Maricopa County Special Health Care District

Bond Advisory Committee Meeting

February 12, 2014
2:30 p.m.

Agenda

MARICOPA SPECIAL HEALTH CARE DISTRICT
Count on us to care.

Committee Members	
Bill Post, Chair	Doug Hirano
Lattie Coor, Vice Chair	Diane McCarthy
Tony Astorga	Terence McMahon, Ex-officio
Paul Charlton	Rick Naimark
Kote Chundu	Joey Ridenour
Frank Fairbanks	Brian Spicker
Nita Francis	Ted Williams
Merwin Grant	

AGENDA – Bond Advisory Committee Meeting

Bond Advisory Committee of the Maricopa County Special Health Care District

▪ Maricopa Medical Center ▪ Administration Building ▪ Auditoriums 3 and 4 ▪
▪ 2601 E. Roosevelt ▪ Phoenix, AZ 85008 ▪ Clerk's Office 602-344-5177 ▪ Fax 602-344-0892 ▪

Wednesday, February 12, 2014
2:30 p.m.

If you wish to address the Committee, please complete a speaker's slip and deliver it to the Executive Director of Board Operations. If you have anything you wish distributed to the Committee and included in the official record, please hand it to the Executive Director who will distribute the information to the Committee Members. Speakers are limited to (3) three minutes.

ITEMS MAY BE DISCUSSED IN A DIFFERENT SEQUENCE

Call to Order

Roll Call

Call to the Public

This is the time for the public to comment. The Bond Advisory Committee may not discuss items that are not specifically identified on the agenda. Therefore, pursuant to A.R.S. § 38-431.01(H), action taken as a result of public comment will be limited to directing staff to study the matter, responding to any criticism or scheduling a matter for further consideration and decision at a later date.

General Session Presentation, Discussion and Action:

1. Discuss, Review and **Approve** Final Bond Advisory Committee Report and Recommendations to the Maricopa County Special Health Care District Board of Directors
   Bill Post, Committee Chairman

Agendas are available within 24 hours of each meeting in the Board of Directors Office, Maricopa Medical Center, Administration Bldg, 2nd Floor 2601 E. Roosevelt, Phoenix, AZ 85008, Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. Accommodations for individuals with disabilities, alternative format materials, sign language interpretation, and assistive listening devices are available upon 72 hours advance notice through the Clerk of the Board's Office, Maricopa Medical Center, Administration Bldg, 2nd Floor 2601 E. Roosevelt, Phoenix, Arizona 85008, (602) 344-5177. To the extent possible, additional reasonable accommodations will be made available within the time constraints of the request.

2/10/2014 11:15 AM

General Session Presentation, Discussion and Action (cont.):

2. **Approve** Bond Advisory Committee Meeting Minutes dated January 21, 2014
Committee

Adjourn

Maricopa County Special Health Care District

Bond Advisory Committee Meeting

February 12, 2014

Item 1.

Maricopa Integrated Health System

Bond Advisory Committee Final Report – DRAFT February 7, 2014

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

The Maricopa County Special Health Care District Bond Advisory Committee (BAC) was formed by the Maricopa County Special Health Care District's d.b.a. Maricopa Integrated Health System (MIHS) Board of Directors (BOD) under a specific Charter. The Charter states the BAC has the following purposes:

1. Review, prioritize and make recommendations to the Maricopa County Special Health Care District Board of Directors on proposed bond projects in support of the Maricopa Integrated Health System mission, vision, and community needs

2. Develop a bond proposal comprised of prioritized projects and make a recommendation to the District Board regarding the issuance of bonds or any other viable financing vehicle to fund the prioritized capital projects, including the consideration of a bond election

3. Obtain public comment, community and stakeholder input, and expert opinion into bond project and proposal deliberations

The BAC has accountability to the MIHS BOD for its final recommendations; however it operates independently from the BOD for the purposes of its bond review process. The BAC's first task was to select an independent consultant to facilitate the committee process. Following a request for proposals, the BAC reviewed applications, interviewed qualified candidates, and selected Kurt Salmon U.S., Inc. from the pool of applicant finalists. Kurt Salmon consultants report directly to the Chairman of the BAC. The BAC operates with input from the MIHS executive leadership, strategic recommendations from the BOD, and support from the BOD's strategic planning consultants Navvis Healthways.

In order to meet the obligations of its Charter, the BAC conducted a series of public meetings from March 2013 to February 2014, to take a comprehensive look at the information needed to offer its recommendations to the BOD. During this process, a parallel track of work was led by MIHS Leadership and the BOD to formulate the vision and strategic direction for the organization. This effort, facilitated by Navvis Healthways, was intricately linked to the process of the BAC as it provided the strategic foundation, inputs and reasoning behind the ultimate recommendations for capital needed to support the mission and vision of the community's only public teaching hospital and health system.

The work of the BAC was informed by the strategic and facility plans, and based on the following mission, vision, community value, facility assessment, and investment recommendation.

1. **MISSION:** The foundational mission of the community's only public teaching hospital and health system provides an essential service to those who live and work in Maricopa County. This includes:
    - Teaching and training a next generation of physicians, nurses and allied health professionals in response to an ongoing shortage of clinicians in Maricopa County and statewide;
        i. Currently MIHS trains more than 400 resident physicians per year, many of which remain in the local community, making it the largest contributor to graduate medical education in the Metropolitan Phoenix area.

ii. Additionally, MIHS provides over 3,000 clinical rotations each year for medical and osteopathic students, nursing students, allied health professionals, and military readiness experiences for healthcare practitioners prior to deployment.

- Serving as a safety net provider to fill critical gaps in care for underserved populations and the under and uninsured individuals and families.
  i. Providing services for the medically underserved is core to the mission and represents one third of the total patients served at MIHS.
  ii. Currently, uncompensated care as a percentage of gross revenues at MIHS is upwards of 30%, nearly four times greater than the 7% on average experienced at Arizona hospitals (source: AzHHA Uniform Accounting Reports).

- Organizing primary care access points in communities across the County where services today are insufficient to meet current and growing needs; and

- Offering a critical point of leadership as the only medical system in the community directly accountable to the taxpayers for addressing broad public health care issues and emerging and unmet community needs.

2. **VISION:** The strategic plan as articulated by the BOD fulfills the MIHS teaching and safety net mission. It creates a better model for patient care and medical education that improves access, quality, cost and outcomes for patients across the County and increases the supply of future health professionals.
   - The plan emphasizes expansion of ambulatory care to enhance primary care access and provide better care cost-effectively to more patients as good stewards of taxpayer support.

     Note, primary care investments in other communities have demonstrably reduced the need for costly emergency services and simultaneously improved the overall health of populations.

   - The plan calls for expansion of behavioral health services to ensure that the needs of mental health patients in the community are met and that Maricopa County residents have access to the levels of behavioral health care they deserve when they need it. Moreover, the integration of behavioral and medical services as envisioned in the MIHS model of care will improve early intervention and reduce fragmentation and costly duplication of services for the community's most vulnerable populations.

   - The plan calls for the replacement and appropriate sizing of a teaching hospital that trains medical professionals to deliver quality care in a cost-effective, team-based, and technology-enabled environment. Efficiencies gained in the design of a new hospital, coupled with an expanded network of increased ambulatory and behavioral health capacity, will reduce the need for acute care inpatient beds in the replacement teaching facility.

3. **COMMUNITY VALUE:** A strong public teaching hospital and health system is as much a mark of a healthy vibrant community as quality educational institutions, modern transportation systems, thriving arts organizations, and great sports franchises. MIHS touches virtually every corner of the County through its regional burn center, Level 1 trauma center, behavioral health hospitals, comprehensive specialty services, neighborhood health centers, public health initiatives, and medical education and clinical training programs. MIHS is as relevant today as it has been for over one hundred years. It is well positioned to lead needed changes in the healthcare industry. MIHS' distinctive strength is the operating model of a public teaching hospital and health system of care that knows how to engage patients with complex needs, to teach and train inter-professional teams of clinicians (physicians, nurses and allied health professionals), and to do so in a very cost effective manner as good stewards of community resources. This system of care is unique to MIHS. Loss of the MIHS public teaching hospital and health system would have devastating effects on the community for generations.
    - Of the top 20 largest metropolitan areas, seventeen have a public safety net hospital, signaling that the crucial role vibrant public hospitals play in the communities they serve.
        i. For more than 140 years, MIHS has provided significant leadership in community health initiatives, patient advocacy, public policy, and economic stability as a major employer.
        ii. Closure of MIHS would require private hospital systems in the community to bear the burden of absorbing over $100 million annually of uncompensated care, providing 500,000 patient care visits, training more than 400 physicians in numerous residency programs, and offering more than 3,000 clinical rotations for medical students, nurses and allied health professionals.
        iii. Case studies from communities where public hospital systems have closed demonstrate that while public funding continues, transparency of expenditures supported by tax dollars is lost.

4. **FACILITY ASSESSMENT:** The current MIHS facilities are not suitable for modern healthcare delivery or the training of modern healthcare professionals. The future of MIHS, a valued community asset, is uncertain without substantial capital investment.
    - For decades now, MIHS facilities and services have not kept pace with the growth of the County population. The medically underserved are distributed across Metropolitan Phoenix and the current MIHS network of health facilities is insufficient to serve these populations. The MIHS facilities need to be reconfigured and expanded geographically to meet current and future community needs for medical and behavioral health services.
    - The Family Health Centers (FHCs) need renovation and expansion to create an ambulatory clinical network that improves access for patients and providers; provides an appropriate environment for medical training; and more efficiently servces the needs of the community. The current national healthcare cost restricting requires providers to shift resources into primary care medical home models and more cost-effective outpatient care settings for care.
    - The Comprehensive Health Center (CHC) in the Central Valley is in need of renovation and most importantly, replication. As the Maricopa County population has grown, the need for specialty services in the East Valley and West Valley has increased. The

centrally located CHC is unable to meet these needs. In order to provide an ambulatory based model of specialty care for County residents east and west, MIHS must construct additional CHCs in these respective communities.

- The current MIHS behavioral health facilities are at capacity and unable to meet current community need, much less the growing future needs. The demand for additional cost-effective behavioral health services is at an all-time community high, with little relief in sight. Moreover, MIHS is paving the way for the transformation of behavioral health services through its innovative and widely recognized integrated health home model that effectively and efficiently serves the whole person needs of the behavioral health patient.

- The teaching hospital, Maricopa Medical Center, constructed more than 40 years ago, has reached the end of its useful life. The facility design is not suitable for the team-based care models, advanced technologies, teaching and training requirements, and the acuity of patients today. The current facility configuration makes renovation cost-prohibitive and would not address the non-functional aspects of the current design for today's medical training and patient care expectations.

5. **INVESTMENT RECOMMENDATION:** Based on detailed assessment and estimated scale of future programs, the capital required to support the facilities that enable the mission and strategic vision of the organization is **$935M.**
    - The cost includes the renovation of existing FHCs, expansion of the current CHC, addition of new CHCs in the East Valley and the West Valley, expansion of behavioral health services, and replacement of the public teaching hospital with a right-sized inpatient facility that has a reduced number of inpatient care beds.

It is evident that a significant capital investment is required for MIHS to fulfill its mission and provide a valuable essential asset to the Metropolitan Phoenix community. The 2003 voter-approved initiative and the subsequent enabling legislation created the capacity for MIHS to utilize the Maricopa County tax base as its source of funding for community needs. The BAC recommendation is based on careful consideration of this fact and how MIHS can best serve the community. While it is not critical that all of these investments be made immediately, it will be necessary to have a plan and the corresponding funding that addresses all of these issues in a progressive and specific time frame, recognizing that inflation will increase the amount of capital required as time goes on.

The subsequent information in this report provides the supporting detail as presented to the BAC to inform their recommendations and conclusions. This comprehensive array of information has been presented to the BAC through a progressive series of meetings such that the information from the prior meetings created the foundation for the subsequent meetings so the BAC could become fully informed prior to making a recommendation to the BOD.

The detail is laid out in the following format:

- Committee Charter and Structure
- Committee Process
- Macro Healthcare Context
- MIHS Strategic Plan
- Evaluation of Existing Facilities
- Facility Development Options Capital Requirements
- Financial Implications
- Final Recommendation to the Board of Directors

II. COMMITTEE CHARTER AND STRUCTURE

Purpose

1. Review, prioritize and make recommendations to the Maricopa County Special Health Care District Board of Directors ("District") on proposed bond projects in support of the Maricopa Integrated Health System mission, vision and community needs.

2. Develop a bond proposal comprised of prioritized projects and make a recommendation to the District Board regarding the issuance of bonds or any other viable financing vehicle to fund the prioritized capital projects, including the consideration of a bond election.

3. Obtain public comment, community and stakeholder input, and expert opinion into bond project and proposal deliberations.

Creation of Advisory Committee

1. The Maricopa County Special Health Care District Board of Directors ("Board") will create the Bond Committee as an Advisory Committee of the Board of Directors, as authorized by A.R.S. 38-431.

2. By Board Resolution, the Board will
    a. Identify the powers of the Advisory Committee.
    b. Establish a budget and funding source for the Advisory Committee.
    c. Require annual review of need for continuation of the Advisory Committee.
    d. Identify and contract with a consultant with project management and meeting facilitation experience to staff the Advisory Committee.
    e. Establish, in conjunction with the Chief Executive Officer, criteria by which to evaluate projects and prioritize them.
    f. Develop a timeline for delivery of the bond proposal and a companion ballot proposal.

Membership of Advisory Committee

1. Advisory Committee members are to be appointed by the District Board.

2. The District Board will select members of the Advisory Committee, representing each District and reflecting the community at large, as well as representatives from different stakeholder groups.

3. By the majority vote of the Board of Directors, one member of the District's Board of Directors shall be selected to serve as a non-voting member of the Advisory Committee.

4. The Chair and Vice Chair of the Advisory Committee are to be appointed by the District Board.

Powers of Advisory Committee

1. Make recommendations to the District Board regarding the creation of a bond proposal and consideration of a bond election for the voters of Maricopa County whose goal is consistent with the Purpose of the Advisory Committee as stated above.

2. As directed by the Board of Directors and in conjunction with the consultant:

   a. Develop a working knowledge of MIHS's mission, vision, strategies, services, programs, operations and finances as a foundation from which to evaluate future needs and projects, while taking into consideration recent economic challenges, future health care delivery trends and models, and healthcare workforce training education.

   b. Tour all current MIHS facilities to understand their ability to deliver services to meet community needs today and into the future and to secure MIHS's role as a 21st century academic medical center.

   c. Review each proposed project in terms of its overall purpose, strategy, goals, resource requirements, performance expectations and cost. Challenge underlying project assumptions regarding demand and utilization expectations as well as changes in healthcare delivery. Any recommendations for new programs or service lines need to include business plans with a five-year return on investment pro forma.

   d. Recommend a proposed capital investment proposal that:

      i. identifies the capital needs, and priorities of the District based on goals and objectives;
      ii. analyze the operational cost impact of each plan component; and
      iii. includes a recommendation regarding capital financing.

3. The Advisory Committee may at its discretion appoint subcommittees to assist the Advisory Committee.

4. Conduct hearings to review bond projects, present the bond proposal and seek input from the community.

5. Request additional Powers from the District Board, via Bond Advisory Committee charter amendments, in order to carry out its duties as defined in the Purpose of said charter.

6. Limitations on power:

    a. The Advisory Committee may not expend District funds without the District Board prior approval.
    b. The Advisory Committee may not make District policy.

Administrative Requirements

1. Advisory Committee and its members, and any subcommittee and its members, are subject to the Arizona Open Meeting Law and Public Records Act and Arizona and District conflict of interest laws, regulations, and policies; and therefore:

    a. Must record and maintain minutes of all meetings.
    b. Conduct all meetings as open to the public and noticed as required by the Arizona Open Meeting Law.

2. Make bimonthly reports of the activities of the Advisory Committee and any subcommittee to the District Board. The Advisory Committee shall meet not less than once a month.

3. The Advisory Committee's final report is due by February 28, 2014.

All funds held by Advisory Committee are public funds and must be held in accounts permitted for public funds and are subject to audit as public funds. Funds can only be spent in accordance with District procurement procedures.

III. PROCESS

The process to fulfill the goals set forth by the BAC Charter started in March of 2013, and went through February 2014. This process ran in parallel with the efforts by leadership and the BOD to create and finalize MIHS's strategic vision and direction for the next five to ten years as it prepares for the changing macro healthcare environment and responds to local community need. The overall timeline of this project was dependent on the outputs of the strategic plan as it ran through its appropriate process with MIHS leadership and the Board of Directors.

The process occurred in four phases:

Phase 1: Project Organization and Fact Gathering

- Develop committee process and timeline
- Facility Walk Through / Contextual Interviews
- Alignment with Strategic Plan

Phase 2: Assessment

- Facility condition assessment
- Strategic situation assessment
- Facility sizing study
- High level capital requirements

Phase 3: Sensitivity and Institutional Implications

- Operational, financial, and care model implications
- Capital prioritization
- Phasing options

Phase 4: Bond Preparation and Communication

- Finalize financial implications
- Prepare final recommendation
- Communication

Phases 1-3 are complete with the expectation that Phase 4 will primarily occur after the recommendation of the committee has been made to the BOD. If a bond is eventually approved future planning work will focus on developing a preferred option, detailed timeline and detailed project budget with additional studies that may be required to arrive at the best and most cost effective plan.

IV. MACRO HEALTHCARE CONTEXT

The U.S. healthcare system continues to evolve quickly, impacting the way health systems are expected to deliver care and will be reimbursed in the future. While it is difficult to know exactly what will happen to the industry over the next five to ten years, there are some trends that are fairly robust and suggest a potential direction. The BAC considered the following observations in Phase 1 of their committee process.

1. U.S. spending patterns are not sustainable; we are a "sick care" system, not a "health care" system.
2. Hospitals and physician services have represented more than 50% of the increase in per capita healthcare cost over the past decade.
3. 5% of patients are responsible for 50% of health care spending – there will be a continued emphasis to target the 5% in creating models of care to reduce overall costs.
4. Our current payment models are not sustainable (e.g. fee-for-service payment models that reward increased utilization).
5. Chronicity and co-morbidities are likely to drive increased healthcare demand over the next decade, even if utilization is managed and "waste" is eliminated.
6. The funding for reform includes provider payment cuts, but the gap between supply and demand for most health professionals suggests there may not be a significant drop in "per unit" labor cost.
7. Funding sources for public hospitals are expected to deteriorate, which will force systems to identify alternative funding sources or cut overall expenditures.
8. Being in a capital-intensive sector with a relatively poor history of asset utilization has caused many institutions to defer investment to the fixed asset base.
9. The average age of plant for hospitals across the country is now close to ten years.
10. Historical reimbursement favored highly complex care, which is where teaching hospital investments (i.e., talent, facilities, technology) have been concentrated.
11. As the reimbursement model shifts towards more of a value-based, population health model, the emphasis will have to shift to managing patients before, during and after acute care interventions.
12. Managing patients across a continuum will entail a series of build vs. buy vs. partner decisions, and impacts availability of capital for hospital and ambulatory investment.
13. As care delivery shifts, and patients become more responsible for their healthcare spending, reputation will no longer serve as a proxy for quality.

Many of these trends will have a direct impact on MIHS and are shaping a strategic direction that will enable our public asset to deliver its community teaching hospital and safety net health system mission successfully in the new healthcare environment.

V. MIHS STRATEGIC PLAN

The voters of Maricopa County founded MIHS in 1871, and reaffirmed its community-critical mission in 2003, when County citizens voted to create the Maricopa County Special Health Care District and support MIHS with public funding. An elected five-member BOD leads the Special Health Care District and has responsibility for ensuring the long-term viability of MIHS and its voter-mandated mission.

This year, the BOD completed a strategic planning process and in August, approved the 2013 – 2018 Strategic Plan. The BOD developed the strategic plan by considering emerging community need, healthcare industry trends, the accomplishments achieved from the prior five-year strategic plan, an assessment of current operating assets, and the charter of the organization as approved by voters in 2003.

The MIHS 2013 – 2018 Strategic Plan informed the foundational work of the BAC. The key elements of the plan are noted in the following six strategies:

1. Enhancing Mission Relevancy and Community Leadership
2. Creating a System of Care to Improve Community Health
3. Addressing a Community Crisis in Behavioral Health
4. Offering Unmatched Community Value
5. Designing Health Facilities for the Future
6. Ensuring Financial Sustainability

Each of these strategic elements is described below in greater detail.

1. **Enhancing Mission Relevancy and Community Leadership:** MIHS is the public teaching hospital and safety net health system of care serving the fourth largest populated county in the United States. During the strategic planning process, the BOD reaffirmed a set of core purposes for MIHS including:

    - Teaching and training a next generation of physicians, nurses and allied health professionals in response to an ongoing shortage of clinicians in Maricopa County and statewide;

    - Serving as a safety net provider to fill critical gaps in care for underserved populations and the under and uninsured individuals and their families.;

    - Organizing primary care access points in communities across Maricopa County where access is insufficient to meet current demand; and

- Offering a critical point of leadership as the only medical system in the community directly accountable to the taxpayers to address broad public health issues and emerging and unmet community needs.

MIHS has always adapted and responded to community needs. That is a common thread that runs through the organization's 140+ year legacy. It is a legacy of leaders who have carried the public teaching hospital and health system mission forward and it is a mission that is relevant as much today as it was in the beginning. As the public teaching hospital and health system grew over the hundred plus years, MIHS leaders viewed community wellness from a big picture perspective. Hence, the system today offers the full continuum of services to care for its community and is exactly the system of care model required for the future. From prevention and education programs, primary and specialty care clinics, behavioral health hospitals, regional burn and trauma center, emergency and hospital services, a managed care insurance company, and an integrated medical group, MIHS occupies an important public mission and is complementary to the private healthcare sector.

The legacy of leadership is similarly represented in the multi-specialty physician group practice that is the primary partner and medical staff provider for MIHS, District Medical Group, Inc. (DMG). DMG is also the County's largest integrated medical group practice. The MIHS partnership with DMG is foundational to the 2013 – 2018 Strategic Plan, and hence, the plan includes the contributions and passionate ideas of the medical group. DMG shares the MIHS mission of teaching and training future healthcare professionals and serving as the community safety net for the most vulnerable, and the MIHS vision of designing a public teaching hospital and health system model for the 21st century.

2. **Creating a System of Care to Improve Community Health:** The demands on a public teaching hospital and safety net system of care are changing in light of the Affordable Care Act (ACA) and Maricopa County's growing and increasingly diverse and geographically dispersed population. As a provider of last resort for people who lack the means to pay for care, and for high risk populations with complex co-morbid conditions and illnesses, MIHS must provide leadership in the design and deployment of new models of patient care and new methods of clinical training that align provider accountability for care outcomes and reduced costs. This is a shift of risk for performance to providers and MIHS must invest in the people, processes, and technology to manage that risk.

   To respond to those changes MIHS will pursue strategies to deliver more care outside the walls of the hospital and in the community, and teach and train clinicians to work in inter-professional teams to deliver efficient and effective care. Specifically:

   - The MIHS strategic plan allocates a greater share of system resources to grow access to primary care and specialty services in undeserved parts of the County and to deliver that care in a more efficient, integrated model that can improve outcomes and experience and reduce costs. This enhanced capacity and service is essential to address emerging and unmet needs that often translate into longer-wait times for primary and preventive care services, access to specialists, and overuse of the hospital emergency department for non-emergent needs.

- Moreover, community need is growing due to an aging population and an increase in co-morbid conditions (i.e., congestive heart failure, diabetes, pulmonary disease). This demand is occurring independent of the passage of the ACA and represents a shift of care from the hospital to the physician-office or ambulatory care setting. The ACA encourages development of medical "homes" that can manage the total care of patients and be accountable for outcomes and costs of populations. MIHS has a strong track record in delivering care in this model. MIHS care management support services such as diabetes education, family learning centers and prenatal programs focus on health and wellness, outcomes and value, preventing unnecessary and expensive hospitalization costs. The strategic plan specifically aligns to the medical home model and defines a scope of services in the ambulatory sites consistent with the required competencies of a medical home care site.

- The strategy recognizes the imperative to replace the functionally obsolete Maricopa Medical Center (MMC). That investment is essential so that the District might continue to serve both MIHS' teaching mission and safety net role. Absent a new MMC it will be increasingly difficult if not impossible for MIHS to teach, train, and continue its role as the region's only public safety net teaching hospital and health system of care.

The system of care strategy commits MIHS to continue supporting through advocacy, education, and service delivery those programs that improve care outcomes, access, and costs at the population level. It represents an affirmation of the leadership role MIHS intends to play as a partner with payors, employers, municipalities, school districts and hospitals and physicians to make Maricopa County a healthier place to live and work. In effect, the strategy refines the role of a 21st century public teaching hospital and system of care in a post-ACA market.

3. **Addressing a Community Crisis in Behavioral Health:** The MIHS strategic plan recognizes the gaps in access to behavioral health services in Maricopa County and the reality that lack of access to needed mental health and substance abuse services drives up emergency room utilization and costs for the region's schools, law enforcement, other health systems and hospitals, and employers. To address those needs the plan specifically:

   - Proposes increased inpatient bed capacity for behavioral health services as a response by MIHS to meet the glaring need in the community for more mental health and substance abuse services;

   - Considers consolidation of MIHS inpatient behavioral health capacity on a single campus to enable better care for patients and enhanced service to families;

   - Envisions the opportunity to generate operational efficiencies and savings via the construction of one new facility rather than maintaining three separate hospitals and then reinvest savings in new programs and expanded behavioral health services to meet emerging needs; and

- Supports the integration of behavioral health services into community-based primary care medical homes so that needed access to care can be provided closer to population centers across the County.

4. **Offering Unmatched Community Value:** The MIHS planning process considered the cost of transferring the case mix and mission of a public teaching hospital and safety-net system of care to private sector hospitals, most notably Banner Good Samaritan and Dignity St. Joseph. Critical findings were:

    - The need for taxpayer subsidy of care for the underserved and medically indigent would not go away; rather, funding would most likely need to be transferred to private hospitals to offset the adverse financial impact of a sudden influx of the medically indigent and under-insured at a time when all hospitals are already facing increased financial uncertainty from the ACA; in this scenario, challenges with respect to public accountability for use of those funds and the transparency that comes with a public governing board would be significant.

    - A failure to re-invest in MIHS would have an adverse impact on employers at a time when they are already struggling with the rising costs of care from an aging, chronically ill and fast growing population that needs access to the primary and preventive care services that MIHS offers.

    - MIHS, today, partners with numerous clinical training institutions and offers eight fully-accredited residency programs that are an essential training ground to address an already acute and unfortunately growing shortage of clinicians (physicians, nurses and allied health professionals) in Maricopa County. The investment of resources required and the complexity involved to replicate those programs in another system will only further strain the region's already stressed health care.

    - MIHS has a culture of caring, an integrated medical staff and faculty, a complex patient population, and the special expertise to support inter-professional training and clinical rotations unlike any other health system in the Valley. The emerging model for effective and efficient healthcare delivery will require organizations to teach and train physicians, nurses, pharmacists and allied health professionals to work together in teams organized around the needs of patients. The MIHS strategy is to build an integrative hospital campus that accommodates this team-based approach to training. The team-based approach is essential to implementing new models of care that hold out promise to improve care outcomes, patient experience, and to better manage costs of care.

    - MIHS has a long-standing and deep history of collaborations. Its success is rooted in successful community collaborations and building of broad community coalitions. The 2013 – 2018 Strategic Plan envisions the creation of many more such alliances. The plan specifically calls out opportunities to partner with other federally qualified health systems, private practice physicians, healthcare providers, and educational institutions who share the same vision for improving community health.

- Lastly, the mission and work of MIHS as the County's vital public teaching hospital and health system is consistent with broader goals envisioned for the community. For example, the Center for the Future of Arizona in its **The Arizona We Want 2.0** report suggests that education is the key driver of Arizona's economy; that we need to recruit and retain more talented young people who are committed to Arizona's future; and that the strength of the state rests in local communities. The MIHS strategic plan relates and contributes to each of these important goals. Specifically, MIHS provides more medical education and clinical training than anyone else in the County; has trained more physicians currently practicing in the County than anyone else; and has more community-based family health centers than any other healthcare provider. As MIHS continues its strategic transformation as the premier teaching provider of essential health services with a focus on wellness, population health, and chronic disease management, MIHS is indeed contributing to making Maricopa County a healthy and vibrant community.

5. **Designing Health Facilities for the Future:** An objective assessment of MIHS' current facilities in the context of emerging community need and the organization's strategies to serve that need reveal a critical gap that can only be addressed through a reinvestment in MIHS' community and physician-office based services, behavioral health facilities, and an acute care teaching hospital. Specifically:

   - The network of Family Health Centers (FHC) that are so critical to extending access to primary and preventive care services to at-risk and underserved populations are a collection of buildings inherited by the District from the County. Most are undersized, outdated relative to changing care models, and not in locations that correspond to emerging community needs.

   - The Comprehensive Health Center (CHC) represents a good model for delivering quality, efficient care outside the hospital. The current CHC on the Roosevelt campus requires updating and expansion, and additional CHC sites are needed across the County to accommodate emerging community need for geographically dispersed specialty services.

   - The two MIHS behavioral health hospitals are operating at capacity and cannot meet current and growing community need. Neither of these facilities is functionally effective nor do they have the ability to expand capacity and moreover, operating two facilities on separate campuses prohibits operating efficiencies that could be achieved by consolidation.

   - Maricopa Medical Center (MMC) is more than 40 years old; changing community needs and care models has rendered it functionally obsolete and exceedingly costly to operate for purposes of providing safe, quality care.

6. **Ensuring Financial Sustainability:** The MIHS strategic plan has been designed to improve the District's financial performance so that it can stabilize its operating margin and prepare for anticipated funding challenges facing public teaching hospitals in the future. Specifically the plan calls for the following strategies:

- Converting Uninsured to Covered Lives: The strategic plan presumes that MIHS will be able to retain patients currently served by MIHS that are today uninsured, however, in 2014, they will be covered through AHCCCS or the health exchanges. Retaining these reinsured and newly insured patients through an updated and renovated network of clinical sites and services, MIHS can generate an estimated $20 million annually in financial improvement.

- Growing Ambulatory Capacity to Serve More People in Need: The plan expands outpatient capacity to enable MIHS to serve more unmet need and underserved patients outside the walls of MMC and in a community setting, producing an estimated $16 - $20 million in additional improvement for MIHS once fully implemented.

- Continuing to Manage Costs: The strategic plan acknowledges the continuing need to improve operations to reduce expenses consistent with the industry-wide pressure to deliver better care at lower cost as envisioned in the ACA. Assuming a five percent reduction in cost aided in part by more efficient facilities MIHS may improve operating performance by $20+ million on a go forward basis.

Collectively, fully implementing the strategic plan, including funding new facility projects, could generate an additional $50 - $60 million in new margin to offset the costs of serving unmet community need as a public teaching hospital and safety net health system of care.

VI. EVALUATION OF EXISTING FACILITIES

The condition and functionality of existing facilities is an important consideration when trying to determine if or how those facilities may be used in the future. These assessments are based on current use of each space although determining the future value of each building must also take into account projected levels of activity by type and the adaptability of each building to better serve a current or future use.

Developing the evaluation of the existing facilities was a progressive process that built upon input from the local knowledge of MIHS staff, Kurt Salmon's proprietary facility condition survey tool and Kurt Salmon's national healthcare experience.

The existing facilities were evaluated in three ways:

1. Condition of the existing infrastructure and configuration
   - Provides insight into the capacity of the existing buildings to continue to be used for current purposes as is, or to be adapted to serve those needs.
2. Use of the available capacity of the existing spaces vs. national comparisons
   - Evaluates whether the clinical spaces are fully utilized or have capacity for growth
3. The amount of department space per key clinical room vs. planning standards
   - Comparison of the size of individual rooms and the total department space to serve the contemporary healthcare technology and care models

A tour of the facilities and review of floor plans also supported a quantitative assessment to put into context the use of capacity as impacted by the amount of space in each room / department.

<u>Evolution of Healthcare</u>

Healthcare facilities are much different than most commercial buildings. They are comprised of a large quantity of highly specialized rooms that have a great density of infrastructure. Because they serve the public at their most vulnerable times they are also governed by a stringent set of building codes and operational requirements for certification as a healthcare facility.

Much has changed in the 43 years since MMC was built for inpatient acute care services and the 38 years since the 2619 Building was built for inpatient behavioral health services. **Figure 1** provides examples of several of the high-profile changes from the past 43 years. In addition to these clinical, technology and legislative factors there have also been changes in what is considered the best practice of medicine in both the acute care and behavioral health environments.

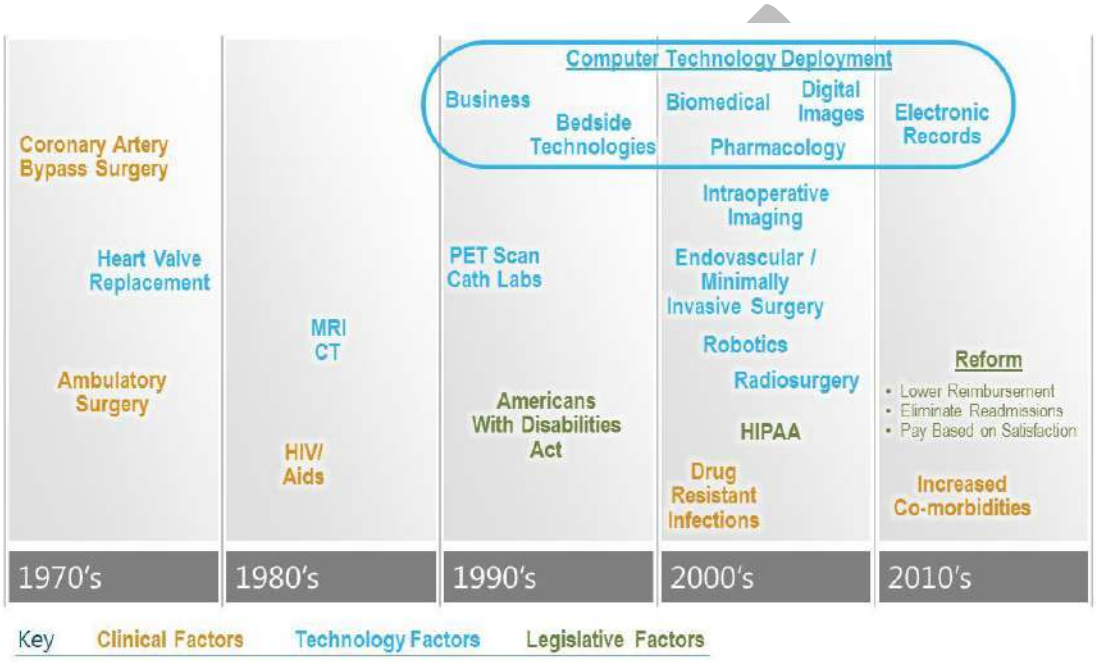


Figure 1 – Technologies, diseases and legislative changes since 1970

Beyond the inpatient environment, these evolutionary events have created the need for robust outpatient centers such as the CHC. The CHC and FHCs are generally newer buildings and the change of how care is provided in these buildings while having an impact, is not as physically impactful as in the inpatient environment.

Regardless of inpatient or outpatient activities, changes will continue to occur over the next 40 years. Therefore the evaluation of the existing facilities must not only consider functionality relative to today's requirements but also the capacity of these buildings to adapt to future use. The evaluation takes into account the past and the recommendation going forward anticipates even more rapidly occurring changes in the future.

