needs

Potential Service Area Partnerships

*Heard in the Research*

- Behavioural health, psychiatry
- Home health
- Dialysis
- Inpatient rehab

*1) Transcatheter aortic valve replacement.*
4. Patient-oriented transfer centers

Service Redistribution Ineffective Without Direction

Patients Need Navigation Support After Service Changes

Following service redistribution, organisations need a contingency plan to redirect patients to the appropriate sites. Patients have two primary entry points into the health system: referral by their doctors or self-presenting to the ED. Without strategies to send patients to the correct sites, the benefits achieved through service rationalisation will be overridden by patient confusion.

Two Primary Patient Entry Points

1. Referral from Doctor
   Patients referred to inpatient care and/or specialists through referrals

2. Present to ED
   Patients arrive at the emergency department seeking care for emergent or urgent care needs

Fundamental Steps for Patient Redirection

One-Stop Doctor Scheduling

Investing in a centralised doctor scheduling platform and clinician-staffed transfer centers is a crucial first step to directing patients to the correct location. Organisations such as Cleveland Clinic have established transfer centers that the patient or referring physician can call when the patient needs an acute care service. Teams of clinicians at the transfer center (typically doctors and nurses) then determine the appropriate care site for the patient, no matter where they present.

Transportation Between Sites

In some instances, patients who show up to a site looking for services that are no longer there will require physical transportation. After a hospital in Laurens Health System was turned into a short-stay site, Laurens introduced a shuttle service to drive patients seeking services that had moved to their new location 25 miles away. This was particularly important since their community lacked adequate public transportation.

Proactive Redirection

Systems can solve the issue of unnecessary ED overflow by proactively redirecting patients to the appropriate care site. Greater Baltimore Medical Center sends patients who do not specifically require ED services to the appropriate specialists on the hospital campus. Such a program requires significant collaboration between specialists and ED care managers, such as opening and pooling schedules.

5. Flexible facility design principles

Asset Flexibility No Longer Optional

Menu of Flexible Design Options Available

Many institutions struggle to balance the necessity for high occupancy with the need for capacity to meet unpredictable surges in demand. New technologies and care models have introduced a further need for additional space. Meanwhile, the space that health systems currently have tends to be overly specialised, leading to excess capacity. Organisations focused on rightsizing fixed costs must introduce flexibility into the design of acute care sites.

Opportunities at Every Level

Benefits of Flexible Design

- Standardised templates support consistent clinical operations, staff mobility between sites
- Multipurpose space adapts to patient surges, specialised needs
- Modernised units accommodate variety of patient acuities in one location
- Adjustable rooms reduce patient transfers

At the largest scale, organisations can introduce flexibility into hospital design. Banner Health has introduced facility standardisation as a way to support their clinical efforts. System leaders use a standardised design template for all new acute care construction. Their base template is scalable for projects as small as ~1,400 m² or as large as 12,000 m², allowing it to accommodate multiple levels of care. It can also be easily altered to meet future care needs, and is updated annually to match demographics, care models, and technology changes. Using the templates not only saves two months’ design time and are most cost-effective to create, but also helps to create a unified brand experience for patients across Banner’s sites.

Source: Advisory Board interviews and analysis.
Utilise Flexible Space to Manage Seasonal Volume Growth

Floor
Manage Volume Swings with Inter-unit Space

Flexibility can be hardwired into an individual floor of a hospital. PinnacleHealth West Shore Hospital created inter-unit flex space between the emergency department and adjacent radiology department at a new site. The space serves as either surge capacity when ED volumes are high or holding bays for patients waiting for radiology procedures.

Such flexibility will be essential during times of seasonal volume surges, which will likely become more common as more patients adopt high-deductible health plans.

Unit
Transform Inpatient Unit for Short-Stay Needs

Multipurpose Beds Within Unit

Some organisations also build flexibility into individual units, particularly with floors that see less-than-ideal use rates. For example, when the University of Michigan Health System saw a significant increase in observation and ED patients, ~2,000 m² of an underutilised hospital floor was repurposed to create a short-stay unit. The addition doubled the number of short-stay beds from 20 to 40, and it will allow patients to remain in the same room with minimal disruption in care, even if they were first classified under observation status.

