



# Petersburg Medical Center

**A brighter tomorrow starts today**

**It's the dawning of a new day  
in quality patient care and  
operational efficiency**

## Trinity:NAC







# Program

## Setting the Stage

*Introductions*

*National Expertise & Local Knowledge*

*Our Purpose for Planning & Design of Rural Health*

## Mapping our Course

*Exploring Challenges & Opportunities for your Replacement Hospital*

*Mapping the Future with Confidence*

*Planning a Hospital that is Accessible, Affordable & Adaptable*

## Seeing it Through

*Your Steward for a Successful Project*

**NAC**  
ARCHITECTURE



# Setting the Stage







**Dan Kurtz**  
Principal-in-Charge



**Jill Kurtz**  
Project  
Management



**Bob Gesing**  
Analytics, Programming  
& Planning



**Elizabeth Sandberg, FNP-C**  
Clinical Consulting and  
Integration



**Amy Wessel**  
Strategy & Lean  
Operational Planning



**Jill Woods**  
Experiential  
Planning & Design



**Boris Srdar**  
Lead Architectural  
Design



## Setting the Stage: Your Team



# CAH and Rural Healthcare Organizations We've Been Honored to Guide

STATE	CAH	RURAL
Alabama	1	*
Alaska	*	2
Delaware	*	1
Florida	*	1
Hawaii	1	*
Idaho	6	*
Illinois	2	4
Kentucky	*	1
Michigan	1	*
Minnesota	*	1
Missouri	4	2



STATE	CAH	RURAL
Montana	2	1
North Dakota	1	*
Ohio	9	11
Oregon	1	*
Pennsylvania	2	2
South Carolina	*	2
Texas	*	3
Vermont	1	*
Washington	15	2
West Virginia	1	*
<b>Total</b>	<b>47</b>	<b>35</b>

Setting the Stage: Local Knowledge Meets National Expertise



# We Understand That Rural Healthcare is Very Different

CASE IN POINT:

Memorial Hospital

Rural Idaho

## EXPERTS SAY:

Concentrate Services at High-Acuity Hubs



## BUT THE REALITY IS:

Many Patients Stop Treatment Due to Travel

Focus on Digital Connectivity



More Than Half of the County Lacks Mobile Phone Service

Expand Primary Care Services



The County is in a Healthcare Provider Shortage Area



Setting the Stage: Purpose-Driven Design





**Create a Remarkable & Sustainable  
Health Facility & Experience  
that Helps Petersburg Thrive!**



1

**Understanding &  
Engaging your  
Community**

2

**Crafting an  
Extraordinary Patient  
Experience**

3

**Caring for Caregivers**

4

**Anticipating  
What's Next**

5

**Rightsizing &  
Lean Operations**

6

**Resiliency**

7

**Design**

8

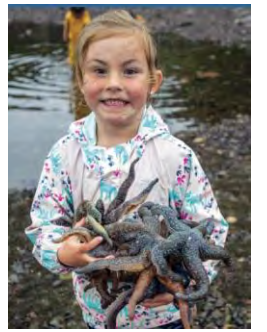
**Moving from  
“Get Well” to “Be Well”**



**Mapping Our Course**

## Getting to Know You

- I grew up here; I have 2 children under age 10 and provide in-home nursing care
- A native of Montana, I relocated here for the natural beauty; I am a math teacher for the high school
- I am married and a 3<sup>rd</sup> generation salmon fisherman
- I am single and serve aboard the USCGC Pike
- I am member of the Tlingit tribe; I work for Sealaska in the ocean-based food business



Understanding and Engaging Your Community



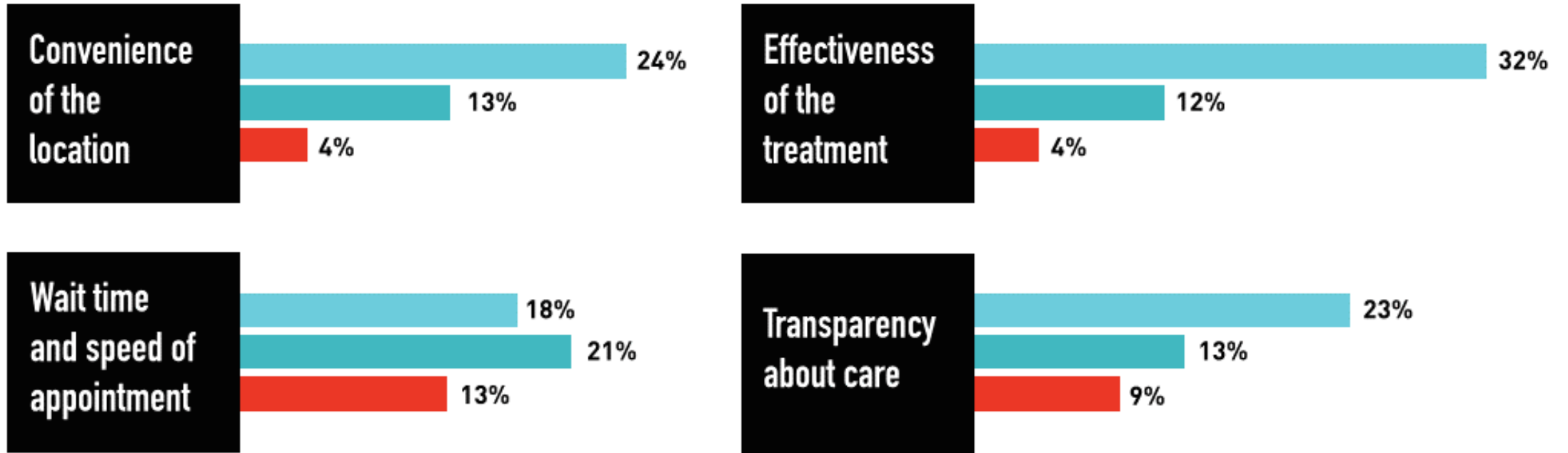
# Involving your Community

- Surveys, Focus Groups, Town Hall Meetings, Advisory Group to follow through the entire process
- Engaging the community builds trust and ownership. Those involved become ambassadors.