MIHS has continued to evolve since its inception in response to community need and changes in how healthcare is provided. As a result, MIHS now has a variety of facilities and locations including eleven Family Health Centers, a Comprehensive Health Center, the inpatient hospital Maricopa Medical Center, and inpatient behavioral health services at Desert Vista in Mesa and the 2619 Building on the Roosevelt campus.

Each of these facilities was objectively evaluated on the basis of data analytics and infrastructure assessment surveys. Each facility was toured by the Kurt Salmon staff that qualitatively assessed each against their national experience with healthcare facilities. Each was evaluated for capacity, functionality, space allocation, and condition of the building and its systems.

Facility Condition Survey

The best buildings are at, or just above, the 50th percent scoring against contemporary healthcare facility criteria. Most of the existing MIHS facilities score between the 15th and 40th percentile.

- Family Health Centers are the lowest rated of all of the MIHS buildings. They range from just above the 15th percentile to the 25th percentile of contemporary ambulatory clinic criteria. All of the facilities are poorly rated for mechanical, electrical and IT infrastructure. The Guadalupe and Mesa centers are also deficient in their functional/structural configuration. For current demand and functionality most of the buildings could be improved with the exception of these last two.

- The CHC has a higher rating. Its electrical systems need upgrading and this can be addressed in the existing building. The configuration of the building is highly adaptable to continued use as an outpatient facility. The building is also structured to support two more floors vertically and that positions the building as a good long-term asset.

- The 2619 Building serves two purposes, inpatient behavioral health and administrative office functions. The building has a score in the 40th percentile of the criteria of these uses. Electrical and mechanical shortcomings represent the greatest deficiencies. In addition, the configuration of the behavioral health units were designed for the model of behavioral health care nearly 40 years ago and that model has since changed. The patients that are seen here have medical conditions and would be better served in a behavioral unit within a general acute care hospital. This facility is not easily adaptable for contemporary behavioral health services, however it has the potential to serve as a long-term asset for administrative functions on the Roosevelt campus.

- Desert Vista is ranked in the 40th percentile and, even though it is much newer than 2619, it is not well designed for providing contemporary inpatient behavioral health services. The site, vertical circulation, mechanical and electrical systems are all deficient. These latter deficiencies can all be addressed but the building has limited capacity to be reconfigured for private patient rooms. Although the building is structured to support two more floors vertically which would create some private rooms, this is not a viable solution to adding capacity. The number of rooms added would not be enough to create an all private rooms model of contemporary care and vertical construction would require the closure of the facility for an extended period, taking the beds out of commission and hence rendering it useless to meet current critical community behavioral health needs.

- Although Maricopa Medical Center is over 40 years old, it scored just above the 50th percent against contemporary hospital criteria. Unfortunately, achieving that score, the highest rating of all of the MIHS buildings, has come at a substantial cost. Maintenance of MMC has consumed nearly all of the modest capital available to the health system over the past ten years. The annual expenditures required for maintaining adequate operating systems at MMC, specifically mechanical, electrical, information technology, ADA requirements and life/safety systems, has been increasing with each passing year due to the significant age of plant. Annual maintenance costs aside, the two greatest limitations facing MMC are distances between support columns and the relatively narrow building envelope, especially on the bed floors. With the need for new technologies, larger rooms and more separation of patients, it will virtually impossible to adapt this building for long-term inpatient use.

- The Warehouse and Administration buildings on the Roosevelt campus are similar in rating to the hospital, with the electrical and mechanical systems being most deficient. These deficiencies can be addressed in these buildings. Based on the functions these buildings serve, they have the potential to be viable long-term assets for MIHS.

Functional Assessment

The functional assessment is based on the key metrics of the use of available capacity, the size of key clinical rooms (patient bed rooms, operating rooms, imaging rooms, emergency department rooms, etc.) and the total size of the department including all support space for these clinical services. A red/yellow/green rating is assigned by type of bed and category of clinical function. The measures for these ratings are based on contemporary planning standard developed through Kurt Salmon's experience in planning for healthcare facilities similar in nature to those at MIHS.

Quantitative Assessment

- Ambulatory Services
  - Many of the FHC's measure as having adequate to excess total space, except for Chandler and Sunnyslope.
  - With the exception of Avondale, Glendale and Chandler, the remaining sites have good individual exam room sizes.
  - There is available capacity at each of the sites.

- Inpatient Services
  - Maricopa Medical Center, the 2619 Building and Desert Vista are rated in the red category for space per room and overall department space, with the exception of labor, delivery and NICU units.
  - The majority of acute care beds are underutilized which is partly due to the lack of private beds. This creates the need to "block" beds to accommodate patients who cannot be placed with another patient for gender/age/infection reasons.

- Behavioral health beds are highly utilized. These patients are more adaptable to placement in a non-private bed environment although this may affect the quality, safety and length of care.

- Diagnostic and Treatment Services
  - The main floor of the hospital been appended and adapted multiple times to keep up with the demand for services and new technologies. As a result some there are some areas that have excess space that cannot be well utilized due to the configuration or location of that space.
  - The surgery, cardiology, endoscopy and MRI testing/treatment rooms are undersized. Most of the remaining rooms are close to contemporary standards.
  - Surgery and endoscopy are undersized in total department space due to lack of equipment and supply storage, staff work space, and patient prep/recovery beds.
  - The total department space for imaging is mainly oversized. Even though there is excess square footage it is largely underutilized space because it was configured for a much different time and not easily adaptable. For example, MRI rooms have been added to the periphery of the first floor and not inside the department due to column widths and where/how the space is available.
  - With the exception of diagnostic imaging, the remaining modalities have some available capacity.

Qualitative Assessment

Family Health Centers

The FHC's are highly variable in their amenities, access and functionality. Some are open and friendly with good resources for patients while others have security bars and are more intimidating. The locations of most of the FHC's do not offer high visibility and easy access, which will be especially important to meet the strategic goals of MIHS.

Comprehensive Health Center

The CHC was originally built in 1994 and not fully occupied initially. Over the years it has been built out as it has been filled with services. To continue to expand exam room capacity and add services, the space for patient waiting has been moved into the building's central corridor.

The clinical areas are generally well sized and organized. Some of the departments could take on more patient volume if schedules were evened and rooms were shared more fully. A high percentage of the departments are highly utilized.

The CHC has largely reached its capacity to adapt to further changes, however it is well positioned for continued use as a good MIHS asset. It will need to expand to accommodate any significant amount of increased demand.

Behavioral Health Services

Behavioral health services are spread across three locations; Desert Vista, the 2619 Building and the Psych Urgency Center. MIHS owns the first two buildings, which are outdated in their ability to delivery contemporary care. Currently the inpatient facilities only have capacity to serve non-voluntary patients and demand is exceeding capacity. MIHS is unable to accept voluntary patients and is therefore not meeting community need.

The majority of patient rooms house two to three patients each. Patient security and staff control of the environment are challenging in this type of setting, which affects the efficacy of patient care. It is beneficial to the community as a whole that this type of care be effective and serves the unmet needs of those with mental diseases.

Having three locations results in a high level of ambulance transfers including frequent multiple transfers for some patients. In addition the care providers are spread across a wide geographic area resulting in lower use of their time in patient care.

Behavioral patients with medical needs are placed in the 2619 Building. While this building is on the hospital campus it is difficult to have the proper resources in this facility and, with the open nature of the unit, expensive medical equipment is at risk and frequently damaged. Some patients must move between this building and the hospital as well.

It would be most cost effective and patient care effective to:

- Locate all of the non-medical behavioral health patients in a single facility
- Design that facility for contemporary care of these patients
- Locate the medical behavioral health patients in the acute care facility
- Have all behavioral health patients on a single campus so the care providers may work together seamlessly and efficiently

Maricopa Medical Center

Maricopa Medical Center was built at a time when healthcare delivery, technology, acuity and building codes were much different than today. Like most facilities designed to serve the needs of the past, the size and configuration of the facility limits its adaptability for the present and future provision of healthcare.

Current hospital building codes have recognized these needs leading to larger areas for advanced technologies, more space around the patient bed for equipment and staff, greater separation of patients into single rooms, spaces to accommodate disabled patients and requirements for greater confidentiality. Major limiting factors for most older hospitals is the height of floors to allow for expanded infrastructure requirements, the distances between building support columns to allow for the clear spaces required by code, and the width of the building envelope.

i. Floor to floor heights: The existing building heights are actually quite good even by today's contemporary hospital planning guidelines.

ii. Support column width: New inpatient buildings have 28 to 32 feet between support columns throughout the building. The distance between support columns at MMC are mostly 16 and 24 feet. These distances make it nearly impossible to adapt the building to meet code and improve functionality (bed rooms, operating rooms, imaging rooms, and cardiac catheterization labs in particular) even with renovation.

iii. The narrow column spacing results in a narrow building width, which also limits the adaptability of the hospital on each inpatient floor. The patient units are long and narrow with a centrally located nursing station, limiting visibility and staffing efficiencies.

These constraints are "hard-wired" into the building making it nearly impossible to expect to use MMC for many more years. The limited adaptability of the hospital is seen in multiple ways. Inpatient units are designed for a time before drug resistant bacteria when average patient acuity was lower, longer lengths of stay were acceptable, there were fewer treatment options and much of today's technology was not yet invented. For example:

- There is a very low ratio of single patient rooms making infection control and managing patient treatment more difficult.
- The intensive care units at MMC are open spaces with little space between patient beds and limiting the ability to manage light and noise.
- Semi-private rooms result in underutilization of available capacity since beds must be blocked for gender and age matching or because of infectious patients.
- Semi-private rooms also increase the length of stay of the average patient because more transfers are required to make the best use of available rooms. Each transfer causes a longer length of stay.
- Managing noise, light and transfer can result in an improved outcome and lower use of resources.
- Higher acuity means more staff providing care, and more supplies, drugs and equipment to treat the patients. The units were not sized to store these additional staff and materials and so other support spaces are inappropriately taken over, including teaching space.

There are similar implications for diagnostic and treatment service areas.

- Space for some imaging and treatment modalities have been added onto the building resulting in disjointed departments.
- Very few beds are available for surgery same day admission patients. The areas are crowded and inefficient, lacking privacy and room for adequate storage.
- Departments are compartmentalized which limits cross-functionality of staff and makes way-finding for patients more difficult.

These realities work against the goals of healthcare reform and increase the challenge of controlling healthcare costs which ultimately is an ongoing added cost to the public.

The end result is that the existing portfolio of MIHS healthcare facilities is not suitable to enable implementation of the MIHS strategic plan. Therefore, the current facility conditions place MIHS at risk of fulfilling its fundamental and voter-mandated community mission, which is:

- Training the next generation of healthcare providers for the community and region;
- Providing safe, reliable, quality care to the citizens of Maricopa County;
- Serving the medically underserved;
- Meeting emerging community need; and
- Functioning cost-effectively as a good steward of community resources.

VII. FACILITY OPTIONS AND CAPITAL REQUIREMENT

As outlined in the facility assessment section of this report, the voter-mandated mission of MIHS cannot be achieved within the existing portfolio of health facilities, specifically the health centers, the behavioral health hospitals, and the acute care hospital. Repositioning the ambulatory health centers, redesigning the behavioral health facilities, and replacing the general acute care hospital can better serve the public teaching hospital and health system community goals.

In general, when organizations develop new healthcare facilities today, they strive to create environments that meet anticipated capacity requirements, support effective patient care, and do so in an operationally efficient way. Regardless of the mechanisms used, it is a fundamental national economic necessity to achieve these pragmatic and practical goals, as outlined by in the healthcare reform act. These strategic and public policy goals serve as the underlying drivers for MIHS to consider investing in its facilities for the next era of service to Maricopa County.

The purpose of developing facility options was not to reach a final conclusion on a specific plan, rather to demonstrate that there are solutions available and to define an order-of-magnitude cost to execute the possible solution. Solutions for the ambulatory health centers considered current geographic locations, health center capacity for growth, and emerging community need. This led to a defined set of outpatient capital investments across the health centers, incorporating both renovation and new construction, which would best serve the strategic ambulatory need and volume projections.

Alternatively, various options were considered for the location of a new behavioral health hospital and a replacement general acute care hospital. These included renovation and new construction options on the existing Desert Vista campus, the Roosevelt campus, and a potential green-field campus. Considering various construction and locations options provided the BAC with an investment cost range that could confidently accommodate the most appropriate solutions going forward.

Community Need

The strategic planning process, conducted by the BOD and with data provided by Navvis Healthways, identified community need for ambulatory, behavioral and general acute hospital services. Navvis Healthways developed three demand scenarios looking out ten years for each of the respective services, specifically including low, moderate and high community need options. This community need analysis was shared with the BAC who then asked Kurt Salmon to translate the projected service demand into facility requirements. Kurt Salmon then matched the projected community need facility requirements for the three scenarios against the existing capacity of MIHS facilities.

Based on the evaluation of existing facilities, and the relatively tight range between low and high 2023 volume projections, the components and alternatives for each facility option became narrowed. With the exception of behavioral health inpatient beds, both the low and high ends of the range of projected volumes result in essentially the same number of rooms required to serve that volume. Even for behavioral health the

difference is only approximately one bed unit (24 beds), and the mid-point of those projected behavioral health volumes was used to arrive at the targeted number of behavioral inpatient rooms.

In the categories of ambulatory and behavioral health services, MIHS falls short of projected need and requires increased capacity. In the general acute care hospital category, MIHS requires less capacity going forward than it has today. The following table compares existing capacity against projected need for MIHS ambulatory, behavioral and acute care hospital services.

MIHS SERVICE CATEGORY	MIHS EXISTING CAPACITY	MIHS PROJECTED NEED
Community need is driving INCREASED demand for outpatient and behavioral services.		
FHC's and new East/West Valley CHC exam rooms	142	203
Central Valley CHC exam rooms	158	171
Behavioral health inpatient beds	183	240
Operational efficiencies are driving DECREASED need for inpatient capacity, with the exception of imaging services.		
Emergency department treatment rooms	57	50
Acute care beds	280	264
Invasive services rooms (e.g., operating, cath lab, endoscopy)	18	14
Imaging testing rooms	11	18

Based on these inputs, the following fundamental goals were established as parameters to developing the potential facility investment options:

<u>Outpatient Services</u>

1. Renovate, expand and/or relocate the existing FHCs to achieve strategic patient service goals and efficient operating models.
2. Expand the CHC capacity on the Central Valley Roosevelt campus to enable continued shifting to outpatient services.
3. Construct new CHCs and include diagnostic, treatment and therapy services to improve access to healthcare across the County.

<u>Behavioral and Acute Care Inpatient Services</u>

1. Replace the acute care hospital with fewer inpatient beds for improved teaching, efficiency, safety and satisfaction.
2. Consolidate all three behavioral health service sites for improved efficiency.
3. Redesign clinical care services to deliver contemporary care and improve training.

<u>Medical Education and Clinical Training Programs</u>

1. Enhance academic and education capabilities and support spaces.

Facility Options

Three high-level facility options each were devised for the acute care hospital and behavioral health services. In addition to meeting the fundamental goals, a major emphasis in developing the options was to gain as much functionality and efficiency as possible while limiting unnecessary spending.

Prior to arriving at the final three options for acute and behavioral services as noted below, multiple options were conceptualized, considered and tested. Most of those concepts were variations on the final three. The following guidelines where then used to arrive at those options that have the greatest potential to serve the stated goals. These include:

1. Each option must be buildable, phase-able and functional when complete.
2. Minimize the number of "make-ready" projects required to achieve the end result.
3. Retain and/or repurpose as many existing buildings as possible.
4. Each building should have adequate parking that is close to a highly visible front entrance.
5. Various types of vehicular traffic circulation should be separated (e.g., public, emergency, physicians/employee, service).

An overview of these remaining options is shown below and cross-referenced to align compatibility of behavioral health and acute care options.

	Acute Care Options		
Behavioral Health Options	Option 1: East 	Option 2: West 	Option 3: New 
Option 1: Renovated Main Hospital	Replace Power Plant and Add Parking Garage	Add Parking Garage	√ (√ = compatible without modification)
Option 2: New Hospital on Main Campus	N/A	√	√
Options 3: Greenfield Site	√	√	√ (assume combined site)

Regarding the construction of a replacement acute care hospital, three viable options exist, specifically constructing on the east and west ends of the Roosevelt campus, as well as building on a green-field site. The variability in cost between these three options is negligible, less than two percent. This includes the necessity of acquire land to build a green-field option.

Regarding the behavioral health options, renovating the existing acute care hospital, Option 1 above, was retained to show that reuse of MMC was tested. While this is possible to do so, as shown below, the estimated cost of renovation is within seven percent of the cost of building a new behavioral health hospital. Therefore, it is a possible option, however not recommended. While renovating the acute care hospital is slightly less costly, the end result is a facility that may not be suitable or safe for behavioral health patients and staff. The resulting inefficient configuration would likely require additional staffing which would make this solution much more costly over the life of the building.

Capital projections were developed for each option considered, for new CHCs, and for replacing the FHCs, with the exception of the HIV/AIDS clinic that has been recently renovated. The capital needed for each potential option was fully loaded project costs, including construction costs, fees, furniture and equipment. To provide context, these costs include inflation between now and 2020 for most projects and through 2022 for the option to reuse MMC for behavioral health. While it is possible to complete the amount of construction proposed in the option by 2020, a specific implementation timeline was not defined. If these projects were spread over a longer time period then additional inflation of these costs should be added to the capital total below.

Acute Care Hospital	BH Hospital	CHC's	FHC's	Total
$541M to $548M	$247M	$102M	$26M	
New Hospital Education / Research Laundry Power Plant 2619 Renovation Relocate Helipad Demolition of existing hospital	New Hospital Renovate Main Hospital $231M	East CHC West CHC Expand Central CHC	Replace: Avondale El Mirage Sunnyslope South Central Guadalupe 7th Avenue No change to McDowell	**$916M to $923M**
+$5.5M		+$2M each for East and West		**+$4M to $9.5M**

VIII. FINANCIAL IMPLICATIONS

In the strategic plan the MIHS Board specifically called out the importance of being good stewards of public resources as MIHS fulfills the role of Maricopa County's public teaching hospital and health system of care. Directly related to that goal, the Board reviewed data on emerging market need, changing models of reimbursement, and the strategies to improve the District's operating margins so that it can sustain critical access to needed care.

Three strategies were identified that can help build fiscal sustainability for the mission of the system, specifically:

Converting Uninsured to Covered Lives:

A review of MIHS' historical payer mix from FY2010 to FY2013 suggests that MIHS can realistically achieve a redistribution of current patient volume from uninsured status to insured status via either AHCCCS or health exchange enrollment. Assuming no volume growth, this improved payer mix produces an average bottom line improvement of approximately $20 million (after netting out presumed annual expense increases). Realizing this gain will require MIHS to execute strategies to proactively enroll patients in AHCCCS and convert uninsured patients to the health exchanges; and to reinvest in facilities and programs to retain those patients who currently are served by MIHS, however will now have additional choices through ACA-mandated coverage.

Growing Ambulatory Capacity to Serve More People in Need:

Assuming full build-out of two ambulatory health centers, incremental outpatient volume increases were calculated. Net realizable values by payer as developed by MIHS were then applied to the forecasted increase in volumes, and based on that calculation and the revised payer mix, a projected potential increase of $20+ million in net revenue is as follows:

	Accumulated Ambulatory Growth			
Ambulatory Growth	**2015**	**2016**	**2017**	**2018**
CHC	1,902,227	1,671,801	3,995,159	6,547,172
FHC	1,374,025	1,374,025	704,672	1,073,851
Inpatient	1,921,955	1,921,955	1,938,772	2,179,249
Total Ambulatory Growth	5,198,207	4,967,782	6,638,603	9,800,273
Accumulated Ambulatory Growth		10,165,989	16,804,592	26,604,865

A complete breakdown of the projected increases in volume of visits by projected site of service and payer mix is provided below.

Incremental/Growth of Visits									
	2015	2016	2017	2018		2015	2016	2017	2018
FHC	12,901	12,901	6,300	10,929	**CHC**	39,700	43,144	49,964	61,142
FHC									
AHCCCS - Non MP	3,241	3,241	1,582	2,745	AHCCCS - Non MP	6,895	3,444	6,820	11,177
AHCCCS - MP	1,830	1,830	894	1,550	AHCCCS - MP	4,858	2,545	5,039	8,259
Exchanges	-	-	-	-	Exchanges	1,000	-	-	-
Medicare	716	716	350	606	Medicare	460	966	1,912	3,134
Medicare HMO	791	791	386	670	Medicare HMO	516	1,084	2,146	3,517
HMO PPO	855	855	418	724	HMO PPO	551	1,157	2,291	3,755
Commercial	23	23	11	19	Commercial	21	45	89	146
Agency (RBHA) & Grant	-	-	-	-	Agency (RBHA) & Grant	-	-	-	-
Self Pay	4,951	4,951	2,418	4,194	Self Pay	(7,002)	6,088	12,055	19,757
Other	494	494	241	419	Other	284	596	1,179	1,933
Total	12,901	12,901	6,300	10,929	Total	7,583	15,925	31,532	51,677
Then the net revenue by payer by visit amount:									
AHCCCS - Non MP	116	116	116	116	AHCCCS - Non MP	126	126	126	126
AHCCCS - MP	119	119	119	119	AHCCCS - MP	139	139	139	139
Exchanges	116	116	116	116	Exchanges	139	139	139	139
Medicare	173	173	173	173	Medicare	125	125	125	125
Medicare HMO	138	138	138	(84)	Medicare HMO	134	134	134	134
HMO PPO	214	214	214	214	HMO PPO	499	200	499	499
Commercial	856	856	855	858	Commercial	499	499	499	499
Agency (RBHA) & Grant	-	-	-	-	Agency (RBHA) & Grant	-	-	-	-
Self Pay	59	59	59	59	Self Pay	37	37	37	37
Other	107	107	246	246	Other	233	233	233	233
Then net revenue total (incremental volume x payment per visit)									
AHCCCS - Non MP	375,830	375,830	183,579	318,454	AHCCCS - Non MP	868,722.00	433,964.43	859,405.63	1,408,329.42
AHCCCS - MP	217,804	217,804	106,345	184,502	AHCCCS - MP	675,191.02	353,753.91	700,525.33	1,147,992.83
Exchanges	-	-	-	-	Exchanges	139,000.00	-	-	-
Medicare	123,817	123,817	60,443	104,862	Medicare	57,470.96	120,752.64	238,962.10	391,782.32
Medicare HMO	109,196	109,196	53,348	(56,075)	Medicare HMO	69,124.34	145,179.29	287,503.80	471,186.78
HMO PPO	182,948	182,948	89,359	154,996	HMO PPO	274,928.17	231,440.06	1,143,117.76	1,873,343.00
Commercial	19,675	19,675	9,604	16,721	Commercial	10,720.06	22,530.30	44,582.55	73,015.84
Agency (RBHA) & Grant	-	-	-	-	Agency (RBHA) & Grant	-	-	-	-
Self Pay	292,124	292,124	142,654	247,433	Self Pay	(259,021.82)	225,360.25	446,169.91	731,154.26
Other	52,632	52,632	59,339	102,958	Other	66,092.00	138,820.48	274,892.00	450,367.44
Total	1,374,025	1,374,025	704,672	1,073,851	**Total**	1,902,226.72	1,671,801.37	3,995,159.08	6,547,171.88

Enhancing Operational Efficiencies:

By operating more efficiently in a right-sized network of clinical facilities, MIHS has the potential to reduce current costs by roughly $20 million a year.

In summary, an investment in new facilities is needed to retain the patients MIHS currently serves and convert them from self-pay to insured, serve growing community need, and operate more efficiently. While successfully implementing all three initiatives is expected to drive roughly $50 - $60 million per year in improved financial performance, failing to do so will likely result in net revenue declines as MIHS' ability to serve emerging community need and operate efficiently further deteriorates.

IX. FINAL RECOMMENDATION TO THE BOARD OF DIRECTORS

Development of the Recommendation

Since March, 2013, the Bond Advisory Committee has met monthly with a charge to deliver a recommendation to the Maricopa County Special Health Care District Board of Directors by February 28, 2014, regarding the issuance of bonds or any other viable financing vehicle to fund proposed Maricopa Integrated Health System (MIHS) strategic capital projects, including the consideration of a bond election. To develop its recommendation, the Bond Advisory Committee has toured all MIHS facilities across the Valley; met with Navvis Healthways, consultants to the MIHS Board of Directors, to review the MIHS strategic plan; worked with an independent consultant, Kurt Salmon U.S., Inc., as facilitator of the committee process and for the provision of bond project expertise; thoughtfully considered healthcare industry trends; received a thorough assessment of the current state of MIHS facilities from industry experts Kurt Salmon; reviewed trends in healthcare design and facility construction; and, with the help of Kurt Salmon, considered multiple options for the various project investments. It is important to note that the Bond Advisory Committee focused on community need throughout its deliberations and considered new and creative solutions, rather than simply extrapolating forward from the current state.

The Bond Advisory Committee and its members have followed the Arizona Open Meeting Law and Public Records Act as per the administrative requirements of the Bond Advisory charter. Therefore, all meetings have been open to the public and recorded. Minutes of all meetings have been maintained. Materials presented at Bond Advisory Committee meetings are available on-line at www.mihsbondadvisory.org. The Bond Advisory Committee meetings have been well attended by members of the public.

The Bond Advisory Committee was also charged with obtaining public comment and community stakeholder input into the bond project and proposal deliberations. Therefore, the Bond Advisory Committee held five Town Halls, one in each hospital district, hosted by the district's elected representative. The Town Halls were held on January 7th, 9th, 13th, 14th and 15th, at the Maricopa Medical Center hospital campus and the Sunnyslope, Chandler, Mesa and El Mirage MIHS Family Health Centers, respectively. Information regarding the Town Halls was advertised in the Arizona Republic, the Capitol Times and the Phoenix Business Journal, as well posted on-line and promoted through Facebook. The five Town Hall meeting rooms were filled with attendees. Each Board member opened the Town Hall in his or her respective district. A brief video of MIHS President and CEO, Steve Purves, explaining the MIHS strategic plan and corresponding facility needs was shown. Bond Advisory Committee Chairman Bill Post facilitated the Town Hall discussions. There was no opposition expressed at the Town Halls. Chairman Post fielded numerous questions and received many comments regarding the value MIHS provides in our community.

Town Hall questions generally fell into one of five categories. These included the impact of the Accountable Care Act on MIHS; the assumptions underlying the proposed strategies; the specifics regarding the bond projects; likelihood of success regarding a bond ballot measure; and the risk to the community if these investments are not made. Town Hall comments received generally covered three topics. These included

confirming the need for expansion of the various planned services; citing the value of MIHS to the community today and in the future; and a willingness to provide support and assistance in a bond election to fund the strategic plan.

In addition to the Town Halls, MIHS CEO Steve Purves and Bond Advisory Committee Chairman Bill Post met one-to-one with more than 30 community leaders and stakeholders over the past few months. They received positive feedback regarding the essential role MIHS plays in our community and the investments needed to maintain its teaching and safety net mission. In summary, the Town Hall and stakeholder feedback validates the community need for MIHS' safety net and teaching services and the corresponding capital investments required to meet that need.

The Recommendation

The Bond Advisory Committee understands and supports the MIHS 2013 - 2018 Strategic Plan approved by the Board of Directors last summer. The plan sets forth strategies to ensure MIHS fulfills its voter-mandated teaching and safety net mission. Specifically, the Strategic Plan describes a 21st century model for medical education and patient care that guarantees a much needed supply of future health professionals and improves access, quality, cost and outcomes for the residents of Maricopa County.

The Strategic Plan defines a clinical teaching and safety net healthcare network that requires investments in geographically distributed primary care and specialty ambulatory clinics, expanded behavioral health services, and replacement and right-sizing of the aging acute care hospital that will require fewer inpatient beds going forward. The goal of the clinical network is to create an integrated system that will improve Maricopa County residents' access to care, advance the MIHS mission of medical education and clinical research, increase the supply of medical professionals available to care for the community, and enhance MIHS' ability to deliver exceptional outcomes through a comprehensive and coordinated services continuum.

Following an objective assessment by independent facility experts, the Bond Advisory Committee has concluded that the current MIHS buildings are insufficient to implement the clinical network described in the Strategic Plan and over time, will erode MIHS' ability to continue its voter-mandated mission. For decades, MIHS facilities and services have not kept pace with changes in care delivery, medical education, technology, nor the growth of the County population. Therefore, MIHS requires a substantial investment to meet current and future community needs for prevention and wellness, medical and emergency care, trauma and burn regional services, and behavioral health services. Moreover, MIHS must have a clinical environment conducive for training the thousands of medical professionals it attracts each year.

It is the recommendation of the Bond Advisory Committee that the Special Health Care District Board of Directors exercise their legislative authority to issue General Obligation Bonds in an amount not to exceed $935 million for the financing of strategic capital projects. The Bond Advisory Committee has reviewed the proposed strategic capital projects and agrees that significant facility investments must be made to ensure MIHS sustain its mission critical role today and in the future. The strategic capital projects comprise a portfolio of investments that in total may require up to $935 million of funding. The Bond Advisory Committee recommends that a not to exceed amount of $935 million be available to the Board of Directors as a future funding stream. The Bond Advisory Committee also recommends that such funds should be

accessed only after cost effective solutions have been identified which generate the best value for each project and the tax payer impact has been minimized to the extent feasible.

The Bond Advisory Committee is making the following seven recommendations.

1. Grow Medical Education
2. Expand the Outpatient Health Centers
3. Increase Behavioral Health Capacity
4. Replace and Right-Size the Public Teaching Hospital
5. Complete an Economic Impact Study
6. Develop a Bond Proposal and a Bond Communication Plan
7. Create a Community Stakeholder Engagement Plan

Recommendation #1: Grow Medical Education

The Bond Advisory Committee recommends that investments in MIHS healthcare delivery models and facilities also include strategies to address the critical and growing shortage of medical professionals in Arizona. Today, Arizona ranks 43rd out of 50 states in the number of active primary care physicians who engage in direct patient care. According to the Association of American Medical Colleges, by 2025, the U.S. healthcare sector will face a national shortage of more than 130,000 physicians. A growing and aging population, the rise of chronic diseases, and the expansion of health coverage contained in the federal healthcare reform law are driving increasing demand for healthcare professionals, and Arizona is already critically behind.

Over the past decade, consumers, providers, insurers, policy-makers, employers, regulators and politicians have recognized that every effort must be made to define the value of health care, not just the cost of medical services, and that the value equation must measure accessibility and quality of outcomes as well as dollars spent. There is growing consensus that the country needs a seamless, value-oriented system that offers affordable health care to all Americans.

Looking through the crystal ball, healthcare thought leaders seem to agree that the future of medicine will include a new health model in which there are fewer acute care hospitals and more disease prevention and primary care health centers that include far more than doctors' offices. With the advent of personalized and predictive medicine, people will be treated before the onset of disease, avoiding hospitalization altogether. Specialized hospitals will bring together the best doctors and equipment to combat specific diseases. In the future, people will require less hospitalization, and will be able to be treated where they want to be: at home. In cases where hospitalization is required, patients will be hospitalized in specialized facilities with far better outcomes.

As a full continuum of community healthcare services, the Bond Advisory Committee understands MIHS offers exactly the kind of model required for the future of medicine. MIHS provides a system of coordinated care that includes prevention and education programs, primary and specialty care clinics, behavioral health hospitals, regional burn and trauma centers, emergency and hospital services, a health insurance company, and an integrated medical group that cares for patients across a geographic network of services. Managing care across this integrated system of services improves outcomes, access, and costs for the populations served.

The Bond Advisory Committee recognizes the tremendous value MIHS can offer to medical education. The teaching and training of physicians, nurses, pharmacists and allied health professionals that occurs at MIHS in multi-disciplinary teams across the comprehensive continuum of care is unmatched in Maricopa County. In this manner, healthcare professional training can occur in an environment where care is organized around the needs of patients and technology is used to deliver better care, improved outcomes and lower costs. Hence, the Bond Advisory Committee strongly recommends that capital bond investments made in MIHS facilities be leveraged to grow medical education capacity in the community. This will enable an increasing number of tomorrow's providers to be trained in the new, modern 21st century health system of care.

The Bond Advisory Committee notes that although primary care is critical to promoting health, improving care and reducing overall system costs, it has been historically underfunded and under-valued in the United States. As a result, not enough providers are in place to meet existing demands for services and the number of primary care providers is rapidly declining. A primary care practice is a key point of contact for patients' healthcare needs. Growing medical education capacity should include strategies to strengthen primary care by expanding the role of non-physician members of the primary care workforce, improving care coordination, making it easier for clinicians to work together, and helping clinicians spend more time with their patients.

The Bond Advisory Committee recommends that MIHS collaborate with other hospital systems, healthcare providers and medical education institutions to increase the community supply of physicians, nurses and allied health professionals. In particular, the Bond Advisory Committee recommends that MIHS leverage its public teaching hospital status to access potential sources of funding and work collaboratively with other healthcare organizations to explore solutions for sustaining and growing the number of graduate medical education residencies and fellowships in Maricopa County. Today, Maricopa County hospitals are unable to meet current medical student demands for graduate medical education residencies. Growing the number of graduate medical education residencies available in the community would be highly beneficial to increasing future Arizona physician supply because 70% of physicians remain to establish medical practices in the communities in which they complete their medical residency training, In addition to ensuring the supply of physicians to care for our community, increasing the supply of medical professionals adds higher wage jobs to the Arizona economy and attracts other medical and bioscience industry businesses to the State.

Of note, on Wednesday, February 5th, the governing body which has oversight responsibility for the Family Health Centers voted to support the MIHS strategic plan and corresponding capital projects at their Maricopa County Family Health Centers Governing Council meeting.

Recommendation #2: Expand the Outpatient Health Centers

The Bond Advisory Committee acknowledges that MIHS offers an affordable network of outpatient health centers across Maricopa County that is the front line of defense for keeping people well, managing chronic illness, and providing care cost-effectively. The health centers provide primary and preventive services to at-risk and underserved populations whose only alternative for care is the emergency room. Unfortunately, the Family Health Centers which were inherited by the District from the County are undersized, outdated and not in locations that correspond to emerging community needs. The Family Health Centers require substantial renovation and expansion to create an outpatient clinical network that improves access and patient throughput; provides an appropriate environment for medical training; and serves the needs of the community. This enhanced capacity will reduce wait times, improve access to specialists, and avoid overuse of hospital emergency departments. Investing in Family Health Centers also creates a laboratory for the training of medical professionals. As our nation's healthcare system puts increased emphasis on delivering care in the most cost-effective setting, the demand for coordinated care practices will grow. The Family Health Centers provide an environment and patient populations for training teams of providers. Primary care physicians, specialists, behavioral health providers and mid-level providers such as physician's assistants and nurse practitioners, can work together to deliver care with improved outcomes and lower costs. Technology will facilitate improved communication among team members and with patients.

Similarly, the Bond Advisory Committee recommends renovation and expansion of the outpatient specialty services across Maricopa County. The MIHS Comprehensive Health Center in Central Phoenix offers both primary and specialty outpatient services, and is an effective model for delivering quality, efficient care outside the hospital. The facility, however, requires several building system upgrades as well as additional patient exam rooms. Furthermore, as the Maricopa County population has grown, the need for these kinds of specialty services in the East Valley and West Valley has increased, and the Phoenix Comprehensive Health Center is simply too far from the populations who need it. Therefore, the Bond Advisory Committee is recommending the construction of additional Comprehensive Health Centers to provide accessible and affordable outpatient specialty services to the East Valley and West Valley residents of Maricopa County.