Source: Advisory Board interviews and analysis.
Acuity-Adjustable Rooms Expanding to More Systems

Room

Acuity-Adjustable Rooms Accommodate All Patients

Acuity-adjustable rooms (also known as universal, flex-up, or flex-down rooms) provide another opportunity for flexibility. Able to accommodate the full range of patient acuity, the rooms can reduce transfers and associated medical errors.

A number of systems, such as Parkland Health, MetroHealth, Dartmouth-Hitchcock Medical Center, and University of Cincinnati Health’s University Hospital have invested in such rooms. Though these rooms typically cost 25% more to construct and may increase the burden on a nurse’s workflow, their use has reduced length of stay by a full day for high-acuity patients at some institutions.

Evaluating the Range of Flexible Design Options

While there are many different options for introducing flexible design into a health system, their applicability varies. Standardised design templates and flexible floor usage typically benefit all institutions; the efficacy of acuity-adjustable rooms, though promising, requires more study.

Key Considerations for Incorporating Flexibility in Hospital Design

<table>
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<tr>
<th>Standardized Templates</th>
<th>Benefits</th>
<th>Challenges</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>Room design that can adjust to the full range of patient acuity to accommodate any patient and keep patient in same room throughout duration of stay</td>
<td>Increases speed to market, reduces costs, and supports clinical standardisation</td>
<td>Requires organisation-wide consensus on design</td>
<td>Health systems will attain improved speed to market and clinical standardisation benefits</td>
</tr>
<tr>
<td>Rooms are typically 300 to 400 square feet in size to accommodate electrical outlets, medical gases, observation window, and data ports found in ICUs</td>
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<tr>
<td>Rooms are divided into three zones for the patient, family, and care team</td>
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<tr>
<td>Acuity-adjustable rooms cost approximately £102,899 to construct, compared to £83,027 for an average room</td>
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<thead>
<tr>
<th>Multipurpose Floor Space</th>
<th>Benefits</th>
<th>Challenges</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space adapts to a variety of uses based on current needs</td>
<td>Balances the need for specialisation with flexibility</td>
<td>Best for high-growth service lines or services with spikes in usage</td>
<td>Overall Grade: A</td>
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<td></td>
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<table>
<thead>
<tr>
<th>Unit Flexibility</th>
<th>Benefits</th>
<th>Challenges</th>
<th>Assessment</th>
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</thead>
<tbody>
<tr>
<td>Different bed types can treat patients regardless of acuity</td>
<td>Space for a flexible unit is not always available</td>
<td>Worth pursuing as a low-cost means for managing observation patients</td>
<td>Overall Grade: B+</td>
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<table>
<thead>
<tr>
<th>Room Adjustability</th>
<th>Benefits</th>
<th>Challenges</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>Reduces patient transfers</td>
<td>May be cost-prohibitive and space may not be available</td>
<td>ROI dependent on significant length-of-stay reductions</td>
<td>Overall Grade: B</td>
</tr>
</tbody>
</table>

6. Gradual bed reduction

Finding Solutions for Overbuilt Assets

Downsizing as Part of Modernisation Project

In some situations, adding flexibility is inadequate to solve a facility’s problem of excess space. Some organisations, such as Banner Health, have turned to gradual bed reduction to slowly rightsise facilities’ fixed costs.

As Banner began the physical plant renovation of Desert Medical Center, projected utilisation rates suggested that the market would not have the volumes needed to support the site’s existing bed capacity. Instead, the necessary renovation was used as an opportunity to steadily rightsise their facility.

Roughly one unit is renovated per year to increase the square footage of each room, while decreasing the number of rooms per unit. These changes also increase the flexibility to add or remove equipment. By 2025, Banner plans to reduce bed count by almost 10%. Rightsising in this piecemeal fashion makes the process more operationally sustainable. By rebuilding one unit at a time, Banner is then able to more effectively incorporate the unit’s update into its annual property, plant, and equipment budget, linked to the depreciation schedule.