# Issues that Impact our Health and Choices

● Gen Z ● Millennials ● Baby Boomers



Showing % respondents who answered “Dissatisfied” and “Very Dissatisfied” regarding traditional healthcare

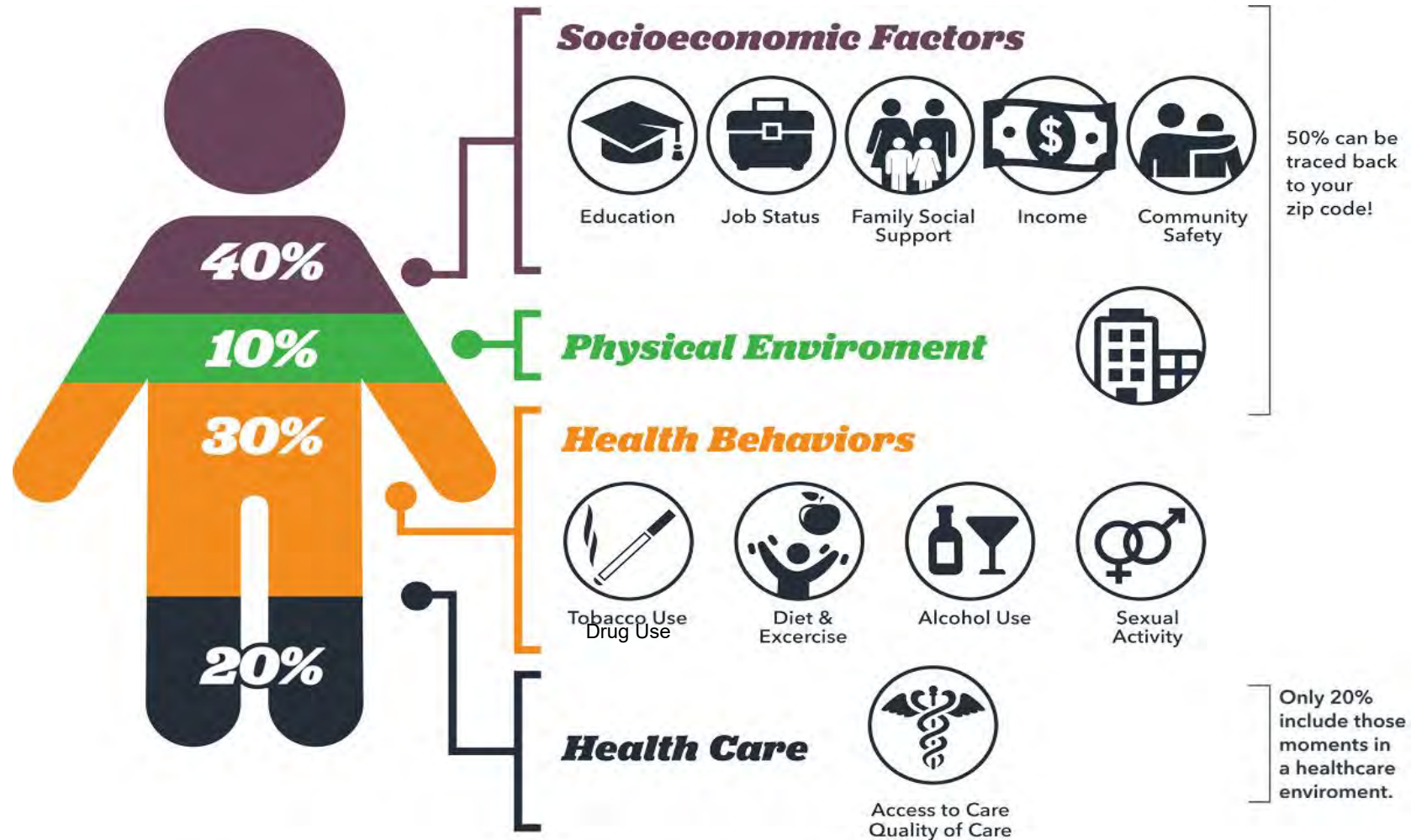
SOURCE: Accenture 2019 Digital Health Consumer Survey, U.S. Results



## Understanding & Engaging your Community



# 80% of What Makes Up Someone's Health is Determined by What Happens Outside of the Hospital and Health Clinic




Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

Understanding & Engaging your Community

# Remarkable Healthcare Builds Self-Sufficient Communities That Thrive



**TOM**  
White Male  
Late 60s  
Retail Owner



**MARIA**  
Black Female  
Late 40s  
Data Center  
Technician



**EMILY**  
White Female  
Mid 30s  
Social Worker &  
Mom of 3



**DAVE**  
Male  
20s  
Fisherman



**MARY** **AGE:** 81 **GENDER:** Female **LOCATION:** 99833  
**MEDICAL HISTORY:** Rheumatoid Arthritis, CHF, Breast Cancer Survivor  
**PAYER:** Medicare / Co-Insurance

## THREE THINGS I VALUE THE MOST

- Confidence in the Provider's Expertise
- Diagnostics are Reviewed with Me
- My Provider Knows & Cares About Me

# 3

## THREE THINGS I VALUE THE LEAST

- Extended Hours
- My Mental Health Needs Considered
- Reasonable Wait Time

## THINGS THAT WILL MOST LIKELY MOTIVATE ME TO MOVE TO A NEW PRIMARY CARE PROVIDER

- I will have no out-of-pocket costs
- PCP makes sure I understand illness & treatment plan
- PCP guarantees I always see them at my appointment
- PCP shows respect & patience with patients & families
- PCP guarantees a wait time of less than 15 minutes

## DID YOU KNOW ...



Prefer one provider coordinating my healthcare needs



My out-of-pocket expenses & premiums are important to me

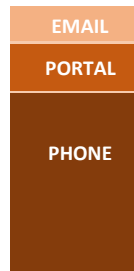


I don't get around well & don't like to drive in traffic

## HOW I FEEL ABOUT LOYALTY & REFERRALS

- I want my PCP to know my medical history and care about me as a person
- I am loyal to my PCP
- Travel distance is more important than following a referral or hospital affiliation

## HOW I TALK TO MY PCP



## WHAT I'LL PAY MORE FOR

- I will pay more for healthcare services if my health improves
- I am less likely to pay more for receiving specific treatments
- I should not pay more for having my mental health needs considered as part of my care