The Bond Advisory Committee supports the MIHS strategy to connect Family Health Centers and Comprehensive Health Centers with other healthcare providers, hospitals and agencies in their respective geographic markets so that patients receive convenient and coordinated care close to where they live and work. The return on investment of a public teaching hospital and health system is maximized when community services are integrated in a market rather than duplicated. By partnering with local providers, MIHS will ensure the community receives the greatest value for the outpatient health center investments.

Recommendation #3: Increase Behavioral Health Capacity

The Bond Advisory Committee recognizes gaps in access to behavioral health services in Maricopa County. Lack of access to behavioral services drives up emergency room utilization and costs for schools, law enforcement, other health systems and hospitals, and employers. The community demand for additional behavioral health services is at an all-time high, with little relief in sight. The current MIHS behavioral health

facilities are at capacity and cannot meet current community need, much less growing future needs. The facilities are functionally ineffective and offer little to no options for expansion.

Therefore, the Bond Advisory Committee recommends increasing inpatient bed capacity for MIHS behavioral health care to meet the glaring need in the community for more mental health and substance abuse services. Additionally, the Bond Advisory Committee supports the consideration of consolidating MIHS inpatient behavioral health capacity on a single campus to enable better care for patients and enhanced service to families. The Committee understands opportunities exist to generate operational efficiencies and savings by constructing one new facility rather than adding fragmented capacity to multiple facilities.

Additionally, the Bond Advisory Committee supports the expansion and integration of behavioral health services into the MIHS Family Health Centers and Comprehensive Health Centers to better service residents across Maricopa County. The Bond Advisory Committee encourages MIHS to continue its leading industry accomplishments in integrating medical and behavioral health services via community-based primary care medical homes, particularly in the additional outpatient health center investments envisioned.

Lastly, the Committee reviewed various viable options for constructing an inpatient behavioral health hospital on the existing Maricopa Medical Center campus as well as on an greenfield site. The Committee recommends that due diligence be conducted once funding is secured to determine the most cost-effective behavioral health solution for ensuring that Maricopa County residents have access to the levels of care and mental health services they deserve.

Recommendation #4: Replace and Right-Size the Public Teaching Hospital

The Bond Advisory Committee recommends the replacement and right-sizing of the obsolete public teaching hospital, Maricopa Medical Center, effectively reducing the number of inpatient beds, creating a contemporary environment and increasing the flexibility of the hospital for the future as medicine evolves. Constructed more than 40 years ago, Maricopa Medical Center has reached the end of its useful life. Changing community needs and care models have rendered it functionally obsolete and exceedingly costly to operate. The facility design is not suitable for team-based care models, advanced technologies, teaching and training requirements, and the acuity of patients today. The current facility configuration makes renovation cost-prohibitive and unable to meet today's medical training and patient care expectations.

There is adequate space on the existing hospital campus for a replacement facility. Viable options exist for siting a replacement hospital on the campus with convenient access for patients and staff, good separation of service zones and vehicular traffic, and continued use of existing support structures such as the warehouse and power plant.

A new hospital will enable MIHS to train medical professionals in a team-based and technology-enabled environment, as well as improve the care of patients, particularly those who need specialty intensive care, trauma and burn services. Significant research and evidence exists on how

organization, culture and environment can impact innovation. In particular, facility and campus design can have a major impact on breaking down the organizational, cultural and physical silos that are inherent with any complex campus or organizational structure. The recommendation is to construct a new inpatient teaching hospital which will provide a higher integration of patient care, medical education and clinical research, significantly improving how healthcare is delivered and creating a model for teaching health systems across the country. Efficiencies gained in the design of the hospital, coupled with an expanded community network of increased ambulatory and behavioral health capacity, will reduce the number of acute care beds required in the replacement teaching hospital.

Recommendation #5: Complete an Economic Impact Study

The Bond Advisory Committee recommends the completion of an economic impact study to quantify the value that MIHS brings to our community today as well as the additional value MIHS will generate by implementing the bond project recommendations. The Bond Advisory Committee believe that MIHS contributes significant economic value today on several fronts, namely as a major employer representing more than 3,000 employees; as a safety net health system that fills gaps in care for the working poor and medically underserved; and as a public teaching hospital that provides clinical training for thousands of doctors, nurses and allied health professionals each year. Additionally, there will be considerable economic value provided in the local economy from the creation of construction industry jobs and the associated spending that would result from it.

The Bond Advisory Committee believes constructing a new and robust MIHS clinical network will add significant benefit to the community's bioscience efforts. The Bioscience Roadmap commissioned by the Flinn Foundation concluded that Arizona possesses many of the essential elements needed to become a global leader in the biosciences, but must strengthen its biomedical-research base and build a critical mass of bioscience firms and jobs. The study outlines a 10-year roadmap that can "fast track" Arizona on a path to achieving national bioscience stature and a diversified economy. The findings describe the need for increased public and private sector investments plus collaboration among Arizona's higher education, industry, and nonprofit sectors.

Investments in the MIHS clinical network will enable Arizona to attract more individuals interested in an advanced clinical and scientific training experience. Physicians, scientists, biotech researchers and students working in and considering the medical and bioscience professions will view the opportunities offered through the MIHS clinical network favorably. Arizona will likely retain more professionals post-training because of the growing scientific community.

Investments in healthcare offer Arizona an opportunity to establish a high-wage, technology-driven employment base of highly skilled workers that brings stability to the state's economy by balancing more cyclical industries. The challenge is for Arizona to 'catch-up' to other states that have already made substantial investments.

A community investment in the MIHS clinical network vision will provide significant momentum toward 'catching up'. The not-so-secret key to Arizona's success thus far has been collaboration among institutions, including colleges and universities, clinical providers, research institutes, government, and industry. Expanding these partnerships will help move discoveries rapidly from the laboratory into patient care, accelerate the translation of new discoveries into commercial products and services, and strengthen Arizona's financial viability through times of continuing economic instability.

Currently, there is growing community support for investments of the scope and scale described in the MIHS vision. Community leaders and stakeholders with whom the MIHS Strategic Plan has been shared have expressed enthusiasm and support for the patient care and medical education investments. These advancements in healthcare and clinical training will greatly contribute to the state's biomedical capacity and bolster a recovering economy.

Recommendation #6: Develop a Bond Proposal and a Bond Communication Plan

The Bond Advisory Committee is recommending that the Special Health Care District Board of Directors develop a proposal for a bond initiative in an amount not to exceed $935 million, submitted for voter approval on the November 2014 ballot. A not to exceed $935 million ballot measure will ensure adequate funding to make the necessary capital investments in outpatient health centers, behavioral health capacity, and the replacement and right-sizing of the public teaching hospital. The Bond Advisory Committee is recommending the bond projects are presented to voters as one, comprehensive initiative because the capital projects are interconnected and strategically linked to the organization's ability to accomplish its voter-mandated medical education and safety net mission. Additionally, the Bond Advisory Committee consultants have developed an analysis regarding bond financing of the capital projects which should be included in the bond proposal.

Upon voter approval, the Bond Advisory Committee recommends that the Board of Directors complete project-specific due diligence to value engineer the most cost-effective solution for each proposed investment. This will ensure bond funding is utilized most judiciously, providing tax payers with the greatest value for their community investment.

The Bond Advisory Committee is also recommending the development of a bond communication plan that details strategies for sharing the MIHS story, its value to our community, the capital required to implement the Strategic Plan, and the investment return our community will receive from supporting the bond projects. The story should address the economic impact to Maricopa County of the capital investments, the improved health of the community, and the benefit to all of having a vibrant public teaching hospital and health system of care. The Committee believes the MIHS story and legacy is significant and relevant to every member of our community, whether they directly utilize its safety net healthcare services or not. Therefore, the Committee is recommending a bond communications strategy be developed to convey and demonstrate how the bond election touches everyone in Maricopa County.

Recommendation #7: Create a Community Stakeholder Engagement Plan

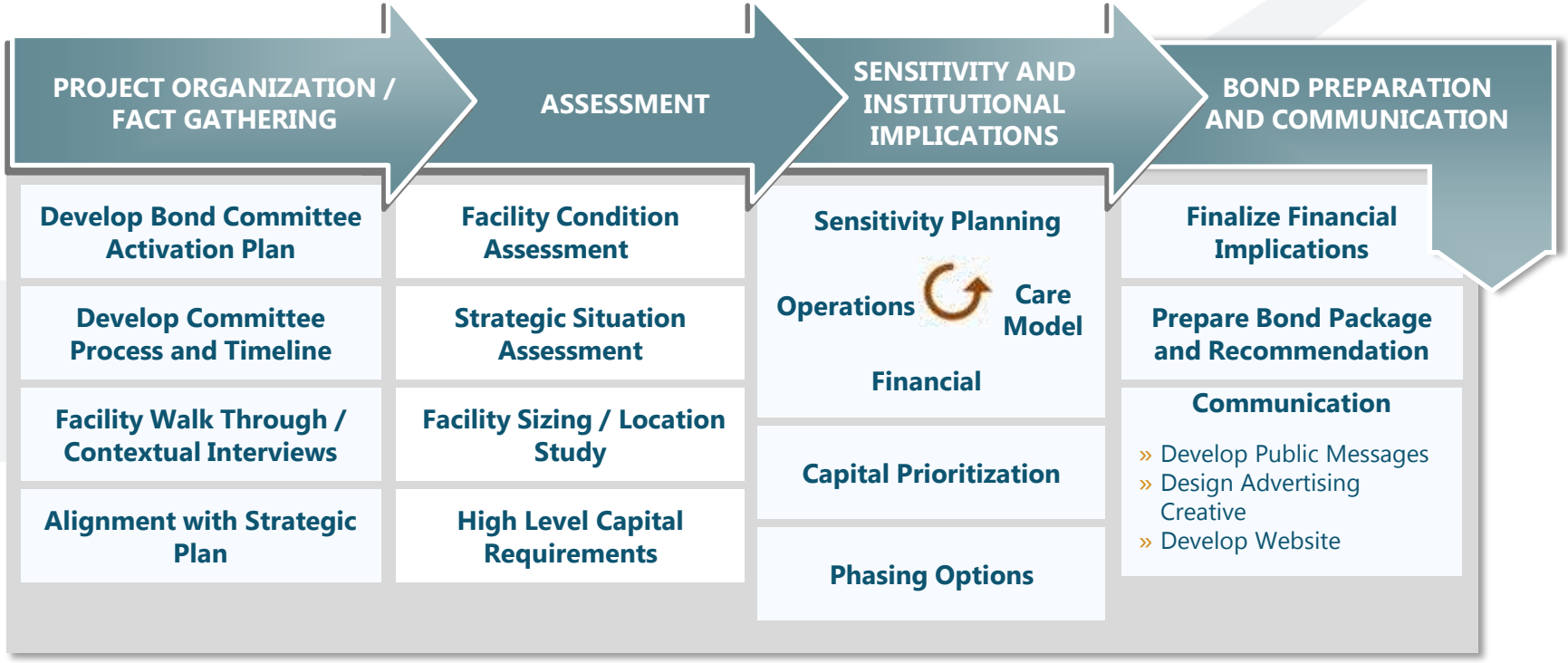
The Bond Advisory Committee is recommending the creation of a community stakeholder engagement plan. In anticipation of a successful bond election, the purpose of the engagement plan is to devise a framework for ensuring stakeholder involvement going forward. The Bond Advisory Committee has worked to ensure transparency in its deliberations and suggests that execution of bond projects should similarly do the same. Additionally, the valuable feedback received from recent community leader meetings and Town Halls suggests that even greater value can accrue by engaging other healthcare providers, community agencies, businesses, civic leaders and consumers in the implementation process and execution of specific bond projects. The Bond Advisory Committee suggests that MIHS Board of Directors and senior leadership remain flexible regarding the capital project plans during the implementation phase of work so that these types of creative collaborations and partnerships can indeed occur for the benefit of all.

Maricopa County Special Health Care District
Bond Advisory Committee
Supplemental Material
February 2014

MARICOPA INTEGRATED HEALTH SYSTEM

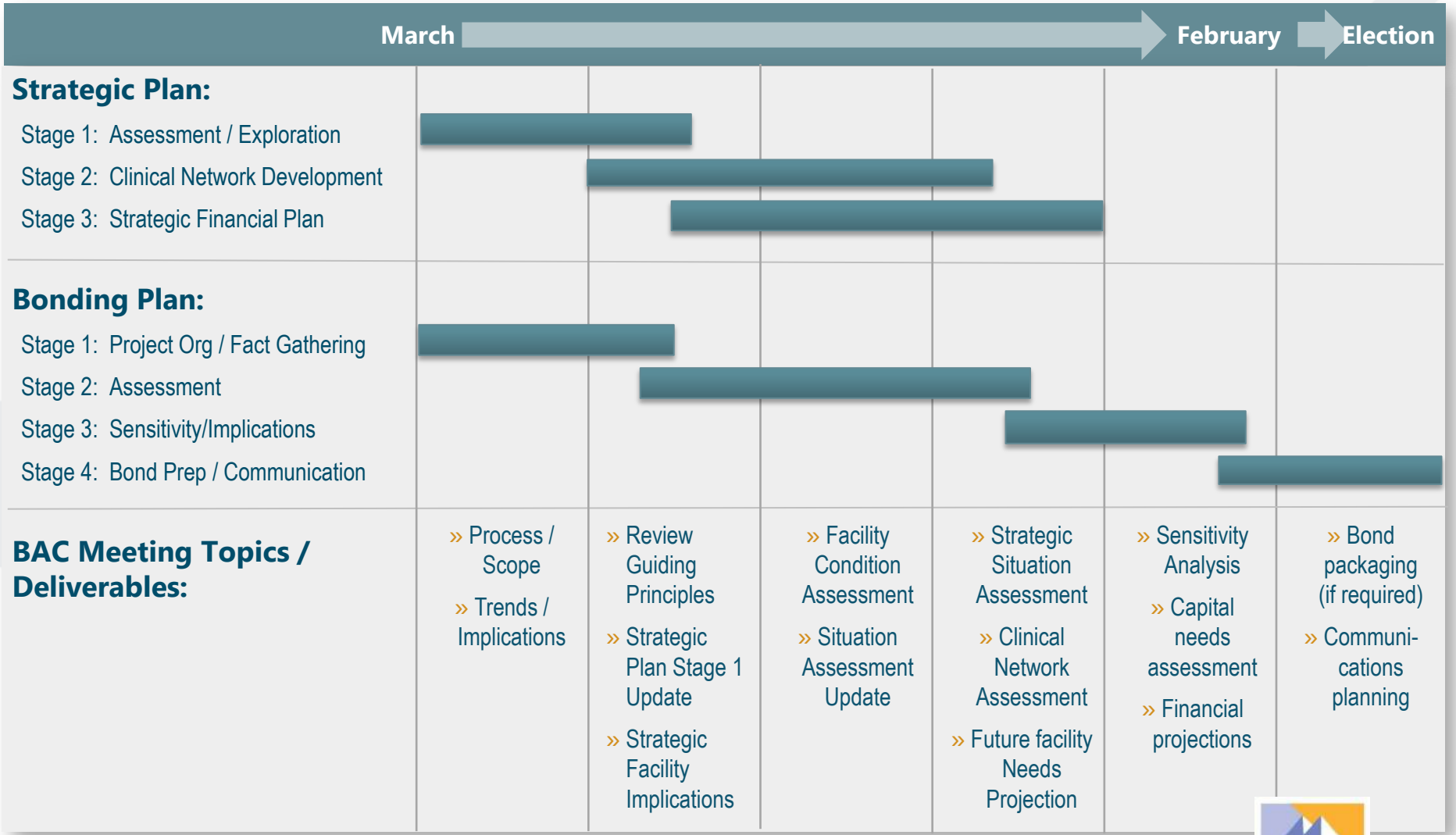
Work Steps

» The project consisted of four phases of work.



MARICOPA INTEGRATED HEALTH SYSTEM

Process Review: Integration with Strategic Plan



MARICOPA INTEGRATED HEALTH SYSTEM

Thoughts on the Future

Fact → We don't know what will happen

Fact → Many past predictions have been proven wrong

Fact → There are some trends that are fairly robust, and suggest a potential direction

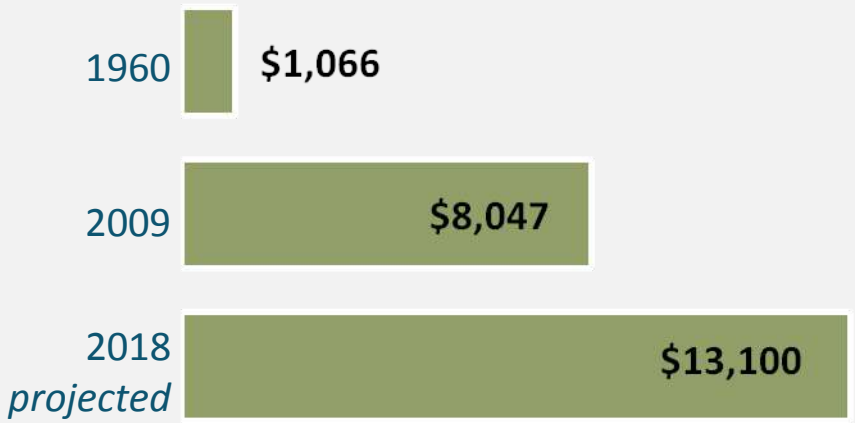
Fact → MIHS will have to make many key decisions in the face of incomplete information

MARICOPA INTEGRATED HEALTH SYSTEM

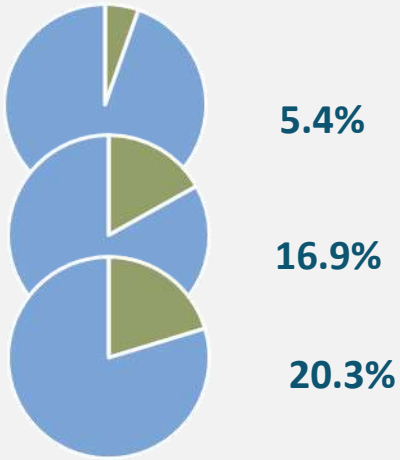
A Few Facts…

1. U.S. spending patterns are not sustainable; we are a "sick care" system, not a "health care" system

National U.S. Health Expenditures per Person…



… and as a % of GDP



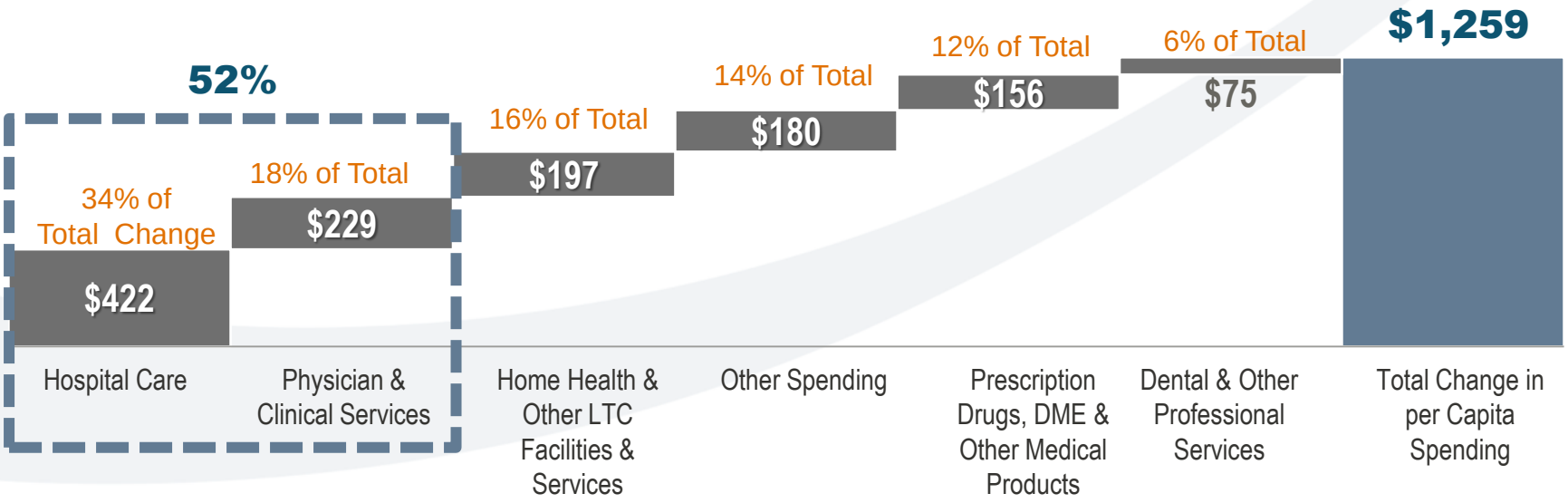
Source: OECD Health Data, 2010, Accessed 9-10-10 www.oecd.org

- On its own, U.S. health care (~$2.6T) is the fifth largest economy in the world
- U.S. health care metrics are not among the best internationally
  - Life expectancy ranked in the bottom 10 out of 30 OECD countries
  - Infant mortality ranked in the bottom 10 out of 30 OECD countries

MARICOPA INTEGRATED HEALTH SYSTEM

A Few Facts…

2. Hospitals and physician services have represented more than 50% of the increase in per capita healthcare cost over the past decade



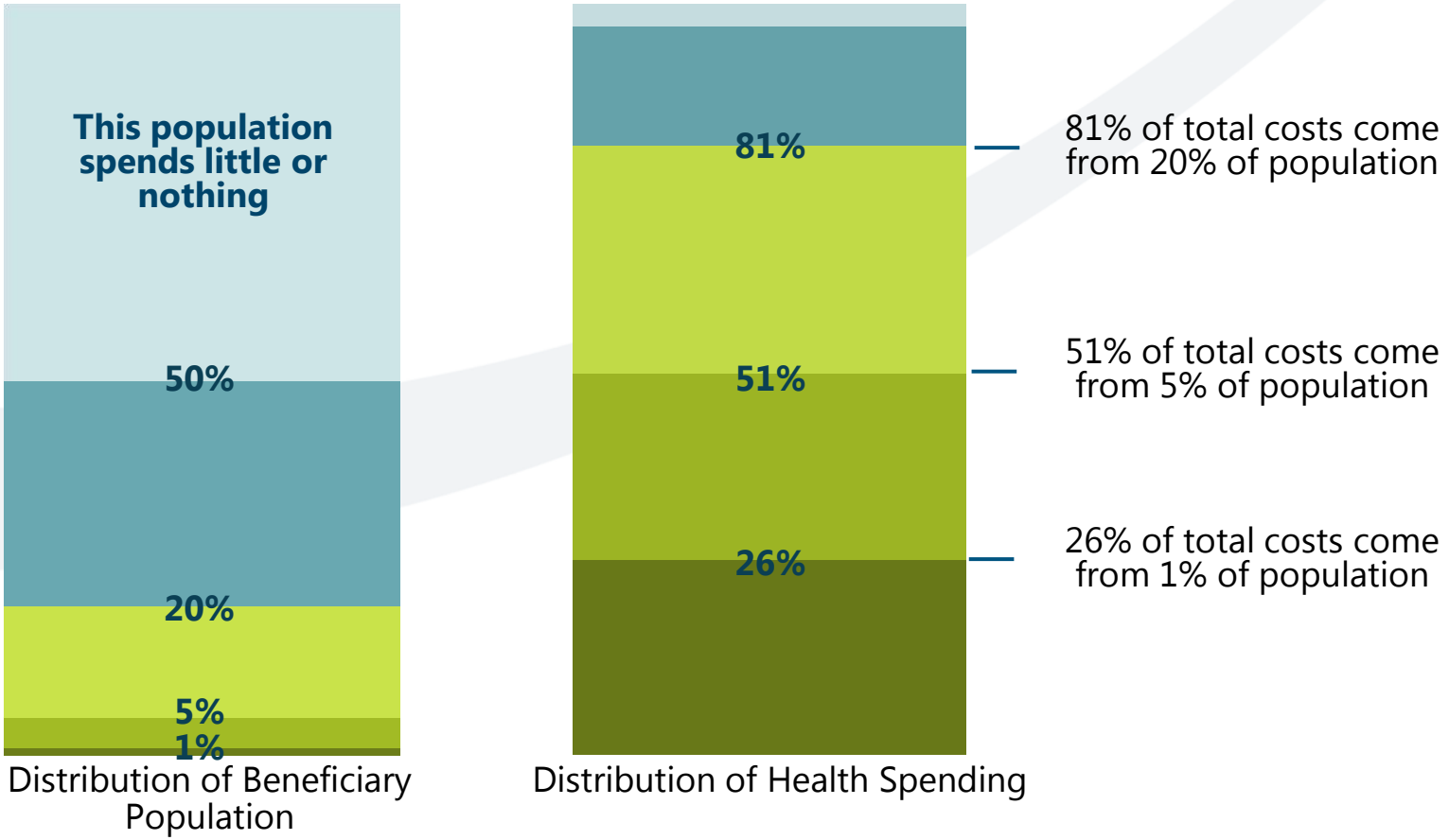
Source: NIHCM Foundation analysis of data from the National Health Expenditure Accounts, available at http://cms.gov/NationalHealthExpendData

- Hospital and physician practice patterns generally reflect society's expectations
- Reimbursement, regulatory and litigation environment prevent change

MARICOPA INTEGRATED HEALTH SYSTEM

A Few Facts…

3. 5% of patients are responsible for 50% of health care spending

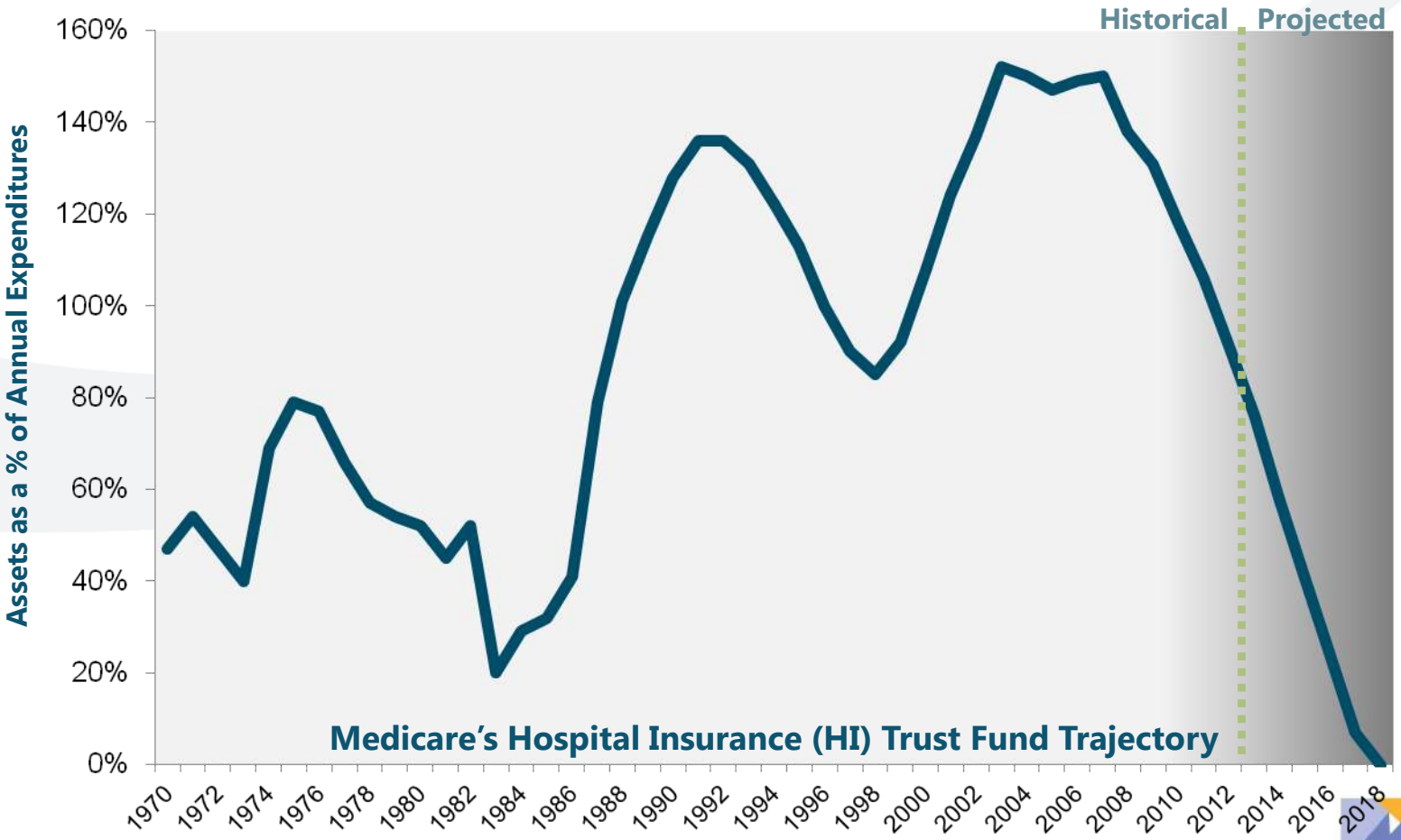


Source: NIHCM Foundation analysis of data from the Medical Expenditure Panel Survey, available at http://www.meps.ahrq.gov/data_stats/meps_query.jsp.

MARICOPA INTEGRATED HEALTH SYSTEM

A Few Facts…

4. Our current payment models are not sustainable



MARICOPA INTEGRATED HEALTH SYSTEM

Some Trends that We Can Extrapolate

1. Chronicity and co-morbidities are likely to drive increased healthcare demand over the next decade, even if utilization is managed and "waste" is eliminated

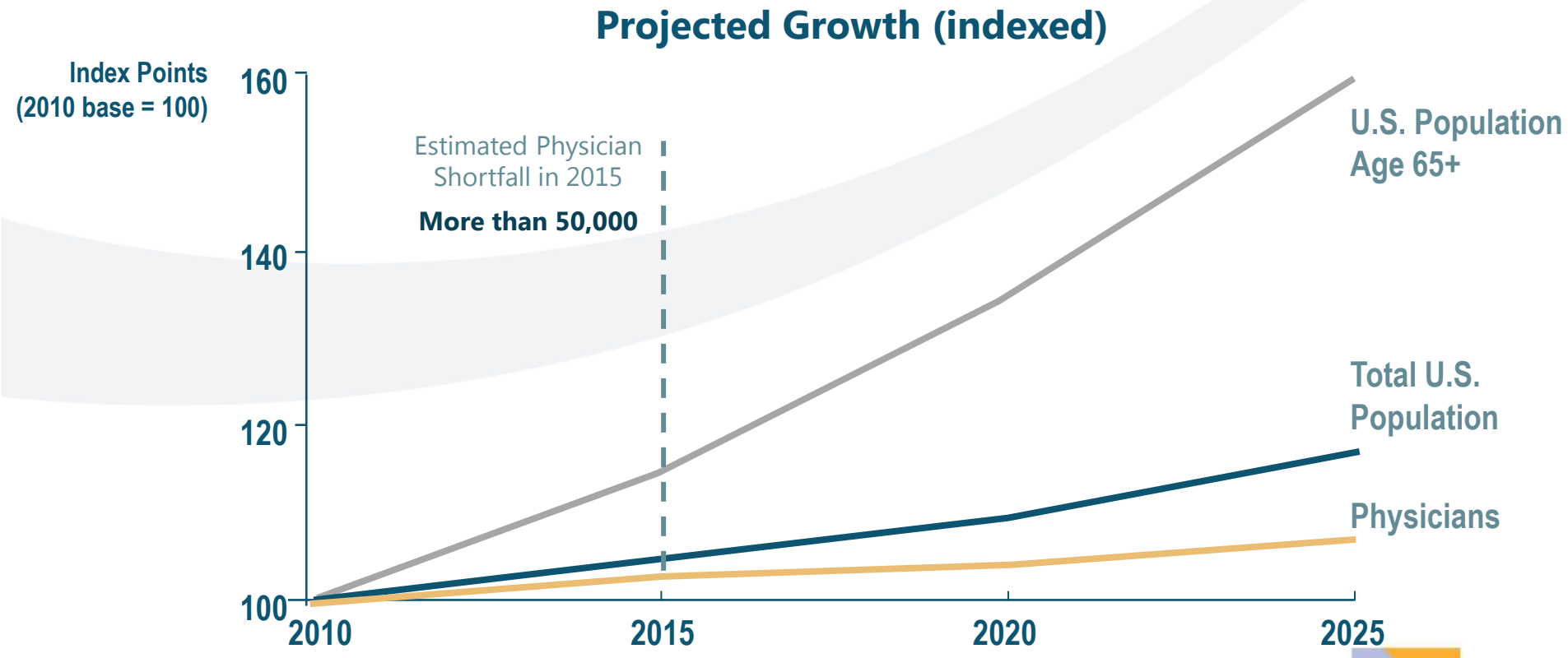
Population growth	↑	Arizona's population growing by 1.3+% annually, nearly double that of the national average
Chronicity	↑	14.2% of Arizona's residents above the age of 65, compared to 13.3% nationally
Access to Care	↑ ↓	18% of Arizona residents are uninsured, compared to 16% nationally
Health Status	↑	Arizona ranked 25th in the United Health Foundation's 2012 health status rankings
Technology/Science/Rx	↑ ↓	
New disease	↑	

Net impact ↑ *More Demand for Health Care Services*

MARICOPA INTEGRATED HEALTH SYSTEM

Some Trends that We Can Extrapolate

2. The funding for reform includes provider payment cuts, but the gap between supply and demand for most health professionals suggests there may not be a significant drop in "per unit" labor cost



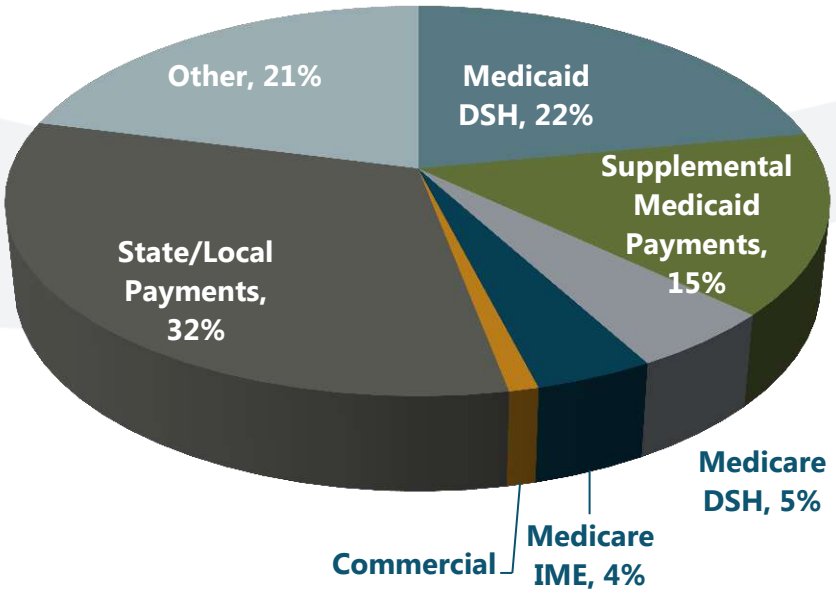
Source: AAMC, *New York Times*, HFMA

MARICOPA INTEGRATED HEALTH SYSTEM

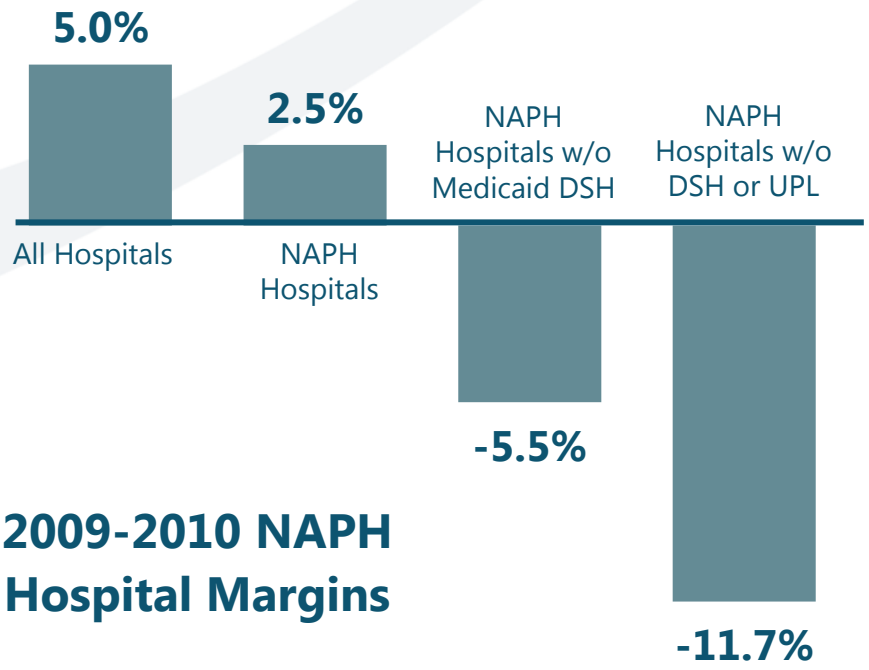
Some Trends that We Can Extrapolate

3. Funding sources for public hospitals are expected to deteriorate, which will force systems to identify alternative funding sources or cut overall expenditures