The larger rooms also benefit patients, who enjoy having more space for themselves, their care teams, and their families. Furthermore, the extra space allows for larger mattresses and equipment like bed lifts, which will become more useful as the population of aging patients grows.

Annual Unit Renovations Reduce Bed Count, Increase Room Size

Case in Brief: Banner Desert Medical Center

- 401-bed hospital in Mesa, Arizona
- Banner is renovating roughly one unit a year at Desert Medical Center and decreasing the number of beds in each unit
- Larger room size accommodates family members, increases patient satisfaction
- Banner plans to convert 32 beds in small rooms within a unit to 24 to 26 beds in larger rooms

Source: Advisory Board interviews and analysis.
Starting to Confront an Unfortunate Reality

Acute Care Economics No Longer Supporting Every Hospital

When incremental change is not enough, health systems must make more significant changes, many of which involve reconfiguring the inpatient space altogether. With demand pressure and footprint challenges straining existing bed stock, many markets, progressive organisations will have to convert hospitals into ambulatory facilities that better suit a community’s needs.

Any hospital executive in our state would tell you that we are overbedded. There are probably two too many hospitals in our city.”

SVP of Corporate Strategy
Health System in the Northeast

The process of actually removing inpatient beds, is almost always a challenging situation, given the role a hospital often has in a community as both a major employer and site of sentimental value. As a result, navigating the key flashpoints and community concerns is paramount to the success of the transition.

Engagement and communication with both internal and external stakeholders must be addressed early on in the process. Key constituents include the local board, the local doctor group, and state regulators. Then, organisations must carefully manage the transition’s logistics and to minimise service and staff disruptions.

Key Flashpoints in Conversion Process

<table>
<thead>
<tr>
<th>Stakeholder concerns</th>
<th>Stakeholder Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mitigate conflicts with boards, donors, local and state governments, and doctors by showcasing new service offerings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community backlash</th>
<th>Communication Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proactively engage staff, community leaders, unions, and media</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient concern with disruption to care</th>
<th>Logistics Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Determine how to provide undisrupted service to community throughout closure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finding new roles for displaced staff members</th>
<th>Staff Transitions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transition staff to new roles within system</td>
</tr>
</tbody>
</table>

Source: Advisory Board interviews and analysis.
Overcome Common Barriers to Conversion

Proactive Engagement Essential to System Success

Organisations must proactively address four key flashpoints in the hospital conversion process. Overcoming these challenges effectively determines whether or not the transition is ultimately successful.

1 Stakeholder concerns

Developing an effective strategy to engage key stakeholders such as regulators, physicians, and staff involves careful evaluation of and proactive responses to potential objections to the hospital transition.

In particular, organisations that have successfully engaged their communities stress the undeniable influence of the local doctor community. Taking hospital beds offline means changing long-standing practice patterns, so engaging doctors early in the process is crucial to success.

2 Community backlash

Actively communicating the intentions behind the transition is necessary in any community, but it is particularly important in rural areas, where such a change can have a powerful impact on hospital-community relations. When IU Health converted its Morgan Hospital to an ambulatory facility, leaders found that actively engaging staff, community leaders, unions, and the media was crucial to their success. Rather than highlighting the loss of a hospital, IU Health emphasised the several million dollars (USD) of investments made in the new site using three key mediums: a public forum at the annual county fair, social media communication, and at on-campus events.

3 Patient concern with disruption to care

One of the most disruptive aspects of hospital conversion is the closure of a long-standing ED, which could have serious consequences for patients unaware of the change. During IU Health’s closure of the under-utilised ED at their University Hospital campus, system leaders created a backup plan for patients who continued to show up at the closed ED. An ambulance was stationed outside the hospital to transport patients needing emergency care to their nearby campus. In addition, University Hospital continues to maintain a basic emergency clinical crew to address needs of the high-acuity patients presenting at the old site.

4 Finding new roles for displaced staff members

Lastly, best-in-class health systems make a dedicated effort to transition staff to other roles in the organisation. For example, Montefiore Health System was able to mitigate the effects of transitioning Westchester Square Hospital to a freestanding ED by providing the staff with new roles either at the new freestanding ED or at other sites within the Montefiore system. While it may not be possible to do this for all staff affected, evident dedication to staff well-being throughout the process helps to maintain support.