## MOST DESIRABLE / IMPORTANT THINGS TO ME OFFERED AS PART OF-DEMAND SERVICES



On-site diagnostics



In-network



Walk-in w/o appointment & seen in 30 minutes

## LEAST DESIRABLE / IMPORTANT THINGS TO ME OFFERED AS PART OF-DEMAND SERVICES



Stylish waiting area or decor



Affiliation with my hospital



Don't know prices until I get a bill

Crafting an Extraordinary Patient Experience



# Crafting the Experience

- More than a building
- It doesn't begin once you arrive
- Thinking, empathetically, about each step of the journey

operations

design

operations and design



home



traveling



arrival



greeting



waiting

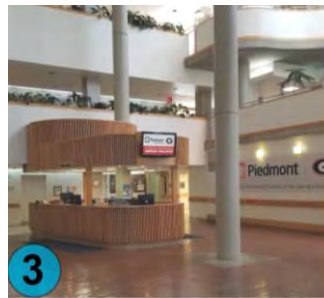


destination

Crafting an Extraordinary Patient Experience

# Learning from where you are

- Visit and study your existing facility
- Identify what is working well that we want to build upon
- Identify things that may not work well but have become accepted
- This study looks at circulation, adjacencies, views, operations and all things that impact the experience

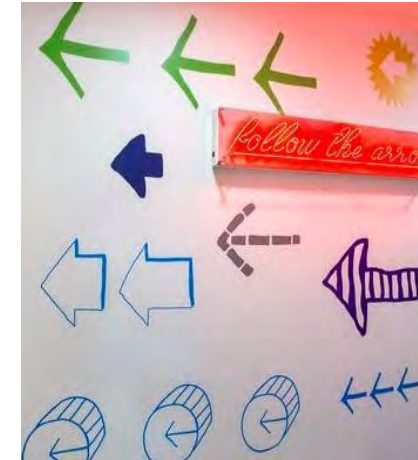




# Everything Impacts our Experience

Providing patients with control over their experience reduces stress and builds confidence

- Offer options for passing time and respite
- Ensure safety & cleanliness without going institutional
- Enable everyone to intuitively find the way
- Infuse playfulness and positivity into the design






Crafting an Extraordinary Patient Experience



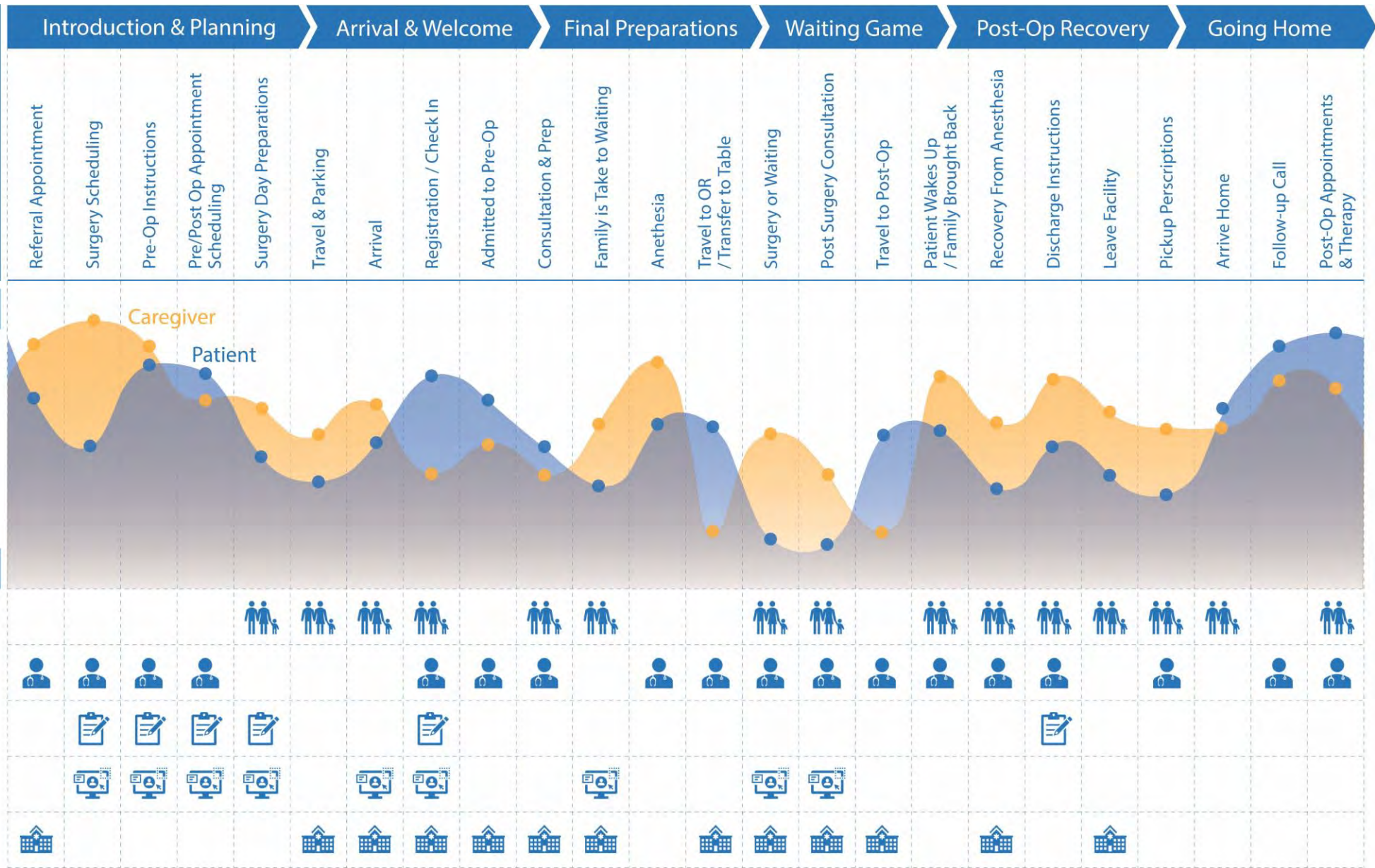
## Phases & Subphases

## Emotional Journey

-  Positive
-  Neutral
-  Negative

## Touchpoints

-  Family
-  Medical Professionals
-  Admin & Scheduling
-  Technology
-  Built Environment



# Crafting an Extraordinary Patient Experience



# Caregiver Experience

Just as much, if not more, thoughtfulness needs to go into the experience of those providing care

- Provide exposure to **daylight** and access to **nature**
- Design to make work **easier** and **more efficient**
- Ensure **safety** and **security**
- Consider **ergonomics** in all decisions
- **Effortless access** to respite spaces to recharge and refresh
- Provide amenities and flexibility to **make life easier**