NAPH Hospital Sources of Financing



2009-2010 NAPH Hospital Margins

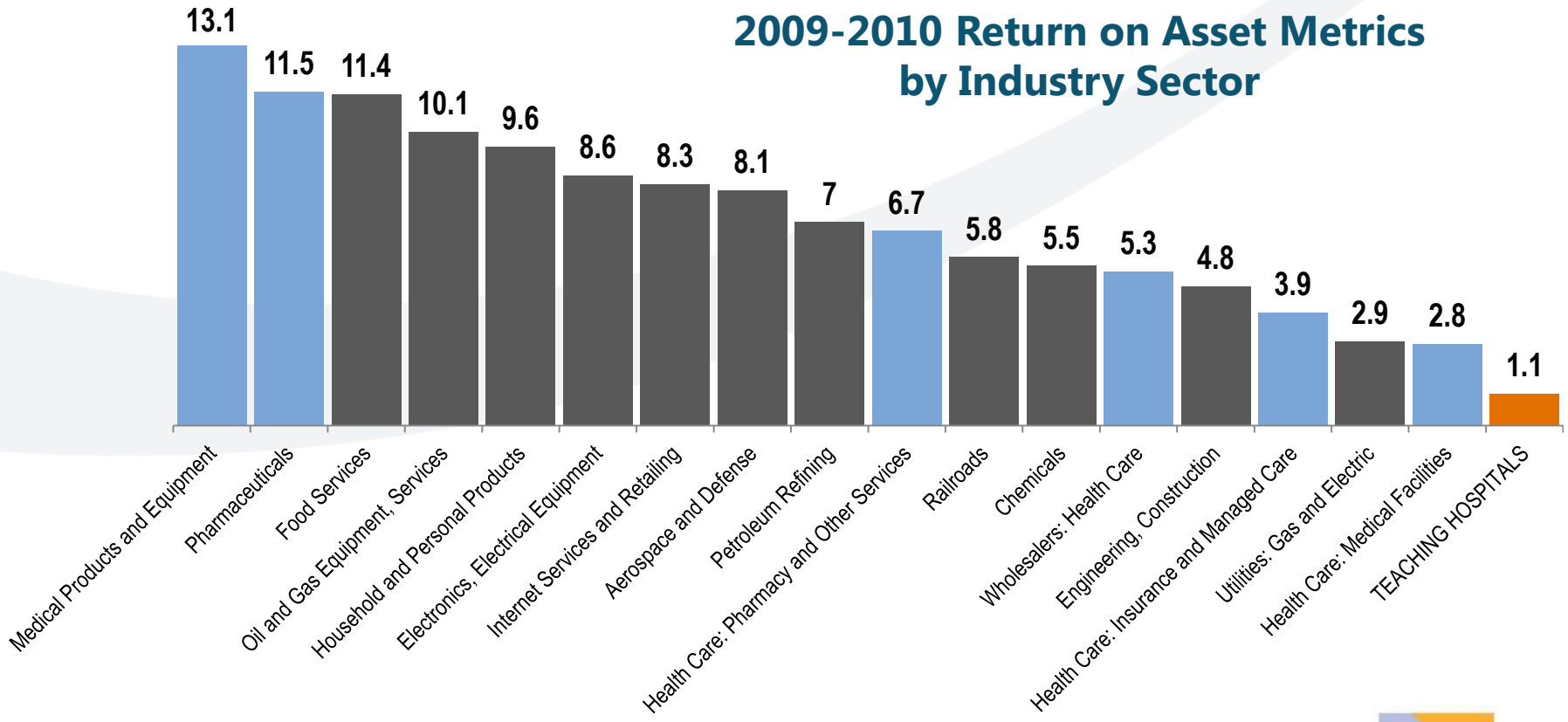


NAPH Hospital Characteristics 2009

MARICOPA INTEGRATED HEALTH SYSTEM

Some Trends that We Can Extrapolate

4. Being in a capital-intensive sector with a relatively poor history of asset utilization has caused many institutions to defer investment to the fixed asset base



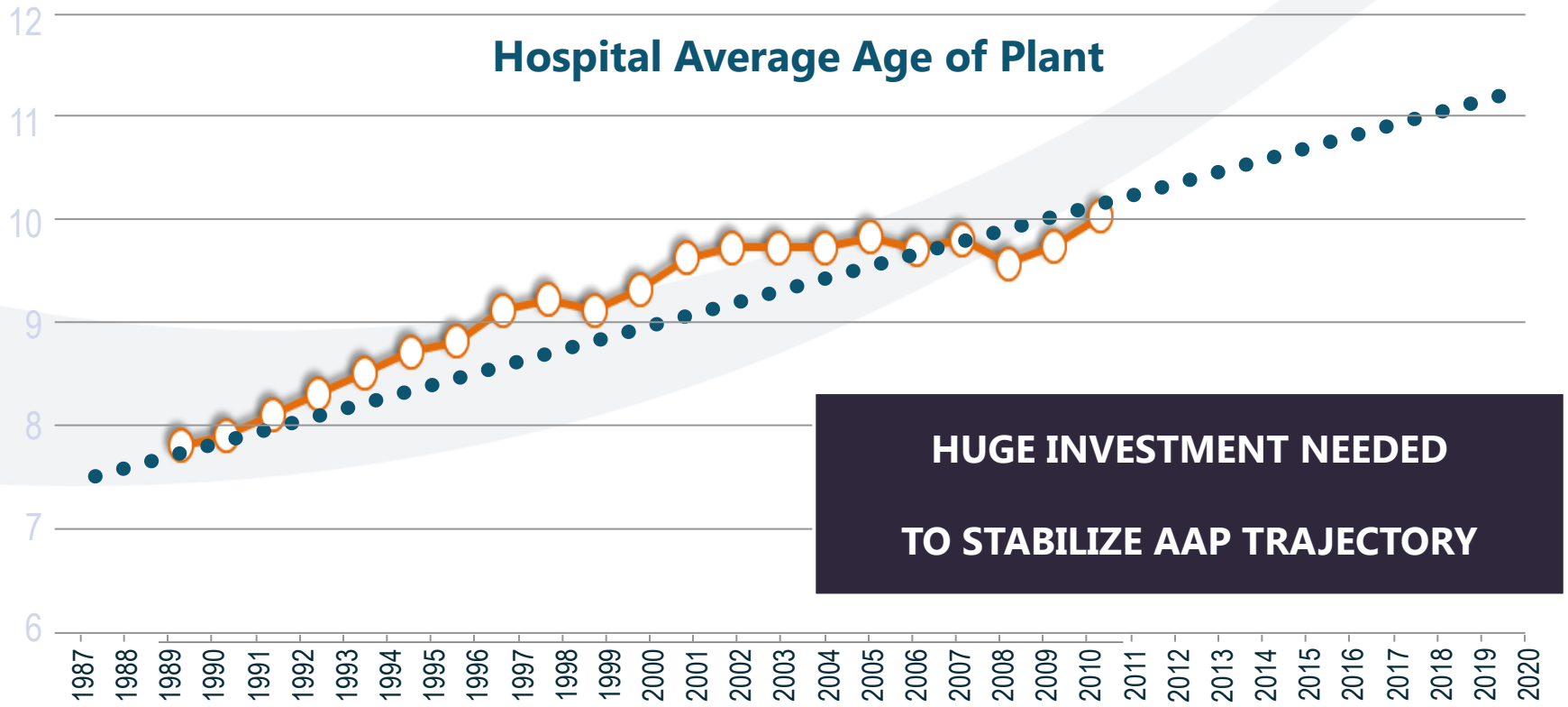
Return on asset data for all industry sectors based on 2009 Fortune 500 information.

Academic Medical Center (AMC) ROA calculation based on an average of data from 40 AMCs across the country, pulled from 990s posted to GuideStar

MARICOPA INTEGRATED HEALTH SYSTEM

Some Trends that We Can Extrapolate

5. Yet the average age of plant for hospitals across the country is now close to ten years, and many facilities are no longer considered contemporary



Sources: CHIPS/Ingenix 2008 (Accumulated Depreciation/Depreciation Expense); Ingenix, Almanac of Hospital Financial and Operating Indicators, 2005, 2008, 2009, 2010, 2011, and 2012 and CHIPS, The Almanac of Hospital and Financial Operating Indicators, 1994 and 1996-7.

Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

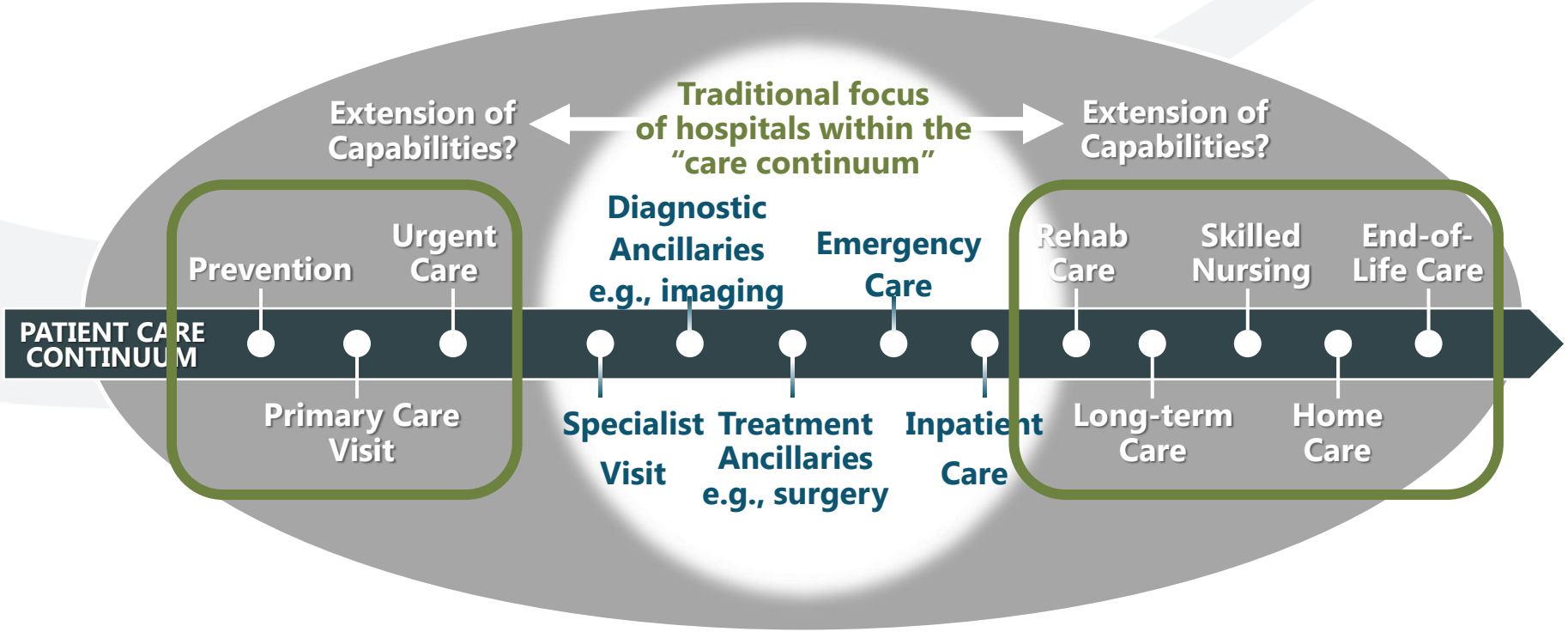
Some Trends that We Can Extrapolate

6. Historical reimbursement favored high complexity care, which is where teaching hospital investments (i.e., talent, facilities, technology) have been concentrated

Illustrative Teaching Hospital	BASIC	MODERATE	HIGH	TOTAL
Discharges	11,191 (54.1%)	7,990 (38.9%)	1,379 (6.7%)	20,560
Average Daily Census	85.1 (26.4%)	149.0 (46.1%)	88.8 (27.5%)	322.8
ALOS	2.8	6.8	23.5	5.7
% admits from referral/scheduled	51.5%	42.7%	22.4%	46.1%
% admits from ED/walk-in	45.6%	49.4%	54.7%	47.7%
% admits as transfers	2.8%	7.7%	22.6%	6.1%
Total Net Patient Revenue	$38.4M	$83.6M	$71.3M	$193.4M
Direct Costs per Discharge	$3,731	$10,673	$50,300	$9,567
Direct Costs per Patient Day	$1,338	$1,568	$2,140	$1,665
CM per Discharge	($69)	$422	$4,485	$427
CM per Patient Day	($25)	$62	$191	$75
Percent Medicare	15.2%	27.2%	26.5%	20.6%
Percent Medicaid	29.0%	17.4%	18.0%	23.7%
Percent Commercial	25.2%	28.1%	29.0%	26.5%
Percent Self-Pay	17.6%	17.3%	15.5%	17.3%
Percent Other	13.1%	10.1%	11.0%	11.8%

Some Trends that We Can Extrapolate

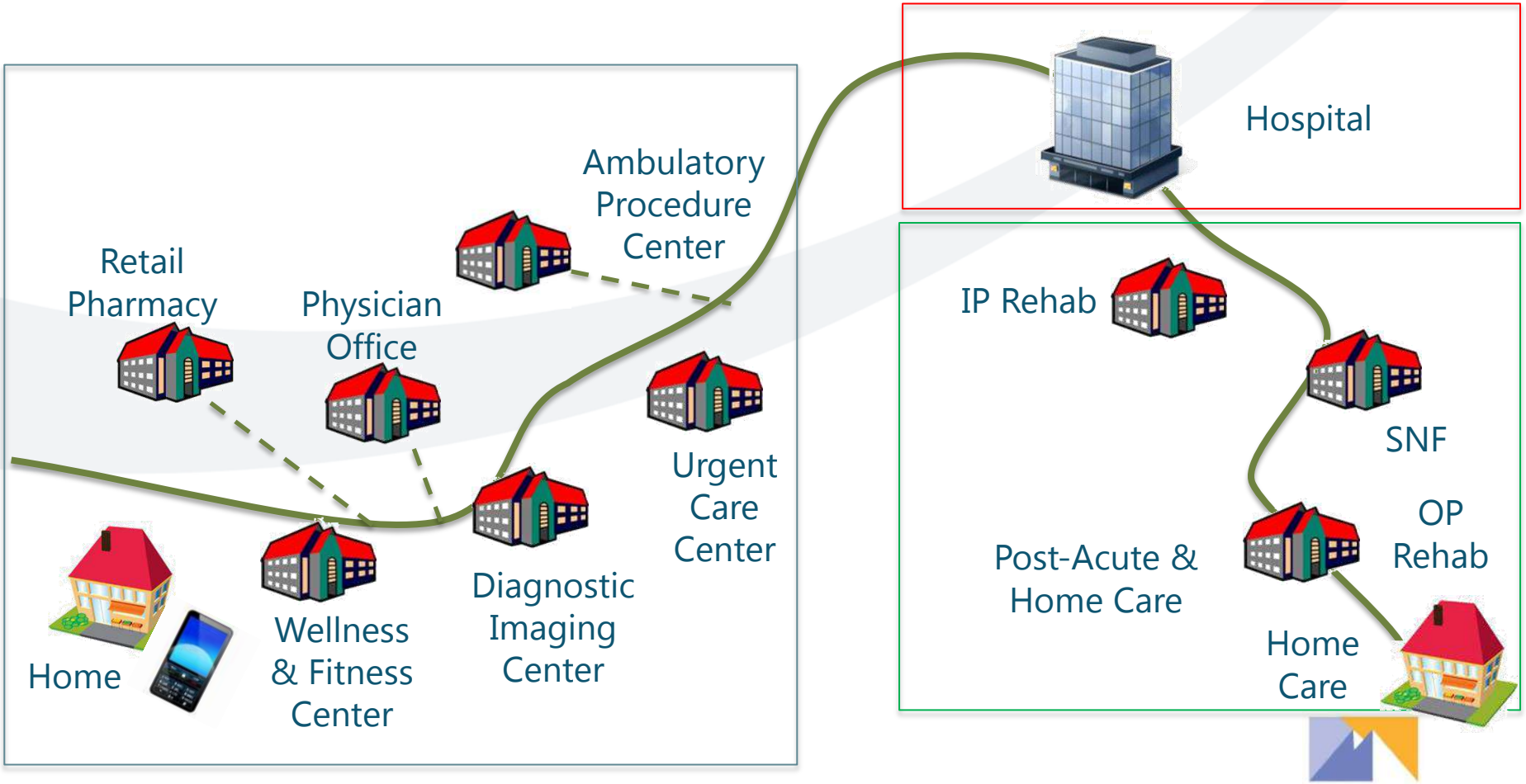
7. But if the reimbursement model shifts towards more of a value-based, population health paradigm, then the emphasis will have to shift to managing patients outside the traditional acute care episode



MARICOPA INTEGRATED HEALTH SYSTEM

Some Trends that We Can Extrapolate

8. Managing patients across a continuum will entail a series of build vs. buy vs. partner decisions, and impacts availability of capital for hospital and ambulatory investment

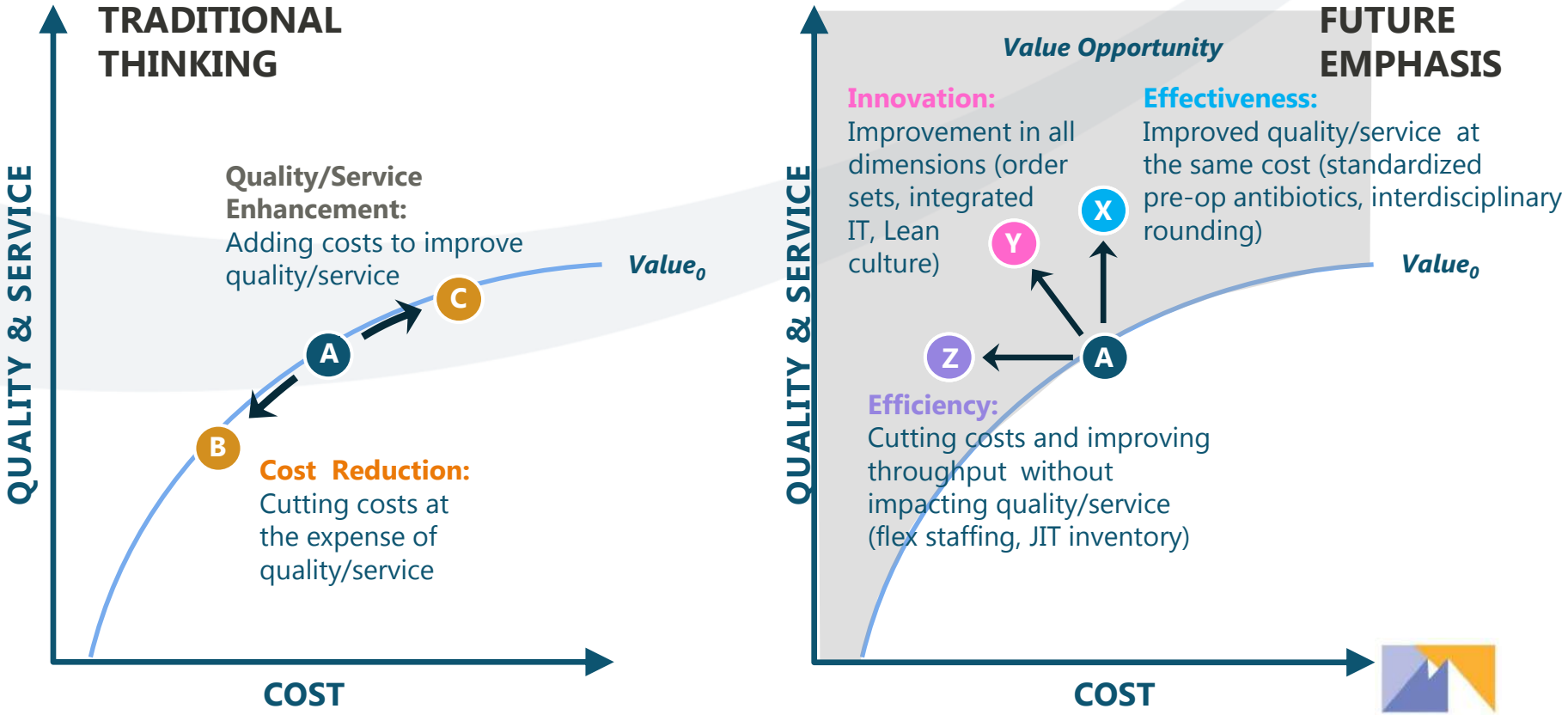


MARICOPA INTEGRATED HEALTH SYSTEM

Some Trends that We Can Extrapolate

9. As care delivery shifts, and patients become more responsible for their healthcare spending, reputation will no longer serve as a proxy for quality

Value (V) = Quality (Q) x Service (S) / Cost (C)



MARICOPA INTEGRATED HEALTH SYSTEM

Some Trends that We Can Extrapolate

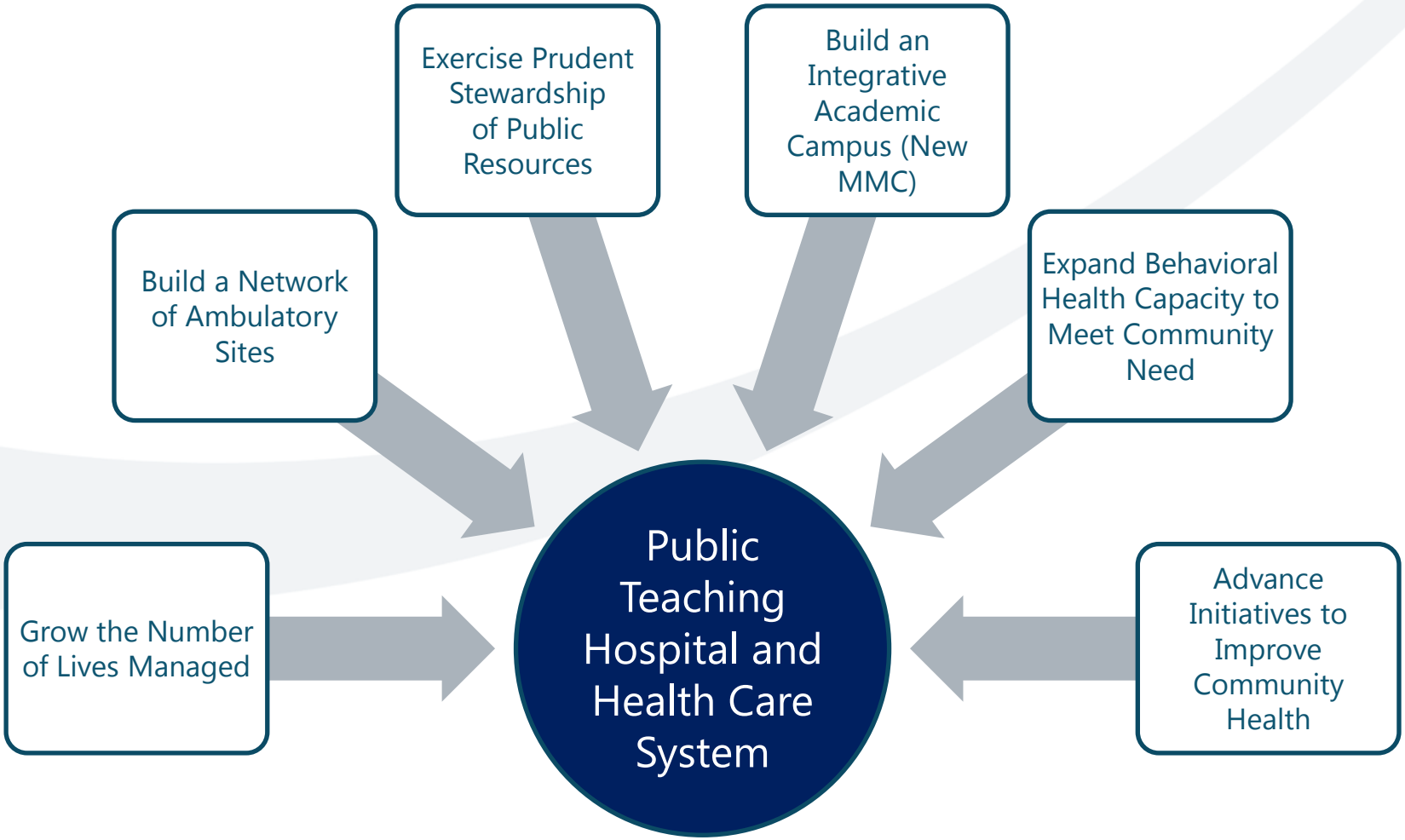
10. Health systems will begin to coalesce around one of two overarching strategies, with major implications for the future allocation of capital

    1. **Own/Control all the elements of an integrated delivery system, with the primary objective of managing the health of a population**
        - Ability to bear risk through health plan ownership
        - Broader employment discussions to expand the physician network
        - Investment in care continuum assets (pre- and post-acute)
        - Dramatic expansion of the asset base

    2. **Differentiate as the highest-value tertiary/quaternary acute care provider in the region, and partner with multiple other integrated delivery systems**
        - Divestiture of clinical components that don't support the core competency
        - Partnerships with other children's providers along the continuum
        - Focused IT investments on tracking and demonstrating value (quality, service and cost metrics)
        - Maximize use of the existing asset base

MARICOPA INTEGRATED HEALTH SYSTEM

Maricopa Integrated Health System Strategy Priorities



Mission/Vision

Mission Statement [1]

Maricopa Integrated Health System (MIHS) is Maricopa County's only public teaching hospital and health care system. We are committed to providing safe, comprehensive, high-quality physical and behavioral health care in a patient-centric environment to the communities we serve; and expanding the community's available pool of physicians and other health care professionals by offering excellent academic programs.

Vision Statement [1]

MIHS will be recognized locally and nationally as an effective, efficient, and fiscally responsible organization that maintains an integrated, high quality, patient-centric health care delivery system and an excellent academic medical center.

Aligning Our Network to Our Vision

Our vision is to organize a clinical network to design and deploy systems of care around the needs of patients and evidence-based care standards, with a goal of improving health outcomes, better managing costs, and improving the patient experience.

As we think about designing and deploying that clinical network, our strategies and resource allocations will be informed by the answers to the following:

1. Where is there unmet need or emerging demand in the community?

2. If our goal is to improve health outcomes and to better manage costs, what services must we organize and provide?

3. If the success of our brand and business strategy is to improve the patient care experience, how should we configure and organize our care sites and where specifically should they be located?

NAVVIS & HEALTHWAYS

MARICOPA INTEGRATED HEALTH SYSTEM

Emerging Market Dynamics

Critical Trends that Will Shape our Strategy

- Demand for care in Maricopa County will continue to increase, especially in the southwest (15.1%) and northeast (9.0%) valley and away from Maricopa Medical Center's primary service area.
- Demand will grow for adult primary and urgent care, pediatrics, orthopedics, cardiac medicine, and behavioral health – and will be in office-based and ambulatory care settings, not hospitals.
- Payors will increasingly reward care models that destroy inpatient demand. Hospitals will struggle to maintain inpatient volume and margin, and compete aggressively for inpatient specialty volumes.\.
- Expanded access to insurance coverage (AHCCCS, insurance exchanges) will mean more people have coverage but not necessarily care, as the primary care shortage worsens.

Inpatient market share will be a less reliable indicator of success, impact and sustainability than total lives managed in risk-arrangements.

NAVVIS & HEALTHWAYS

MARICOPA INTEGRATED HEALTH SYSTEM

New Competitive Realities

Shift from Inpatient Focus to Ambulatory Brand

- MIHS must pursue strategies to [1] extend its presence into new markets in the southwest and northeast valley, [2] grow its presence in the northwest and southeast valley; and [3] diversify its portfolio of service offerings in all markets.
- MIHS will need to decouple its primary and ambulatory care strategies from a goal of driving demand from the secondary markets into Maricopa Medical Center and/or the Comprehensive Care Center.
- This shift in strategy enables MIHS to rethink MMC as an integrative public teaching hospital focused on care delivery, health science research and systems-based training in primary care and population health management.
- MIHS will need to shift its business and brand strategies away from a hospital-centered focus to a network of convenient non-hospital care.

Hospital beds and specialty care are increasingly commoditized; new value will be created by efficient and effective outcomes and cost management.

Physician Network Analysis

Opportunity and Imperative to Partner with Primary Care Across all Markets

- Employment of physicians by systems in the market has not translated into tight alignment for purposes of referral network management. There is a significant cohort of non-DMG primary care physicians whose patients end up "down-stream" seeing a DMG specialist.

- There are a sizable number of patients who are seen by a physician in the FHC who are shared with specialists from other systems. The data suggests an opportunity to improve continuity of care by having dedicated specialists at ambulatory sites in critical northwest and southeast markets. This strategy does not presume capture of patients for inpatient care at MMC.

- There are a significant number of DMG-aligned specialists who could generate additional patient volume and revenue if they had referral options for follow-up care in the secondary service area and emerging markets. These referral options would be to programs, services, and physicians located in network ambulatory care sites.

MIHS should utilize its clinically integrated network as the platform for aligning with primary care providers in the emerging geographic markets.

NAVVIS & HEALTHWAYS

MARICOPA INTEGRATED HEALTH SYSTEM

Growth Outside the MMC PSA

2012 – 2017 Current Year Estimates & Five Year Projections

MIHS Market Area	2017 Population Size	% Growth 2012 - 2017	2017 Medicare % of Total Population	2012 Number of Households	2012 Median Household Income	2012 Median Age
SE Valley	1,226,412	7.0%	11%	428,110	$58,709	33
Phoenix	1,159,132	3.3%	9%	420,143	$48,130	34
NW Valley	787,360	9.0%	20%	272,789	$55,054	40
SW Valley	627,265	15.1%	8%	155,887	$51,588	31
NE Valley	368,375	4.5%	16%	158,447	$76,367	43
Total	**4,168,544**	**7.2%**	**12%**	**1,435,376**	**$56,094**	**36**

Source: Census Bureau; Thompson Reuters

Demographic characteristics by market area indicate that the:

- SE Valley market will have the largest population and number of households
- SW Valley market will grow the fastest, will have the youngest median age and lowest percent of its population in the Medicare aged cohort
- NE Valley market will have the highest median household income and oldest median age
- Phoenix market will experience the slowest growth and the lowest median household income
- NW Valley market will have the highest percent of its population in the Medicare aged cohort

Growth in the Ambulatory Market

2012 – 2017 Aggregate Outpatient Size & Growth Projections for Maricopa County

MIHS Market Areas	2012 Hospital Outpatient Department	2017 Hospital Outpatient Department	5 Year Estimated Growth	% Growth	2012 Physician Practice/Ambulatory	2017 Physician Practice/Ambulatory	5 Year Estimated Growth	% Growth
SE Valley	1,308,190	1,426,532	118,342	9.0%	7,422,356	8,194,160	771,804	10.4%
Phoenix	1,118,663	1,205,785	87,122	7.8%	6,507,980	7,090,227	582,247	8.9%
NW Valley	886,283	980,729	94,446	10.7%	4,791,603	5,369,361	577,758	12.1%
SW Valley	487,360	565,438	78,078	16.0%	2,956,479	3,453,079	496,600	16.8%
NE Valley	455,351	488,650	33,299	7.3%	2,443,809	2,649,303	205,494	8.4%
Total	**4,255,847**	**4,667,134**	**411,287**	**9.7%**	**24,122,227**	**26,756,130**	**2,633,903**	**10.9%**

Aggregate service volumes in the table above represent all ambulatory services by market area within either a Hospital based outpatient department or within a physician practice/non hospital based ambulatory center setting.

MIHS Market Areas	2012 ED Volume	2017 ED Volume	5 Year Estimated Growth	% Growth	2012 Urgent Care Volume	2017 Urgent Care Volume	5 Year Estimated Growth	% Growth
SE Valley	536,703	577,520	40,817	7.6%	592,154	645,902	53,748	9.1%
Phoenix	485,943	500,183	14,240	2.9%	518,045	536,123	18,077	3.5%
NW Valley	317,837	346,010	28,173	8.9%	340,619	373,021	32,402	9.5%
SW Valley	247,070	284,690	37,620	15.2%	263,228	303,667	40,438	15.4%
NE Valley	144,604	150,664	6,059	4.2%	155,019	161,771	6,751	4.4%
Total	**1,732,157**	**1,859,066**	**126,909**	**7.3%**	**1,869,066**	**2,020,483**	**151,417**	**8.1%**

Aggregate service volumes in the table above represent the ambulatory services by market area for only emergency department visits or visits to an urgent care setting.