**Involve Community in Asset Replacement**

**Case in Brief: Kaleida Health**

- Four-hospital health system headquartered in Buffalo, New York
- Launched international design/development competition to determine future reuse of Kaleida Health’s Millard Fillmore Gates Circle Hospital in Buffalo, New York, with a $1 million prize for the winner
- Developer TM Montante to begin converting site to retirement community

When a hospital closure cannot be followed by a conversion into a different health care site, it can often be difficult to determine what to do with it. When Kaleida Health closed one hospital in Buffalo, leaders launched a design competition to actively involve the local community in its replacement. This not only solved a strategic problem for Kaleida, but also engaged the community and mitigated conflict over the hospital’s closure.

Of the many community proposals, a retirement community was both popular and economically feasible. Kaleida then turned the hospital over to a developer to implement the plan.

After seeing the success of this endeavor, Kaleida is also using a design competition to determine the future role of the Women’s and Children’s Hospital of Buffalo after it closes.

Incorporating the Community

<table>
<thead>
<tr>
<th>Finalist Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Veterinary Medicine</td>
</tr>
<tr>
<td>Apartment Complex</td>
</tr>
<tr>
<td>Retirement Community</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winning Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 independent and assisted living apartments</td>
</tr>
<tr>
<td>Surrounding retail shops</td>
</tr>
</tbody>
</table>

Kaleida Health, “Kaleida Health Offers $1 Million Prize for Hospital Reuse Design/Development Competition,” January 2011, [https://www.kaleidahealth.org/](https://www.kaleidahealth.org); Advisory Board interviews and analysis.
# Key Takeaways

## A Toolkit for Hospital Conversion or Closure

While many of the case studies discussed here are about decreasing inpatient capacity, they are also about reinvesting in the community. Through principled stakeholder engagement, communication strategy, and logistical planning, organisations can provide better, more sustainable health care to their communities.

## Considerations When Planning a Hospital Conversion or Closure

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Potential Objections</th>
<th>Engagement Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulators/Local Government</td>
<td>Likely to object to potential job losses</td>
<td>Showcase efforts to transition staff to new roles; highlight investment in new population health services</td>
</tr>
<tr>
<td>Board Members</td>
<td>Concerned with loss of long-standing presence in community</td>
<td>Refocus board on how ambulatory conversion better meets community health needs; highlight investments in new services</td>
</tr>
<tr>
<td>Medical Staff</td>
<td>Unhappy with shift in historic practice locations</td>
<td>Highlight improved quality/cost outcomes from service consolidation</td>
</tr>
<tr>
<td>Key Donors</td>
<td>Donors may have financially supported hospital construction, unhappy to see philanthropic contributions “wasted”</td>
<td>Show how removal of acute care changes only one small impact of hospital footprint; engage donors on population health/ambulatory priorities</td>
</tr>
<tr>
<td>Unions/Staff</td>
<td>Concern with loss of jobs in community</td>
<td>Ensure that all staff members have access to jobs across entire system</td>
</tr>
<tr>
<td>Community Members/Patients</td>
<td>Concern with break in continuity of care, loss of health care in area</td>
<td>Highlight new investments; explain strategies that maintain care continuity; provide transportation to relocated sites</td>
</tr>
</tbody>
</table>
8. Asset ownership exit strategy

Staking a Claim in Hospital Properties

REITs¹ Entering Acute Care Space

The final strategy hospitals can use to reduce their fixed costs is to hand over real estate management to a third party. Leasing property to real estate investment trusts (REITs) is already commonplace in the hotel and airline industry, and it is starting to emerge in the acute care space as well. In 2015, Ardent Medical Services and Capella Healthcare sold their properties to REITs and are now leasing the space back.

Many organisations may equate selling real estate with relinquishing control over the internal operations. But an in-depth examination of the Ardent and Ventas partnership reveals that most REITs are not interested in interfering with the hospital’s business. While Ventas requires Ardent to inform it of any major service changes, it maintains a hands-off approach to the operations. Moreover, distribution of control is determined in the contract agreement, which can include use-restrictions limiting what the REIT can do to the facility, including whom they can bring in as tenants.

