



2016 BAMC Performance Improvement Report

VOLUME 1:

Designing a New Medical Center

**Bay Area  
Medical Center**

*An Aurora Health Care Affiliate*

# Bay Area Medical Center

## Performance Improvement



Constant attention and response to opportunities to improve systems and processes is foundational to achieving our mission, our strategic plan objectives, and to assure that BAMC is a safe and compassionate place for our patients.

This publication is a unique one – we have the performance improvement opportunity to totally redesign the environment for our patients, visitors, staff, and providers.

We intend on publishing three volumes of annual performance improvement reports related to this opportunity. This year's will focus on our design efforts. Next year (2017) we will share our transition planning (moving from our current facilities to our new ones), service enhancements, and technology improvements. The final publication in the series (2018) will reflect our actual experience once we are operational in our new facilities, in an effort to constantly learn and share our successes and missed opportunities with other healthcare organizations.

Every good plan begins with a vision. BAMC and Aurora leadership, medical staff leadership, board members, and our planning consultants from Boldt Construction, Cannon Design, Harty-Elving, and Affiliated Engineers Incorporated (AEI) gathered to define this vision. In addition to internal input, we performed a community survey which helped us identify elements that were most important to our patients and their families.

The following outline the highest priorities, or Key Performance Indicators (“KPIs”) we identified for our project:

- Create a destination of choice
- Improve the patient and family experience
- Improve the engagement of staff and providers
- Reduce hospital acquired infections
- Eliminate unnecessary redundancy of resources (equipment, supplies)
- Decrease staff and provider workload through efficient workflow

The KPIs were at the forefront of the decisions made throughout our planning processes.

We wish to extend a sincere thank you to our staff, providers, board members, and community members who provided their time and expertise for our planning efforts, as well as our partners from Boldt, Cannon Design, Harty-Elving, AEI, and the multitude of trade partners who participated in our planning efforts. We also wish to thank other healthcare organizations who opened their doors to us for site visits, and our community who responding to our survey of their needs.

Handwritten signature of Ed Harding in black ink.

Ed Harding  
BAMC CEO

Handwritten signature of Bernie VanCourt in black ink.

Bernie VanCourt  
BAMC COO/CNO

Handwritten signature of Tim Klein in black ink.

Tim Klein  
BAMC Director of Facilities

# Improving the Inpatient Experience: Med/Surg

## Objectives

The Inpatient facility planning teams identified several objectives to be achieved in design of our new inpatient rooms and support space, with the ultimate goal of improving experience for our patients, their families, and our staff:

- Assure patient privacy
- Improve patient comfort
- Improve family comfort
- Enhance patient safety
- Engage patients and families more actively in their plan of care
- Provide for clinical staff efficiency

## Process

Research was performed regarding contemporary inpatient department and patient room design. “Mock up” real sized rooms were created in which staff were invited to design for the ultimate patient, family and staff experience.

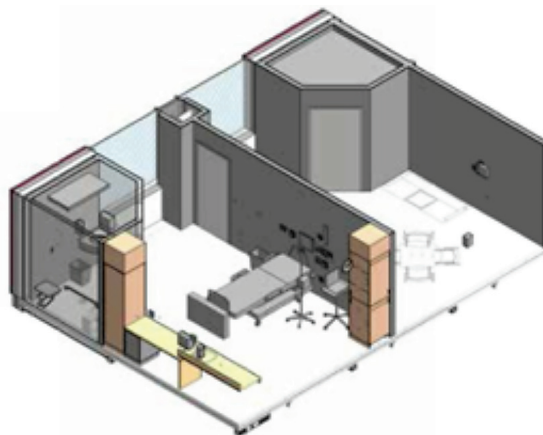
Site visits occurred to other newer facilities to gather ideas and consult the staff about what has worked well and what has not.

## Med/Surg Plan

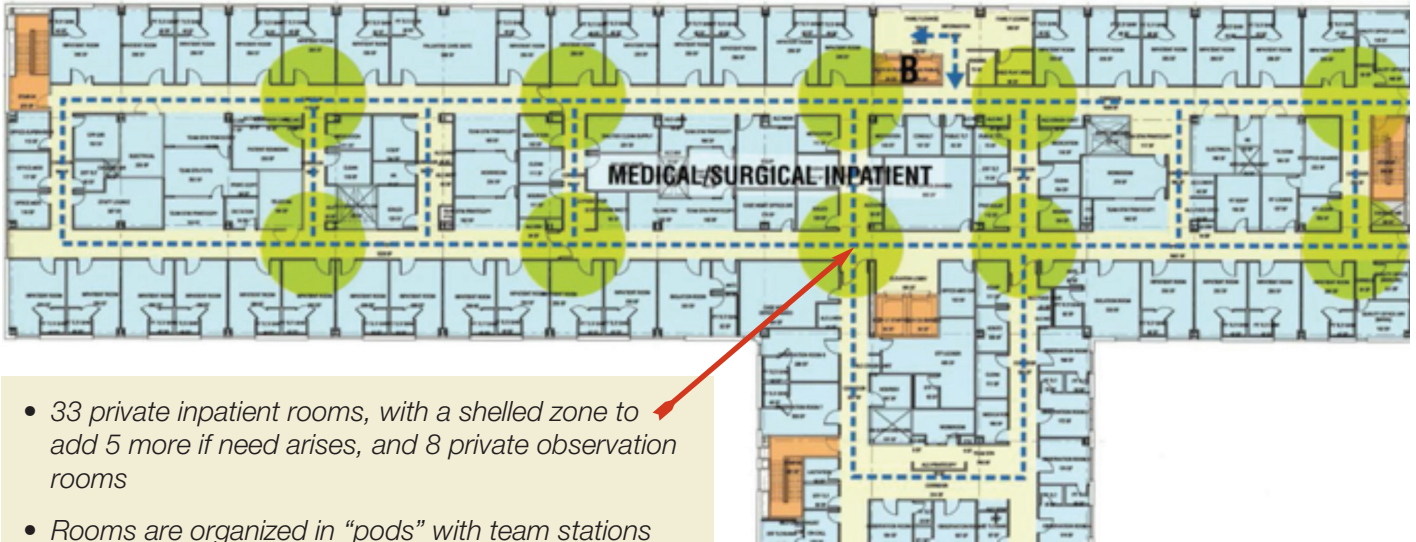
- Rooms are divided into 3 “zones” for staff, patients, and families
- Each inpatient room has a shower
- Sleep couches for family members
- New nurse call system
- Nurse servers with pass-through for sticking and accessing care supplies
- Electronic patient “white boards” to assure up-to-time information regarding the patient’s care
- New heating and cooling system with patient control



- A palliative care suite with adjoining family room
- 2 dedicated bariatric rooms with ceiling patient lift devices
- Dedicated consult rooms for private conversations with patient’s family



# Improving the Inpatient Experience: Med/Surg



- 33 private inpatient rooms, with a shelled zone to add 5 more if need arises, and 8 private observation rooms
- Rooms are organized in "pods" with team stations serving each pod

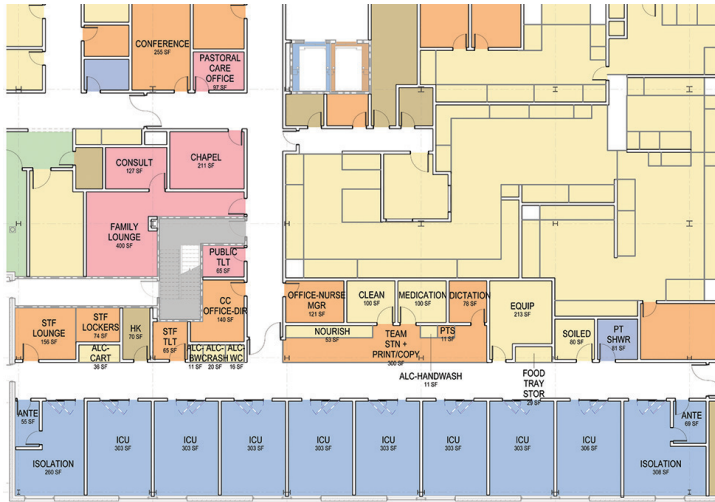
- Hospitalists support space right on the unit
- 5 rooms will have cameras for close monitoring of patients



- Dedicated meditation room, as well as a large family waiting area with a "kid's corner"

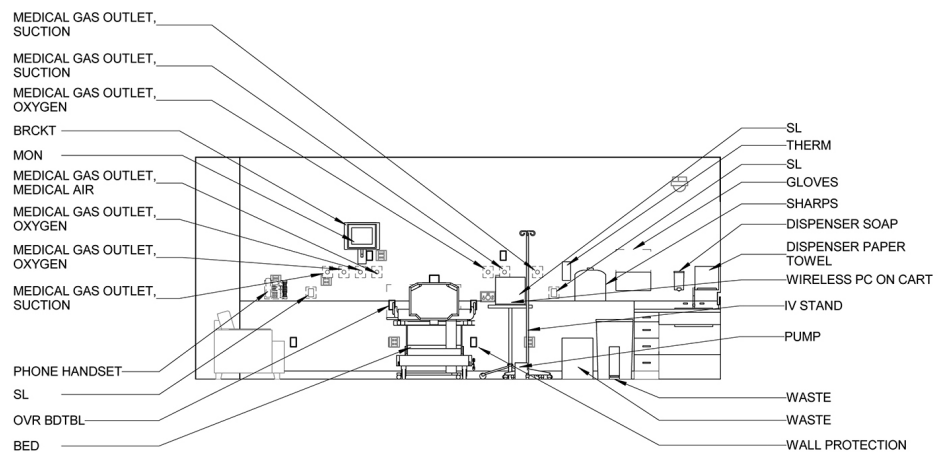


# Improving the Inpatient Experience: ICU/IMCU and Obstetrics



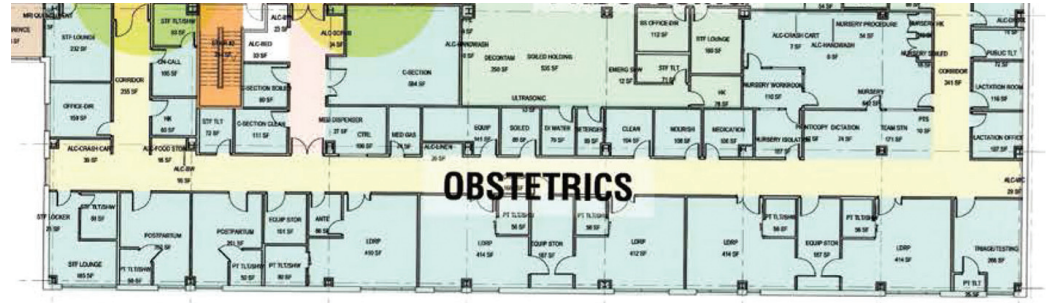
- 10 private patient rooms.
- 5 rooms will be equipped for “e-ICU” monitoring
- The Spiritual Room is located near the ICU/IMCU
- Dedicated consult rooms for private conversations with patient’s family

- Sleep couches for family members
- Each inpatient room has a shower
- Electronic patient “white boards” to assure up-to-time information regarding the patient’s care
- New nurse call system
- And of course, new heating and cooling system with patient control!