Caring for Caregivers

# Evolving Needs & Expectations

What matters to today's workforce is different than what matters to the workforce of the future



**BOOMERS**



**GEN X**



**MILLENNIAL**



**GEN Z**

<b>Ambitious, Loyal, Work-Centric</b>	<b>Entrepreneurial Spirit</b>	<b>Socially Aware</b>	<b>Practical and Have High Expectations</b>
Goal-Oriented	Independent Mindset	<b>Culture Extremely Important</b>	<b>Motivated By Ensuring a Secure Life Out of Work</b>
Value Expertise Over All Else	<b>Work-Life Balance</b>	Seek Team-Based Collaboration	<b>Seeking Something Outside of Themselves</b>

Late Technology  
Adopters



Digital Natives

Dedicated,  
Assigned  
Environments,  
Hierarchy



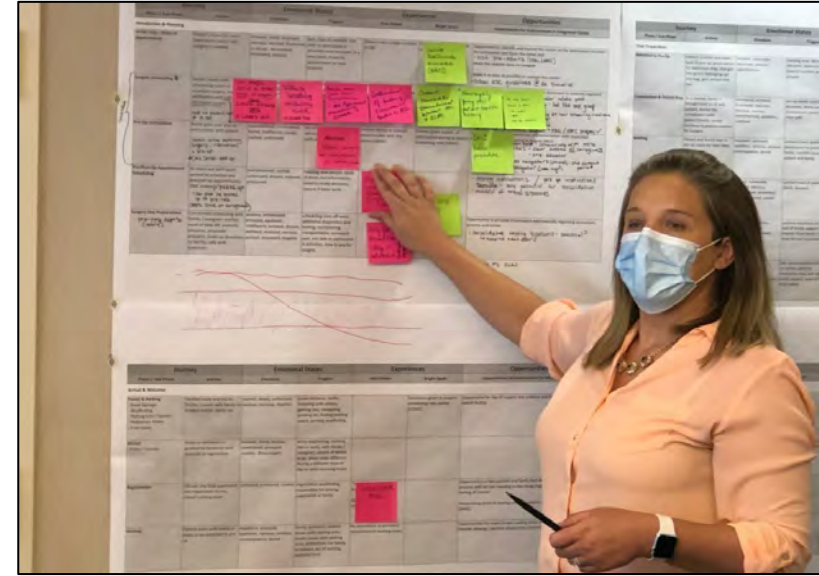
Shared Spaces,  
Egalitarianism



## Caring for Caregivers



## Two Simple but Powerful Questions...



***“What if”?*** and ***“Why not”?***

Anticipating What's Next



## We Understand Generational Needs and Requirements: Generation Z (Born 1997-2011)

- 18-23yrs: Account for 82 of the 330 Million Americans or ~27%
- Use more primary care than other age groups, but not in a traditional clinic setting
- Likely to stick with what they know or try first
- Spread their preferences across more clinic features
- Willing to pay extra for special treatment



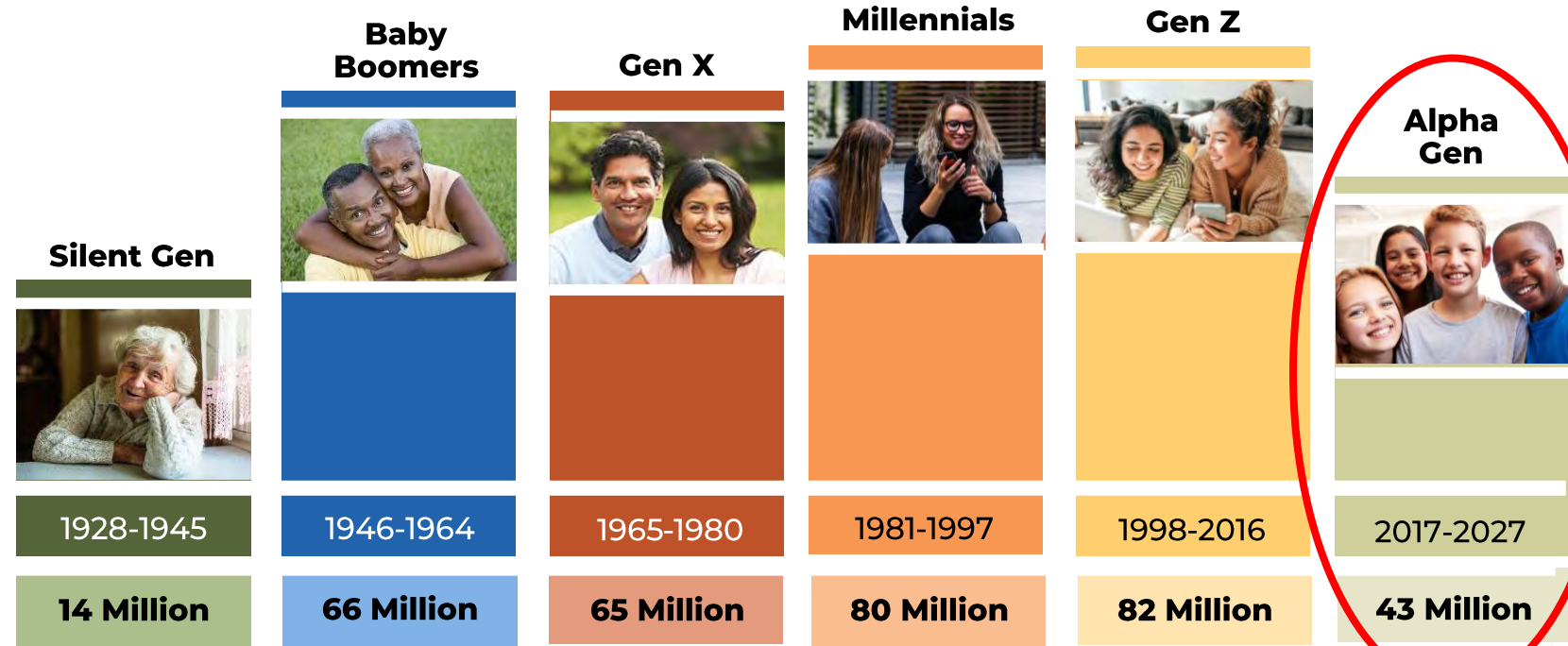
Anticipating What's Next



# On the Horizon are the Preferences and Expectations of the Alpha Generation

- Born at a time when technological devices are getting smarter.
- Everything is connected, and the physical and the digital are coming together.
- New technologies will become part of their lives, experiences, attitudes and expectations of the world.
- Anticipate more virtual visits, immediate access requirements.