Innovation in Brief: Ventas and Ardent Medical Services Transaction

- Ardent operations now owned by hospital management, third-party equity, and Ventas
- Ardent and its hospitals continue to be controlled and managed by existing team
- Ardent leases real estate from Ventas
- Both parties partnering on future expansions and acquisitions

Benefits to Ardent and Its Management

- Speed and flexibility with tailored transaction
- Capital for future growth and investment in high ROI projects
- Ardent maintains operational independence

Although selling to a REIT reduces fixed costs and provides a health system with a large sum of capital, there are significant tradeoffs for not-for-profit systems to consider. Most notably, not-for-profits that sell their real estate to a REIT would not only have to start paying property taxes, but also face more limited benefits from tax-exempt financing.

Innovation in Brief:

Ventas and Ardent Medical Services Transaction

- Ardent operations now owned by hospital management, third-party equity, and Ventas
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Benefits to Ardent and Its Management

- Speed and flexibility with tailored transaction
- Capital for future growth and investment in high ROI projects
- Ardent maintains operational independence

Clear Benefits for For-Profit Systems…

- Improves cash position
- Gains capital for future investment opportunities, acquisitions
- Maintains autonomy over operations of acute care facilities

…but Less Appealing to Not-for-Profits

- Not-for-profits get access to more unrestricted capital
- Partnering with a REIT requires not-for-profits to pay property taxes in form of higher lease payments
- Shift from tax-exempt debt to REIT-financing reduces benefit from tax-exempt status, may lead to for-profit adoption
- May face community backlash for shift in tax status


1) Real estate investment trusts.
Invest In Low-Cost Care Site Alternatives

Legacy Acute Care Assets Vulnerable

The outmigration of the inpatient business to lower-cost sites of care has become more pronounced in recent years and promises to accelerate. Previously profitable business lines such as hospital-based imaging, cardiac services, neurosciences, and orthopaedics will potentially be hugely impacted by innovations in technology, increased consumerism, shifts toward population health, and the rise of non-health system competitors.

These developments pose a significant threat to hospital volumes and revenue. As a result, the future of acute care cannot simply involve downsizing inpatient towers. Instead, the solution is not necessarily less acute care, but a different kind entirely that is lower-cost, higher-quality, and better equipped to meet patient needs.

Unbundling the Hospital Asset

With these new forms of acute care, hospital leaders must solve for two market challenges: first, delivering procedural care at a far lower cost, and second, finding a less expensive alternative for low-acuity medical care needs. While many systems have made significant investments in new large ambulatory care centres or full-scale hospitals, these sites either do not offer the necessary breadth of services or are too big for expansions into new markets. Instead, systems must find a middle ground that allows systems to deliver a comprehensive set of clinical services without expensive up-front costs.

For procedural care, progressive organisations have turned to micro-hospitals and hospitals-without-beds. Meanwhile, innovations in medical care have led to sub-acute facilities and hospital-at-home emerging as potentially viable alternatives for inpatient stays.

Type of Service

<table>
<thead>
<tr>
<th>Procedural Care</th>
<th>Medical Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro-hospital development</td>
<td>Sub-acute facility substitution</td>
</tr>
<tr>
<td>Hospital-without-beds deployment</td>
<td>Hospital-at-home strategy</td>
</tr>
</tbody>
</table>

“The last thing we wanted to do was build another giant hospital in this market... However, we were not located in this very fast-growing community, and we wanted to provide more full-service care and establish a beachhead rather than just have an ambulatory surgery center.”