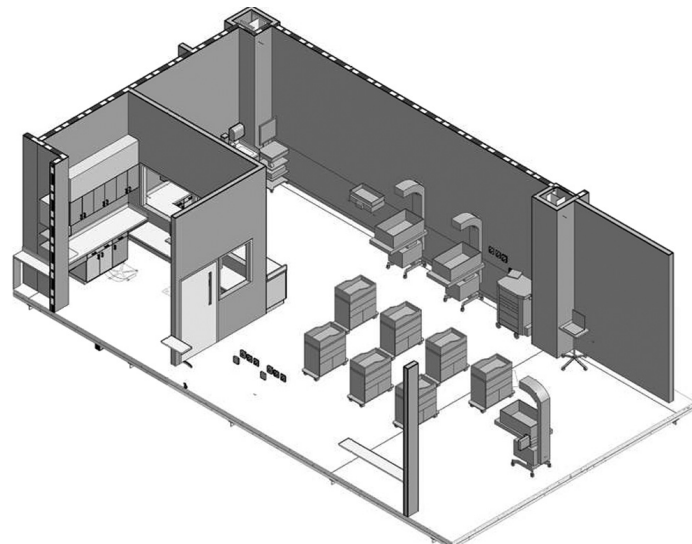
# Improving the Inpatient Experience: ICU/IMCU and Obstetrics

- 5 LDRP rooms, 2 post-partum rooms and a triage/testing room
- A dedicated c-section suite within the department



- Electronic patient “white boards” to assure up-to-time information regarding the patient’s care
- Nurse servers with pass-through for sticking and accessing care supplies
- New nurse call system
- And of course, new heating and cooling system with patient control!

- Large family waiting area with a “kid’s corner”



# Centers of Excellence: Ambulatory Surgery

## Objectives

Patients expect efficiency and convenience when they need an outpatient procedure. They also expect that operations are efficient, which translates into lower cost of care. This is the platform under which ambulatory surgery centers have sprung up across the country.

We were fortunate in 2001 when we built our Center for Outpatient Services (COS) that we were able to design to meet these needs. However, we have learned a lot since then related to additional opportunities to improve the environment to continue to strive to meet those expectations. Thus our objectives for this design, aligned with our key performance indicators (KPIs outlined in the cover letter) were to:

- Create a destination of choice for outpatient procedures
- Provide efficient work flow for staff and surgeons
- Eliminate unnecessary redundancy of resources (equipment, supplies)

• *Large waiting area with a nutrition center*

## Process

The design team included our surgery leaders and staff, with input from our surgeons. Many hours were spent designing optimal patient and staff flow with an eye toward not only access and convenience, but also importantly, patient and family comfort. Our initial design plan combined inpatient and outpatient surgeries.

We then became aware that many insurance companies are looking to guide their enrollees to ambulatory centers to receive their procedures, based on the assumption of lower cost care.

Research was done to assure we fully understood the specific facility requirement of ambulatory surgery centers, and we re-designed our new facility to meet these while still seeking to gain more efficiencies and patient and family comfort.

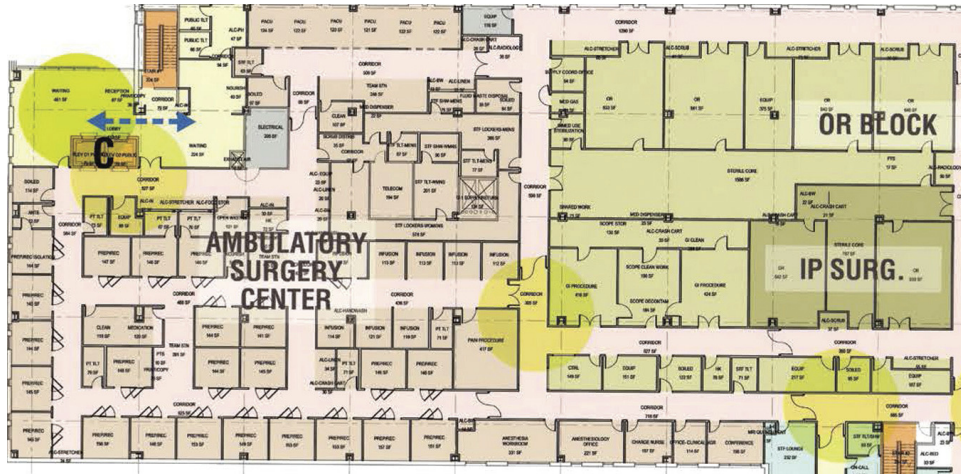


- *A separate parking lot and entry with a vestibule staffed by greeters and transported*

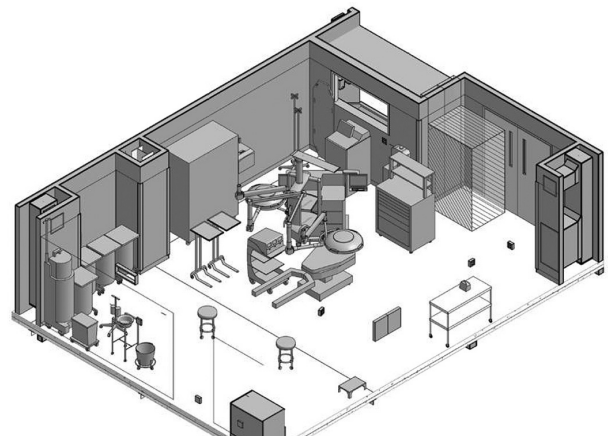


# Centers of Excellence: Ambulatory Surgery

- 4 OR suites, 1 minor procedure room, and 2 GI suites
- Adjacent to the Inpatient OR with 2 additional OR suites and the CVIS (Cath Lab)
- Also adjacent to central sterile
- 23 private Prep/Recovery rooms



- 6 PACU (Recovery room) bays
- 8 private infusion bays for patients receiving outpatient IV therapies
- Lots of storage space!





# Centers of Excellence: Women's Health

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## Objectives

BAMC has had a vision for comprehensive Women's Health Services for many years: *"Grow Women's Health Services through comprehensive, contemporary care delivered with a compassionate focus on the needs of women through all phases of life."*

In a business plan presented to our Board of Directors in 2007, the plan for this Service Line had a two-phased rollout, beginning with a "virtual" Center as the first phase of developing services that would be remarketed under the BAMC Women's Health Center brand.

The second phase was the completion of a building project in 2008-2009 to provide a consolidated physical location for a dedicated Center offering a wide range of women's services.

Unfortunately, many factors including purchasing our land and buildings from Marinette County and economic downturns prevented our full realization of the vision at that time.

## Process

The design team included:

- Our Women's Health Service Line Leader
- ABAMG OB providers' office leaders
- Our Breast Health Navigators
- Our bladder health rehab staff and leader
- Our ultrasound staff
- Our Mammography Manager

Many hours were spent assuring a design that provided convenience of access, a very good patient experience, and contemporary technology.

The Women's Health Center will be located on the second floor of the new Medical Office building, adjacent to surgery, convenient for women who have guided needle placements for open breast biopsies.

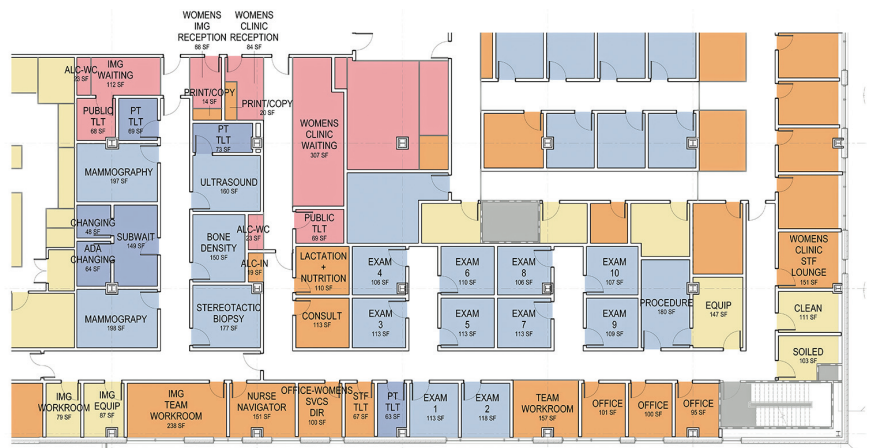
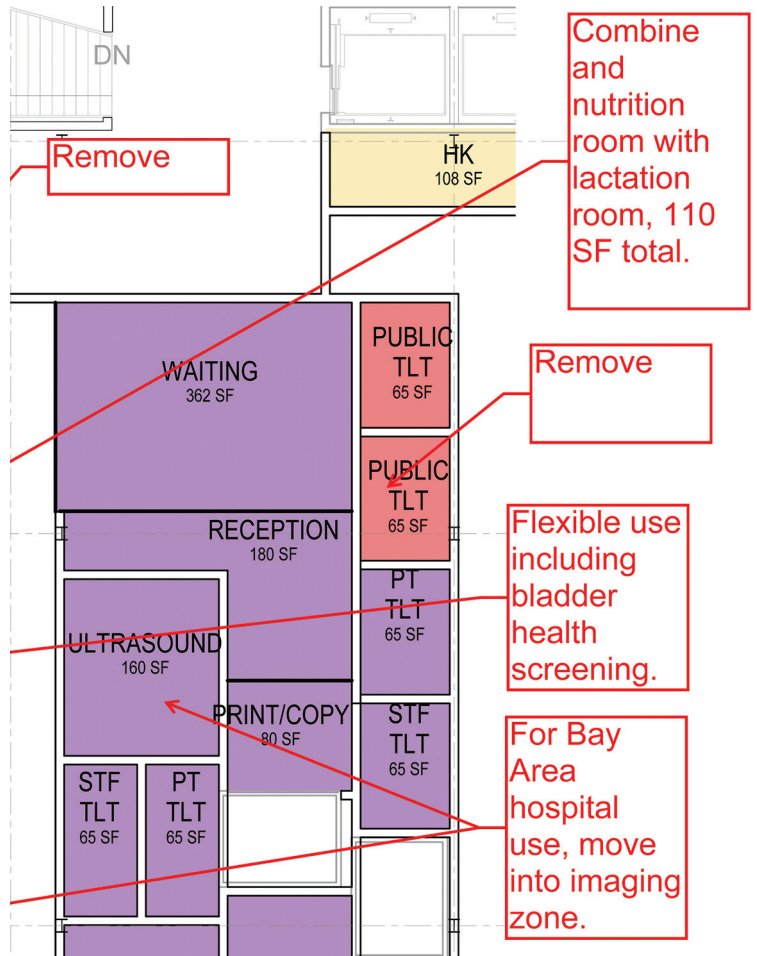
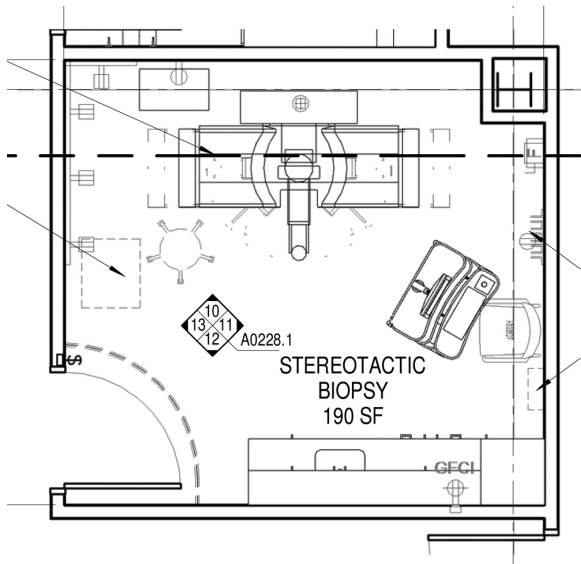