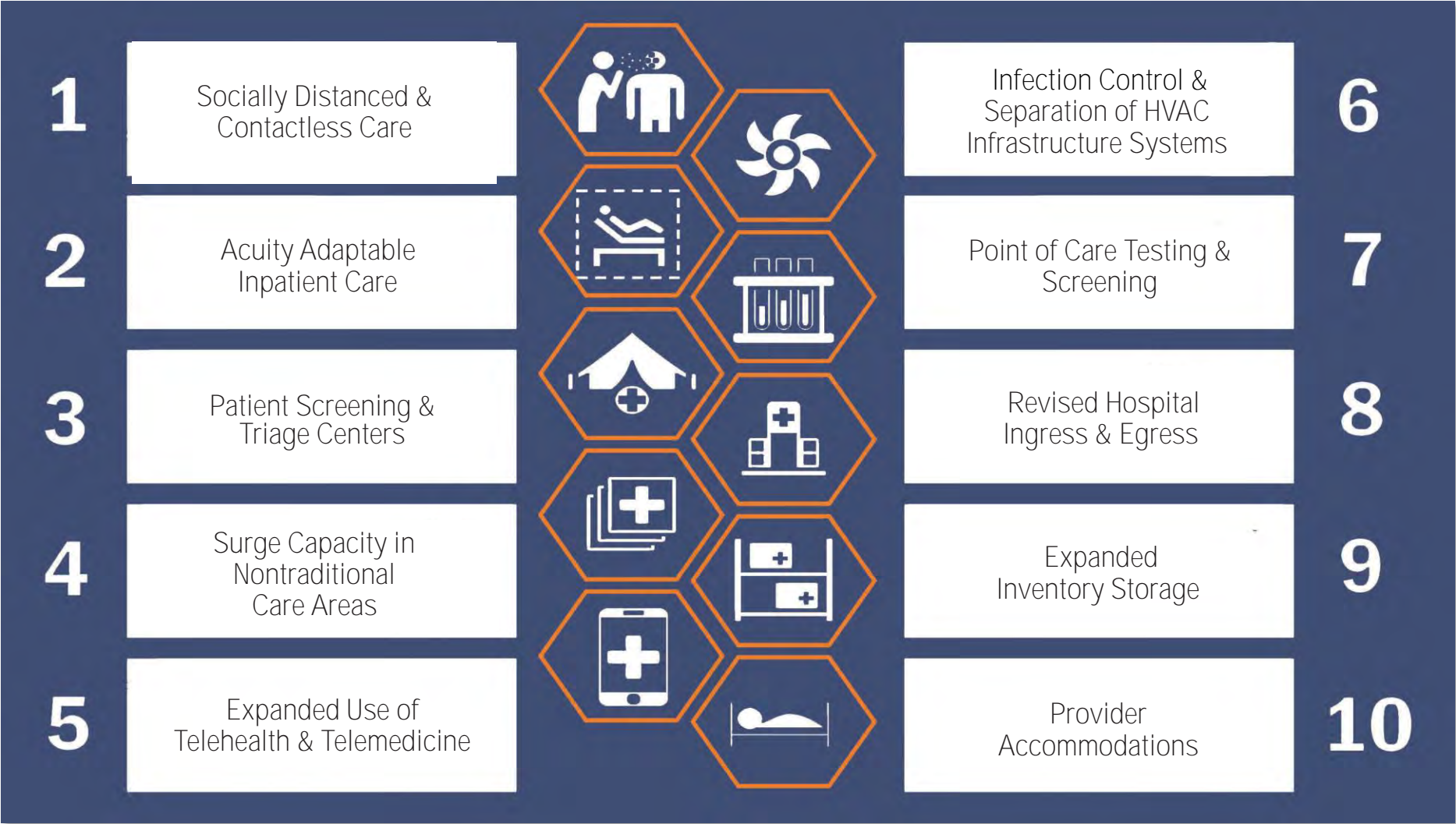
## By 2027, There Will Be Six Generations of Consumers in the Marketplace



Source: U.S. Census Bureau National Population Projections

Anticipating What's Next

# Applying what was Learned from COVID



## Anticipating What's Next



## Major Post-Covid Impacts

- **70%**
- **11%**
- **25%**



- **Reduced in-person visits**
- **Less in-person rooms**
- **Increased telehealth consults**