SVP and Chief Strategy Officer
Integrated Delivery System in the West

Source: Advisory Board interviews and analysis.
Micro-hospitals a Sweet Spot for Investments

Typical Facility Options Insufficient for Growth

Key Features of Micro-hospitals

### Core
- Emergency services
- Imaging
- Pharmacy
- Lab services
- Primary care

### Optional
- Outpatient surgeries
- Women’s services
- Dietary services
- Outpatient surgeries
- Women’s services
- Dietary services

Organisations Investing in Micro-hospitals

- SCL Health
- Baylor Scott & White
- Trinity Mother Frances

A New Alternative to Opening a Hospital

For organisations trying to enter new markets, a full-scale hospital is often a large and risky investment, while freestanding EDs and urgent care centers do not have the range of services necessary to solve all patients’ health needs. Micro-hospitals present a sustainable alternative as smaller-scale inpatient sites for lower-acuity procedures.

Micro-hospitals are licensed hospitals that operate 24/7 in a fraction of the space of traditional acute care hospitals. They’re equipped to respond to almost any medical issue, including those requiring critical care. While there is a core set of services required of any micro-hospital, the sites are also highly customizable, which allows organisations to adapt them to their target market.

Many organisations have used micro-hospitals to enter a new market without the significant investment needed for a full-scale hospital. For example, SCL Health in Colorado has employed them as their primary strategy to move into the high-growth areas of the Denver metro area. The micro-hospital model allowed SCL Health to develop a care model that was much more accessible for patients and has brought inpatient services to neighborhoods where demand would not justify a traditional hospital. Leaders at SCL Health established a joint venture with Emerus, who will build the micro-hospital and provide capital and facility management services. Several other organisations, such as Baylor Scott & White and Trinity Mother Frances have initiated similar micro-hospital developments.

Source: Advisory Board interviews and analysis.
Technology has made it possible for many previously inpatient procedures to now be performed on an outpatient basis. Delivering an improved patient experience is also increasingly a priority for many leaders. To adapt to this new environment, some organisations have turned to the “hospital-without-beds” as a new procedural hub. The hospital-without-beds has all the services available at a typical inpatient hospital, ranging from as primary care, specialties, imaging, labs, pharmacy, and ambulatory surgery.

Some organisations in especially dense markets have already introduced this model. Recognising the significant need in its market, Montefiore Health System built a 12-story, 26,000 m² multispecialty care centre. The site is about the size of a small community hospital and offers nearly all the same services, with the exception of the definitive features of an inpatient site: the ED, inpatient beds, and an ICU. This layout allows Montefiore to derive significant economies of scale from this new center, particularly with a surgical capacity larger than that of most traditional hospitals.

**Case in Brief: Montefiore Health System**

- Opened 12-story, 26,000 m² multi-specialty ambulatory care center in Bronx, New York
- Offers a range of services in one location, including 12 Operating Theatres, four procedure rooms, imaging, subspecialty services
Substitution of Acute Care Increasingly Necessary

Other Sites Potentially Better Suited for Medical Admissions

Many patients with an acute care need do not necessarily require full-service hospitals, but rather clinical supervision or short-term recovery from a procedure. The growth of medical cases will add further stress to existing inpatient medical management. Progressive systems looking to support their acute care business need to find new, lower-cost methods to treat these cases.

Mulligan Health System1 a Pioneer ACO participant, uses the three-day SNF2 waiver to decrease hospital length of stay. The waiver relieves the system from the three-day inpatient stay requirement, so Mulligan is able to instead use predictive analytics to determine the best discharge site and schedule and then sends patients to SNFs as soon as clinically permissible. This has led to decreased LOS, and as its analytics mature, Mulligan hopes to bypass the hospital altogether.

Early results have shown that this practice is remarkably cost-effective. A recent Health Affairs study of Medicare Advantage plans found a net decline in length of stay of 0.7 days, amounting to about £1,200 in savings per stay.

Potential Benefit of Three-Day Waiver

<table>
<thead>
<tr>
<th>Reduced Hospital LOS</th>
<th>Current Application: Uses predictive analytics to determine best site of care for patients, decreasing hospital LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to send patients directly to SNF</td>
<td>Future Potential: Ability to send patients directly to the SNF without a hospital admission</td>
</tr>
</tbody>
</table>

Case in Brief: Mulligan Health System

- Multi-hospital health system in East
- Pioneer ACO participant
- Three-day waiver allows organisation to send patient directly to cost-appropriate site of care

Promising Results of Three-Day Waiver2

| 0.7 | Net decline in hospital length-of-stay (in days) for patients not subject to three-day stay requirement |
| £1,150 | Savings derived from an 0.7-day reduction in hospital stay |

Even for organisations currently without the three-day waiver, a preferred post-acute care network is crucial to managing acute care costs. While preferred partner networks are increasingly common, some systems have gone one step further, establishing joint ventures with post-acute care providers, and exclusive partnerships with single providers for high-frequency services.