# Centers of Excellence: Women's Health

## Plan

The following services will be consolidated and located in our new **Women's Health Center**:

- OB/GYN provider clinics (9 exam rooms)
- Mammography and Tomosynthesis (new technology for breast imaging)
- Stereotactic Breast Biopsies
- Breast Health Navigators
- Lactation consultation
- Bone mineral density testing
- Breast ultrasounds
- Bladder rehabilitation therapy



# Centers of Excellence: Cancer Care

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## Objectives

The Aurora Bay Area Medical Group currently operates two Cancer Care Centers, one within our current hospital and the other at the ABAMG Health Center on Old Peshtigo Road.

Oncology consults and chemotherapy are provided at both locations. The Center within the hospital also provides radiation therapy.

The vision for oncology services was to provide a single comprehensive regional center for cancer care.

## Process

The planning team included leaders and staff from both Centers. Our pharmacists were involved as well to help design the chemotherapy workflow.

The team tapped into Aurora's expertise in view of their multiple Vince Lombardi Cancer Centers located throughout Northeast Wisconsin.



*The Cancer Care Center will be on the first floor of the Medical Office Building, with a dedicated parking lot and entrance. It is a future vision to enhance the landscape with the development of a healing garden adjacent to the Center.*

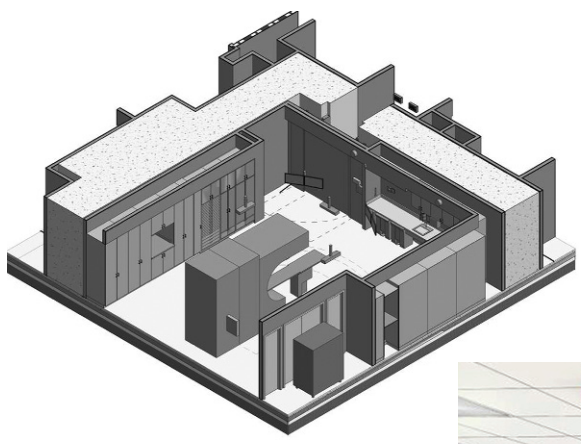


# Centers of Excellence: Cancer Care

## Plan

The following services will be consolidated and located in our new Cancer Care Center:

- A new linear accelerator and CT simulator, providing the latest technology for radiation therapy
- 8 medical oncology exam rooms
- 3 radiation oncology exam rooms
- 13 chemotherapy stations, with large windows and views into a landscaped courtyard and pond
- An oncology procedure room
- Chemotherapy compounding within the Cancer Center, which will enhance timeliness and also consultation between the physicians, nurses, and pharmacists. (currently it is compounded in our inpatient pharmacy and transported up to the Cancer Center)
- A dedicated phlebotomy station for patients needing lab work



# Centers of Excellence: Heart & Vascular Center

## Objectives

When BAMC organized our Heart & Vascular services in 1999, a vision was defined: *“BAMC will provide and market comprehensive preventative, diagnostic, treatment, and rehabilitative cardiac services through a coordinated product line of internal services and partnerships with tertiary providers.”*

Since then we have added many services to achieve this vision:

- Our CVIS (cath lab)
- Our Disease Management Services (CHF and anticoagulation monitoring)
- Seated nuclear medicine camera for stress tests
- External Counter Pulsation therapy

We have seen tremendous growth in the number of patients we have served through this service line.

Unfortunately however, because of space constraints, our services are scattered throughout the hospital and MOB. A key objective was to locate all of the current services in one location.



## Process

The design team included our cardiologists and their clinic and disease management staff, cardiac rehab staff, nuclear medicine staff, and ultrasound/echocardiography staff and leaders.

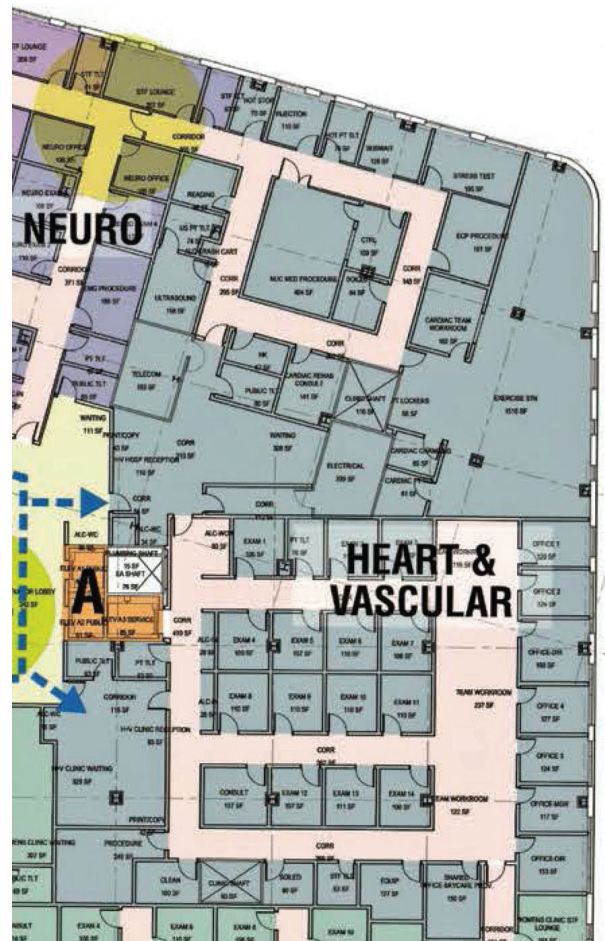
Hours were spent designing a comprehensive center with a focus on patient convenience, access, and comfort.

# Centers of Excellence: Heart & Vascular Center

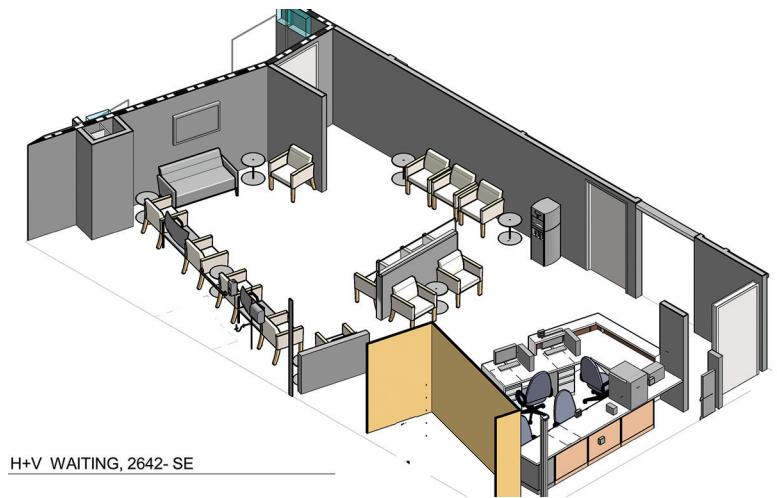
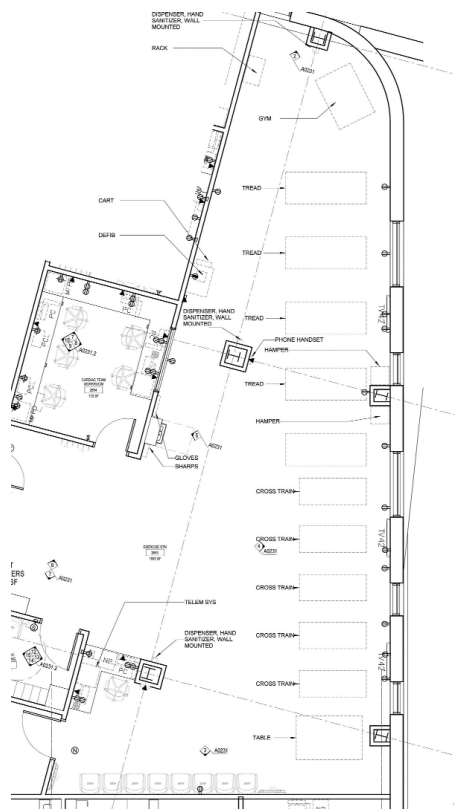
## Plan

The following services will be consolidated and located in our new **Heart & Vascular Center**:

- Outpatient (clinic consults) for patients with cardiac and vascular problems. We will have three full-time cardiologists and also receive support from four Aurora Bay Care cardiologists (14 exam rooms!)
- Disease Management Services: Congestive Heart Failure, Anticoagulation, and Pacemakers
- Vascular testing
- External Counter Pulsation therapy for patients with heart failure
- Cardiac and Respiratory Rehab Services (large windows with a view of the woods and wildlife!)
- Stress Tests with a seated nuclear medicine camera
- Echocardiograms



The Heart and Vascular Center is on the same floor as the CVIS (Cath Lab).