Anticipating What's Next

# Creating Solutions for What's Next

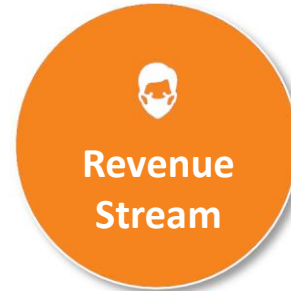
STRATEGY

EXPERIENCE

STEWARDSHIP

OPERATIONS

INTEGRATION



Anticipating What's Next



# Creating Solutions for What is Today...and Tomorrow



**Virtual Medicine**



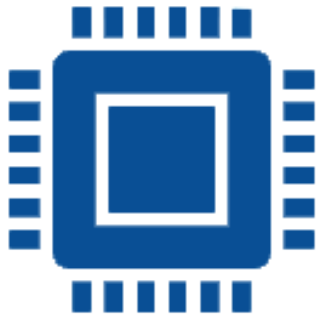
**Concierge Medicine**



**Precision Medicine**



**Implantable Sensors**



**3D Bio-Printing**



**Super SNFs  
Enhanced ALs**



**Hospital at Home**

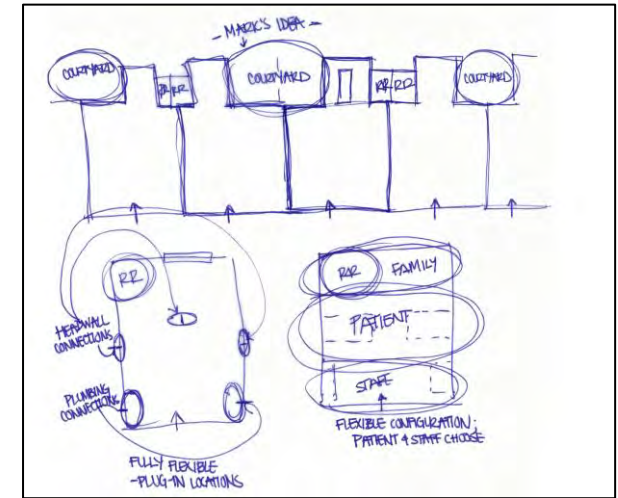
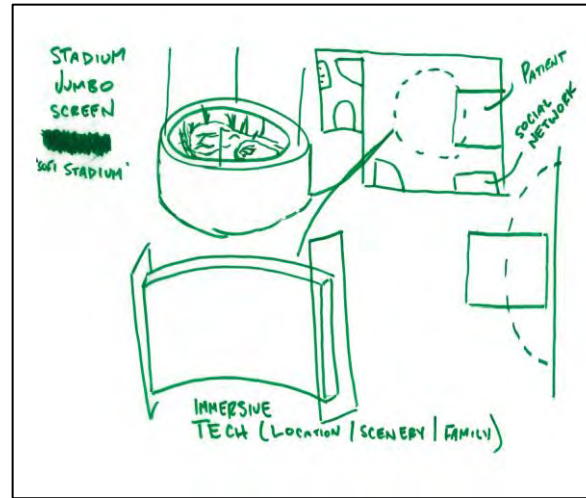
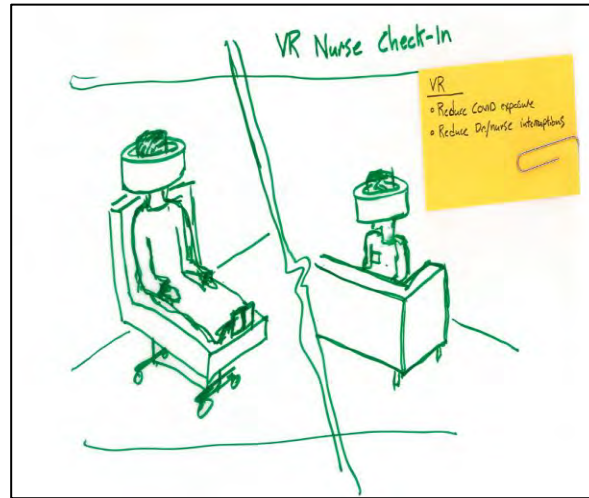
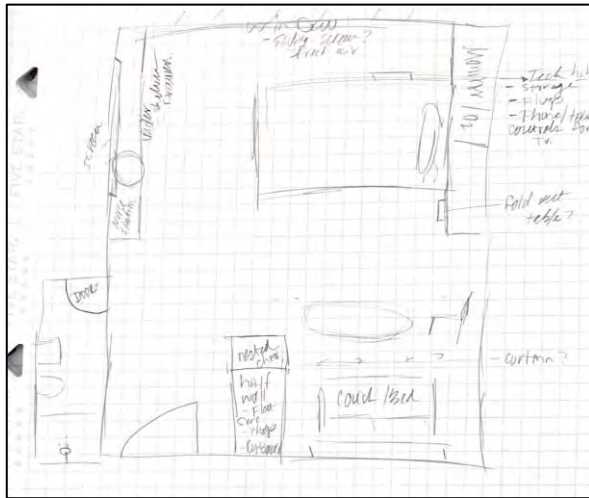


**Curve 2 Value Based Care**

Anticipating What's Next

# Collaborating with Graduate Level Subject Matter Experts and Clinicians to Bridge Architecture and Public Health

- **Teaming Examples:** Seasoned and New Clinicians, Epidemiology Students, Master of Public Health (MPH), Master of Health Administration (MHA)
- **Impact Examples:** Patient Room of the Future, Virtual Reality Check-In



Anticipating What's Next



A close-up photograph of a desk. On the left, a portion of a black keyboard is visible, showing keys for percentage, equals, and plus. In the center, a pair of black-rimmed glasses with gold-colored temples lies on a document. To the right, a silver and brown pen rests on the document. The document features a table with several rows of numbers. A semi-transparent dark grey banner is overlaid on the bottom left of the image, containing white text.

**Align physical space with business strategy and  
LEAN organizational improvement**

93752-14	20340-00
1227-68	487458-44
94979-80	77135-05
	584941-49
	22514-31
	22514-31
	514918-75
	514918-75
	514918-75
	514918-75