For example, Cleveland Clinic formed a joint venture with Select Medical, a national post-acute services company. This partnership allows the organisations to combine the strengths of Cleveland Clinic’s brand with Select Medical’s post-acute care operational strengths. The joint venture also closely aligns financial incentives for both partners. Last, having a single partner lends itself well to a more-consistent patient experience than the one available from a preferred partner network.

1) Pseudonym.
2) A place of residence for people who require continual nursing care and have significant difficulty coping with the required activities of daily living. Nursing aides and skilled nurses are usually available 24 hours a day.
3) Based on a Health Affairs study, reviewing patients enrolled in Medicare Advantage contracts with Medicare FFS.

For a number of ailing patients, the hospital may not necessarily be the right place for them to receive care. It is expensive; the cost to treat the average elderly patient is about £10,000 per stay, which is often lower than the reimbursement for a typical Medicare\(^1\) medical patient. Furthermore, hospitals can still be unsafe places for elderly patients, leading some organisations to revisit the idea of provider services in the patient’s home.

The Hospital-at-Home model, pioneered at Johns Hopkins in the late 1990s, is a promising clinical model for elderly patients. Though not widely deployed, the model has exhibited notable results: patients recovered faster and the costs were ultimately lower. In the model, elderly patients with a range of clinical conditions who present at the ED are enrolled in the program. After receiving patient permission, the hospital then provides treatment in the patient’s home for two to three days.

Systems taking delegated Medicare risk should consider this to be a highly effective model for managing elderly patients. Presbyterian Health Services, which is funding the program through its own health plan, has seen cost savings of £1,500 per patient enrolled.

**Hospital-at-Home Substitutes Inpatient Stay**

<table>
<thead>
<tr>
<th>Targeted Conditions(^2)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ COPD</td>
<td>✓ Cellulitis</td>
<td>✓ Dehydration</td>
</tr>
<tr>
<td>✓ CHF</td>
<td>✓ Pneumonia</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Diagnostic Testing</th>
<th>Infusion Therapies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Home and Personal Care</td>
<td>24/7 Access to Doctor and Nurse</td>
</tr>
</tbody>
</table>

**Case in Brief: Johns Hopkins University Schools of Medicine and Public Health**

- Model pioneered at Johns Hopkins Bayview Medical Center in Baltimore, Maryland
- Patients over 65 years old invited to participate in Hospital-at-Home program who present at the ED
- Model can be used as a platform for providing high-level care in the home

**Patients Treated in Hospital vs. Patients Treated at Home**

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.7 days</strong></td>
<td>Reduction in average length of stay</td>
<td>£1,852</td>
</tr>
<tr>
<td><strong>£1,852</strong></td>
<td>Reduction in average cost per patient</td>
<td>38%</td>
</tr>
<tr>
<td><strong>38%</strong></td>
<td>Reduction in risk of mortality at six months</td>
<td>74</td>
</tr>
<tr>
<td><strong>74</strong></td>
<td>Percentage-point reduction in relative risk of incident</td>
<td></td>
</tr>
</tbody>
</table>

13. Population-targeted Facilities

Population-Specific Facilities Provide Mass Customisation

Population Segments May Warrant Tailored Services, Facilities

For some health systems, tailoring and co-locating population-specific health services can be a vital strategy to alleviating demand pressure and providing more patient-centred care.

Advisory Board research into multiple markets across the globe finds that no two catchment populations are the exact same. In some cases new-comer populations struggling to understand a foreign language and health system can drive disproportionate demand. In other cases, working with the socio-economically deprived in urban centres represents the largest opportunity for demand management.