# Thoughtful Proximities and Backstage Travel

## Objectives

To support the key performance indicators identified for our new facilities (“KPIs” outlined in our cover letter), it was obvious that work needed to be done related to “flow” throughout our facilities.

Currently, adjacencies and access to frequently needed support services are not always convenient as a result of our need to create a patchwork of renovations and additions over the years. The patchwork approach has limited sharing of appropriate support space simply because of the distance between the users. Visitors after hours must travel through the Emergency Department to reach other areas of the hospital.

Also in our current situation, patient and public traffic often cross. Flow of supply deliveries (materials, pharmaceuticals, food service, etc.) travels the same corridors as do our patients and public. Some of our patient treatment rooms open onto public corridors.

The specific objectives related to our KPIs sought in our efforts toward “thoughtful proximities” and “backstage travel” includes:

- Improve the patient and family experienced (privacy)
- Eliminate unnecessary redundancy of resources (efficient use of space and materials)
- Decrease staff and provider workload through efficient workflow (thoughtful proximities)

## Process

Before any design plans were even drafted, initial user group meetings focused on patient, public, and staff travel. What services did patients most frequently have to travel from one point to another? What was the distance from their entry to the service needed? What were the flows of supplies to the needing departments? Which staff groups work most closely together?

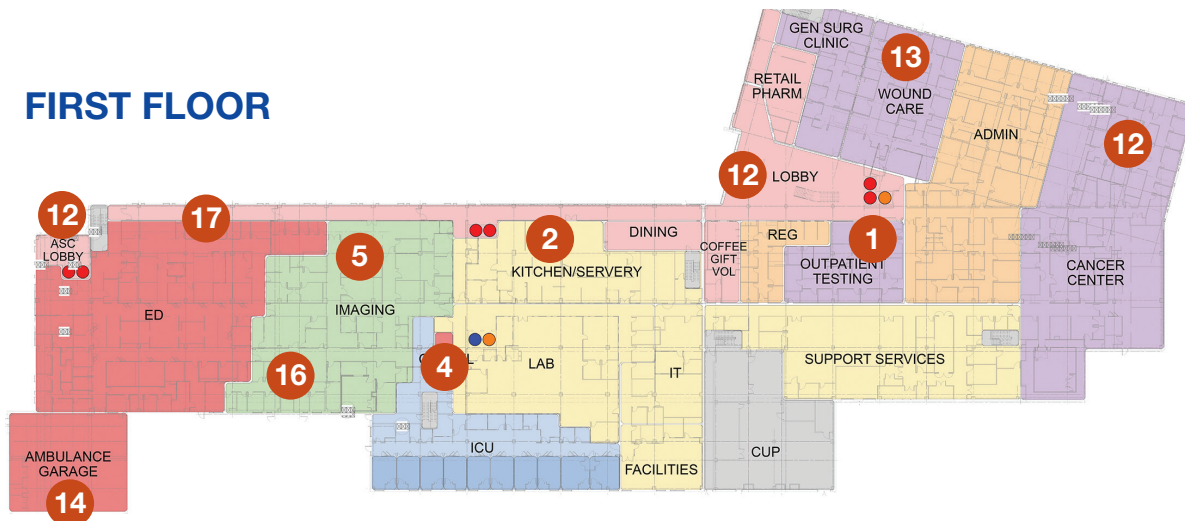
## Plan

The following features address the identified objectives in our design:

### Thoughtful proximities:

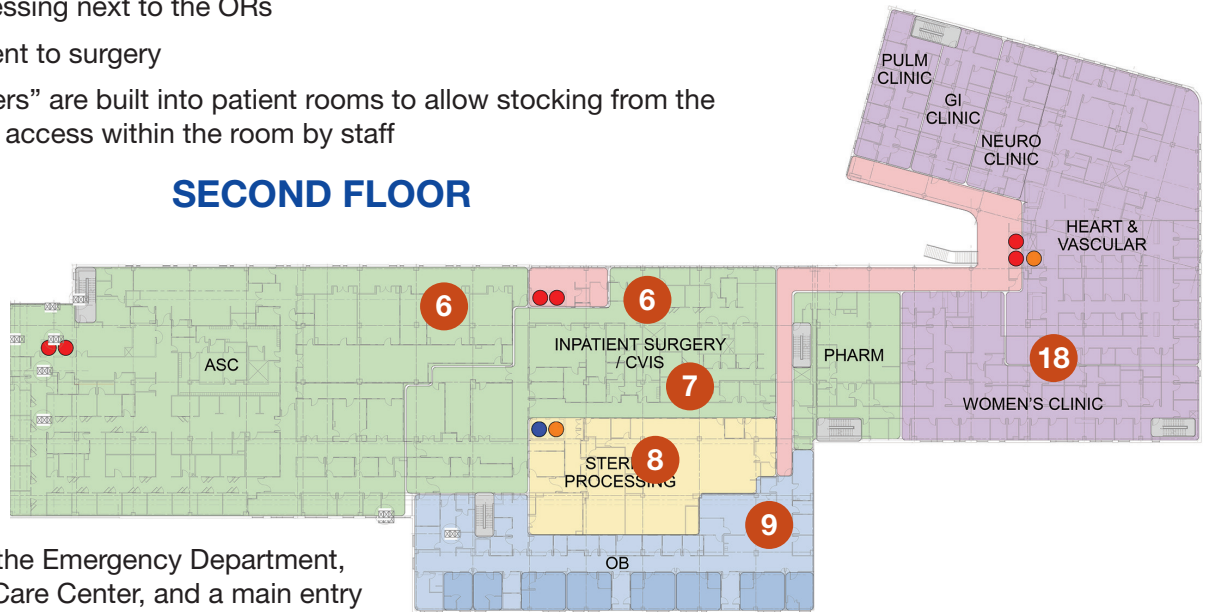
1. Direct access to registration and outpatient testing form the main lobby.
2. The dining area and gift shop are on the corridor from the main lobby.
3. Med/Surg has been organized in “pods” with support rooms (team stations, med rooms, nutrition centers, supplies and equipment rooms) in close proximity to each “pod.”
4. Our Spiritual/meditation room near the ICU and a small room up on Med/Surg
5. Diagnostic Imaging is next to the ED
6. Separate but adjacent outpatient and inpatient ORs
7. The CVIS, GI procedure rooms are in the same suite with Surgery

## FIRST FLOOR



## Thoughtful Proximities and Backstage Travel

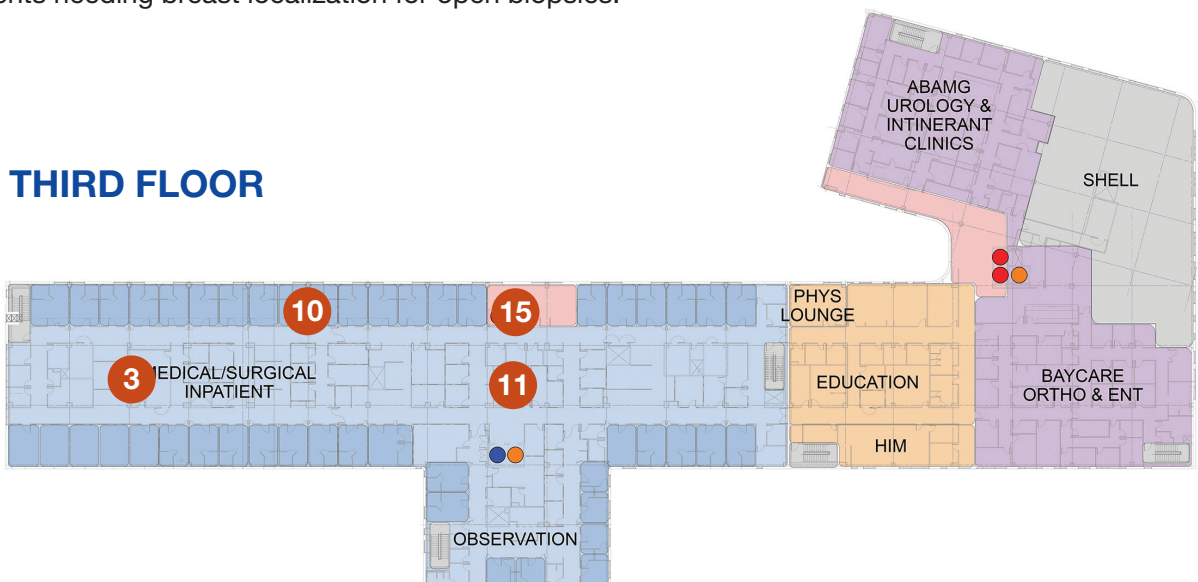
8. Sterile processing next to the ORs
9. OB is adjacent to surgery
10. “Nurse servers” are built into patient rooms to allow stocking from the corridor and access within the room by staff
11. Hospitalists sleep and workrooms are on the Med/Surg floor
12. Convenient entry and parking points for Ambulatory Surgery/GI, the Emergency Department, the Cancer Care Center, and a main entry for both Outpatient Services and Inpatient visitors.



13. The Wound Center and future hyperbaric therapy rooms are adjacent to the General Surgery Clinic.
14. The helipad is directly behind the ED and ambulance garage

### Backstage travel:

15. Separate elevators for the public and our patients and staff
16. Diagnostic Imaging (Radiology, CT, MRI, Nuclear Medicine, Ultrasound) are all in one suite of space with all patient rooms opening to the core and not into public areas.
17. A public corridor traverses from the ED entry to the main lobby.
18. The Women's Health Center's breast diagnostics are on the same floor as surgery for private travel of patients needing breast localization for open biopsies.