# Analytics that Drives Efficiency and Innovation

- Market Dynamics

A No.	A Include?	A Service Line	B Subservice Line	C MS-DRG	D1	D2	D3	E1	E2
					2016 Use Rate per 1,000	2021 Use Rate per 1,000	2026 Use Rate per 1,000	5-Year Change	10-Year Change
<b>1.0 Cardiac Services</b>					<b>13.16</b>	<b>11.05</b>	<b>11.10</b>	<b>-16.0%</b>	<b>-15.6%</b>
<b>2.0 ENT</b>					<b>1.18</b>	<b>1.08</b>	<b>1.08</b>	<b>-8.6%</b>	<b>-8.7%</b>
<b>3.0 General Medicine</b>					<b>41.36</b>	<b>41.95</b>	<b>42.98</b>	<b>1.4%</b>	<b>3.9%</b>
3.001	y	General Medicine	Dermatology	592 - SKIN ULCERS W MCC	0.04	0.03	0.03	-19.6%	-22.0%
3.002	y	General Medicine	Dermatology	593 - SKIN ULCERS W CC	0.04	0.03	0.03	-21.2%	-22.5%
3.003	y	General Medicine	Dermatology	594 - SKIN ULCERS W/O CC/MCC	0.01	0.00	0.00	-24.0%	-32.0%
3.004	y	General Medicine	Dermatology	595 - MAJOR SKIN DISORDERS W MCC	0.01	0.01	0.01	-9.7%	-10.1%
3.005	y	General Medicine	Dermatology	596 - MAJOR SKIN DISORDERS W/O MCC	0.04	0.04	0.04	-5.1%	-9.9%
3.006	y	General Medicine	Dermatology	602 - CELLULITIS W MCC	0.16	0.14	0.15	-11.2%	-8.4%
3.007	y	General Medicine	Dermatology	603 - CELLULITIS W/O MCC	1.61	1.58	1.58	-2.2%	-2.0%
3.008	y	General Medicine	Dermatology	606 - MINOR SKIN DISORDERS W MCC	0.01	0.01	0.01	-8.8%	-10.8%
3.009	y	General Medicine	Dermatology	607 - MINOR SKIN DISORDERS W/O MCC	0.08	0.09	0.10	10.6%	14.6%
3.010	y	General Medicine	Endocrinology	637 - DIABETES W MCC	0.18	0.21	0.20	14.0%	10.1%
3.011	y	General Medicine	Endocrinology	638 - DIABETES W CC	0.56	0.64	0.62	12.9%	11.0%
3.012	y	General Medicine	Endocrinology	639 - DIABETES W/O CC/MCC	0.34	0.37	0.36	9.9%	6.0%
3.013	y	General Medicine	Endocrinology	640 - MISC DISORDERS OF NUTRITION,METABOLISM,FLUIDS/ELECTROLYTES W MCC	0.37	0.38	0.39	1.9%	3.4%
3.014	y	General Medicine	Endocrinology	641 - MISC DISORDERS OF NUTRITION,METABOLISM,FLUIDS/ELECTROLYTES W/O MCC	1.02	0.89	0.85	-13.4%	-16.5%
3.015	y	General Medicine	Endocrinology	642 - INBORN AND OTHER DISORDERS OF METABOLISM	0.02	0.03	0.03	16.4%	26.4%
3.016	y	General Medicine	Endocrinology	643 - ENDOCRINE DISORDERS W MCC	0.05	0.05	0.05	2.1%	5.8%
3.017	y	General Medicine	Endocrinology	644 - ENDOCRINE DISORDERS W CC	0.10	0.10	0.11	2.2%	3.2%
3.018	y	General Medicine	Endocrinology	645 - ENDOCRINE DISORDERS W/O CC/MCC	0.06	0.05	0.05	-15.2%	-17.9%
<b>4.0 General Surgery</b>					<b>7.89</b>	<b>7.80</b>	<b>7.82</b>	<b>-1.2%</b>	<b>-0.8%</b>
<b>5.0 Gynecology</b>					<b>1.26</b>	<b>1.09</b>	<b>1.05</b>	<b>-13.1%</b>	<b>-16.8%</b>
<b>18.0 Vascular Services</b>					<b>2.23</b>	<b>1.93</b>	<b>1.93</b>	<b>-13.8%</b>	<b>-13.4%</b>



## Rightsizing & Lean Operations



# Analytics that Drives Efficiency and Innovation

- Market Dynamics
- Best Practice Metrics

Hospital Groupings (number of annual visits)	No. of Sites	Acuity			Transfer %	LWBS	% EMS Arrival	LOS per Acuity				ALOP (min)		Diagnostics Utilization			Admit %	% Hosp Admits thru ED	Average Annual Utilization
		Hi CPT	Under Age 2	Under Age 18				MLOS Fast Track	MLOS Treat & Release	MLOS Admit	Median LOS	Door to Bed	Door to Doc	EKG % Visits	Radiology % visits	CT % Visits			
<b>Total All EDs</b>	<b>894</b>	<b>61%</b>	<b>4.9%</b>	<b>22%</b>	<b>1.8%</b>	<b>1.9%</b>	<b>16%</b>	<b>107</b>	<b>142</b>	<b>276</b>	<b>168</b>	<b>15</b>	<b>29</b>	<b>2.9</b>	<b>0.5</b>	<b>0.2</b>	<b>17%</b>	<b>64%</b>	<b>1,561</b>
> 100,000	18	66%	5.2%	20%	1%	2%	23%	127	182	356	214	23	31	30%	49%	23%	22%	67%	1,422
80,000 to 100,000	28	71%	5.3%	18%	1%	3%	21%	103	187	362	218	21	38	25%	42%	22%	21%	61%	1,606
60,000 to 80,000	78	66%	4.5%	18%	1%	3%	19%	128	174	337	205	21	35	31.2	51%	26%	21%	65%	1,561
40,000 to 60,000	164	65%	4.4%	20%	1%	2%	18%	106	156	303	186	18	33	28%	50%	24%	19%	65%	1,621
20,000 to 40,000	299	63%	4.7%	20%	2%	2%	16%	101	134	261	160	14	28	26%	49%	21%	17%	68%	1,641
< 20,000	200	55%	4.5%	24%	3%	1%	12%	105	115	227	139	9	23	20%	45%	18%	13%	70%	1,391
Pediatric EDs	25	48%	23%	99%	1%	1%	8%	104	132	270	147	16	31	5%	31%	6%	11%	60%	1,792
Adult, Specialty EDs	43	71%	0%	3%	1%	3%	23%	130	204	346	240	28	40	34%	48%	27%	25%	60%	1,389
UC/Free Standing ED	39	41%	4%	24%	3%	1%	7%	90	97	240	100	9	22	12%	39%	15%	4%	0%	1,650



## Rightsizing & Lean Operations

# Analytics that Drives Efficiency and Innovation

- Market Dynamics
- Best Practice Metrics
- Operational Characteristics

Service Line/Procedure	A1	A2	A3	A4	A5	A6	A7	A8	A9	B1	C1	D1
	Days of Operation	Peak Days of Operation	Peak Days Percent	Monthly Peak Percent	Peak Month Percent	Peak Hours	Peak Hour Percent	Avg Length of Procedure (hours)	Schedule Variability %	Annual Utilization	Area (sf)/ Driver	Parking Spaces per 1,000sf
<b>Cardiovascular/Pulmonary</b>												<b>3.5</b>
Echocardiography	254.0	254.0	100.0%	9.5%	95.0%	10.0	100.0%	1.00	80.0%	2,130	800	3.5
EKG	254.0	254.0	100.0%	9.5%	95.0%	10.0	100.0%	0.25	80.0%	8,530	500	3.5
Nuclear Cardiology	254.0	254.0	100.0%	9.5%	95.0%	10.0	100.0%	1.50	85.0%	1,510	1,200	3.5
Pulmonary Function	254.0	254.0	100.0%	9.5%	95.0%	10.0	100.0%	1.00	80.0%	2,130	500	3.5
Respiratory Therapy	254.0	254.0	100.0%	9.5%	95.0%	10.0	100.0%	0.50	80.0%	4,270	500	3.5
Stress Test	254.0	254.0	100.0%	9.5%	95.0%	10.0	100.0%	0.75	80.0%	2,840	800	3.5
Vascular	254.0	254.0	100.0%	9.5%	95.0%	10.0	100.0%	1.00	80.0%	2,130	800	3.5
<b>Emergency</b>												<b>3.5</b>
Level 1 (urgent)	365	365	100%	9.0%	95%	16.0	85%	1.5	85%	4,060	700	3.5
Level 2 (semi-urgent)	365	365	100%	9.0%	95%	16.0	85%	3.0	85%	2,030	700	3.5
Level 3 (non-urgent)	365	365	100%	9.0%	95%	16.0	85%	3.5	85%	1,740	700	3.5
Level 4 (emergent)	365	365	100%	9.0%	95%	16.0	85%	4.0	85%	1,520	700	3.5
Blended Average	365	254	85%	9.0%	95%	16.0	85%	3.0	85%	1,660	720	3.5
<b>Hospital Imaging</b>												<b>1.5</b>
Radiology	365.0	254.0	85.0%	8.3%	95.0%	16.0	100.0%	0.40	90.0%	11,150	1,000	1.5
CT Scan	365.0	254.0	85.0%	8.3%	95.0%	16.0	100.0%	0.50	90.0%	8,920	1,500	1.5
MRI	365.0	254.0	100.0%	8.3%	95.0%	16.0	100.0%	1.00	90.0%	3,790	2,500	1.5
Ultrasound	365.0	254.0	85.0%	8.3%	95.0%	16.0	100.0%	0.75	90.0%	5,950	800	1.5
Nuclear Medicine	365.0	254.0	85.0%	8.3%	95.0%	16.0	100.0%	1.50	90.0%	2,970	1,200	1.5
Special Procedure	365.0	254.0	85.0%	8.3%	95.0%	10.0	100.0%	2.00	90.0%	1,390	1,800	1.5