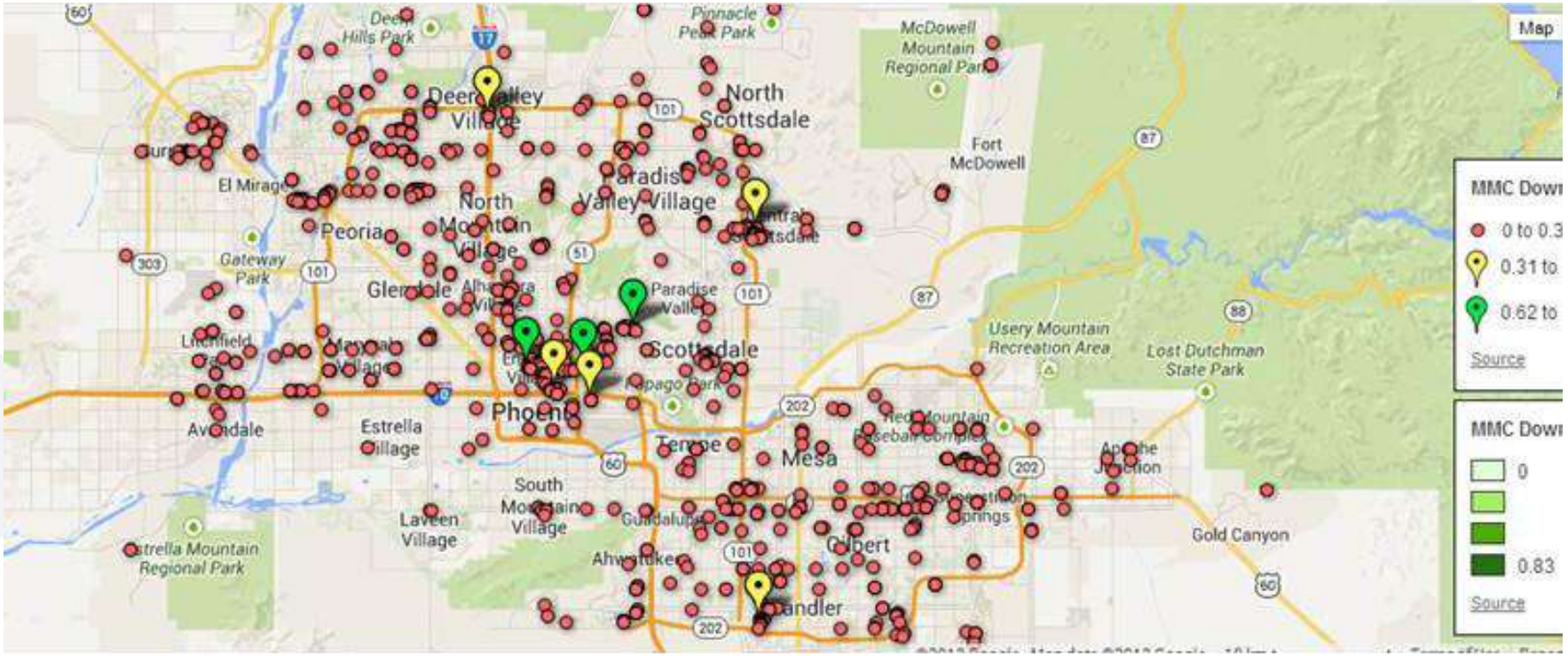
NAVVIS & HEALTHWAYS

Source: Advisory Board, Thompson Reuters

MARICOPA INTEGRATED HEALTH SYSTEM

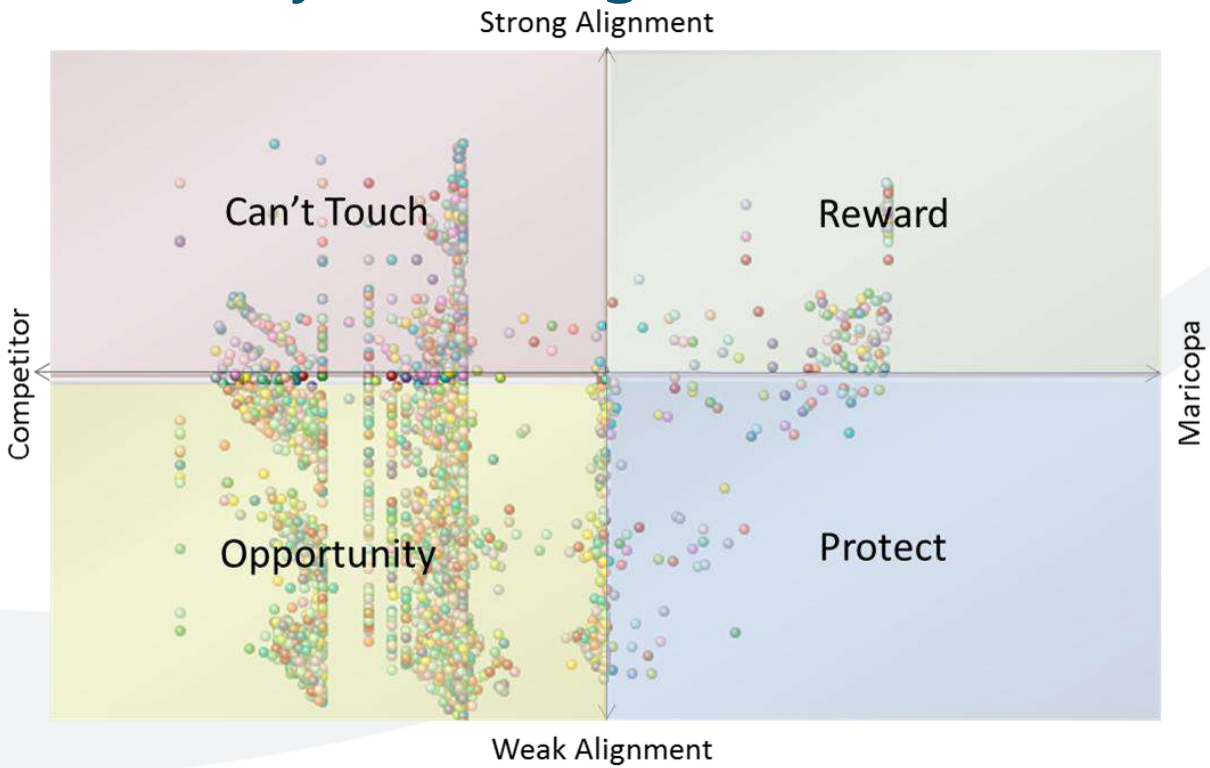
MIHS Source of Business

Rather than focus on moving people to MMC, how does MIHS move care to where people live and work as a means of improving the care experience?



Source: Maricopa County Claims Data 2011 – 2013; (Non-Emergent Referrals)

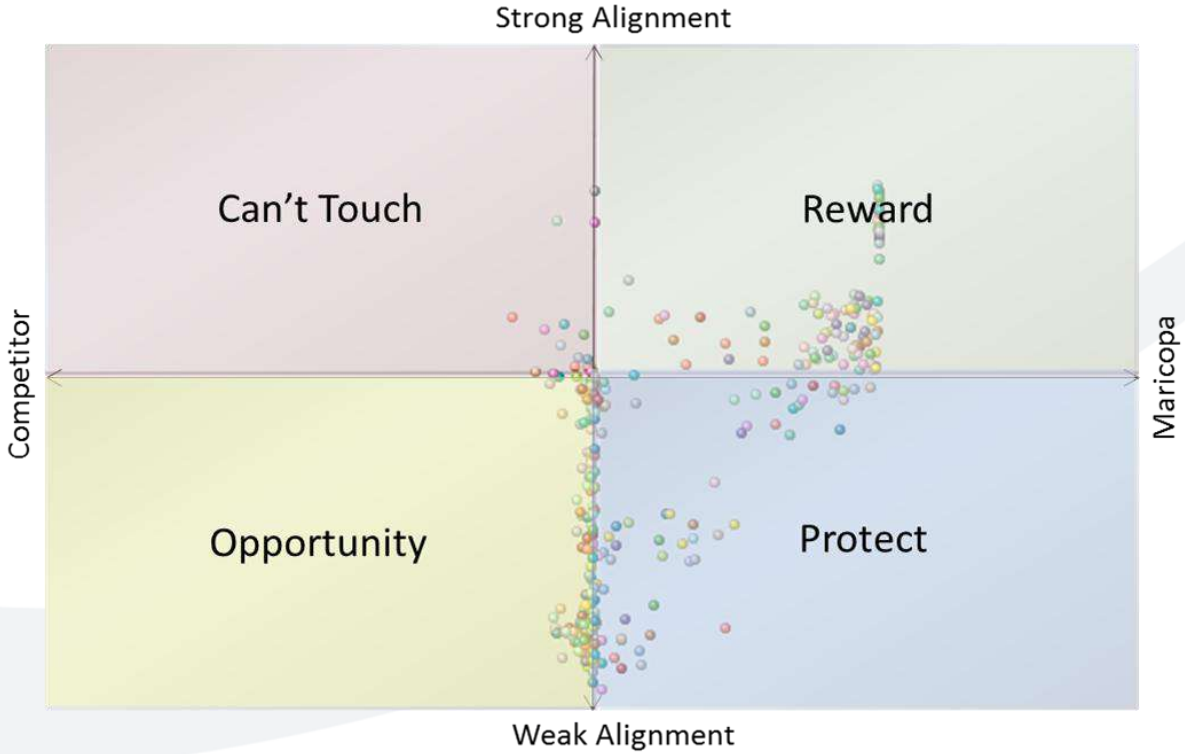
Greater Primary Care Alignment



Opportunity to grow the MIHS primary care / ambulatory footprint

Employment of physicians by systems in the market has not translated into tight referral alignment. There is a significant cohort of non-DMG primary care physicians whose patients end up "down-stream" seeing a DMG specialist. These physicians could be partnership targets in the secondary service area.

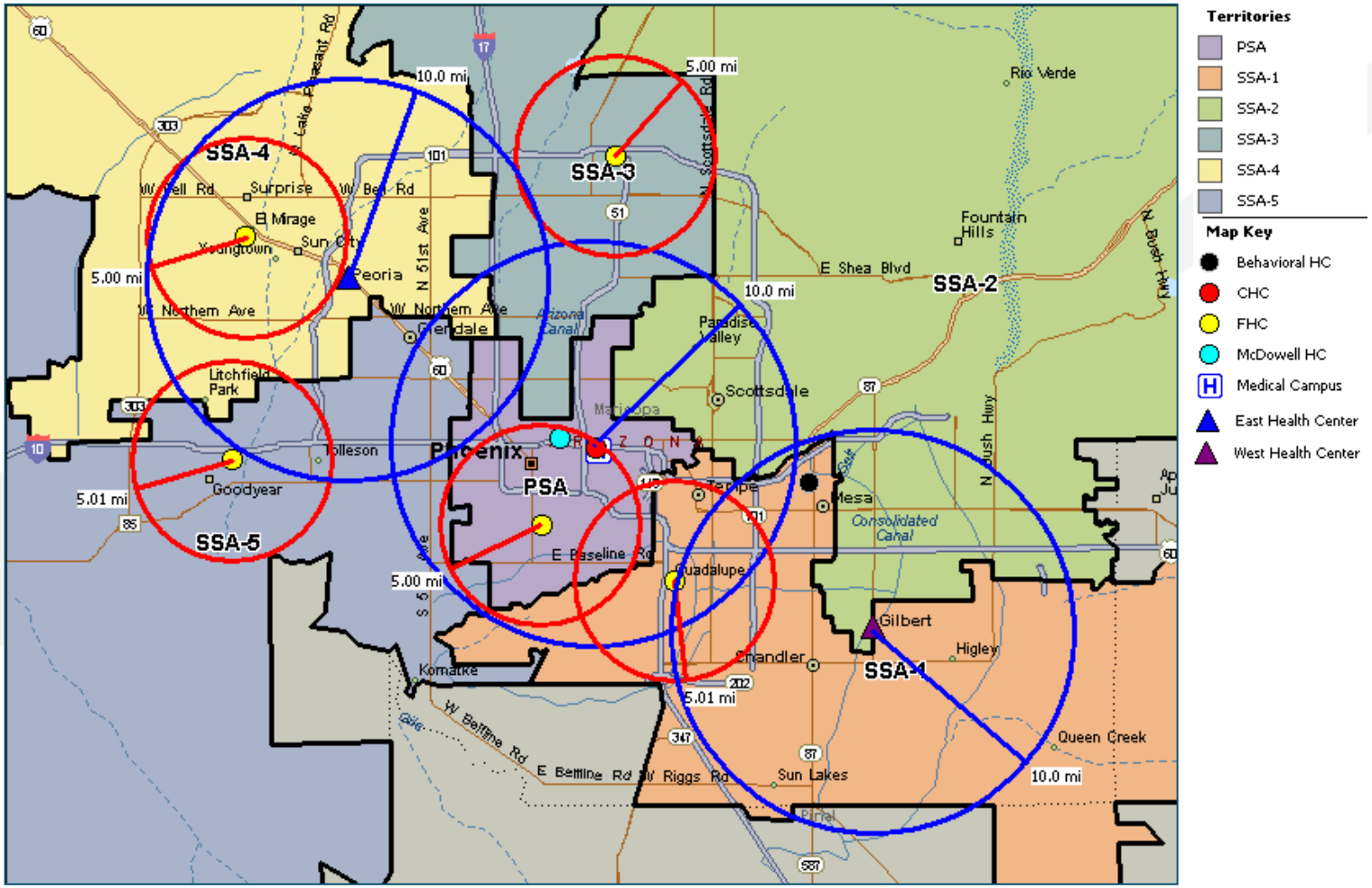
Improved Continuity of Patient Care



Opportunity to capture downstream revenue from DMG specialists

There are a significant number of DMG-aligned specialists who could generate additional patient volume and revenue if they had referral options for follow-up care in the secondary service area and emerging markets. These referral options would be to programs, services, and physicians located in network ambulatory care sites.

Distributed Ambulatory Services



NAVVIS & HEALTHWAYS

MARICOPA INTEGRATED HEALTH SYSTEM

Ambulatory Service Priorities

Based on Strategic Opportunity and Emerging Demand

Service Categories		Strategic Criteria
Group A: Critical Access Channels		
• Adult office visits • Pediatric office visits • Urgent care visits	• ED visits • Imaging • Lab tests	• Critical access channels for patient populations and related immediate diagnosis and screening modalities • Alignment with ambulatory education/training needs for medical education and the next generation of providers
Group B: Highest Strategic Priority Services (Based on Emerging Demand and Market Opportunity)		
• Behavioral Health • Cardiology Medicine • Dermatology • Gastroenterology • General Surgery	• Gynecology • Obstetrics • Orthopedics • Pediatrics • Pulmonary	• Highest priority clinical services identified for the MIHS ambulatory network development plan • Aligns to service needs of target populations across Maricopa County and with expected higher growth opportunities
Group C: Tier 2 Services (Based on Emerging Demand and Market Opportunity)		
• Cancer • Cardiac Invasive • ENT • Neurosciences • Ophthalmology	• Physical Therapy/Rehab • Podiatry • Urology • Vascular	• Aligned with ambulatory clinical service needs based on Maricopa County population • Not prioritized as high based on market dynamics, competitive positioning; may be opportunity for partnered services.

Prioritization based on strategic positioning, financial performance, community need, and emerging demand forecasts.

NAVVIS & HEALTHWAYS

MARICOPA INTEGRATED HEALTH SYSTEM

Ambulatory Site Program Features

Neighborhood, Community, and Health Center Configurations

Services/Metric	Neighborhood	Community	Health Center
Primary Care	✓	✓	✓
Specialty Clinics		✓	✓
Specialty Full Time			✓
Lab/Draw	✓	✓	✓
Basic Imaging	✓	✓	✓
Pharmacy	✓	✓	✓
Advanced Imaging			✓
Advanced Diagnostics			✓
ASC			✓
Dedicated Provider Training Space			✓
Community Education/Resource	✓	✓	✓
Service Mix Footprint (GSF est.)	8,000-9,000	20,000-22,000	70,000-125,000

Recommended Strategies

1. Grow the number of covered lives under MIHS care and management.
   - Organize a physician-led clinically integrated care network that brings physicians, hospitals and others together to redesign care systems and improve outcomes, better manage cost, and enhance the patient care experience by January 2014.
   - Manage at least a total of 100,000 lives through arrangements with payers and employers by December 2015.
   - Increase total system revenue earned from managing lives enrolled in the MIHS health plans and under contract with insurers and employers by December 2015.
2. Build and upgrade a network of ambulatory care facilities, in consultation with the Maricopa Health Centers Governing Council, in key markets outside the Maricopa Medical center primary service area:
   - Design and build an east and a west ambulatory health center to extend the MIHS brand, grow office-based and outpatient volumes, and meet emerging community need by December 2016.
   - Add a new Family Health Center (FHC) in the central portion of northern Maricopa County to meet emerging care needs among AHCCCS patients in an underserved market by July 2016.
   - Reinvest in and reconfigure the existing FHCs to achieve more efficient market coverage and bring more services (including specialists) to targeted markets by July 2016.

Recommended Strategies

2. Exercise prudent stewardship of our resources as a public teaching hospital and health care system.
   - Build a strategic financial plan that the MIHS Board and management can use to assess market strategy and make informed resource allocations by November 2013.
   - Continuously review and refine operational practices so that MIHS can manage lives, deliver care, and teach and train clinicians in the most efficient and effective manner possible (ongoing).
   - Develop an organizational and reporting structure to enhance the ability to evaluate the performance of strategic lines of business (June 2014).
3. Build a coalition of academic programs (medical schools, nursing programs, allied health) to design an integrative academic medical campus that includes a replacement hospital for Maricopa Medical Center.
   - Design a campus to support an inter-professional model of education; deploy and train those teams in evidence-based care models. Complete design work by December 2015.
   - Design a new Maricopa Medical Center as an academic medical center with sufficient beds (220 – 250) to support residency requirements and serve the needs of core service lines including Level 1 burn, adult and pediatric trauma, general surgery, and orthopedics by December 2015.
   - Build an academic brand for MIHS and the clinically integrated network; position MIHS as the program where the finest clinicians chose to train, teach and practice, and as an expert resource for the diagnosis and treatment of complex, comorbid conditions by December 2014.

NAVVIS & HEALTHWAYS

MARICOPA INTEGRATED HEALTH SYSTEM

Recommended Strategies

5. Expand behavioral health capacity to meet community need, specifically:
   - Consolidate the behavioral health programs on a single campus that enables the program to serve rising demand more effectively and efficiently by December 2017.
   - Integrate outpatient behavioral health into the community health clinics to grow convenient access to needed mental health and substance abuse services by December 2014.

6. Advance community initiatives to improve the health of Maricopa County.
   - Develop and deploy population health tools through the clinically integrated network to manage at-risk patient cohorts (dual eligible, uninsured, and populations with disparities) in 2014.
   - Support the Maricopa Health Foundation in its efforts to generate additional funding for community health initiatives.

Introduction

Developing the evaluation of the existing facilities was a progressive process that built upon input from the local knowledge of MIHS staff, Kurt Salmon's proprietary facility condition survey tool and Kurt Salmon's national healthcare experience.

The existing facilities were evaluated in three ways:

1. Condition of the existing infrastructure and configuration
   - Provides insight into the capacity of the existing buildings to continue to be used for current purposes as is, or to be adapted to serve those needs.

2. Use of the available capacity of the existing spaces vs. national comparisons
   - Evaluates whether the clinical spaces are fully utilized or have capacity for growth

3. The amount of department space per key clinical room vs. planning standards
   - Comparison of the size of individual rooms and the total department space to serve the contemporary healthcare technology and care models
   - A tour of the facilities and review of floor plans also supported a quantitative assessment

MARICOPA INTEGRATED HEALTH SYSTEM

Context for Facility and Functional Assessment

The MIHS Main Tower was built in 1970 and many things about healthcare have changed in the subsequent 43 years

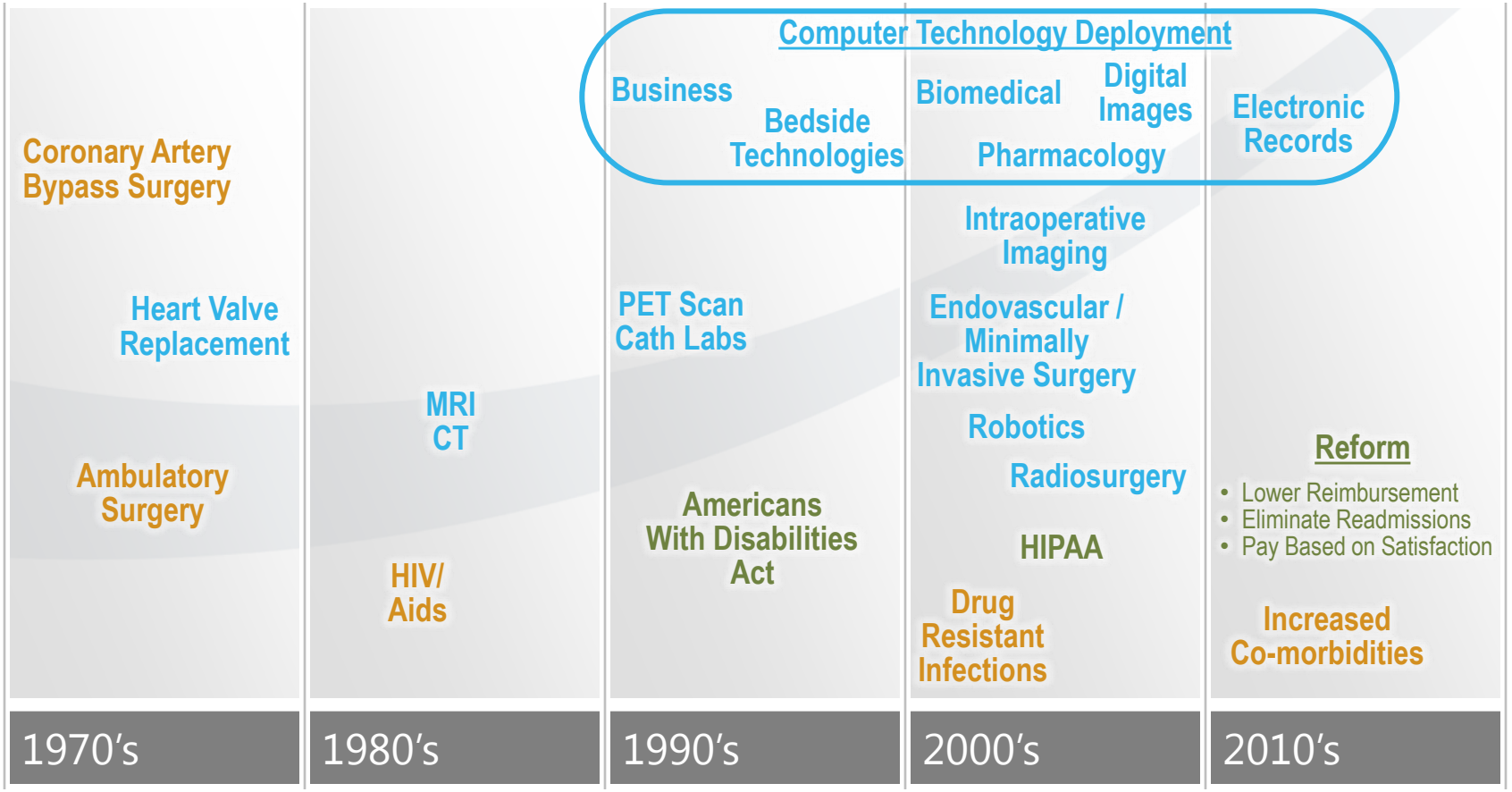
- Medical technologies
- Information / communication technology
- Models of clinical care
- Pharmaceuticals
- Infections and drug-resistant diseases
- Patient and family expectations
- Regulation
- Reimbursement

Any evaluation of facilities and functionality must account for these changes and recognize that the speed at which continued changes are occurring has increased which will only exacerbate current deficiencies.

MARICOPA INTEGRATED HEALTH SYSTEM

Evolution of Healthcare: Changes Since 1970

New technology, diseases and legislative changes impact the physical environment

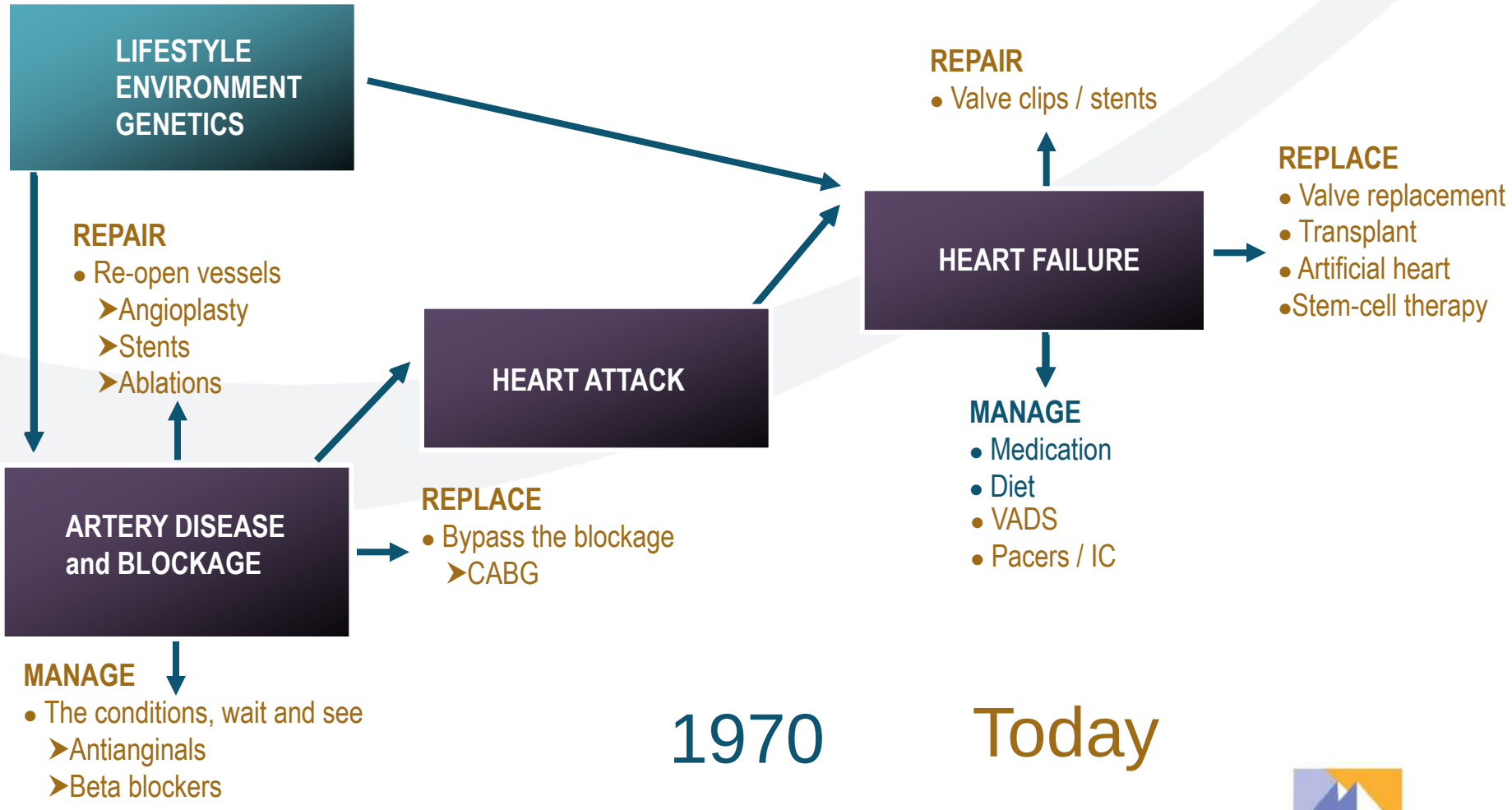


Key **Clinical Factors** **Technology Factors** **Legislative Factors**

MARICOPA INTEGRATED HEALTH SYSTEM

Evolution of Healthcare: Changes Since 1970

More and improved treatments to extend life. Example: cardiac care

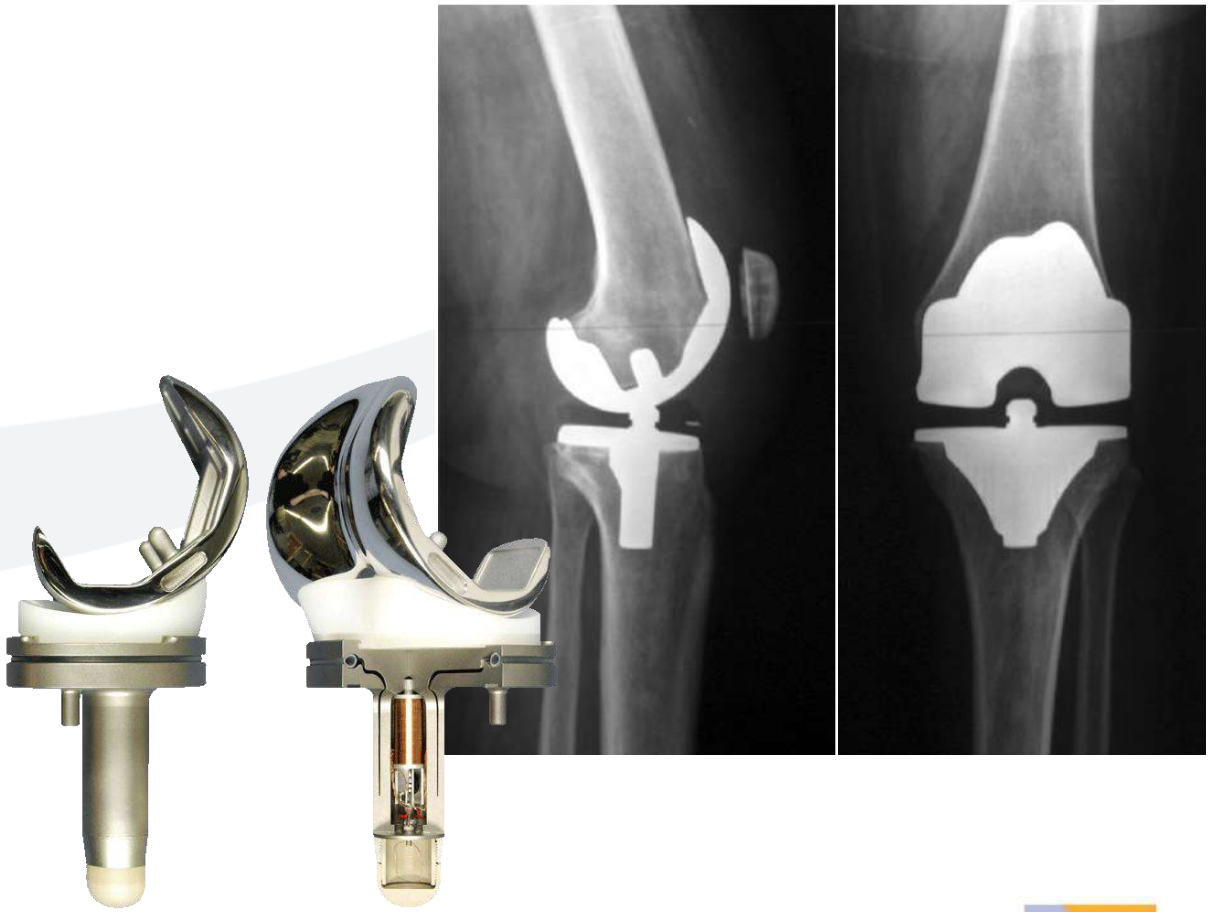


MARICOPA INTEGRATED HEALTH SYSTEM

Evolution of Healthcare: Changes Since 1970

More and improved treatments to improve the quality of life

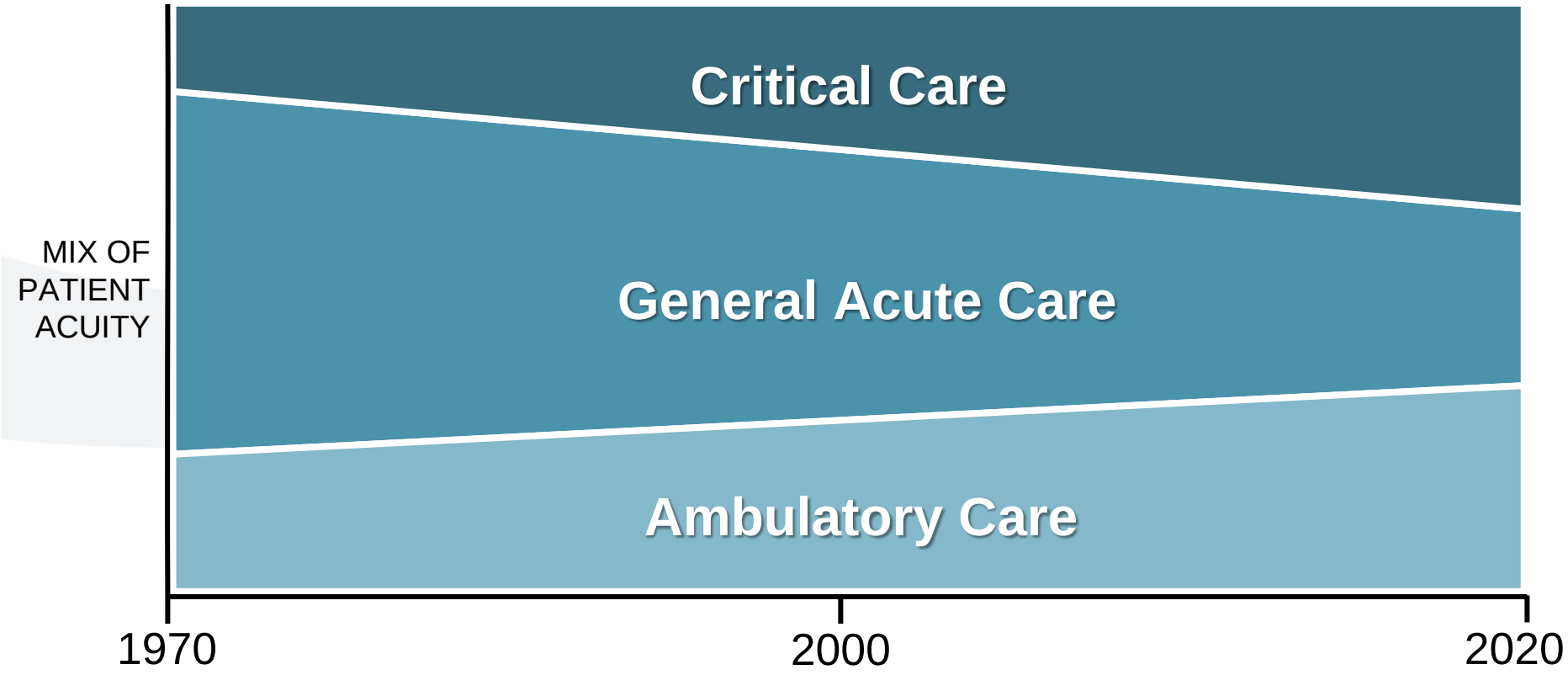
- Implantable Devices
  - Joints
  - Pacemakers
  - Deep brain stimulators
- Cosmetic surgery
- Bariatric Surgery



MARICOPA INTEGRATED HEALTH SYSTEM

Evolution of Healthcare: Acuity Shifting

The mix of patient acuity in healthcare facilities continue to change as less invasive technologies are deployed on an outpatient basis



MARICOPA INTEGRATED HEALTH SYSTEM

Environment Responses: Safety

Inpatient rooms are changing in response:

- All private rooms
- More medical equipment
- Smart and wired
- Accommodations for family