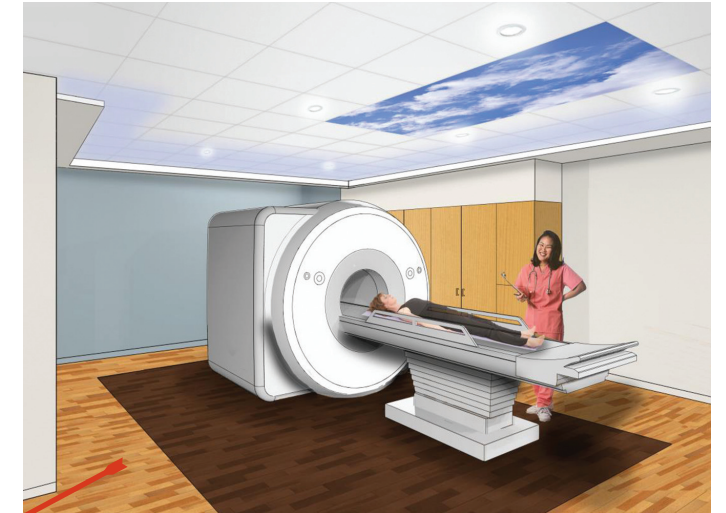
Thoughtful Proximities and Backstage Travel



Direct access to registration and outpatient testing from the main lobby



Our Spiritual/Meditation Room near the ICU



Diagnostic Imaging is next to the ED



Helipad is directly behind the ED and ambulance garages



Main entry for Outpatient Services and Inpatient visitors



The dining area and gift shop are on the corridor from the main lobby



# Improving the Emergency Department Experience

## Objectives

The Emergency Department facility planning team identified several objectives to be achieved in designing the new Emergency Department, with the ultimate goal of improving our patient's experience:

- Assure patient privacy
- Improve patient comfort
- Improve patient throughput (decrease length of an ED patient visits)
- Enhance patient safety

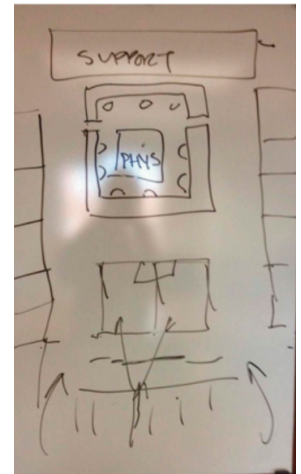


## Process

Research was performed regarding contemporary ED department design. Multiple sources were utilized including the HealthCare Advisory Board, the American College of Emergency Physicians, and the depth of expertise provided by our new partner, Team Health. In addition, a randomized survey was conducted of patients to gather their input on the most important features they would look for.

A site visit occurred to Upper Valley Medical Center in Troy, Ohio to preview their "split flow" model designed to improved patient throughput.

Most importantly, staff and physicians spent many hours assuring the design corrected all of the improvement opportunities we have identified within our existing E.D., as well as to assure we planned for the future.



## Emergency Department Plan

### Patient Privacy:

- 18 Private rooms
- A dedicated consult room to gather large families for updates for critical events

### Patient Throughput:

- 4 Vertical treatment rooms, located near the entry for rapid treatment of non-emergent patients
- A room dedicated for waiting for results, connected to another room dedicated for discharge instructions and education



# Improving the Emergency Department Experience

**Emergency Department Nurse Station**



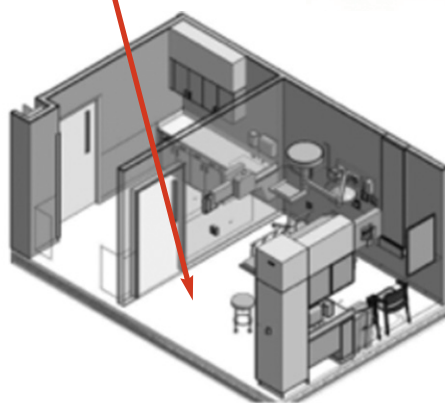
There will be dedicated space located in the ED waiting area for security to maintain a presence as well as access to computer and phone so that they can monitor different locations through security cameras.

**Emergency Department Reception**



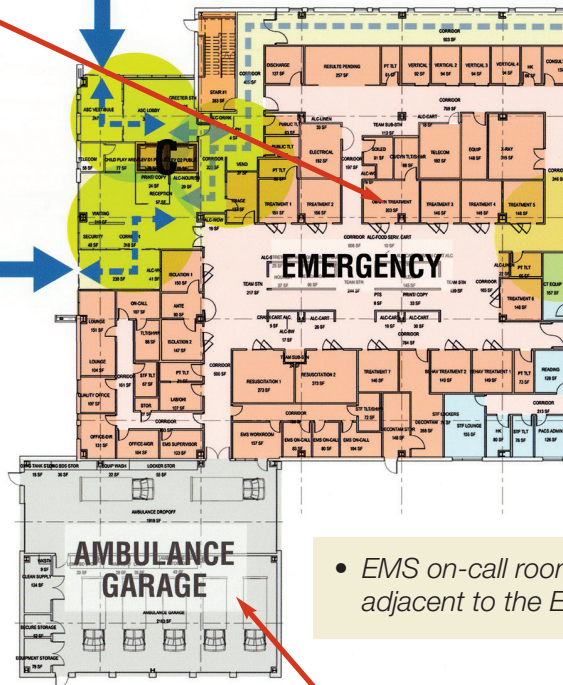
**Patient Safety:**

- 2 rooms designated and set up for behavioral health patients
- Dedicated decontamination room
- 2 rooms designated for isolation patients with an anteroom



**ASC ENTRANCE**

**EMERGENCY ENTRANCE**



- ED located next to Diagnostic Imaging and ICU Departments

- EMS on-call rooms adjacent to the ED

- An enclosed ambulance drop off bay protecting patients from the elements and ensuring ambulance patient treatment supplies will remain at a stable temperature year round

# Centers of Excellence: Laboratory

## Objectives

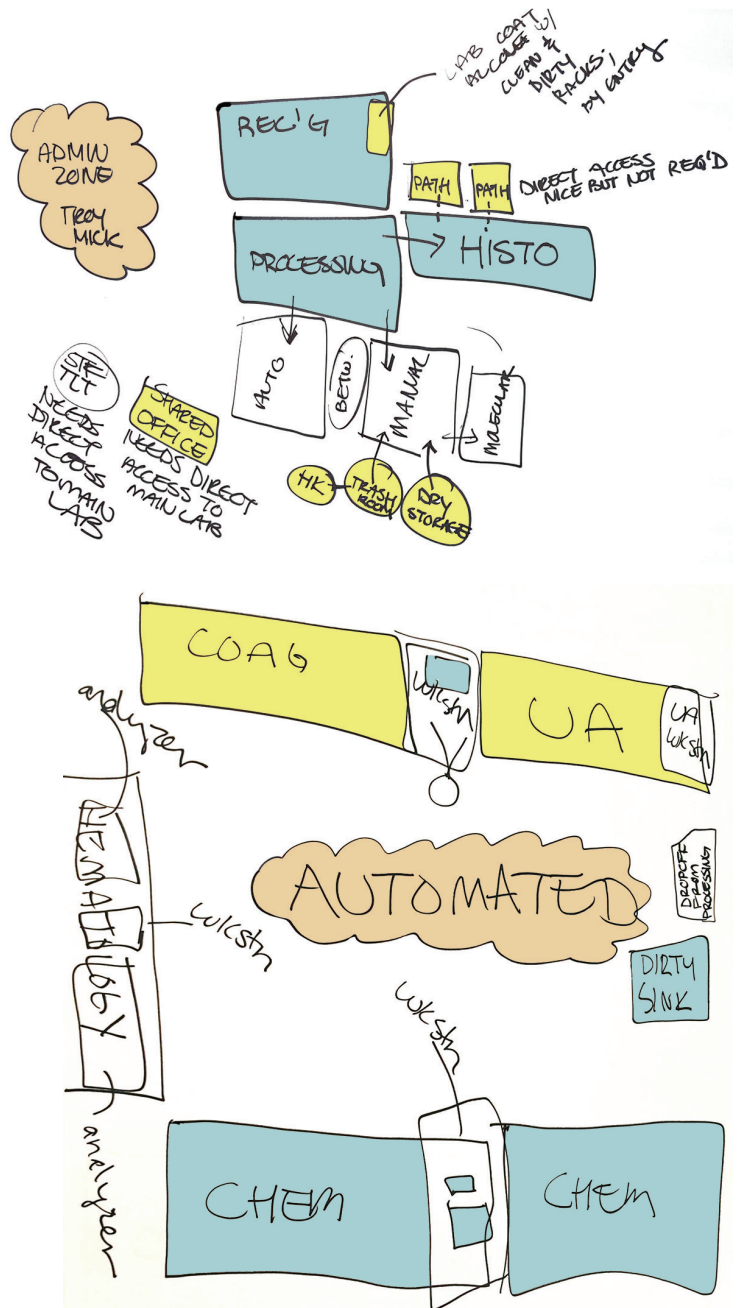
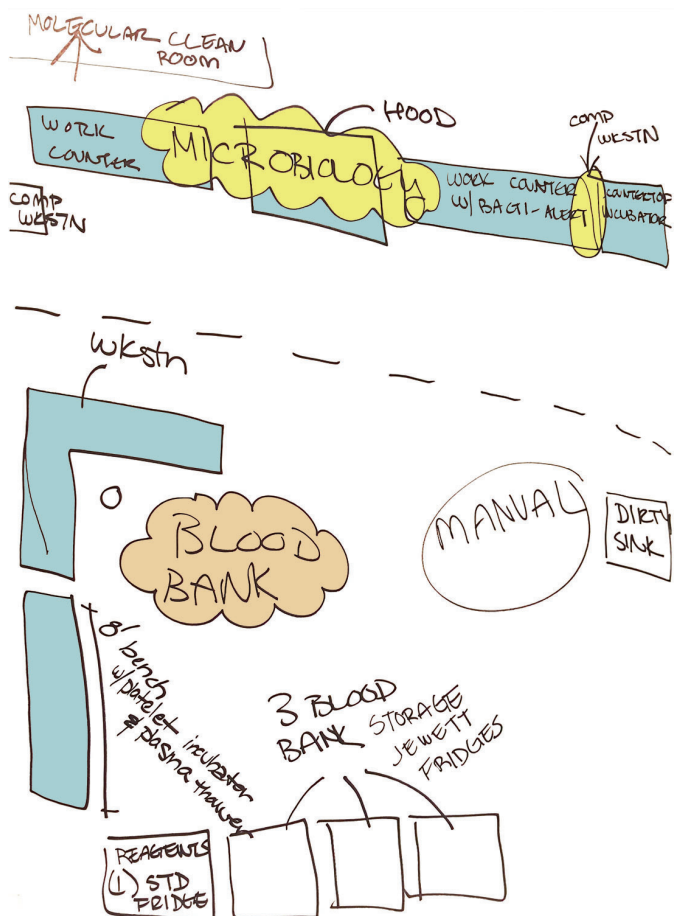
BAMC currently has a very spacious laboratory. Unfortunately that translates into a lot of steps for staff as they receive and process specimens for the large varieties of tests we perform.