Below are two examples of facilities for a specific sub-population:

High-Risk Patient Management

- High-risk patients with no dedicated GP are proactively assigned to Iora high-risk clinics for care management
- Clinical and non-clinical staff oversee care plan progression and assist the patient in understanding care

12.3%
Decrease in total spending for patients enrolled in 2009¹

Case in Brief: Iora Health

- Primary care clinics located close to deprived populations operate clinics for top 10% highest-risk patients
- Multidisciplinary care team (GP, RN, health coach) oversees patient management; specialists available by consult; health coach to patient ratio approximately 1:200
- Team supported by robust analytics including real-time pharmacy data, lab, remote monitoring, inpatient admission, ED visit alerts

Geriatric EDs

For some markets, elderly demand—particularly to the ED—is a source of demand pressure for the hospital. To provide more geriatric-specific services earlier in the care journey, some institutions are developing geriatric EDs.

Early Observations of Geriatric EDs

<table>
<thead>
<tr>
<th>Lower Start Up Costs:</th>
<th>Flexible Bed Calibration:</th>
<th>Community Awareness Critical:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build into existing EDs using senior-friendly amenities</td>
<td>No minimum bed number required, starting size ranges from 5-12 beds</td>
<td>Community awareness and effective patient transfers remain vital to demand alleviation</td>
</tr>
</tbody>
</table>
The applicability of these various care site alternatives varies significantly on an organisation’s service mix and business goals. Micro-hospitals and hospitals-without-beds are most suited for markets with continued acute care growth, while sub-acute facilities, hospital-at-home, and population-specific facilities are a better fit for institutions pursuing a population health strategy.

<table>
<thead>
<tr>
<th>New Care Site</th>
<th>Advisory Board Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Micro-hospital development</strong></td>
<td>Lower-cost growth model for new markets; though it costs more than a freestanding ED, it provides a wider array of services and additional support for acute care needs</td>
</tr>
<tr>
<td><strong>Hospital-without-beds deployment</strong></td>
<td>Best focused on dense urban or suburban markets with high demand for ambulatory services</td>
</tr>
<tr>
<td><strong>Sub-acute facility substitution</strong></td>
<td>Organisations may supplement preferred partner networks with joint ventures for sub-acute facilities for a limited set of clinical conditions, or they can use them as a low-cost site for low-acuity medical needs</td>
</tr>
<tr>
<td><strong>Hospital-at-home strategy</strong></td>
<td>Though demonstrating promising clinical results, the model is not widely reimbursed; model is best utilised through provider-owned health plans or through institutions taking full delegated Medicare risk</td>
</tr>
<tr>
<td><strong>Population-specific facilities</strong></td>
<td>Appropriate for providers managing disproportionate demand from a smaller sub-set of their population. Co-location and design offers opportunities to connect specific services with specific population need</td>
</tr>
</tbody>
</table>

Source: Advisory Board interviews and analysis.
Hospital of the Future Decision Guide

While each of the 12 tactics discussed in this briefing will have varying roles based on organisational priorities, each of them is grounded strongly in the idea that hospitals and health systems must restructure the way acute care is designed to succeed in a changing marketplace. The matrix below is designed help guide organisations as they begin making this important transition.

<table>
<thead>
<tr>
<th>Potential Applicability</th>
<th>Relative Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deploy Cautiously</td>
<td></td>
</tr>
<tr>
<td>Target Selectively</td>
<td></td>
</tr>
<tr>
<td>Pursue Pilots</td>
<td></td>
</tr>
<tr>
<td>Implement Aggressively</td>
<td></td>
</tr>
</tbody>
</table>

### Pursue Pilots
- Multi-provider clinical partnerships
- Flexible facility design principles
- Patient-oriented transfer centers

### Implement Aggressively
- Unified acute care service distribution strategy
- Principled service rationalisation
- Gradual bed reduction

### Deploy Cautiously
- Micro-hospital development
- Asset ownership exit strategy
- Hospitals-without-beds deployment

### Target Selectively
- Hospital campus conversion
- Hospital-at-home strategy
- Sub-acute facility substitution
- Population-targeted Facilities

Source: Advisory Board interviews and analysis.