Goal: Quality and Efficiency

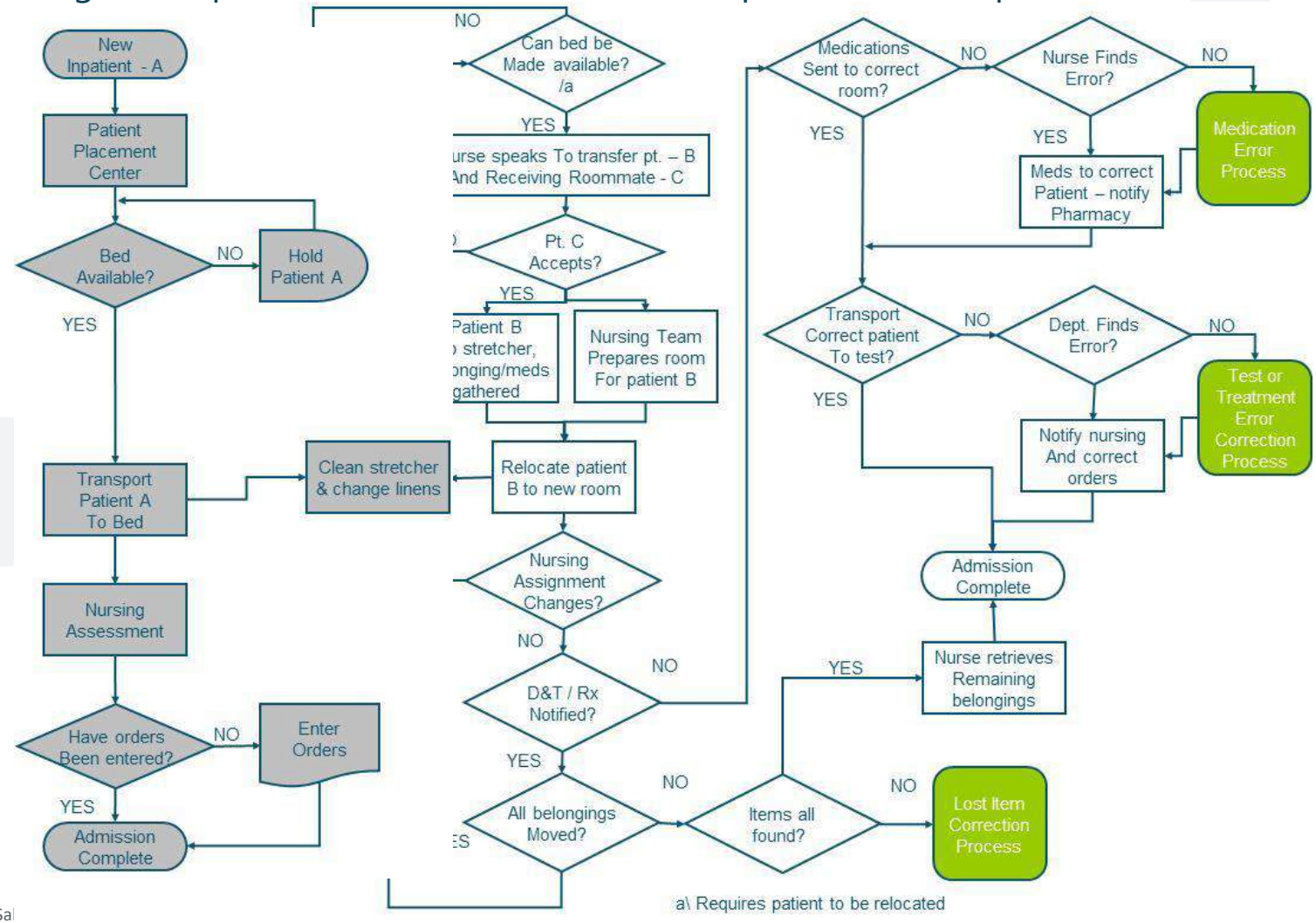
- Improved clinical care / outcomes
- Enhanced safety
  - Reduce infections
  - Prevent falls
  - Eliminate medication errors
- Efficiency
  - No blocked beds
  - Shorten length of stay
  - Fewer transfers / transport

MARICOPA INTEGRATED HEALTH SYSTEM

Environment Responses: Efficiency

Bed assignment process for a hospital with semi-private beds

Bed assignment process is streamlined for an all-private bed hospital



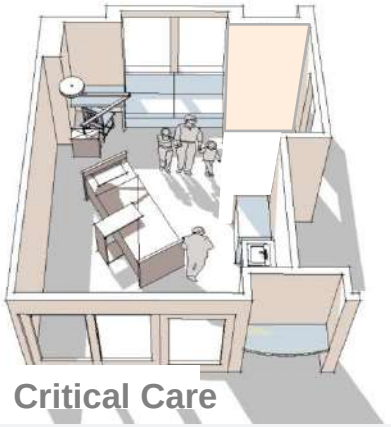
Environment Responses: Efficiency

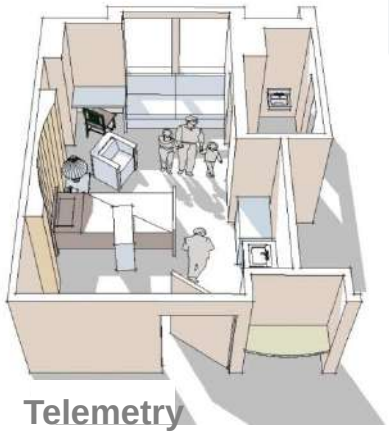
Example – interventional platform at UCLA Westwood has a consolidated prep and recovery area for all invasive procedures resulting in shorter length of stays and consolidated staffing around these patients

MARICOPA INTEGRATED HEALTH SYSTEM

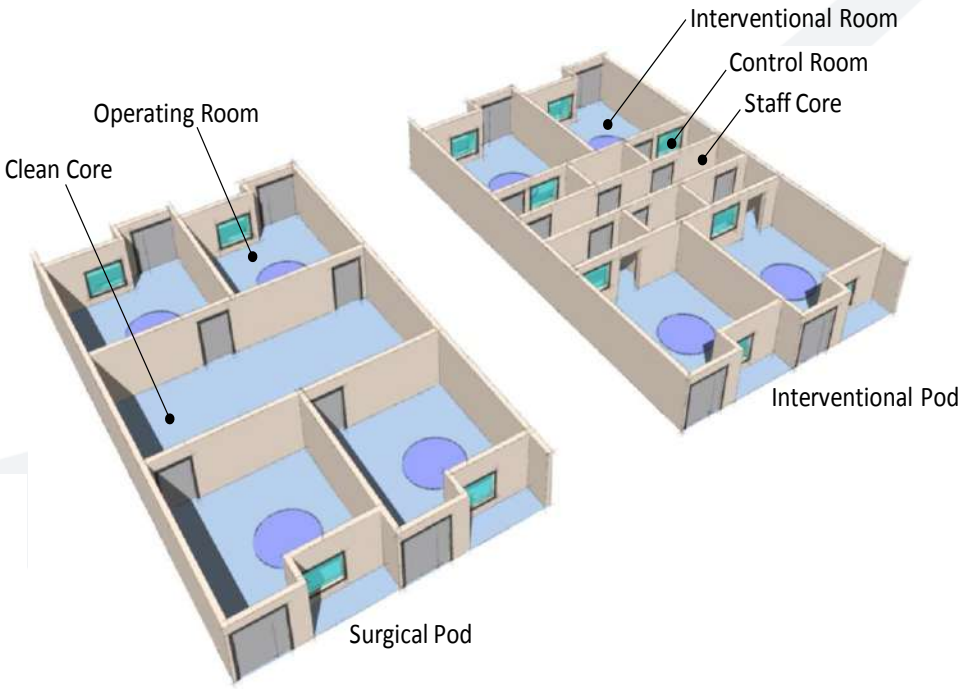
Environment Responses: Adaptability

Modularity and sharing of spaces





Convertible Acuity in the same footprint



Convertible Use

Source: FKP Architects

MARICOPA INTEGRATED HEALTH SYSTEM

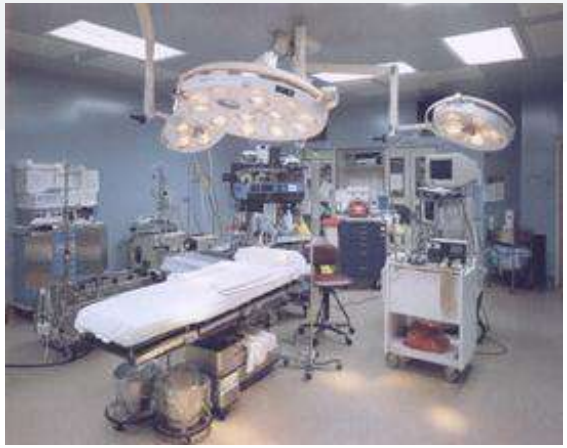
Environment Responses: Technical Capacity

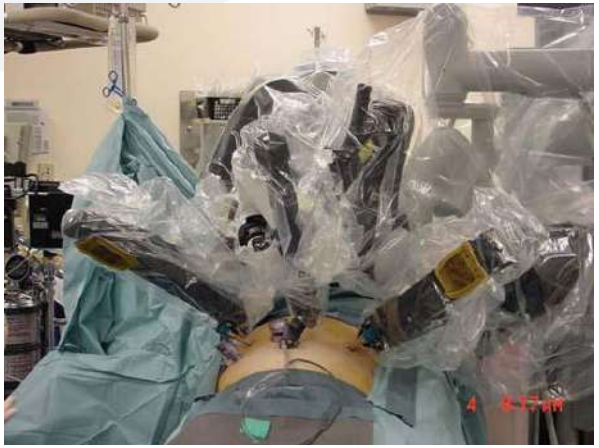
Building Infrastructure

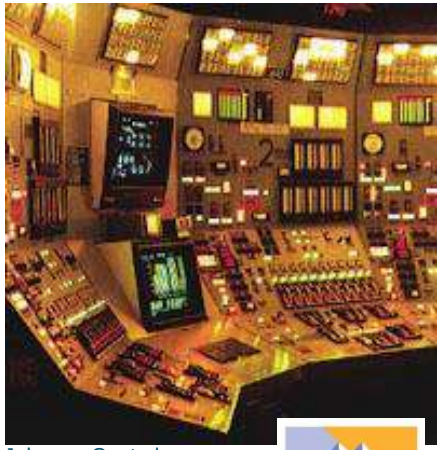
- Larger column grids
- Greater floor-to-floor heights
- Greater floor loading
- Higher HVAC capacity
- Wireless friendly
- Pervasive technology cabling
- Greater electrical capacity

Intelligent buildings

- Pervasive computing
- Centrally linked to on / off campus buildings and physician offices
- Master-controlled energy systems – green buildings
- Automated pharmacy, supplies, bio-medical
- Virtual clinicians







Johnson Controls

MARICOPA INTEGRATED HEALTH SYSTEM

Environment Responses: Planning Standards

Planning standards have increased to enable the evolution of healthcare technology, meet quality expectations and reduce the cost of operations

Comparative examples to the existing MIHS environment:

Surgery

- MIHS today = 2,487 Department Gross Square Feet (DGSF) per operating room
- Today's planning standards = 3,200 to 3,500 dgsf

Intensive Care Units

- MIHS today = 249 to 299 DGSF per bed
- Today's planning standards = 800 to 900 DGSF

Pediatric Clinic

- MIHS today = 415 DGSF per exam room
- Today's planning standards = 600 to 650 DGSF

* Department Gross Square Feet

MARICOPA INTEGRATED HEALTH SYSTEM

Facility Condition Survey: Overview

The Facility Condition Survey™ provides a leadership-focused report

- High-level understanding of building infrastructure status
- Broad in scope—eight categories/54 subcategories

Kurt Salmon proprietary scoring system based on survey of attributes within each category and subcategory

Provides insight on each building's…

- Suitability for current use
- Suitability for continued investment

Inputs represent externally observable attributes and the internal knowledge of MIHS' facility engineering staff

- This survey is not a substitute for a detailed engineering study or as a guide infrastructure investment and maintenance schedules

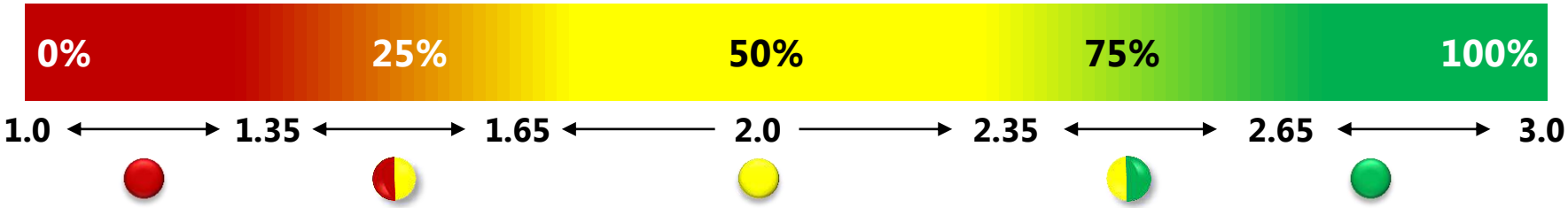
Note: Kurt Salmon's Facility Condition Survey is a proprietary tool

MARICOPA INTEGRATED HEALTH SYSTEM

Facility Condition Survey: Scoring

The rating indicates a building's capability to continue to serve it's current use:

- Not suited for continued current use
- Sufficient to consider continued investment in current use (e.g., inpatient vs. outpatient vs. office building vs. support building
- Strong asset for the long-term investment in current or other uses



Elements of Facility Condition Survey:

- Functional-Structural
- Exterior
- Vertical Circulation
- Mechanical
- Electrical
- IT
- Life Safety
- ADA

Note: elements that are difficult or impossible to change are weighted more heavily

MARICOPA INTEGRATED HEALTH SYSTEM

Process Review: MIHS Locations Evaluated

Kurt Salmon evaluated owned facilities, there are two leased FHC's not included

Main Campus	Off Campus Sites
Main Tower	Desert Vista
CHC	FHC:
Administration	» *Avondale*
Hogan Building	» *Chandler*
Power Plant	» *El Mirage*
Laundry/Maintenance	» *Glendale*
2611 Warehouse	» *Guadalupe*
2619 Building	» *Maryvale*
	» *Mesa*
	» *South Central*
	» *SunnySlope*

MARICOPA INTEGRATED HEALTH SYSTEM

Facility Condition Survey: Clinical Buildings

Main Tower

Characteristics:

- Building Year: 1970
- Floors: 10

Primary Function:

- Inpatient Beds
- Diagnostic & Treatment
- Emergency Department
- Pediatric Emergency Department
- Surgery
- Labor and Delivery
- Burn Unit

CHC

Characteristics:

- Building Year: 1994
- Floors: 3

Primary Function:

- Outpatient Clinics
  - Breast Center, Cardiac Rehab, Dentistry, ENT, Orthopedics, Oncology, Primary and Specialty Care (adult and peds), Renal, Surgery, Woman's Clinic

2619 Building

Characteristics:

- Building Year: 1975
- Floors: 2

Primary Function:

- Behavioral Health
  - Inpatient
    - Adult
    - Geriatric
- MIHS Offices
  - IT
  - Human Resources

Desert Vista

Characteristics:

- Building Year: 1998
- Floors: 2

Primary Function:

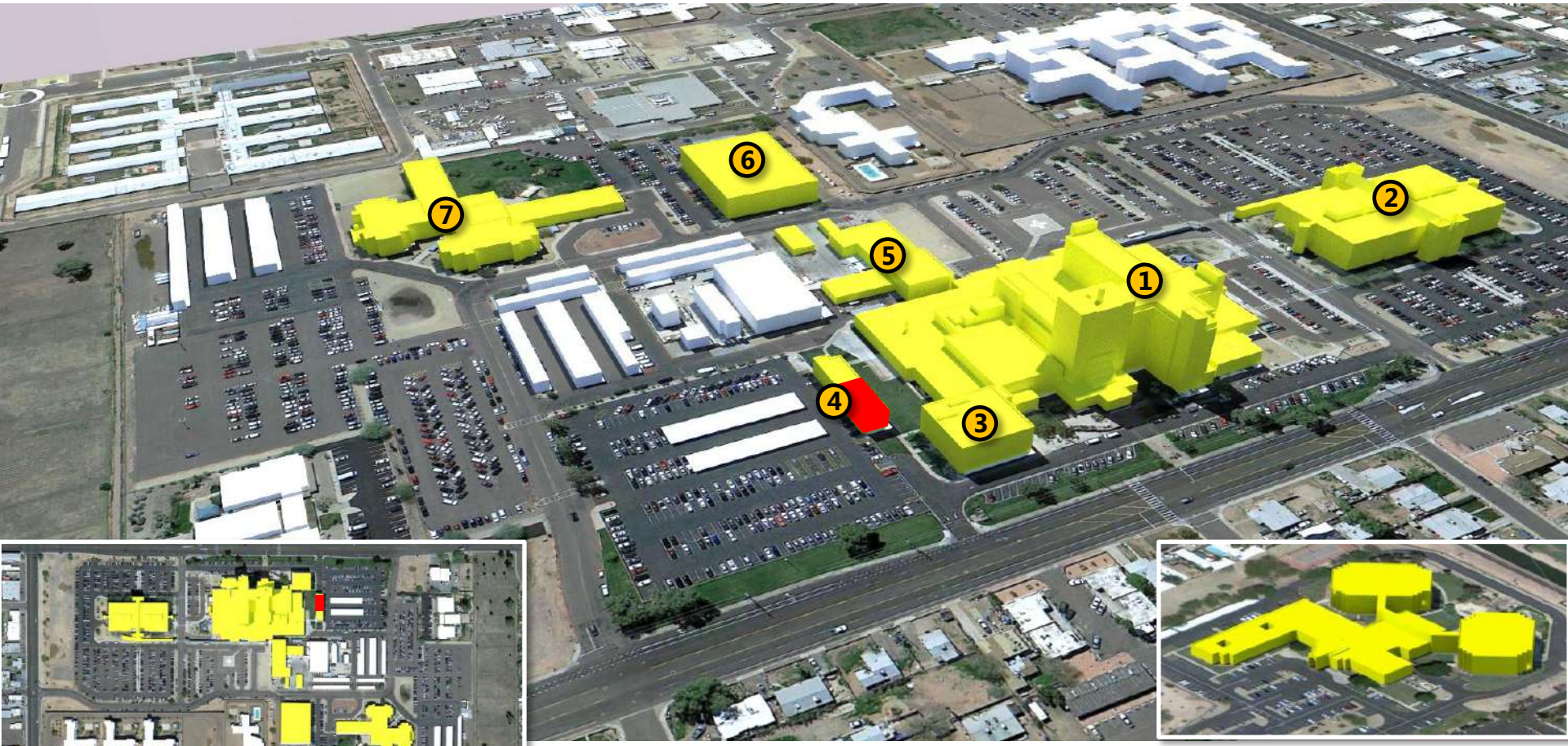
- Behavioral Health
  - Inpatient
    - Involuntarily, court ordered
  - Outpatient
  - Court and legal personnel

Source: MIHS Website

MARICOPA INTEGRATED HEALTH SYSTEM

Facility Condition Survey: Current State

1 Main Tower	1970	**3** CAC	1996	**5** Laundry/Maintenance	1970	**7** 2619 Building	1975
2 Comp. Healthcare Center (CHC)	1994	**4** Hogan Building	1989	**6** 2611 Warehouse	1995		



Desert Vista

Notes: Kurt Salmon and MIHS Facility Staff toured each FHC; Data review by MIHS Staff

MARICOPA INTEGRATED HEALTH SYSTEM

Summary by Category: Main Campus/Desert Vista

	Main Tower	CHC	2611 Warehouse	CAC	2619 Building		Laundry/ Warehouse	Hogan	Desert Vista
					Office	*Inpatient*			
Site Access/Parking									
Functional – Structural									
Exterior Envelope									
Mechanical									
Electrical									
IT Communication									
Life-Safety									
Vertical Circulation									
ADA Accessibility									
Overall Physical Condition									
Score	**2.14**	**2.10**	**2.07**	**2.01**	**1.89**	**1.71**	**1.72**	**1.64**	**1.73**

Notes: Kurt Salmon and MIHS Facility Staff toured each FHC; Data review by MIHS Staff

MARICOPA INTEGRATED HEALTH SYSTEM

Other Considerations

Administration has done a good job of making the best use of the Main Tower through productive renovations given the building's design limitations

1. The first level was not originally designed to support the shift to greater outpatient volume in the diagnostic and treatment services
   - » Few recovery beds for day surgery and same-day admission patients
   - » MRI and CT have been retrofitted into the building, but are not closely tied to the main imaging department
2. The bed tower configuration is not adaptable to contemporary high acuity care
   - » Distances between support columns are insufficient to enable conversion to private acute care rooms without a code variance; it is possible to meet code for behavioral health patients
   - » Conversion to private rooms results less efficient bed units because more staff per bed is required to meet patient care / coverage needs

MARICOPA INTEGRATED HEALTH SYSTEM

Family Health Centers: FCS Scores

*: Avondale was constructed in the 2000's but exact year was not know at time of printining
Notes: Only MIHS owned FHC were evaluated.; Kurt Salmon and MIHS Facility Staff toured each FHC; Data review by MIHS Staff

MARICOPA INTEGRATED HEALTH SYSTEM

Summary by Category: FHC

	Avondale	South Central	Chandler	Maryvale	Glendale	El Mirage	Sunny Slope	Guadalupe	Mesa
Site Access/Parking									
Functional – Structural									
Exterior Envelope									
Mechanical									
Electrical									
IT Communication									
Life-Safety									
ADA Accessibility									
Overall Physical Condition									
Score	**1.78**	**1.64**	**1.61**	**1.58**	**1.48**	**1.47**	**1.47**	**1.35**	**1.24**

Notes: Only MIHS owned FHC were analyzed; Kurt Salmon and MIHS Facility Staff toured each FHC; Data review by MIHS Staff

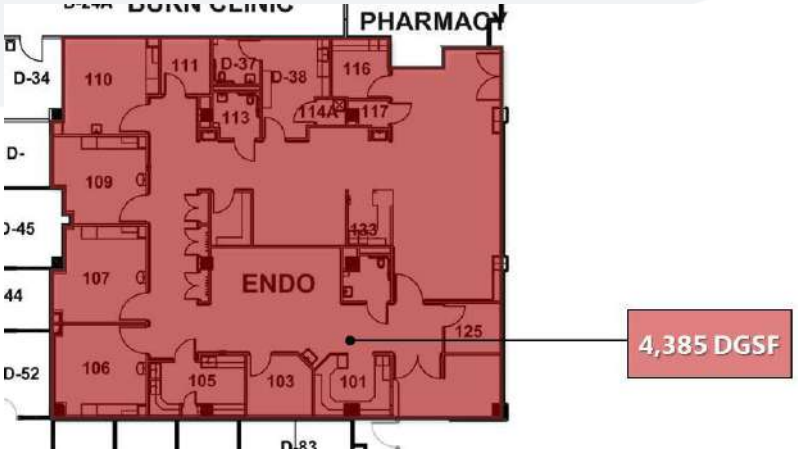
MARICOPA INTEGRATED HEALTH SYSTEM

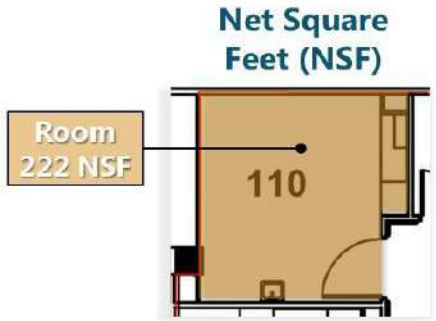
Functional Assessment: Definitions

Kurt Salmon has developed a robust set of assessment metrics developed through our 60+ years of facility planning. The functional assessment is focused on two broad categories: use of capacity and space

The space assessment is based on two primary metrics:

1. Department gross square feet (DGSF) per "key room"
   - Key rooms = beds, operating rooms, emergency beds, etc.
   - DGSF includes all rooms, corridors and walls within a given department
2. Net square feet (NSF) measurements of key rooms
   - NSF is the space within the rooms





MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Definitions

The capacity use assessment measured as follows

Category	Inpatient Beds	Diagnostic and Treatment
Services	• Behavioral Health • Burn • Critical Care • General medical/surgical • Neonatal ICU (NICU) • Obstetrical Beds	• Angiography • Catheterization • Emergency • Endoscopy • Imaging • Surgery
Metric	Occupancy rate at midnight census as a percent of available beds in each category	Visits/tests/procedures per room per year
Comments	Accommodates seasonal and daily variances based on the least busy time of day	Accommodates room turnover, off-hour activity, equipment maintenance and seasonal variation

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Ratings

- Rating compares the existing environment to contemporary planning standards

Unit/Room Size Assessment		Patient Days/Volume Assessment
Green: within target range		**Green**: below target capacity; growth opportunity
Yellow: within 10% of target range		**Yellow**: within target capacity; limited growth opportunity
Red: greater than 10% below target range		**Red**: exceeds target capacity; insufficient capacity available for current activity
Blue: greater than 10% above target range		

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment Summary: Inpatient Beds

- Contemporary hospitals use an all-private room model
  - Infection control
  - Improved efficiency
  - Better healing environment
  - Family participation
  - Complies with AIA guidelines
- Room sizes and total support space have expanded in the past 40 years
  - Increased patient acuity
  - Larger beds
  - More equipment & technology

Bed Unit	Private Ratio	DGSF/Bed Rating	NSF/Room Rating	Occupancy %
Main Tower				
Adult M/S	🔴	🔴	🔴	🟢
Adult Intermediate	🔴	🔴	🔴	🔴
Adult ICU	🔴	🔴	🔴	🟡
Adult Burn Unit	🟡	🟡	🔴	🟢
Post-Partum	🔴	🔴	🟡	🟢
LDR	🟢	🔴	🟡	🟢
Neonatal ICU	🔴	🔴	🟢	🟢
Pediatric M/S	🔴	🔴	🔴	🟢
Pediatric ICU	🔴	🔴	🔴	🟢
2619 Building				
Adult Behavioral Hlth	🔴	🔴	🔴	🔴
Desert Vista				
Adult Behavioral Hlth	🔴	🔴	🔴	🔴

Notes: Occupancy % is as of end of April 2013 – May 2012;

Data review by MIHS Staff

Source: MIHS_Trend_Department Statistics Data Set – April 2013

Functional Assessment: Maricopa Hospital

- Most patient beds are in rooms originally designed as four-bed wards
- Both the MICU and SICU beds are mostly open bays with only curtains in between each bed

					Unit Assessment		Room Assessment				Patient Days		
Flr	Department	Beds	% Prvt	DGSF	DGSF/Bed	Rating	Room Type	NSF	RM Count	Rating	Patient Days	Occ %	Rating
Adult Med Surg													
7	Burn (Peds)	28	7%	16,927	605		Inpatient - Semi Private	470	2		26,730	75%	
							Inpatient - Private	225	1				
7	Burn (Adult)/Med Surg Overflow						Inpatient - Semi Private	470	11				
							Inpatient - Private	225	1				
6	General-Med Surg	38	26%	9,775	257		Inpatient - Semi Private	475	13				
							Inpatient – Private	225	10				
4	Surgery /Trauma	31	6%	12,795	413		Inpatient - Semi Private	460	14				
							Inpatient - Private	220	2				
Adult Intermediate													
5	APCU	23	22%	11,000	478		Inpatient - Semi Private	480	9		9,607	114%	
							Inpatient - Private	220	5				
5	APCU – West	9	100%	2,317	257		Inpatient - Private	143	9			N/A	
Adult ICU													
5	Medical ICU	11	0%	3,285	299		Inpatient (ICU) - Semi Private - Bays	213	11		3,359	84%	
4	Surgical ICU	13	0%	3,240	249		Inpatient (ICU) - Semi Private - Bays	219	13		3,322	70%	
Adult Burn													
1	Burn Unit	19	89%	14,316	753		Inpatient - Semi Private	415	1		5,045	73%	
							Inpatient - Private	222	17				

Notes:
- APCU West patient days cannot be broken out, therefore APCU occupancy may be overstated
- A Semi Private Room types contain 2 or more beds
- Data review by MIHS Staff

Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Maricopa Hospital

- Most pediatric intensive care beds are in open bays
- The NICU is not designed to contemporary concepts that support the neonates ability to thrive

					Unit Assessment		Room Assessment				Patient Days		
Flr	Department	Beds/ RMs*	% Prvt	DGSF	DGSF/Bed	Rating	Room Type	NSF	Room/ Count	Rating	Patient Days	Occ %	Rating
Pediatric Med Surg													
3	Pediatrics Med/Surg	34	38%	13,467	396		Inpatient - Semi Private Inpatient - Private	455 215	10 13		5,340	43%	
PICU													
3	PICU	7	0%	3,927	561		Inpatient - Semi Private	180	7		1,714	67%	
NICU													
2	NICU	31	0%	6,801	219		Inpatient (NICU)	219	31		6,168	55%	
Mother/Baby													
2	Post Partum	27	7%	10,180	377		Post Partum - Semi Private Post Partum - Private	490 220	13 2		4,874	49%	
2	Labor Delivery	20	100%	19,648	982		Labor Delivery, Recovery (LDR)	300	20		3,043	42%	

Notes:
- PICU and NICU contains bays and pods not individual rooms
- A Semi Private Room types contain 2 or more beds
- Data review by MIHS Staff

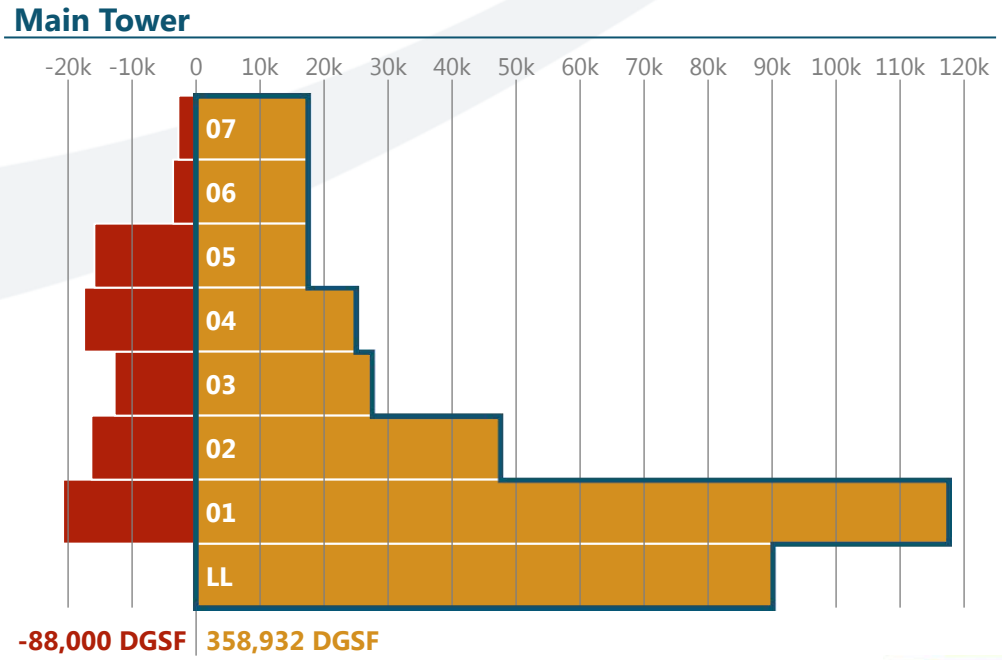
Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Maricopa Hospital: Right Sized Clinical Space

Based on current room count and Kurt Salmon planning standards for clinical spaces:

- Maricopa Hospital is undersized by 25% in total
- Inpatient floors three through seven are undersized by 40%
  - Right sizing these floors would require an additional 4 floors the same size as the existing footprint of the inpatient floors



Does not include ancillary and support space (lab, food services, etc.

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: 2619 Annex

- Standards of behavioral health care have changed to a private room therapy model, since the building was opened
- Behavioral health patients who have medical needs are admitted to this building. However, the building is not designed to manage those types of patients

					Unit Assessment		Room Assessment		Patient Days		
Flr	Department	Beds/ RMs	% Prvt	DGSF	DGSF/Bed	Rating	NSF	Rating	Patient Days	Occ %	Rating
2619 Annex – Inpatient Behavioral Health											
1	Unit A - Adult	20	10%	9,010	451		205		6,804	93%	
1	Unit B - Geriatric	20	15%	9,010	451		215		7,892	108%	
2	Unit C - Adult	20	20%	9,010	451		205		6,975	96%	

Note: Data review by MIHS Staff

Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Desert Vista

- The entire patient population is comprised of involuntary admissions
- Demand for voluntary admissions is reported to exceed the capacity of this facility
- Standards of behavioral health care have changed to a private room therapy model, since the building was opened

					Unit Assessment		Room Assessment		Patient Days		
Flr	Department	Beds/ RMs	% Prvt	DGSF	DGSF/Bed	Rating	NSF	Rating	Pat Days	Occ %	Rating
Desert Vista											
1	Unit 2 - Adult Women	14	0%	7,500	536		228		4,812	94%	
1	Unit 3 - Adult Men	24	0%	7,500	313		228		7,838	89%	
2	Unit 4 - Adult	24	0%	7,500	313		228		8,067	92%	
2	Unit 5 - Adult	17	0%	7,500	441		228		5,705	92%	
2	Unit 6 - Adult	22	0%	7,500	341		228		7,304	91%	
2	Unit 7 - Adult	22	0%	7,500	341		228		7,267	90%	

Note: Data review by MIHS Staff

Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Summary – Diagnostic and Treatment

- With the shift to more outpatient treatments, contemporary surgery suites include:
  - Robust outpatient recovery beds
  - Prep beds for outpatients and same-day admissions
- Non-invasive diagnostic imaging has expanded to more modalities with larger footprints and technology capabilities
- Emergency departments are doing more treatments and lengths of stays have increased to do more admission preparation than when this hospital was built

Department	DGSF/RM Rating	NSF/RM Rating	Cases/ RM/YR
Surgery			
Cardiac Cath			
Endoscopy			
CT			
Diagnostic Imaging			
MRI			
Ultrasound			
Nuclear Medicine/Vascular			
Angiography Suite			
Emergency Department			

Note: Data review by MIHS Staff

Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Main Tower

- The surgical suite has a minimal amount of prep and outpatient recovery beds – most patients are placed in an inpatient unit to recover
- While there are enough emergency department treatment rooms, staff and support space is undersized
- The main imaging department is unable to accommodate new, major technologies

				Unit Assessment		Room Assessment		Volume (Cases/Room)		
Flr	Department	RMs/ Bays	DGSF	DGSF/ RMs/Bay	Rating	NSF	Rating	Patients	Cases/RM/YR	Rating
Surgery/Invasive										
1	Surgery	11	27,362	2,487		519		7,741	704	
	Cardiac Cath	2	4,645	2,323		525		678	339	
	Endoscopy	4	4,385	1,096		200		3,486	871	
Imaging*										
1	CT	2	22,199	2,220		353		13,682	6,841	
	Diagnostic	3				279		27,791	9,264	
	MRI	1				345		2,695	2,695	
	US	3				165		5,987	1,996	
	Nuclear Medicine	2				378		1,047	523	
	Angio Suite	1				625		665	665	
ED										
1	ED (Adult and Peds)	57	29,140	511		138		71,074	1,247	

Notes: *Imaging volume was calculated using an procedure per patient ratio, ratios are listed in appendix; Peds ED was recently renovated, Adult and Peds ED patients are treated in separate and distinct locations
Data review by MIHS Staff
Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Summary – Ambulatory (Main Tower/CHC)

- Healthcare is facing an increasing shift to the outpatient setting
- Efficient clinic utilization is predicated on sharing space and flexibility of use vs. assigned spaces
  - Some specialization is necessary
- All of the CHC has been built out
  - Some public spaces have been "borrowed" for clinical and ancillary functions

Department	DGSF/RM Rating	NSF/RM Rating	Cases/RM/ Year
Main Tower Clinics			
Burn			
Cardiology			N/A
CHC Clinics/Imaging			
Oncology			
Medicine Clinic (Specialty)			
Medicine Clinic (Primary Care)			
Renal Dialysis			
Dermatology			N/A
Antepartum Testing			
Dental			
Pediatric Clinic (Primary & Specialty)			
ENT Clinic			
Woman's Care			
Eye Clinic			
Orthopedic Clinic			
Surgery Clinic			
Woman's Breast Center			
CHC Imaging			

Note: Data review by MIHS Staff
Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

Functional Assessment: Main Tower/CHC

				Unit Assessment		Room Assessment		Volume (Cases/RMs)		
Flr	Departments	RMs	DGSF	DGSF/ RMs	Rating	NSF	Rating	Patients	Cases/ RM/YR	Rating
Main Tower Clinics										
1	Burn Clinic	5	2,054	411		120		6,364	1,273	
1	Cardiology Clinic	7	3,740	534		125			N/A	
CHC Clinics										
1	Oncology	13*	5,920	455		100		8,358	643	
1	Medicine Clinic (Specialty)	20	8,200	410		110		19,816	991	
1	Medicine Clinic (Primary Care)	20	9,045	452		120		10,733	537	
1	Renal Dialysis	11	5,700	518		100		9,356	851	
1	Dermatology	5	2,460	492		110			N/A	
2	Obstetric	4	2,795	699		120		9,468	2,367	
2	Dental	12	4,960	413		110		10,148	846	
2	Pediatric Clinic (Primary & Specialty)	22	9,130	415		100		22,910	1,041	
2	ENT Clinic	4	3,915	979		115		5,677	1,419	
2	Woman's Care	15	7,400	493		120		19,554	1,304	
2	Eye Clinic	10	5,680	568		100		11,862	1,186	
3	Orthopedic Clinic	14	2,575	180		80		13,041	932	
3	Surgery Clinic	16	7,130	446		120		14,590	912	
3	Woman's Breast Center	5	4,410	882		120		2,034	407	
CHC Imaging										
3	CHC – Mammo	2	-	-	-	150		2,136	1,068	
3	CHC - Diagnostic	3	2,985	934		273		8,545	2.848	
2	CHC – US	2	-	-	-	160		1,518	759	

Notes: *Includes 7 chemotherapy chairs. Data review by MIHS Staff
Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Functional Assessment: Summary – Ambulatory (FHCs)

- Current clinic trends are focused on providing patient and family friendly amenities (e.g. free coffee, play areas)
- Current FHC's vary in patient friendly amenities with some utilizing window bars while others have large family learning centers

Department	DGSF/RM Rating	NSF/RM Rating	Cases/RM /Year
Clinic			
South Central			
Avondale			
Maryvale			
Glendale			
El Mirage			
Mesa			
Chandler			
Guadalupe			
Sunny Slope			
Dental			
Chandler			
South Central			
Avondale			
Mesa			
Glendale			
Imaging			
Chandler	-		
Maryvale	-		
Avondale			

Note: Data review by MIHS Staff
Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

Functional Assessment: FHCs

FHC	RMs	DGSF	Unit Assessment		Room Assessment		Volume (Cases/RMs)		
			DGSF/RMs	Rating	NSF	Rating	Vol.	Cases/ RM/YR	Rating
CHC									
South Central	17	14,076	828		120		16,548	973	
Avondale	13	10,769	828		100		14,495	1,115	
Maryvale	22	14,274	649		118		21,619	983	
Glendale	16	12,990	812		100		19,009	1,188	
El Mirage	9	8,019	891		108		15,046	1,672	
Mesa	18	16,281	905		125		18,331	1,018	
Chandler	19	9,923	522		100		20,815	1,096	
Guadalupe	8	4,791	599		107		11,465	1,433	
Sunny Slope	20	9,550	478		115		17,316	866	
Dental									
Chandler	2	998	499		80		1,966	983	
South Central	3	1,074	358		100		968	323	
Avondale	6	1,695	283		110		3,112	519	
Mesa	3	1,081	360		108		2,371	790	
Glendale	2	894	447		125		2,014	1,007	
Imaging									
Chandler – Diagnostic	1	-	-	-	305		519	519	
Chandler – US	1	-	-	-	248		158	158	
Maryvale – US	1	-	-	-	350		162	162	
Avondale – Mammo	1				158		201	201	
Avondale – Diagnostic	1	934	311		228		277	277	
Avondale – US	1				210		153	153	

Noes: Chandler and Maryvale imaging DGSF is included within clinic DGSF; Data review by MIHS Staff
Source: MIHS_Trend_Department Statistics Data Set – April 2013 (Full Year April 2013-May 2012)

MARICOPA INTEGRATED HEALTH SYSTEM

Introduction

Facility development options were based on several planning criteria including projected capacity needs, defined planning goals and options development guidelines. These criteria are grounded in the MIHS strategic plan as well as the existing facility review.