The objectives sought in facility planning for the lab were:

1. Improve staff workload by designing efficient workflow
2. Eliminate unnecessary redundancy of resources (equipment, supplies)

## Process

Our partners in laboratory services, ACL brought a lot of expertise to the table in helping us design the new lab. They have designed many hospital labs, and shared with us that they have learned something new with each of these endeavors. Together with our ACL support and support from equipment and lab cabinetry vendors, our Lab leaders and staff collaborated on our new lab design.

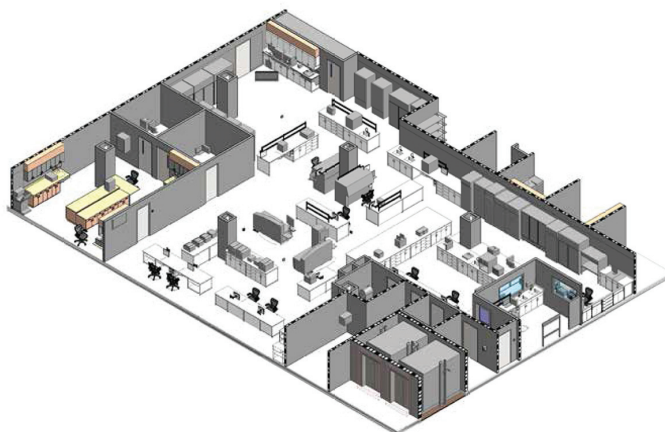
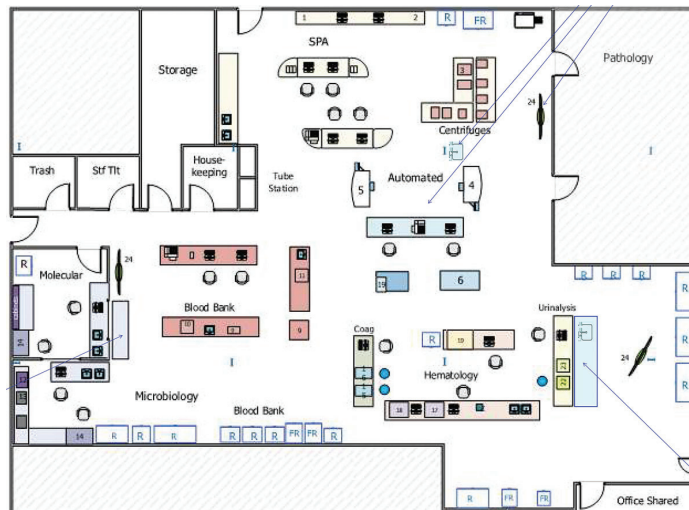
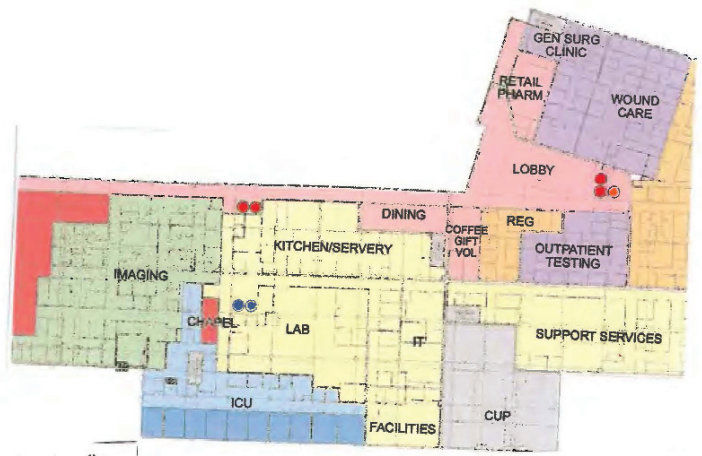


# Centers of Excellence: Laboratory

## Plan

The lab is located on the first floor of the hospital, near the outpatient lab draw area. Some of the redesigned features to meet the intended objectives:

- Open “Line of Sight” – removed physical barriers to allow for better communication.
- Design includes a “Specimen Processing Area” to advantage the use of staff and space for all specimens received in the lab. This includes all aspects of a specimen’s journey from the time it comes through the door, is processed for testing either in-house or for delivery to the central lab via courier, results of the testing into the patient’s medical record, and finally storage of the specimens.



- Centralizing all automated testing performed on analyzers into a “Core” area to leverage efficiencies for larger volume routine and stat testing and accounting for decreased staffing on off-shifts.
- Creation of a “Manual” work cell for lower volume testing not requiring immediate attention.
- Design includes a dual pneumatic tube system to increase efficiency in delivery of specimens to the Lab.
- A Molecular (PCR) testing room was added to account for new technologies in the future.
- Redesign and placement of the Anatomic Pathology and Histology area adjacent to specimen processing and pathology staff.

# Medical Records Space for the New Hospital

## Objectives

The new hospital is being designed without any paper medical record space available. The goal of this team is to come up with options of where BAMC can store current, past and future paper medical record storage for the long term.

## Plan

The following space options were identified by the team and prioritized in the following order below.

### Use University Drive Building:

There is a cost to remodel and an annual cost for operational expenses



#### Pros:

- We would have control of our own records
- One location to obtain records from
- One-time cost for building, shelving, security
- Permanent storage site for all other record types
- Data connectivity already exists

#### Cons:

- Everything needs to be indexed
- Annual cost of maintenance
- We would have to manage multiple retention/destruction policies (BAMC, ABAMG, AMG)
- Building unavailable for lease or sale

## Process

A multi-faceted team was formed to look at all possible options to store medical records that would ensure the records were safe and easily attainable. The team consisted of the following:

- Tim Klein – Team Lead
- Jessica Johnson – Co-Team Champion
- Brian Gamelin – Co-Team Champion
- Pete Eisenzoph – IT
- Melanie Tiedt – Aurora (ABAMG)
- Shelly VanVooren – Aurora
- Thea Hicks – BAMC (ABAMG)
- Amy Kriedeman – HIM, Subject Matter Expert
- Heidi Fox – HIM, Subject Matter Expert
- Molly Martin – Outside Eyes

The team toured current spaces that currently store medical records. There were seven areas that store hospital records, eight BAMC clinic records areas, and seven Aurora clinic records areas.

### Continue to maintain records in current hospital building:

There will be some cost to move shelving and records and security maintenance



#### Pros:

- No initial moving costs
- Lower operational costs, unless leasing from future owner

#### Cons:

- Would need a plan for records by 2019
- Short-term solution



# Medical Records Space for the New Hospital

## Outsource Record Storage:

Received bids from two companies: Iron Mountain and IOD

Cost – Initial cost plus annual operation cost



### Pros:

- They are the experts
- One location to request from
- Takes the burden off of staff
- They would manage the retention policy
- Charging for patient requests (could be pro or con)

### Cons:

- HIM staff are experts on BAMC specific records
- Cost
- Giving up control
- Giving up level of service
- Potential for a quality impact
- Timeliness of retrieval/receipt
- Charging for patient requests (could be pro or con)

## Scan Records:

Received bids from two companies – IOD and ARMS  
Very costly



### Pros:

- Paper is all gone
- Ease of retrieval
- Always accessible
- No retrieval fee

### Cons:

- Cost
- Waste of effort

## Build a new storage facility:

Received bid from local contractor to build pole building on BAMC owned land



### Pros:

- We would have control of our own records
- One location to pull from
- One time cost for building, shelving, install of cameras and alarms
- Permanent storage site for all other record types

### Cons:

- Cost to move records
- Would need to index everything
- Annual Cost of maintenance and utilities
- We would have to manage the destruction policies (BAMC/ABAMG/AMG)

## Purchase/lease a new storage facility:

Purchasing new building would have a high initial cost

Leasing building would have a higher annual cost



- Same Pros and Cons as building new

The team presented their plan and recommendation to the Facilities Steering Committee on December 20, 2016. The committee decided to stay in the current facility until we decide to do with the building. We will then revisit the options to choose the best one.

This process helped free up very valuable space in the new hospital that would have been used for paper record storage.

# Materials Management: Delivering Supplies for New Hospital

## Objectives

Keeping our facilities clean and clutter free is the ultimate goal at BAMC, so with that in mind the new facility has been designed to include space in each area for supplies to be delivered and staged so that nothing is dropped off or kept in the hallways.

## Process

A multi-faceted team was formed to look at all possible options to deliver and store supplies in each department of the new facility. The team consisted of the following:

- Tim Klein – Team Lead
- Kent Demien – Co-Team Champion, Materials Management
- Michelle Mansfield – Co-Team Champion, Materials Management
- Denise Witt – Materials Management
- Brittany Grabowski –Pharmacy
- Jackie Zablocki – Surgery
- Tess Dreyer – EVS
- Mike Hubert – IT
- Christine Walters – Med/Surg
- Jodi Feldheim – Architect, Cannon
- Kevin Broich – Architect, Horty Elving

The team toured the facility looking at all areas that Materials Management uses carts to deliver supplies.

The following areas were identified by the team:

DEPARTMENT	NEEDS	DOOR
IT	Needs a receiving area	4 ft.
Pharmacy	Needs a receiving area	4 ft.
Dietary	Needs a receiving area	2x Door
Facilities	Needs a receiving area	4 ft.
EVS Storage	Needs a receiving area	Door and 1/2
Cancer Center	Needs a receiving area	4 ft.
ED	Needs a receiving area Need a new space for bath blankets	4 ft.
Volunteer	Needs a receiving area	4 ft.
OP Surgery/GI/ Surgery Sterile Area	Consider one space for all of these areas	
OP Surgery	Needs a receiving area	4 ft.
GI	Needs a receiving area	4 ft.
Surgery Sterile Area	Need an alcove or something for a drop off area Round trip totes instead of boxes	
Cath Lab	Needs a receiving area	4 ft.
OB	Needs a receiving area	4 ft.
RT	Needs a receiving area	4 ft.
DI	Needs a receiving area	4 ft.
CS	Needs a receiving area	4 ft.