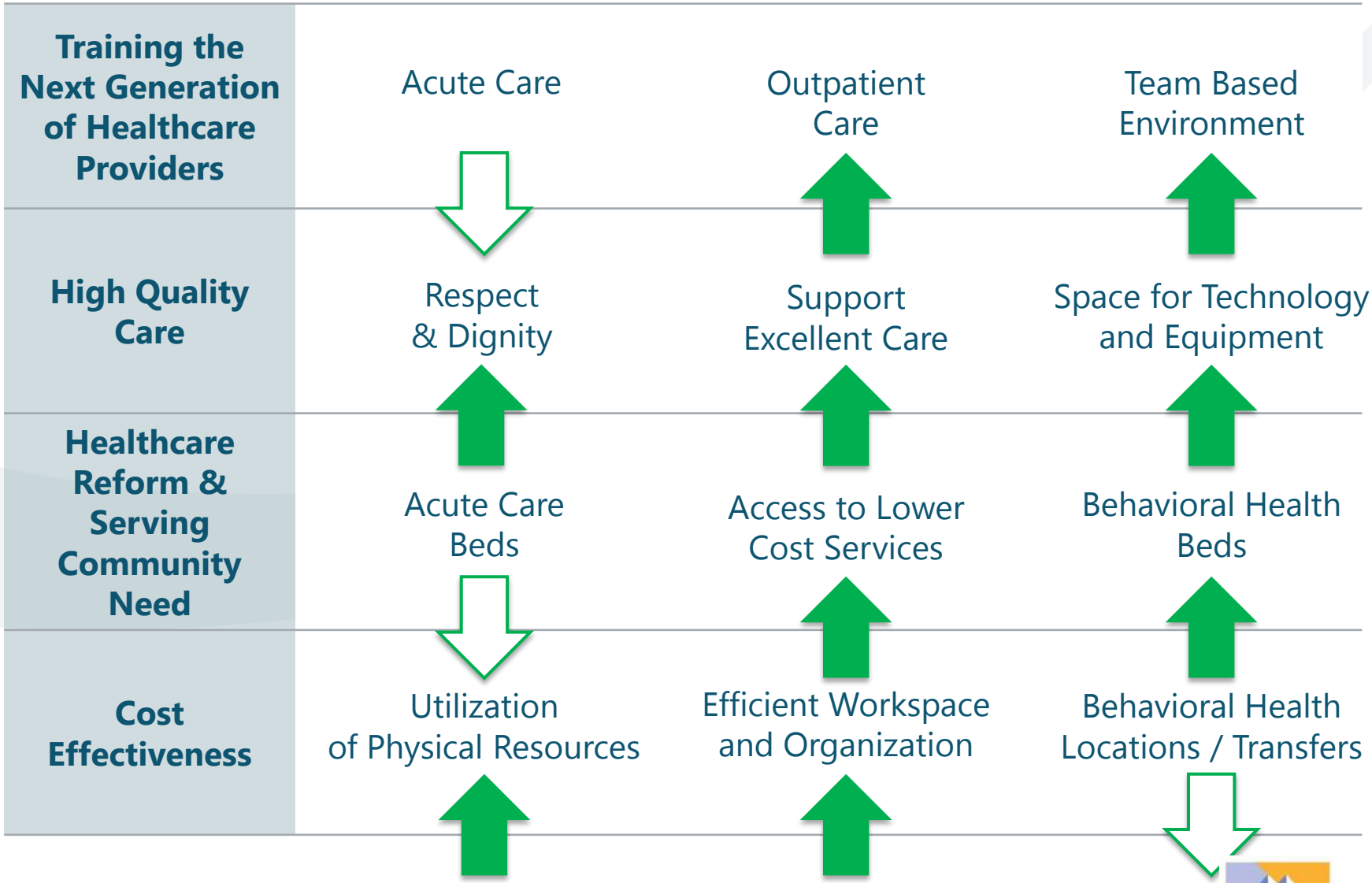
The development of multiple facility options primarily served two purposes:

- Confirm there are viable solutions that achieve the planning goals, and
- define the order-of-magnitude in capital required to implement those solutions

These options were created at a fairly high level but with sufficient detail to achieve the above purposes. A more detailed study along with architectural and engineering planning if this process moves forward.

MARICOPA INTEGRATED HEALTH SYSTEM

Facility Development Serves the MIHS Strategy

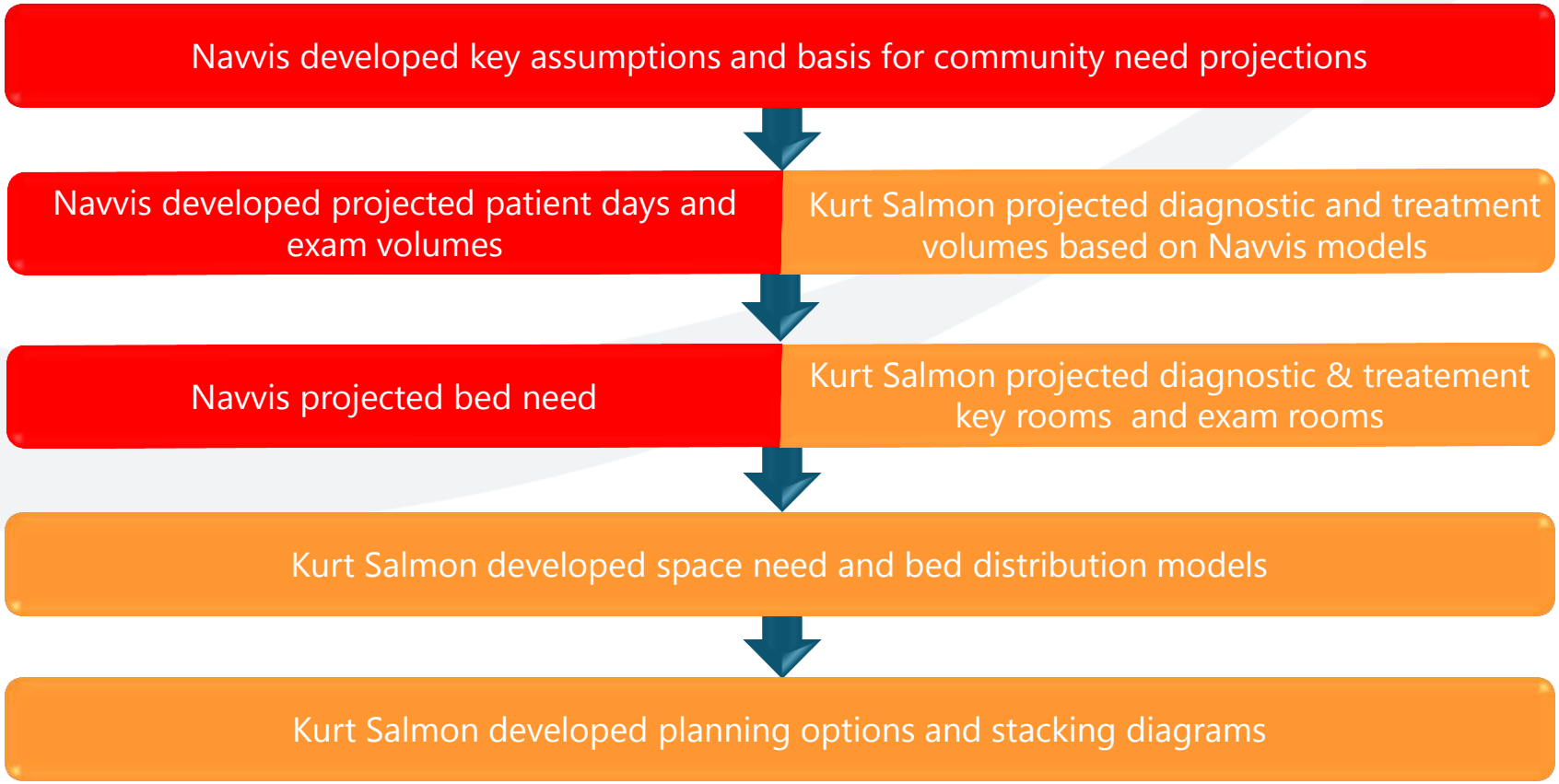


Source: Navvis Healthways; MIHS Strategic Plan

MARICOPA INTEGRATED HEALTH SYSTEM

Options Development Process

The development options are the outcome of fusing community need volume projections from Navvis with the facility planning guidelines of Kurt Salmon



MARICOPA INTEGRATED HEALTH SYSTEM

Projected Patient Days by Volume Scenario

Projected patient days between the low and high scenarios vary by eight percent

	FY 2013	FY 2023		
Patient Days	Historic	Low	Mid	High
Burn	**4,421**	**4,603**	**4,406**	**4,603**
Medical Surgical				
Adult	35,460	39,968	40,637	42,940
Pediatrics	8,244	10,567	9,588	10,567
Neonates (NICU)	**7,931**	**8,685**	**8,948**	**9,151**
Obstetrics	**7,021**	**6,887**	**7,750**	**7,901**
Behavioral Health	**63,211**	**68,851**	**72,893**	**76,177**

Source: Navvis Healthways; MIHS Strategic Plan

MARICOPA INTEGRATED HEALTH SYSTEM

Bed Demand by Volume Scenario

- Projected volume only materially affects bed projections for behavioral health
  - Currently MIHS has 280 acute care hospital beds which are projected to decline to 264
  - MIHS has 183 behavioral health beds today increasing to the low end of the projected range

Type	2023 Average Daily Census (at midnight)				2023 Bed Need (rounded)			
	Low	Mid	High	Planning Occupancy	Low	Mid	High	Recommended \a
Burn ICU	12.6	12.1	12.6	75%	17	16	17	16
Medical/Surgical	138.5	137.6	146.6	80%	173	172	183	176
Adult	109.5	111.3	117.6					
Pediatrics	29.0	26.3	29.0					
Neonates (NICU)	23.8	24.5	25.1	80%	30	31	31	30
Obstetrics	18.9	21.2	21.6	50%	38	42	43	42
Post Partum								32
LDRP								10
Licensed Acute Beds								**264**
Behavioral Health	**188.6**	**199.7**	**208.7**	**80%**	**236**	**250**	**261**	**240**

Source: Navvis, Kurt Salmon planning standards
a\ Based on potential bed unit sizing by bed type

MARICOPA INTEGRATED HEALTH SYSTEM

Diagnostic and Treatment (D&T) – Volume Projections

- D&T projections mirror the change rate of the acute care bed projections
- Emergency volume change is slightly greater than the other services

	FY 2013	Projected FY 2023				
	Historic	Low		Mid		High	
	Volume	Rate	Volume	Rate	Volume	Rate	Volume
Surgery/Invasive							
Operating Room	7,928	1.4%	9,111	1.5%	9,156	2.0%	9,689
Cardiac Catheterization	645	1.4%	741	1.5%	745	2.0%	788
Angiography	665	1.1%	738	1.6%	776	2.1%	817
Endoscopy	3,485	1.4%	4,005	1.5%	4,025	2.0%	4,259
Imaging							
CT	13,682	1.1%	15,189	1.6%	15,957	2.1%	16,816
Diagnostic	27,791	1.1%	30,850	1.6%	32,411	2.1%	34,155
MRI	2,695	1.1%	2,992	1.6%	3,143	2.1%	3,312
US	5,987	1.1%	6,646	1.6%	6,982	2.1%	7,358
Nuclear Medicine	1,047	1.1%	1,162	1.6%	1,221	2.1%	1,287
Mammography	2,136	1.1%	2,371	1.6%	2,591	2.1%	2,625
Emergency Department	71,074	1.4%	74,177	2.4%	79,509	2.4%	79,965

Source: Navvis Healthways Scenarios Model; Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

D & T Room Demand by Scenario

» Like the bed model, projected D&T volumes do not result in a material difference for major hospital-based diagnostic and treatment rooms

	Volume			Visits / Room /Year	Room Need (Rounded)		
	Low	Mid	High		Low	Mid	High
Surgery / Invasive							
Surgery	9,111	9,156	9,689	900	10	10	11
Cardiac Catheterization	741	745	788	1,200	1	1	1
Angiography	738	776	817	1,200	1	1	1
Endoscopy	4,005	4,025	4,259	1,750	2	2	2
Imaging							
CT	15,189	15,957	16,816	3,000	5	5	6
Diagnostic	30,850	32,411	34,155	4,500	7	7	8
MRI	2,992	3,143	3,312	1,500	2	2	2
US	6,646	6,982	7,358	3,000	2	2	2
Nuclear Medicine	1,162	1,221	1,287	1,500	1	1	1
Mammography	3,338	3,338	3,338	3,000	1	1	1
Emergency Department	74,177	79,509	79,965	1,600	46	50	50

Source: Navvis Healthways Scenarios Model; Kurt Salmon planning standards

MARICOPA INTEGRATED HEALTH SYSTEM

FHC and CHC Volume Projections

- Scenarios based on community need assumptions with a greater shift to care in the outpatient environment

Location	Historic Volume		FY 2023 Volume					
			Low		Mid		High	
	Clinic	Dental	Clinic	Dental	Clinic	Dental	Clinic	Dental
Avondale	13,936	3,041	17,839	3,333	19,623	3,649	19,623	3,993
El Mirage	15,237	-	18,035	-	19,838		19,838	
Sunnyslope	18,135	-	20,292	-	22,321	-	24,350	-
Guadalupe	11,538	-	13,272	-	13,272	-	13,272	-
7th Avenue	15,986	-	17,887	-	17,887	-	17,887	-
South Central	16,188	1,041	18,113	1,141	18,113	1,249	18,113	1,367
McDowell	11,959	2,802	13,381	3,071	13,381	3,362	13,381	3,679
West CHC	-	-	-	-	52,203	2,413	59,321	2,640
Glendale	18,556	2,011	21,963	2,204	*Consolidated into West CHC*			
Maryvale	21,539	-	27,572	-				
East CHC	-	-	-	-	54,014	5,318	58,516	5,819
Chandler	20,669	2,001	23,775	2,193	*Consolidated into East CHC*			
Mesa	18,462	2,431	21,237	2,664				
Main CHC	153,509	10,119	176,757	11,089	193,637	12,143	205,376	13,286

Source: Navvis Healthways Scenarios Model

MARICOPA INTEGRATED HEALTH SYSTEM

FHC and CHC Key Room Need

- Once distributed to the individual locations, the scenarios do not result in a material difference by site

Location	Historic Volume		FY 2023 Volume					
			Low		Mid		High	
	Clinic	Dental	Clinic	Dental	Clinic	Dental	Clinic	Dental
Avondale	13	6	15	3	16	3	16	3
El Mirage	9	-	15	-	17	-	17	-
Sunnyslope	20	-	17	-	19	-	20	-
Guadalupe	8	-	11	-	11	-	11	-
7th Avenue	-	-	15	-	15	-	15	-
South Central	17	3	15	1	15	1	15	1
McDowell	-	-	11	3	11	3	11	3
West CHC	-	-	-	-	44	2	49	2
Glendale	16	2	18	2	*Consolidated into West CHC*			
Maryvale	22	-	23	-				
East CHC	-	-	-	-	45	4	49	5
Chandler	19	2	20	2	*Consolidated into East CHC*			
Mesa	18	3	18	3				
Main CHC	161	12	147	9	161	10	171	11

Source: Navvis Healthways Scenarios Model; Kurt Salmon planning standards

MARICOPA INTEGRATED HEALTH SYSTEM

Overall Planning Goals

Inpatient services

1. Replace the Main Hospital per the facility assessment outcomes and strategic plan
2. Consolidate all three behavioral health service sites for improved efficiency
3. Right-size clinical care services to achieve contemporary care and training environment

Outpatient services

1. Right-size and/or relocate the existing FHC's to achieve strategic patient service goals and efficient operating models
2. Expand the CHC capacity on the existing campus to enable continued shifting to outpatient services
3. Develop new CHC's to include exam/diagnostic, treatment and therapy services appropriate to a free-standing ambulatory setting

Training programs

1. Enhance academic and education capabilities and support spaces

Source: Navvis, Healthways; MIHS Strategic Plan

MARICOPA INTEGRATED HEALTH SYSTEM

Option Development Guidelines

1. Each option must be buildable, phase-able and functional when complete
2. Minimize the number of "make-ready" projects required to achieve the end result
3. Retain and/or repurpose as many existing buildings as possible
4. Each building should have adequate parking that is close to a highly visible front entrance
5. Various types of vehicular traffic circulation should be separated (e.g., public, emergency, physicians/employee, service)

Source: Kurt Salmon

MARICOPA INTEGRATED HEALTH SYSTEM

Rule-out example: Desert Vista Expansion Option

- Although this option does was considered for consolidating inpatient behavioral health, it was ruled out as not buildable / phase-able

Attributes

- Uses an asset where the majority of behavioral health patients are currently seen
- Building structured for vertical expansion without extraordinary investment needed
- Development not dependent on make-ready projects

Deficiencies

- **It will be difficult to renovate while the building is occupied**
- **Property size is limited and sufficient parking will require a parking deck**
- Does not consolidate behavioral health services on a single campus
  - Medical behavioral health on the acute care campus, urgent psych center at a third campus
- Does not achieve a private bed model
  - 138 patients in semi-private rooms; 54 patients in private rooms
- Locates Behavioral Health in a neighborhood that is not highly accessible

Source: Kurt Salmon

MARICOPA INTEGRATED HEALTH SYSTEM

Options Overview

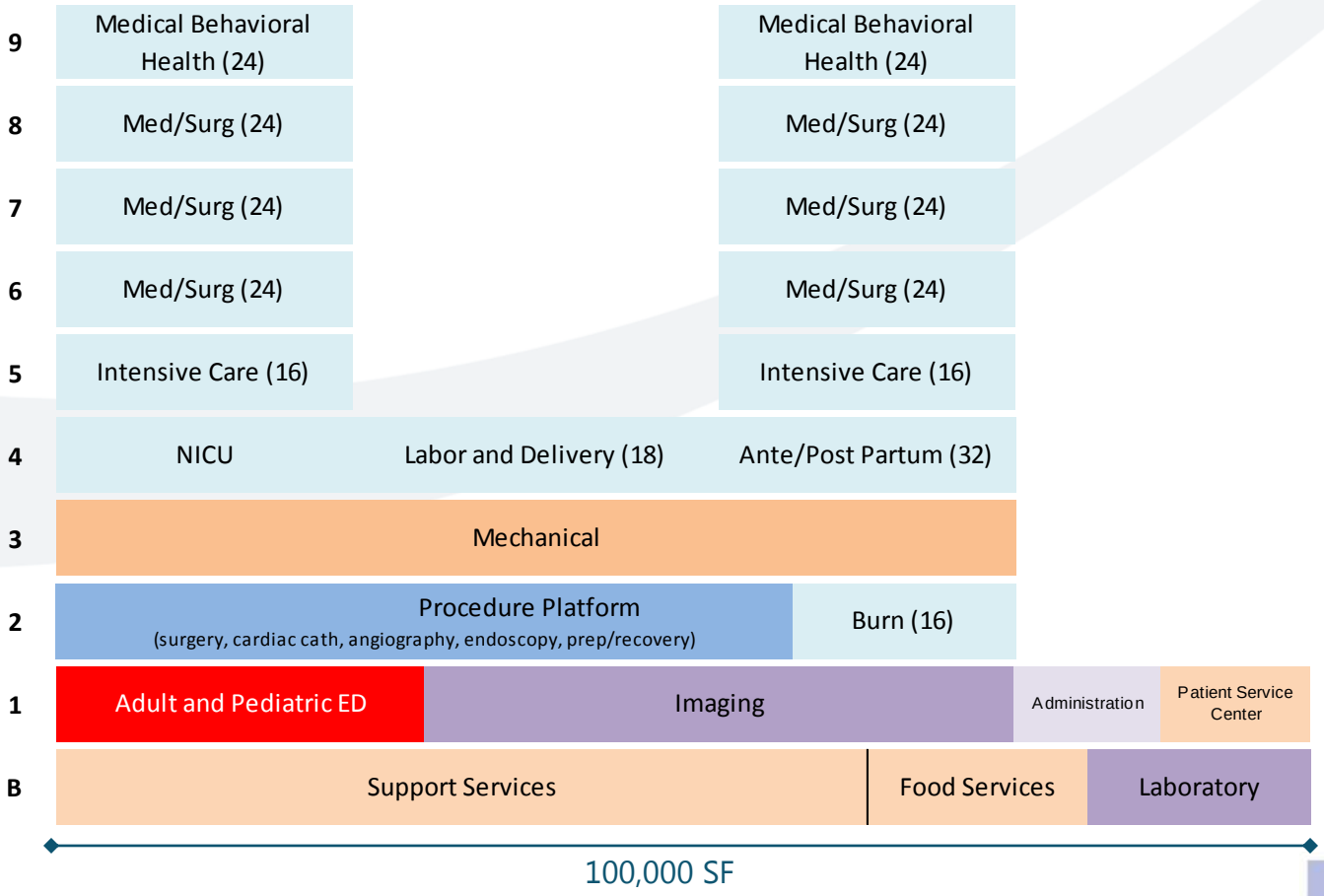
From a larger set of alternatives, three options for acute care services and three options for behavioral health services fit the planning criteria

	Acute Care Options		
Behavioral Health Options	Option 1: East 	Option 2: West 	Option 3: New 
Option 1: Renovated Main Hospital	Replace Power Plant and Add Parking Garage	Add Parking Garage	√ (√ = compatible without modification)
Option 2: New Hospital on Main Campus	N/A	√	√
Options 3: Greenfield Site	√	√	√ (assume combined site)

MARICOPA INTEGRATED HEALTH SYSTEM

Potential Acute Care Hospital Stacking Diagram

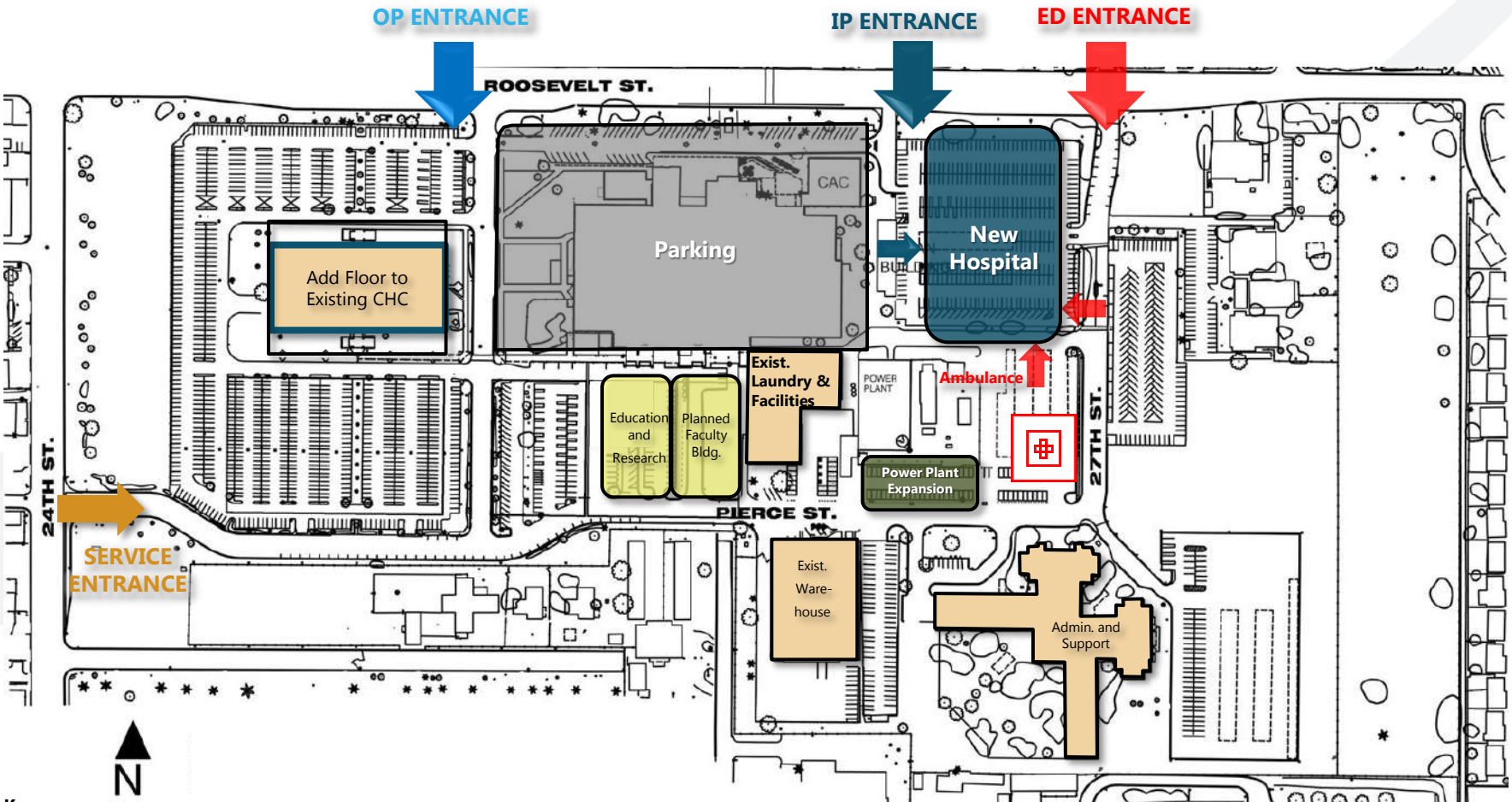
- This potential approach to organizing a new acute care hospital helps establish the approximate footprint of the building



Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

Acute Hospital Option 1: East Option



Key

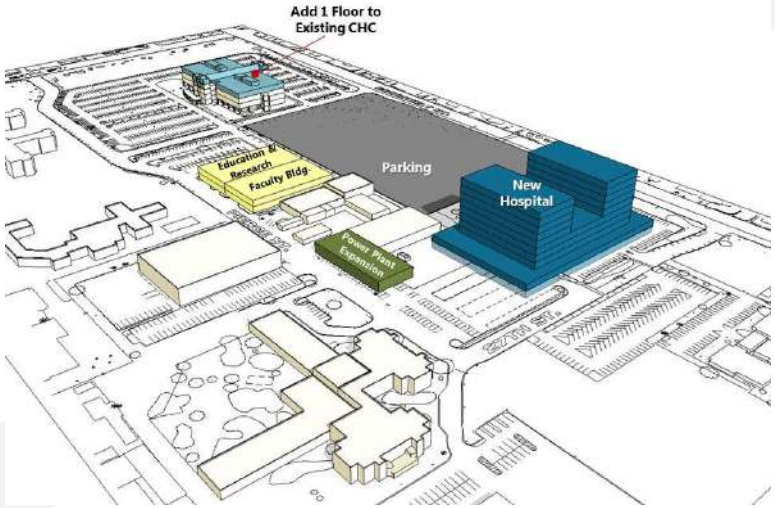
- New Clinical Construction
- New Support Construction
- Renovated Clinical Construction
- New Power Plant
- New Parking
- Existing MIHS Buildings
- Public Entrance
- Ambulance/Walk-in Entrance
- Service Entrance

MARICOPA INTEGRATED HEALTH SYSTEM

Acute Hospital Option 1: East Option

Attributes

- Readily buildable site with minimal impact on patient parking
- Main hospital, CHC and support services right-sized
- Incorporates the current plans for the faculty office building
- Good separation of vehicular traffic
- Continued use of the warehouse, 2619 buildings and existing power plant



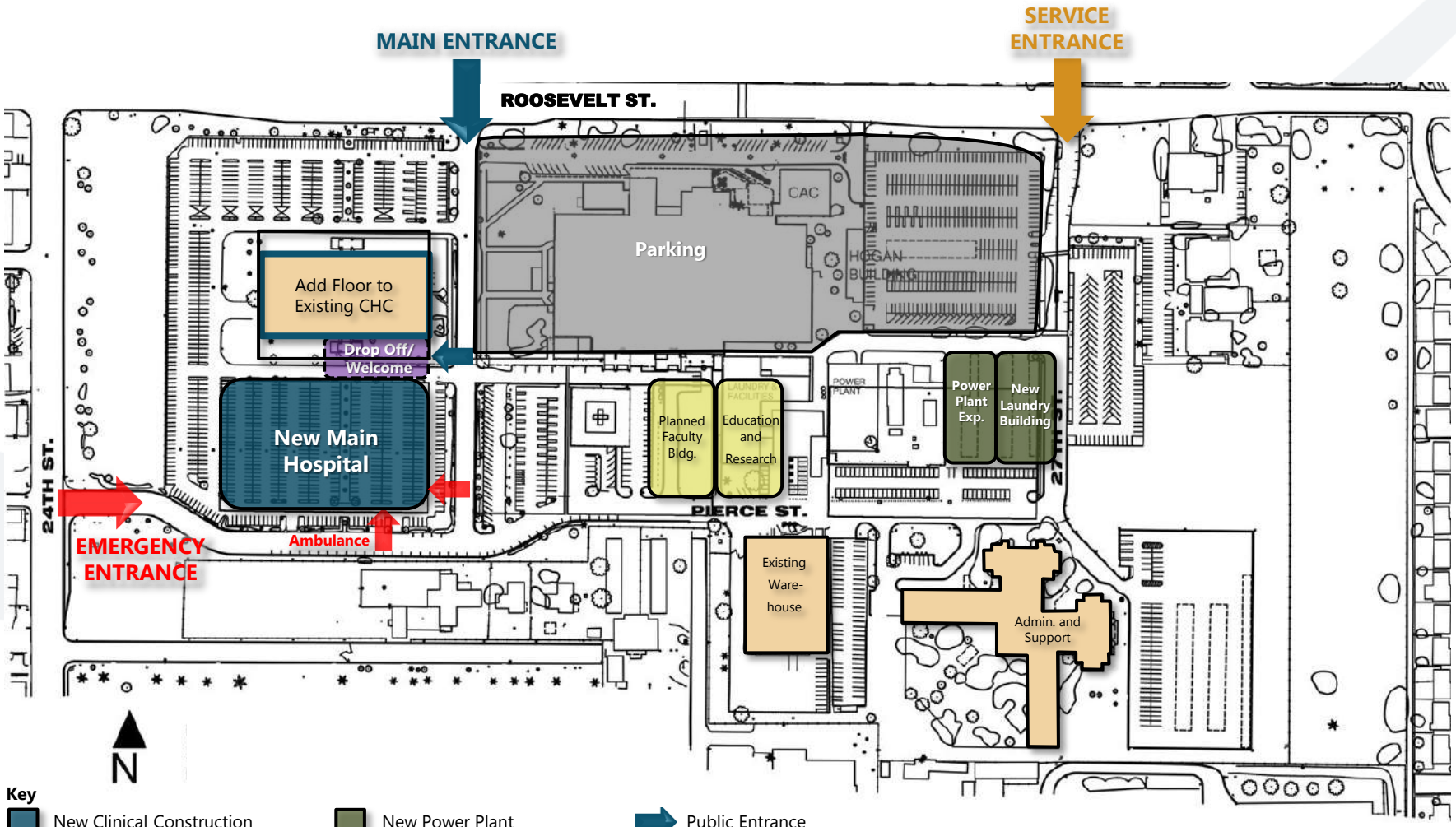
Deficiencies

- Hospital and CHC are disconnected -- on opposite ends of the campus
- Helipad must be relocated
- Expansion of the power plant is required as a "make-ready" project
- An interim parking solution (e.g., shuttle service, parking garage) is also a "make ready" requirement

Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

Acute Hospital Option 2: West Option

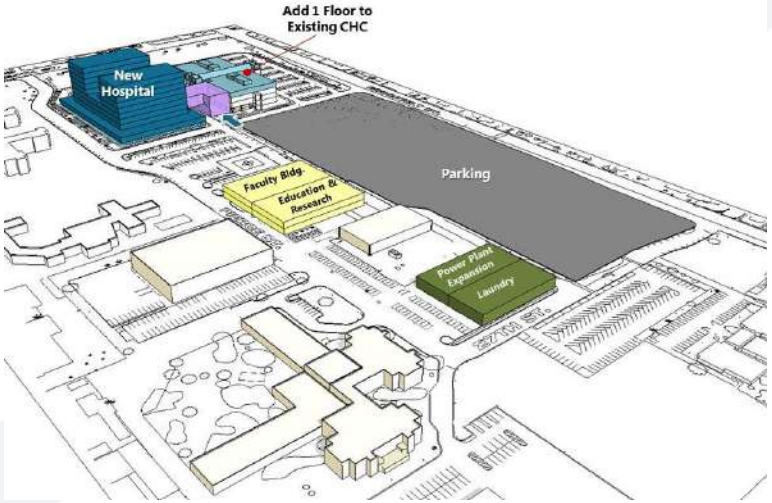


MARICOPA INTEGRATED HEALTH SYSTEM

Acute Hospital Option 2: West Option

Attributes

- Main hospital, CHC and support services right-sized
- Hospital and CHC connected for staff efficiency and patient convenience
- Incorporates the current plans for the faculty office building
- Good separation of vehicular traffic
- Clear separation of service zones from clinical zones
- Continued use of the warehouse, 2619 buildings and existing power plant



Deficiencies

- An interim patient parking solution (e.g., shuttle service) is a "make ready" requirement
- Expansion of the power plant is required as also a "make-ready" project
- Some patient parking is far from the building entrances

Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

Acute Hospital Option 3: Greenfield Site

New Campus

- Acute care hospital
- Faculty offices
- Education building

Existing Main Campus

- Expanded CHC
- Warehouse
- Laundry
- Administrative and IT support

Location TBD

MARICOPA INTEGRATED HEALTH SYSTEM

Acute Hospital Option 3: Greenfield Site

Attributes

- Can organize site without existing constraints
- Main hospital, CHC and support services right-sized
- Continued use of the warehouse and 2619 buildings to support operations

Deficiencies

- Requires the acquisition of an additional property
- Separate the CHC and major support components from the hospital
- Walks-away from the current plans for the faculty office building
- Cannot leverage existing power plant, must be all new
- Requires more / longer transport of supplies and linen

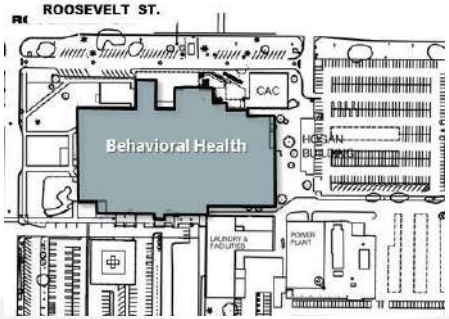
Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

Behavioral Health Options

Option 1

Renovate Main Hospital



- Renovate to meet AIA guidelines for behavioral health facilities
- Remove all asbestos
- Replace all interior walls, ceilings, doors, plumbing, electrical, mechanical systems and windows

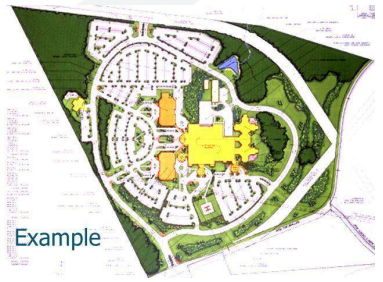
Option 2

New Hospital on Main Campus

- Build a new behavioral health hospital to the east of the existing Main Hospital

Option 3

Greenfield Site



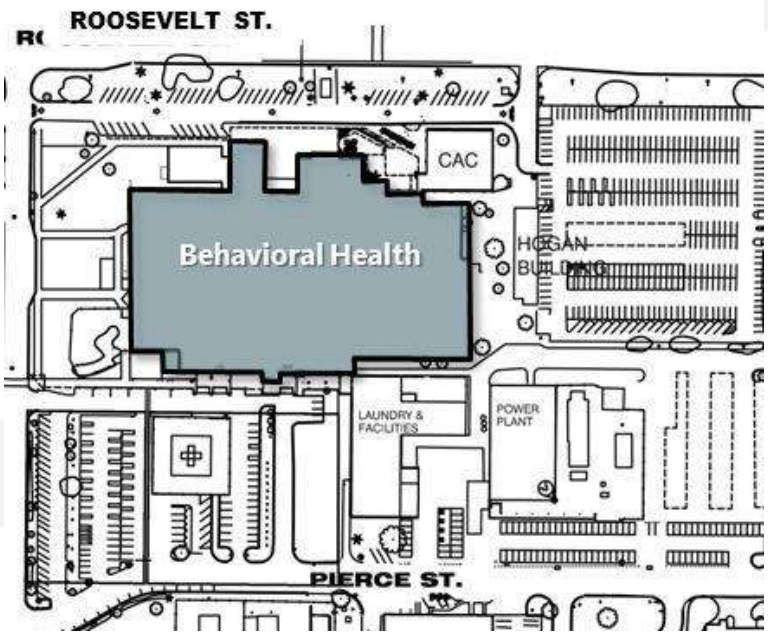
- Develop new inpatient, day hospital and urgent care intake on a new site
- Co-locate with acute care hospital, if acute care option 3 is chosen

MARICOPA INTEGRATED HEALTH SYSTEM

BH Option 1: Renovate Main Hospital

- Existing building can achieve 192 beds to include non-medical behavioral health beds.

7	General (24)	
6	General (24)	
5	General (24)	
4	General (24)	
3	General (24)	
2	Prisoner (48)	
1	Courts, Administrative, Outpatient, Recreation	Geriatric (24)
B	Support (food service, materials, EVS, CSS)	

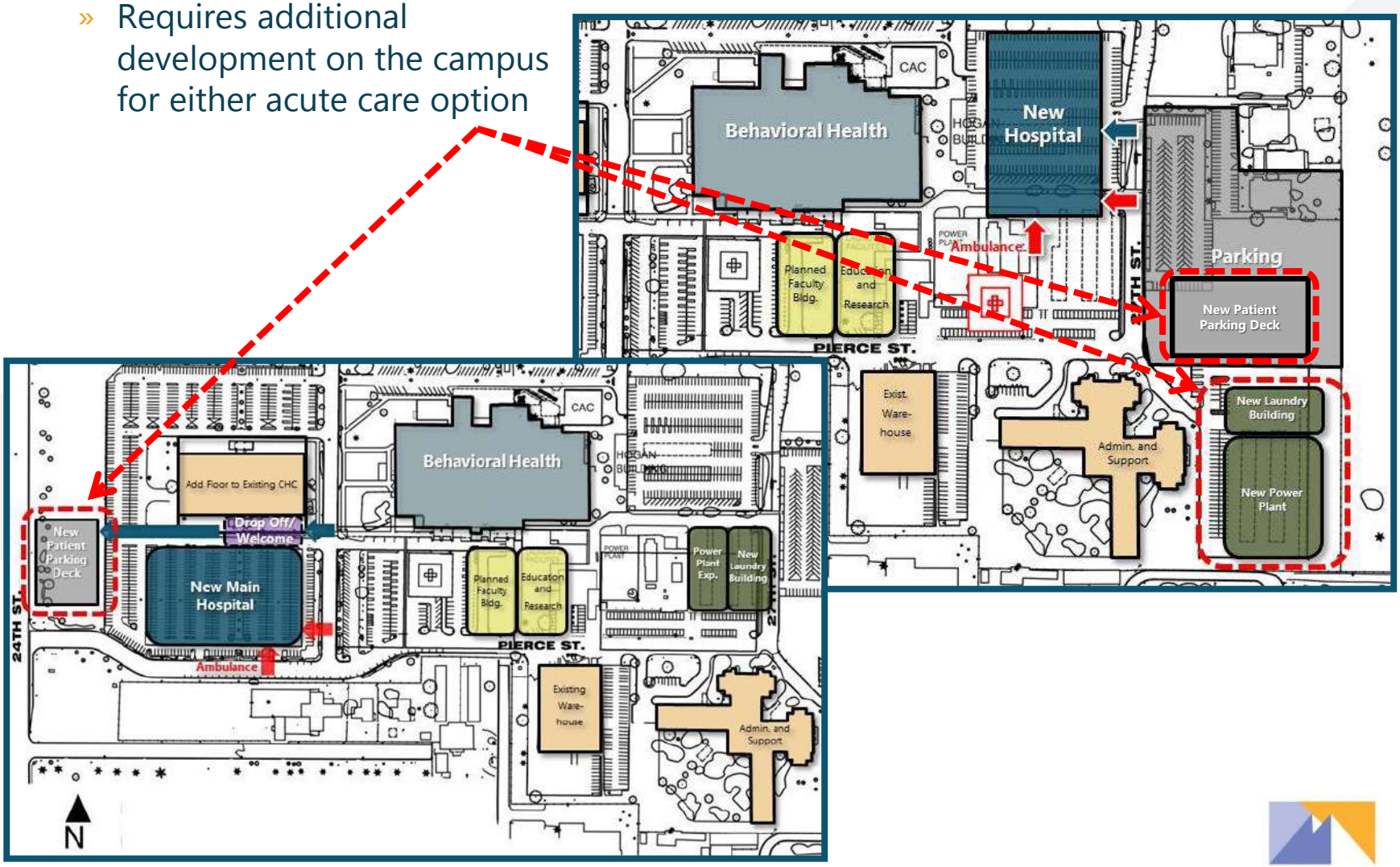


Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

BH Option 1: Renovate Main Hospital

- Requires additional development on the campus for either acute care option

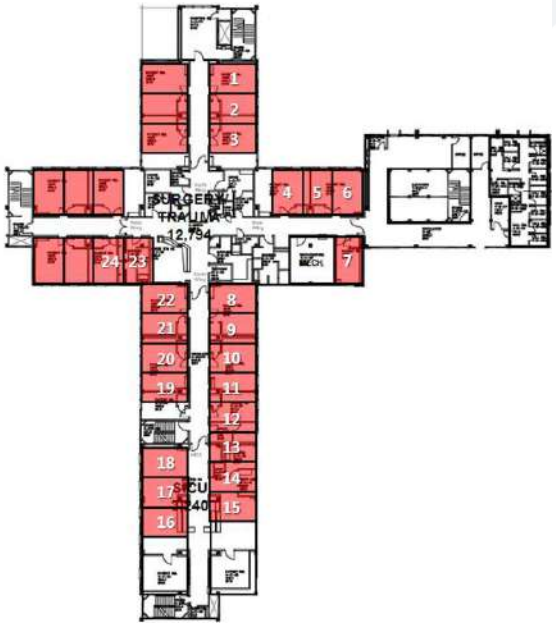


MARICOPA INTEGRATED HEALTH SYSTEM

BH Option 1: Renovate Main Hospital

Attributes

- Utilizes an existing asset
- Consolidates all medical and non-medical behavioral health patients on the same campus
  - Minimizes the number of transfers from intake through discharge
- Sufficient space to include urgent and outpatient programs
- Sale of Desert Vista property can provide some of the funding



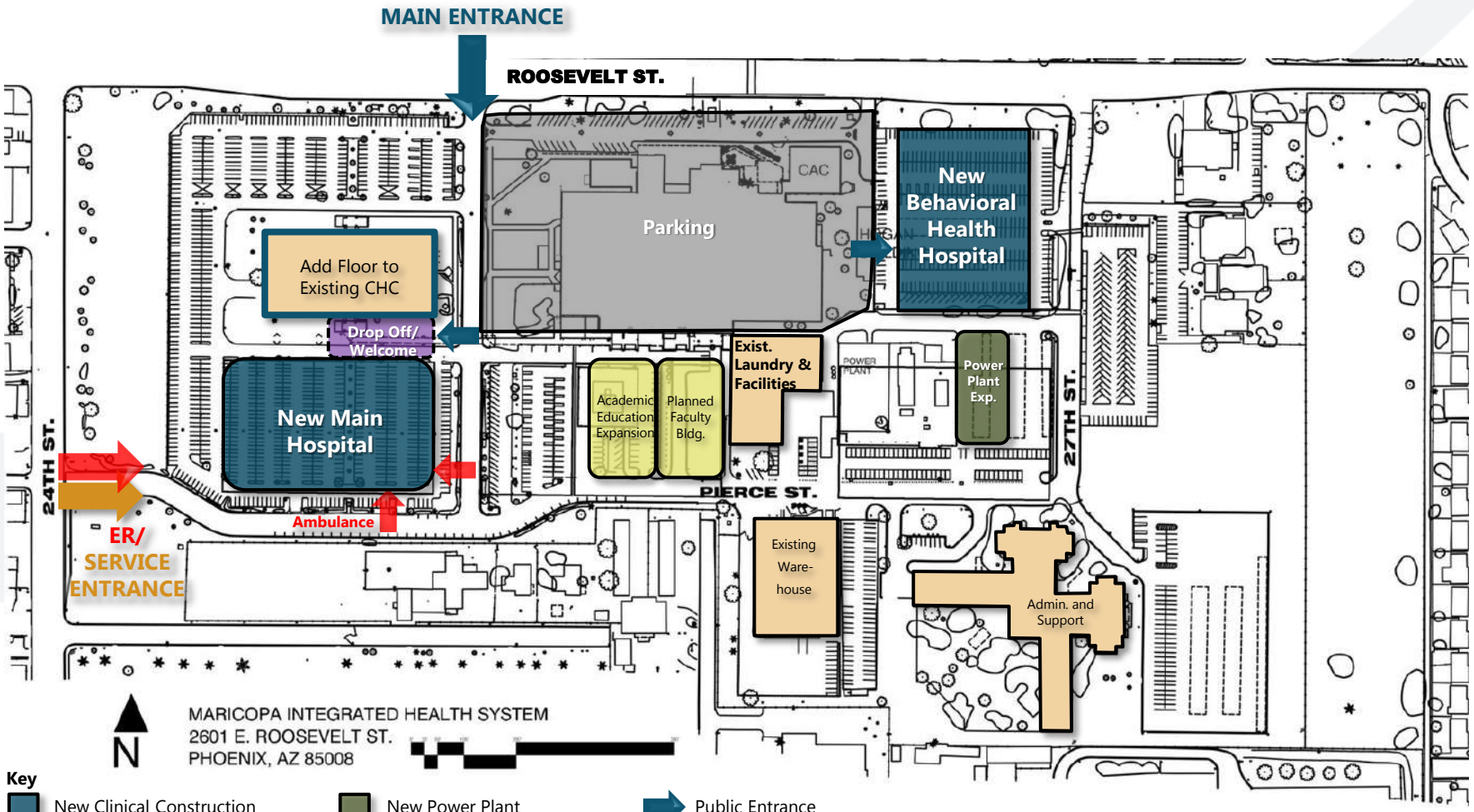
Deficiencies

- Care configuration model will be deficient, despite heavy investment
  - Some of the units will fall short of planning standards
- Adds cost to each on-campus acute care option
- Requires a major investment in a 40+ year old building
- Development cannot start until the new acute hospital is built and occupied
- Abandons existing behavioral health assets

Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

BH Option 2: New Hospital on Main Campus



Key

- New Clinical Construction
- New Support Construction
- Renovated Clinical Construction
- New Power Plant
- New Parking
- Existing MIHS Buildings
- Public Entrance
- Ambulance/Walk-in Entrance
- Service Entrance

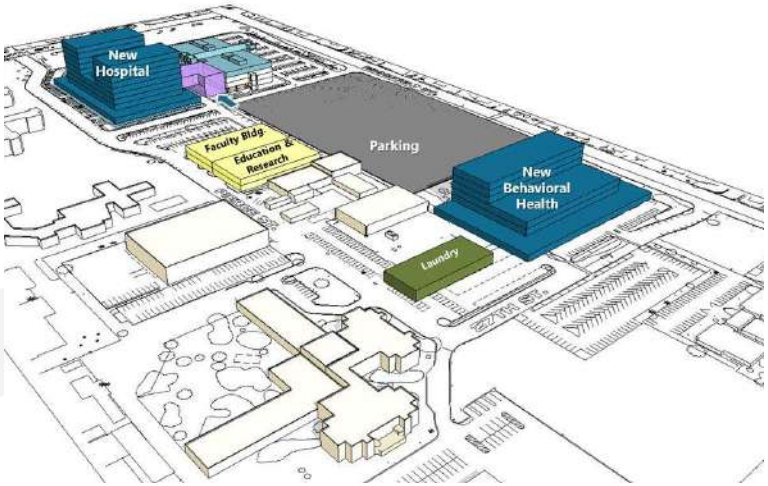
MARICOPA INTEGRATED HEALTH SYSTEM

BH Option 2: New Hospital on Main Campus

The following are additive to the attributes and deficiencies of Acute Care Option #2

Attributes

- Readily buildable site
- Consolidates all medical and non-medical behavioral health patients on the same campus
  - Minimizes the number of transfers from intake through discharge
- Sufficient space to enable development of outpatient programs
- Sale of Desert Vista property can provide some of the funding



Deficiencies

- Abandons existing behavioral health assets
- May require a parking garage to achieve sufficient parking capacity

Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

BH Option 3: Greenfield Site

Attributes

- Can organize site without existing constraints
- Consolidates all medical and non-medical behavioral health patients on the same campus
  - Assumes combination of greenfield acute care option
  - Minimizes the number of transfers from intake through discharge
- Development not dependent on make-ready projects
- Sale of Desert Vista property can provide some of the funding

Deficiencies

- Requires the acquisition of a new property
- Abandons existing behavioral health assets

Source: Kurt Salmon analysis

MARICOPA INTEGRATED HEALTH SYSTEM

Project Cost Overview

Capital project costs for each acute care facility option is nearly the same

- Includes construction, fees, furniture, equipment and contingency
- Escalation of 3% per year through 2020

	Acute Care Hospital	BH Hospital	CHC's	FHC's	Total
	$541M to $548M	$247M	$102M	$26M	
Facility Costs	New Hospital Education / Research Laundry Power Plant 2619 Renovation Relocate Helipad Demolition of existing hospital	New Hospital Renovate Main Hospital $231M	East CHC West CHC Expand Central CHC	Replace: Avondale El Mirage Sunnyslope South Central Guadalupe 7th Avenue No change to McDowell	**$916M to $923M**
Greenfield Land Cost	+$5.5M		+$2M each for East and West		**+$4M to $9.5M**

Kurt Salmon capital projection cost model based on projected building sizes and anticipated local construction costs

MARICOPA INTEGRATED HEALTH SYSTEM

Maricopa County Special Health Care District

Bond Advisory Committee Meeting

February 12, 2014

Item 2.

DRAFT

Maricopa County Special Health Care District
Board of Directors Bond Advisory Committee Meeting
Maricopa Medical Center
Auditoriums 1 and 2
January 21, 2014
2:30 p.m.

Voting Members Present:	Bill Post, Chairman Tony Astorga Paul Charlton – *telephonically* Kote Chundu, M.D. Frank Fairbanks – *arrived at 2:53 p.m.* Nita Francis Doug Hirano Terence McMahon, Ex-officio, Director, District 5 Rick Naimark Brian Spicker Ted Williams
Absent:	Lattie Coor, Ph.D., Vice Chairman Merwin Grant Diane McCarthy Joey Ridenour
Others/Guest Presenters:	Steve Purves, MIHS, President & CEO
Recorded by:	Melanie Talbot, MIHS, Executive Director of Board Operations Cynthia Cornejo, MIHS, Assistant Clerk of the Board

Call to Order

Chairman Post called the meeting to order at 2:41 p.m.

Roll Call

Ms. Cornejo called roll. Following roll call, it was noted that nine of the fourteen voting members of the Maricopa County Special Health Care District Bond Advisory Committee were present, which represents a quorum. Mr. Fairbanks arrived after roll call. Mr. Charlton participated telephonically.

For the benefit of those participating telephonically, Ms. Cornejo identified the individuals present at the meeting.

Call to the Public

Chairman Post called for public comment. Ms. Cornejo indicated no speaker slips were submitted.

General Session Presentation, Discussion and Action:

1. Update on Bond Advisory Committee's Project Process, Deliverables and Timeline

This item was not discussed.

2. Discussion Regarding Public Comments, Community and Stakeholder Input

Chairman Post stated that since the last meeting, Maricopa Integrated Health System (MIHS) senior administration and members of the Board of Directors have been busy. He thanked those that were able to attend the town halls and meetings that were conducted since the last meeting.

There were five community town halls held over the past three weeks; one in each district. The first meeting was held at Maricopa Medical Center (MMC) with the remaining four held at various Family Health Centers (FHCs). Each meeting included the viewing of a video and dialogue around the processes in place, the goals and the general concept surrounding the topics to be included in the final recommendations to the Board. The attendees at each meeting were encouraged to provide input; which they did. In general, the feedback provided was positive.

Chairman Post mentioned that in addition to the community town halls, he and Mr. Purves had meetings with groups and individuals, including city and town mayors, community leaders, healthcare executives, and concerned individuals. The purpose of those meetings was to provide an overview and reasoning for the project, as well as gain input specifically into the process. Those meeting also provided the opportunity to inform participants of the activities at MIHS, as well as clarify the direction and reasoning for the current approach. It was also reiterated that the Bond Advisory Committee is a citizen effort, comprised mostly of non-medical professionals; all participating voluntarily to provide their perspective.

Mr. Hirano asked for clarification on the diversity of those in attendance at the town halls.

Chairman Post said that the reasoning for holding the town halls at the FHCs was to gather input from a diverse community and that is what was received. Those in attendance covered a spectrum of social and demographic representation of the community. Although most attendees were individuals with personal input, there were also some representatives from institutions, such as Valley Interfaith Project, to provide feedback from their organization.

Mr. Hirano questioned if the community was well prepared for the conversation or if they responded to the information that was presented to them.

Chairman Post said that the attendees did not arrive with written statements or agendas; however, it appeared that most did arrive with their own feelings about the process. In an effort to gain their honest input, the presentation began with questions surrounding the areas of graduate medical education (GME), behavioral health, ambulatory care, and the hospital on the main campus.

Chairman Post stated that he had some recommendations based upon the efforts to date, the meetings held and the input received. The recommendations are an extension of the discussions by the Committee in regard to the principle areas of their focus and are to encourage feedback from the Committee.

There are seven recommendations, in context of what would be included on the written report to be presented to the Special Health Care District Board of Directors on February 26, 2014.

The first recommendation would be to increase GME. Due to the organizational status of MIHS, it has a unique opportunity to participate in GME that other organizations do not. With residency programs that attract participants from around the country and world and have a retention rate of over 70 percent, it is critical to Maricopa County to focus on this area; not only from an economic development standpoint, more importantly, proving health care to the residents of Maricopa County. There are also many areas to collaborate.

General Session Presentation, Discussion and Action (cont.):

2. Discussion Regarding Public Comments, Community and Stakeholder Input (cont.):

The second recommendation would be to expand ambulatory care and family healthcare services. With input from the Maricopa Health Centers Governing Council (MHCGC); Chairman Post is anticipating specific suggestions on which areas to focus on. He stated that MIHS was a leader when it first established the FHCs and as the Affordable Care Act (ACA) process is implemented, the need for primary care services will increase. Moving forward, there are some things to consider in order to remain a leader in healthcare trends. The first would be to supplement GME training in the FHCs, to provide newly trained physicians the opportunity to learn how to appropriately delegate and work in teams. The other would be to link the with other health providers in the same geographical area.

The third recommendation would be to continue to grow and link behavioral and physical health through resource consolidation; treat the whole person. The focus on behavioral health has also become a national healthcare trend; also combined with the fact that there is more need than capacity, it is critical.

The fourth recommendation would be to modernize and downsize the hospital on the main campus. While considering the analysis provided by the consultants, it is important for the Committee to put together an effort surrounding three vectors in terms of size: what is needed for GME, what is needed for all specialty services provided; and consider the adjusted patient demand based on the ACA.

Chairman Post stated that there was some misconception that once the ACA is fully implemented, there would no longer be a need for a public or safety net hospital, since citizens will have insurance and can chose their healthcare provider. He stated that during his time on the Committee, he has learned that the ACA and healthcare reform will do many things; however, it will not cure poverty. Healthcare reform will change the patient population and that will need to be taken into consideration when discussing a new hospital to replace the existing facility; which is over 40 years old.

Chairman Post mentioned the next three recommendations are designed to enhance and creatively build solutions for the previous four and to take advantage of the information received by the Committee over the past several months.

He said that is it evident that additional work in terms of collaboration and creating alliances throughout the community can enhance that product; such as GME, behavioral health, and ambulatory care. This is not to interfere with the process of seeking capital acquisition and a specific bond election; however, this would work in parallel to have a process to incorporate alliances in a cooperative way. There are opportunities in each of the above listed areas to create alliances; such as the FHCs and collaborating with centers that are geographically located to increase the process of providing healthcare. Also, creating alliances with political, academic and industry leaders can have a positive effect on the hospital on the main campus. Many collaborations or alliances can be done in conjunction with the acquisition of capital; however, some cannot.

The next recommendation would be to develop the bond proposal with consideration to its composition, the principle and associated communication plan that is required to do that. There is a need for a strong communication plan that helps explain how important and substantive MIHS is to the community; as many things are unknown to the community. As important as the communication plan is, the composition of the proposal is equally significant. It will need to address how the monies would be spent; when considering the phasing plan, when and how the process would go, what components would be looked at and when. This would need to be explicitly developed.

The final recommendation is to complete the economic impact statement and process, which would quantify the impact on the community, for MIHS and what the bond proposal will accomplish. The purpose is to clarify the value of the proposition, explain the benefit, and address the cost of the bond proposal. The economic impact statement needs to be explicit and released prior to the election.

Chairman Post stated that the purpose of the seven recommendations was to provoke a conversation amongst Committee members and gain their feedback.

General Session Presentation, Discussion and Action (cont.):

2. Discussion Regarding Public Comments, Community and Stakeholder Input (cont.):

Mr. Naimark agreed with most of the items; however he was unsure of how to accomplish them with the February deadline. He also agreed that growing GME was an important goal, as it is a challenge on a statewide level. He questioned how the amount of GME growth would be determined, how much of that growth would be the responsibility of MIHS, and how the collaboration efforts would affect the sizing and scaling of the facilities. He referred to the recommendation of modernizing and downsizing the hospital; and asked if the Committee was to make a recommendation to the Board on the specific size of the hospital; which would need to consider the GME expansion, collaborations, adjusted patient demand and specialty services. He requested some clarification.

Chairman Post said that the Committee can begin with the reports generated by the consulting group, which is consistent with the recommendations from the Committee. There are many variables and there needs to be discussions surrounding collaborations to achieve the goals for the organization. This is particularly important for senior administration to consider to ensure the organization is supplying the very best product for the community.

Mr. Naimark agreed with the variables presented. There will be a change in the healthcare landscape; such as the Medicaid Expansion and healthcare reform. The effect of those changes is still unknown; however, decisions for the future need to be considered. Not only does the MIHS perspective have to be considered, there needs to be a broader range in thinking to include regional capacity and it would need to fit the mission of the organization. He also agreed with producing communication plans and the economic impact statement.

Mr. Naimark referred to behavioral health; the changing nature and the connectivity between behavioral and physical health. He stated that alliances and collaborations in this area will vary slightly from those in other areas.

Chairman Post said that there have been meetings and there are collaboration opportunities in this area.

Mr. Naimark stated that he is having trouble seeing the pathway, particularly between now and February.

Dr. Chundu appreciated the time and effort given by Chairman Post. The recommendations provided were right on target. He clarified the GME referred to would include postgraduate medical education programs, fellowships, and residencies. There is a need for medical specialists and there are not many fellowship programs available. He continued to state that GME collaboration will not affect the sizing of the hospital, as the factor that limits training is faculty and funding; not size of a facility.

Mr. Naimark asked if there is an available number for GME now, and if that number needs to be increased, are there organizations other than MIHS capable of providing?

Dr. Chundu stated that the GME spots are currently frozen; the federal government is not providing any additional funds. The GME programs are based on the individual hospital's investment; which the cost for each position in the program is approximately $100,000, not including the faculty time. It is a difficult situation for any organization, however; partnerships could improve the situation.

Mr. Fairbanks also agreed with the recommendations discussed. He stated when developing the proposal, the amount of financial capacity that would be generated as a result should be considered. A bond issue would generate some other financial capacity to the extent of the additional funds generated could be used to accomplish the organizational goals. There are items that the community can understand and support; such as GME and ambulatory care services. The community may feel a discomfort that the government and medical system cannot develop a solution for behavioral health; however, they understand that there is an unmet need for the services.

He referred to the issue of downsizing and modernizing the hospital and questioned if the recommendation was surrounding a new facility or renovating the current hospital.

General Session Presentation, Discussion and Action (cont.):

2. Discussion Regarding Public Comments, Community and Stakeholder Input (cont.):

Chairman Post stated that he envisioned a new facility on the current campus; with the possibility of the current facility serving an alternative purpose.

Mr. Fairbanks stated that the new facility would also include the specialty services; such as burn. He said that it would be helpful for the Committee to lay out a pathway and to note achievements, set goals, and document demonstrable progress.

Chairman Post agreed and stated that having the framework without every detail in place could destroy the process. The Committee should be flexible for the future, which will enhance the opportunity for collaboration and partnerships.

Mr. Astorga said that the role of the Committee was to provide a recommendation; which is what is being done.

Mr. Williams did not have any problems with the recommendations as presented. When discussing the downsizing and modernization of the hospital, the image of the hospital also needs some consideration. He was unsure of how some of the recommendations could be accomplished without changing the image; the quality of care provided at MMC is comparable to other facilities and better is most areas.

Chairman Post agreed that MMC provides quality care; however, the public perception is not as robust as it should be. A solid communication plan would be needed to inform the community of the true benefit of the system. He is certain that the public does not truly appreciate how significant MIHS is to the community.

Ms. Francis referred to the sixth recommendation, to develop a bond proposal with a very strong communication plan. She commended staff for the work completed; which as a result, has started serious conversations in the community. She said the communication distributed has to be done correctly; when recommending a right size for the hospital, what is that number? The cost should also be included, which should not be dissected into the various parts; healthcare is mind and body.

Mr. Spicker thanked Chairman Post for defining the four driving forces and could not think of any countervailing arguments. He expressed his surprise in the lack of opposition from the public and questioned if the Committee was missing an important component. Although there was no opposition currently presenting; the Committee should prepare itself for what those arguments might be.

Mr. McMahon said that MIHS has a tremendous story to tell and the public needs to be aware of it.

Mr. Hirano said the four recommendations are fine; however, he questioned how they connect to the strategic plan. He asked what level of specificity the Committee is to provide.

Chairman Post replied that the recommendations presented are in line with the strategic plan; some items are specific while others may be a subset of the broader description. He also reviewed the recommendation with the charter to ensure the Committee will accomplish what it was asked to do by the Board. As to the specificity of the recommendation to the Board, the Committee can provide a sense of direction and trust senior administration to work through the details.

Mr. Fairbanks said that the specificity of the bond proposal needs to be sufficient to explain to the public the purpose of the proposal in a manner that is understood. He did not recommend being too specific as it restricts the flexibility needed in the planning process.

Dr. Chundu said that the public understands that there is a benefit to the community; providing better care, preventative care, and more physicians. However, the cost of this proposal has not been communicated to the public. He stated that it is not up to the Committee to recommend the validity of those benefits to the community. That is the responsibility of the Board of Directors and senior administration.

General Session Presentation, Discussion and Action (cont.):

2. Discussion Regarding Public Comments, Community and Stakeholder Input (cont.):

Mr. Charlton thanked Chairman Post for time he committed to the meetings. He supported the recommendations; including the discussion surround the level of specificity. He requested clarification on the actual recommendation to be presented to the Board.

Chairman Post suggests that the Committee propose a singular bond election to the Board; the communication that would go along with that would include the value provided in a very concise and very specific terms of the value of that proposition. He would also suggest that the Board develop a process to establish the specific composition in the communication points for the proposal.

Mr. Charlton asked if the Committee would include what the bond amount would be.

Chairman Post said the recommendation will include an amount; which will begin with the information provided by the consultants. He is suggesting the Board and senior administration review the specific numbers and provide their perspective.

Mr. Naimark questioned what needs to be completed by the Committee and MIHS staff before the recommendations are presented to the Board in February.

Chairman Post said that MIHS staff will assist in developing the document to present to the Board. The task at hand now is to take all the information received and translate into the report.

Ms. Francis asked if it is his expectation that the Committee vote on a recommendation in February.

Chairman Post suggested convening a final meeting of the Committee on February 12 to vote on a recommendation to the Board.

Dr. Chundu asked if the Committee would be specifying the dollar amount for each of the presented recommendations. Is the Committee going to propose the recommendations, and base them on the consultants' information, the strategic plan and the input from senior administration?

Chairman Post stated that senior administration will reiterate that the recommendations align with the mission; which is represented in the consultant's report.

Mr. Purves commended the Committee for the amount of work completed; in an open, transparent, and high quality manner. He agreed that GME growth is a topic that resonates at a community and state level. He clarified that the funds received from the bond initiative would be utilized for the building or renovating of facilities. In respect to the facility, it is unquestionably obsolescent and will need to be addressed if providing quality acute care is going to remain the mission of the system.

In regard to communication, it is important to convey the relevancy of the system to the community. If the bond initiative passes, there is going to be a couple of years of detailed facilities planning to translate the plans and goals into a reality. This is a community hospital and the process needs to be very inclusive. Senior administration is prepared to support the process.

Mr. Fairbanks said that he views the new hospital as an essential component of accomplishing the goals of the system, not just a desire for a new building.

Mr. Naimark said if the expansion of ambulatory services, behavioral health, and building a new facility is accomplished, the result would be the growth of GME.

Chairman Post said he is aware that there are currently many changes taking place locally and nationally in regard to healthcare; especially with the ACA. This initiative is consistent with healthcare reform; including the training of medical personnel needed to treat the growing population, not just physicians, but nurses, medical assistants, and technicians.

General Session Presentation, Discussion and Action (cont.):

2. Discussion Regarding Public Comments, Community and Stakeholder Input (cont.):

Dr. Chundu reiterated that the other medical trainees were important, not just physicians. The delivery of healthcare is changing and all medical professionals need to be trained, which provide opportunities for additional partnerships and collaborations; such as nursing schools.

3. Approve Bond Advisory Committee Meeting Minutes dated:
   a. November 12, 2013
   b. December 9, 2013

MOTION: Mr. Spicker moved to approve the Bond Advisory Committee minutes dated November 12, 2013 and December 9, 2013. Mr. Fairbanks seconded. **Motion passed by voice vote.**

4. Wrap Up and Next Steps

Chairman Post asked if there were any objections for the next meeting to take place on February 12, 2014. There were no objections.

Adjourn

MOTION: Mr. Astorga moved to adjourn the January 21, 2014 Bond Advisory Committee meeting. Mr. Fairbanks seconded. **Motion passed by voice vote.**

Meeting adjourned at 4:06 p.m.

_____
Bill Post, Chair
Bond Advisory Committee