# Materials Management: Delivering Supplies for New Hospital



## Plan

With the help of the design team each area identified was designed with a receiving area and a door large enough to receive supplies on the appropriate delivery cart.

## Exchange Cart System

The team also looked at a new delivery system that will be used to deliver supplies to the patient care areas called the exchange cart system.

In the current system the Supply Aide from Materials Management will fill a cart in Materials Management with supplies and go to each patient care area at least twice a day to fill the supply areas.

In the new exchange cart system there will be two carts for each area. The cart will be filled in Materials Management and brought up to the floor and exchanged once a day.

This will be a more effective and efficient system.

## Nurse Servers

The new facility will also have nurse servers in each of the inpatient rooms. This nurse server will have a door in the hallway where the Supply Aide from Materials Management will be able to stock supplies for each room without disturbing the patient or staff.

There will be a locked door inside the patient room that will allow staff to grab supplies for the patient. The locked door allows the nurse server to remain stocked without replacing supplies after each patient due to possible contamination.

## Conclusion

*With each department getting a receiving area and with the creation of the exchange cart system and the nurse servers in patient rooms this will allow us to keep our hallways clear of clutter and safer for patients, visitors and staff.*

# Provider Access and Efficiencies

## Objectives

When BAMC launched our affiliation with Aurora, we clinically integrated the employed local providers (physicians and extenders) into the Aurora Bay Area Medical Group (ABAMG).

Current locations for the providers include sites within the BAMC hospital building, in the MOB attached to BAMC, and at three Health Centers: one on University Drive, one on Old Peshtigo Road, and one in Peshtigo.

The objectives sought in facility planning for these providers were:

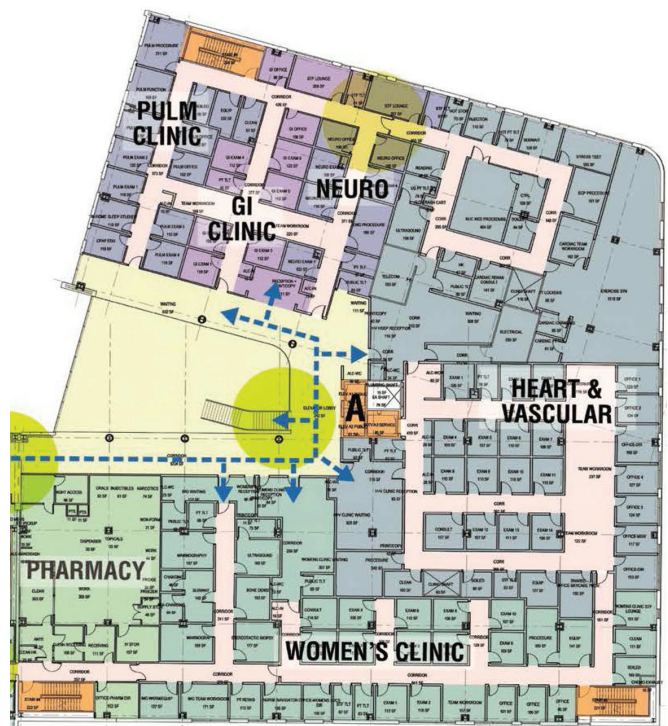
- Assure easy access for all patients
- Support efficiency for those providers who attend patients in their clinics and also provide patient consults and/or perform procedures in the hospital.
- Assure that patients had same site access for commonly performed tests associated with their visits to the providers

## Plan

The following locations for medical specialties and ancillary services were identified:

### BAMC Medical Office Building

*General Surgery, Wound Clinic, Heart & Vascular, Medical Oncology, Radiation Oncology, Pulmonology, Gastroenterology, OB/GYN, Neurology, Urology, Orthopedics, ENT; Access to full ancillary testing at the attached hospital.*



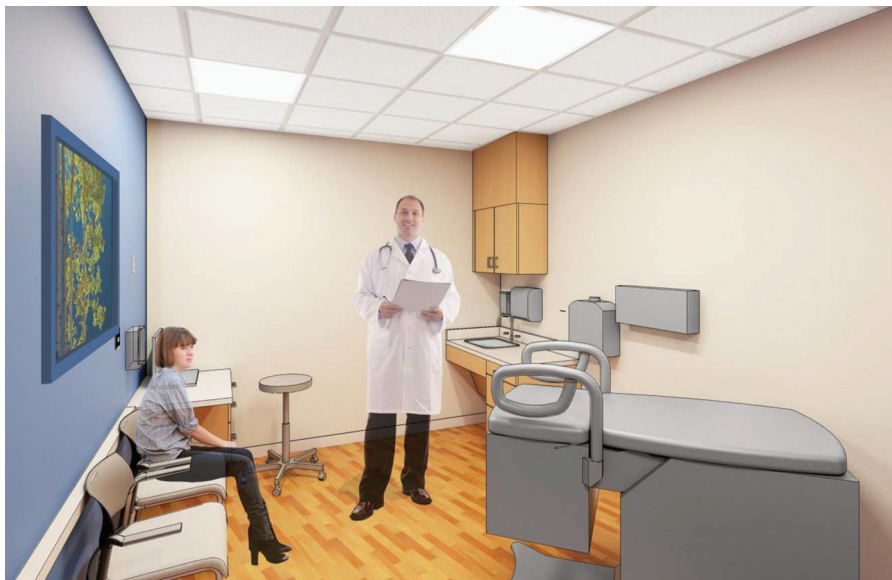
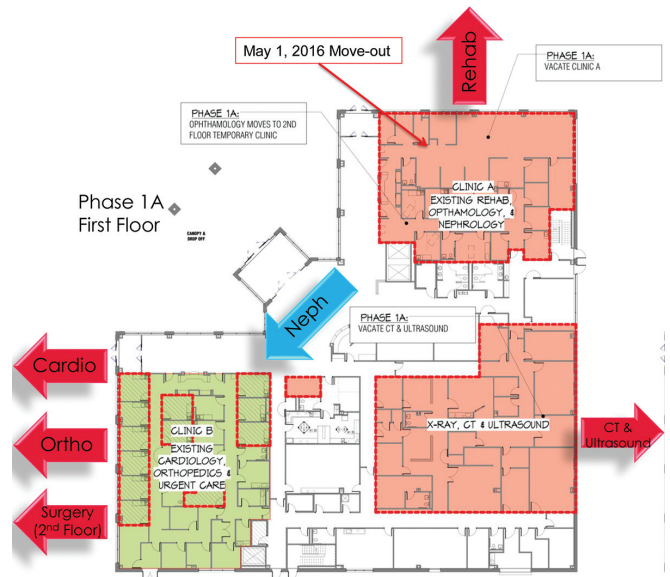
# Provider Access and Efficiencies

## Process

Representatives from BAMC, Aurora HealthCare and ABAMG began by segmenting providers into those that attend hospital patients and those who do not. Commonly ordered same-visits test were identified for each specialty.

### Aurora Bay Area Medical Center Old Peshtigo Road

*Family Medicine, Internal Medicine,  
Ophthalmology, Psychology, Urgent  
Care; Lab and X-ray*



## Remote Sites

### Peshtigo

*Family Medicine*

### University Drive

*Pediatrics*

### Crivitz

*Family Medicine*



# Centers of Excellence: Equipment Planning

## Objectives

Concurrently with space planning for our new facilities, we developed a plan for every single piece of equipment we will need to operate in the new facility. This was important to accomplish at the same time as space planning to assure that our needed equipment fit into our newly designed rooms and the necessary utility hookups were provided in the right locations (plumbing, electrical, both on and off generator, special cooling needs, and data).

Our objectives for equipment planning included:

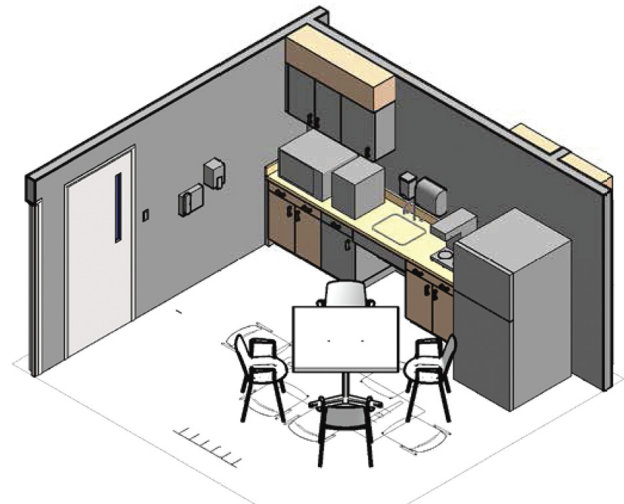
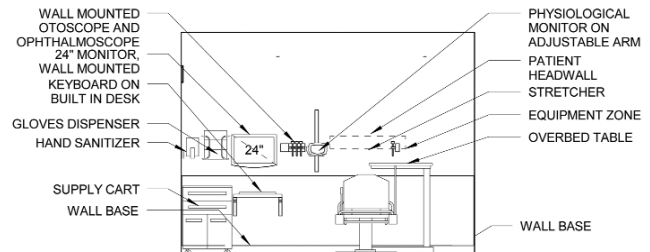
- Assure that we accounted for everything necessary to operate in our newly designed space
- Be efficient in transferring rather than replacing equipment which still had a useful life
- Provide “specifications” for all equipment to the architects to assure we designed correctly.
- Anticipate future needs for equipment and assure our new design supported change

## Process

All leaders, both hospital and MOB were involved in equipment planning over a 12-month period. There were several phases of planning:

1. The first phase involved the creation of a matrix inventory of every single type of needed equipment, identifying which department had the need, how many were needed, if it is fixed or mobile, if it is to be moved, eliminated, or newly purchased, what utilities were needed, and what the cost will be of all new or replacement purchases.

2. We then created “Room by Room Logs” locating each piece of equipment in the type of room for which it will be utilized. Rooms that have multiple locations were treated a “prototypes”, with similar equipment planned for them, but individualized as indicated by the user groups. (Examples include equipment rooms, staff lounges, clean and soiled utility rooms), Equipment “specs” drawings were provided to our design team.



### BAMC - Medical Equipment Listing (12-29-16)

Description	Equip ID	Vendor	Model	New	Existing	Future
Analyzer, Blood Gas- Countertop	13165B	Radiometer America	ABL825FLEX		X	
Analyzer, Chemistry- Floor Model	21580B	Siemens Healthcare Diagnostics	DIMENSION EXL LM		X	
Analyzer, Coagulation- Countertop	687B	Siemens Healthcare Diagnostics	SYSMEX CA1500		X	
Analyzer, Hematology- Countertop	3798B	Sysmex America	XT-2000i		X	
Analyzer, Immunoassay- Countertop	2365B	Biomerieux	MINI-VIDAS		X	
Analyzer, Immunochemistry- Floor Model	29824B	Siemens Healthcare Diagnostics	Advia Centaur XP		X	
Analyzer, Microbiology- Countertop	15796B	Biomerieux	BAC T/ALERT 3D		X	
Analyzer, Platelet- Countertop	10351B	Siemens Healthcare Diagnostics	PFA 100		X	
Analyzer, Pulmonary Function	19475A	Carefusion (Respiratory)	VMAX ENCORE	X		
Analyzer, Sed Rate- Countertop	27768B	HemaTechnologies	ESR STAT PLUS		X	
Analyzer, Urinalysis- Countertop	24748B	Beckman-Coulter	IRICELL 2000		X	
Analyzer, Urinalysis- Countertop	9593B	Siemens Healthcare Diagnostics	CLINITEK 50		X	
Analyzer, Urine Chemistry	23997A	Siemens Healthcare Diagnostics	CLINITEK STATUS +		X	
Anesthesia Machine	18386A	Draeger Medical	FABIUS GS PREMIUM	X		
Apron Holder, 23W 7H 6D Wall Mounted	32825B	BAMC	6D 23W 7H		X	
Apron Holder, 30W 7H 6D Wall Mounted	32821B	BAMC	Custom		X	
Apron, Lead	32609B	BAMC	Not Provided		X	
Apron, Lead Free	28231A	Patterson Dental	DENTAL PANORAMIC APRON		X	
Aspirator, General Purpose	4646A	Allied Healthcare Products	GOMCO 4005	X		
Aspirator, General Purpose	3760A	Ohio Medical Corporation	MOBLVAC III		X	

## Centers of Excellence: Equipment Planning



3. Equipment procurement (purchasing) planning began once all of our items were accounted for. The focus was on assuring all necessary steps to serve our first patients in the new facility would be accomplished prior to our move date. For some equipment this will be a simple purchase and install. For other major equipment we need to plan time for negotiating best price, storage ("staging"), commissioning (by accreditation agencies), staff training, vendor installations, and use of mobile equipment during the transition.
4. In 2017 we will perform the exercise of designating a unique identification number for every piece of equipment to be moved, aligned with its assignment to the specific room it will be moved to. We will then tag all equipment with this number.



5. Another critical planning phase which will occur in 2017 is "transition planning." This phase involves planning for continuous operations as we move to the new facilities. This is quite complex, recognizing that for a period of time we will need to be operational at both sites.



### Plan

Our equipment matrix and Room by Room Logs were complete by October 31, 2016. The matrix has 2,638 rows of equipment items, with a total spend of \$18 million, half of which will be purchased as routine capital equipment in the years' proceeding the move.

For example, new beds and stretchers were purchased in 2016, in 2017 we will purchase anesthesia machines, a PFT lab, and an ECP unit, and in 2018 an MRI and Mammography unit.

Our procurement plan was completed in December 2016.

In 2017 we will complete our unique identification and tagging phase, as well as our transition plan.

# Centers of Excellence: Visual Cues

The paint palette for our new facilities was chosen with care. Our objectives were to:

- To support our vision of creating an engaging community beacon that enhances patient experience and creates a destination of choice
- To provide a calming, stress reducing environment by bringing “the outside in”
- To use colors as a means of way finding

Dual hues of natural colors were identified. The lighter colors will be used as accents within department spaces, and the complimenting darker hue will be used at reception areas. Each department was assigned one of the four select colors.

## Level 1

### HOSPITAL

### MOB

BLUE



IMAGING

ORANGE



INTENSIVE CARE UNIT

GREEN



EMERGENCY DEPARTMENT

BLUE



CANCER CENTER

ORANGE

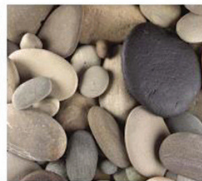


GEN SURG OUTPATIENT TESTING

GREEN

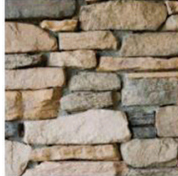
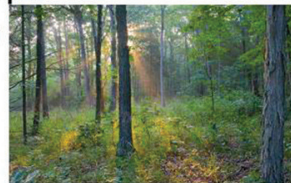


WOUND CARE REGISTRATION



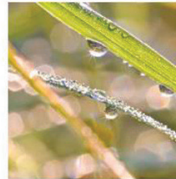
## Patient Experience

Stress Reducing  
Engagement  
Positive  
Welcoming



## Wellness

Well-being  
Therapeutic



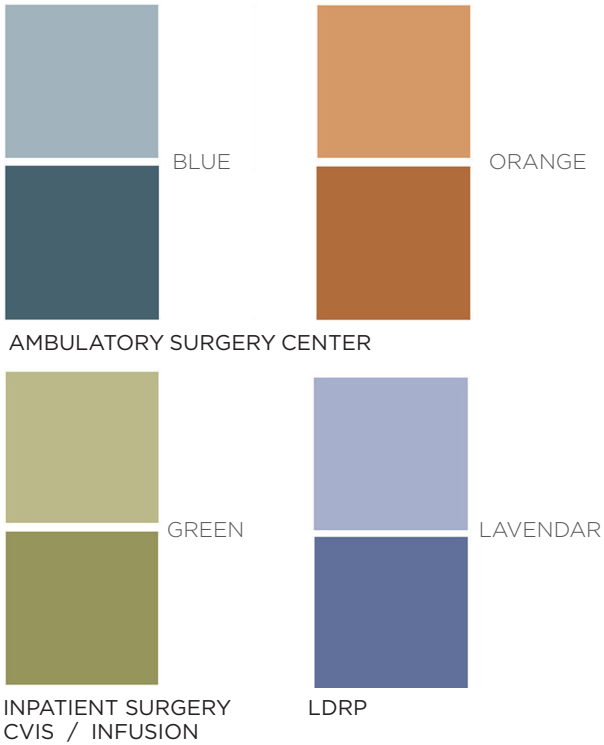
## Community

Destination  
Hub of Activity

# Centers of Excellence: Visual Cues

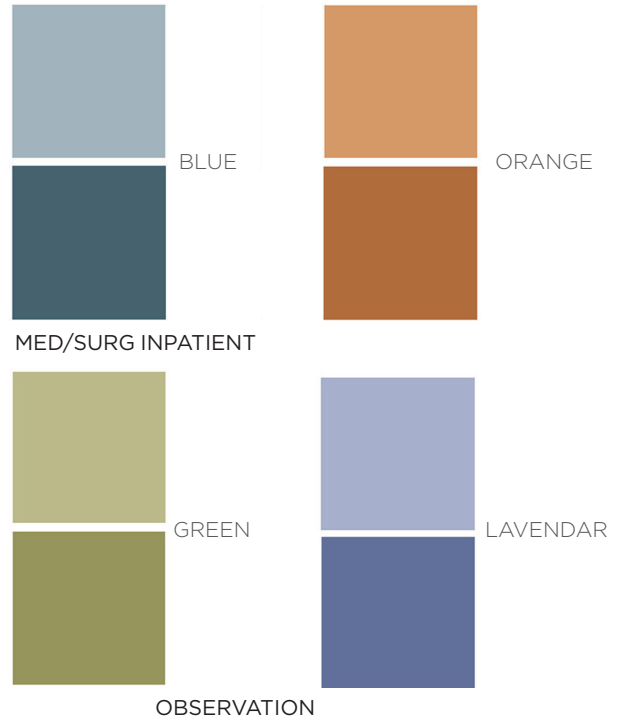
## Level 2

### HOSPITAL



## Level 3

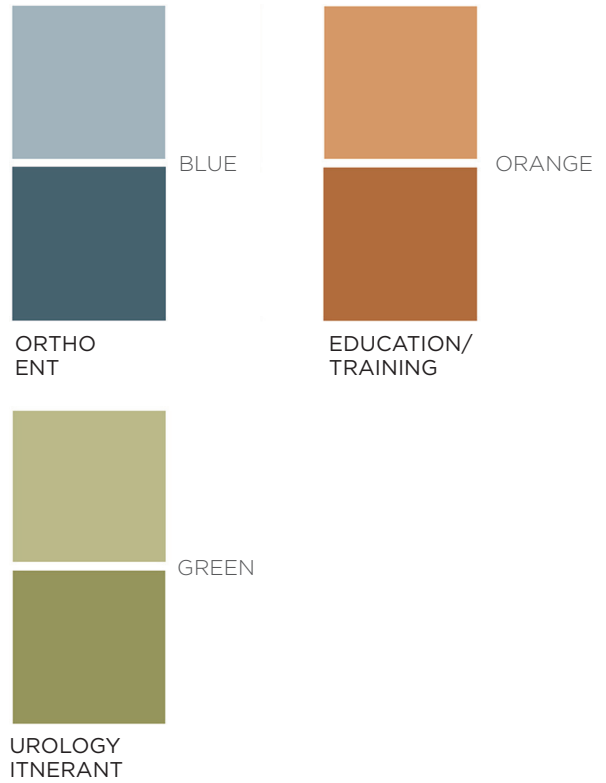
### HOSPITAL



## MOB



## MOB



# Our Mission

We are **Your Partner** for healthcare.

Providing access to exceptional health and wellness services for all.

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# Our Vision

Bay Area Medical Center will be...

## Exceptional

We will deliver and demonstrate outstanding health outcomes and patient/family experiences.

## Engaged

We will attract, retain, and develop the best people and work collaboratively with patients and their families.

## Regional

We will attract and serve patients from our local community and the region.

## Accessible

We will deliver care that is easy to access and well coordinated.

## Efficient

We will deliver care that is cost-effective for all.

## Comprehensive & Connected

We will deliver a broad array of health and wellness services that are connected to world-class providers.

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# Our Values

## Compassion

Recognize the human needs of others.

## Teamwork

Support each other and work together.

## Patient-Centered

Care revolving around and involving the patient and family.

## Respect

We value our patients, their families and each other.

## Service

Exceed expectations with every encounter.

**Bay Area  
Medical Center**  
*An Aurora Health Care Affiliate*