Rightsizing & Lean Operations



# Analytics that Drives Efficiency and Innovation

- Market Dynamics
- Best Practice Metrics
- Operational Characteristics
- **Area Benchmarks**

No. Program Area/Department	Vancouver WA SF/Bed	Denver CO SF/Bed	Pittsburgh PA SF/Bed	Columbus OH SF/Bed	Dublin OH SF/Bed	US Average SF/Bed	Sistersville WVA SF/Bed
1.0 Inpatient Services	682	721	774	778	927	776	850
2.0 Diagnostic & Treatment	302	433	466	454	450	421	645
3.0 Emergency	99	85	178	128	89	116	210
4.0 Support Services	204	232	250	327	286	260	390
5.0 Administration & Public	109	193	200	174	169	169	240
6.0 Building Services	146	81	130	186	180	145	450
<b>7.0 Total DGSF</b>	<b>1,540</b>	<b>1,745</b>	<b>1,996</b>	<b>2,046</b>	<b>2,103</b>	<b>1,760</b>	<b>2,785</b>
<b>8.0 BGSF Factor</b>	<b>1.40</b>	<b>1.30</b>	<b>1.30</b>	<b>1.30</b>	<b>1.18</b>	<b>1.33</b>	<b>1.35</b>
<b>9.0 Total BGSF (rounded)</b>	<b>2,150</b>	<b>2,270</b>	<b>2,590</b>	<b>2,650</b>	<b>2,480</b>	<b>2,300</b>	<b>3,760</b>



## Rightsizing & Lean Operations

# Analytics that Drives Efficiency and Innovation

- Market Dynamics
- Best Practice Metrics
- Operational Characteristics
- Area Benchmarks
- Capital Investment Data

No. Program/Department	A1	A2	B1	C1		C2		D1	D2	D3	E1	E2	F1	F2	G1	G2	H3
	Include?	Phase	Total Area (SF)	Construction Budget		Medical Equip (Note 1)			Furnishings Allowance		Artwork Allowance		Signage Allowance		IT Allowance		
				Construction \$/SF	Estimated Total Cost (rounded)	Unit Cost	Unit Need	Total Allowance \$ (rounded)	\$/ DGSF	Total Allowance \$ (rounded)	\$/ DGSF	Total Allowance \$ (rounded)	Construct. Cost %	Total Allowance \$ (rounded)	Total Allowance \$ (rounded)		
1.0 <b>Emergency Care</b>	y		9,000	\$400	\$3,600,000	\$20,000	10	\$200,000	\$20	\$180,000	\$5	\$45,000		\$17,400	\$252,000		
1.01 Emergency Care	y	one	9,000	\$385	\$3,470,000	\$20,000	10	\$200,000	\$20	\$180,000	\$5	\$45,000	0.5%	\$17,400	\$252,000		
1.02 Site Development (acres)	y	one	0.5	\$5.74	\$120,000	\$0	0	\$0	\$0	\$0	\$0	\$0	0.0%	\$0	\$0		
2.0 <b>Ambulatory Care Center</b>	y		31,975	\$378	\$12,100,000	\$951,000	32	\$3,805,000	\$19	\$623,000	\$5	\$161,000		\$52,800	\$876,000		
2.01 Non-invasive Cardiology	y	one	5,375	\$335	\$1,800,000	\$96,667	6	\$580,000	\$25	\$134,000	\$5	\$27,000	0.5%	\$9,000	\$151,000		
2.02 Lab	y	one	1,500	\$335	\$500,000	\$0	4	\$0	\$20	\$30,000	\$5	\$8,000	0.0%	\$0	\$23,000		
2.03 Infusion/Transfusion	y	one	2,300	\$320	\$740,000	\$5,000	4	\$20,000	\$20	\$46,000	\$5	\$12,000	0.5%	\$3,700	\$64,000		
2.03 Nephrology	y	one	0	\$335	\$0	\$15,000	0	\$0	\$20	\$0	\$5	\$0	0.5%	\$0	\$0		
2.04 Neurology	y	one	600	\$335	\$200,000	\$15,000	1	\$15,000	\$20	\$12,000	\$5	\$3,000	0.5%	\$1,000	\$17,000		
2.05 Oncology	y	one	9,800	\$310	\$3,040,000	\$15,000	8	\$120,000	\$20	\$196,000	\$5	\$49,000	0.5%	\$15,200	\$274,000		
2.06 Pain Management	n	0	0	\$335	\$0	\$5,000	0	\$0	\$20	\$0	\$5	\$0	0.5%	\$0	\$0		
2.07 Physical Therapy/Rehabilitation	n	0	0	\$335	\$0	\$15,000	0	\$0	\$15	\$0	\$5	\$0	0.5%	\$0	\$0		
2.08 Podiatry	n	one	0	\$335	\$0	\$15,000	0	\$0	\$20	\$0	\$5	\$0	0.5%	\$0	\$0		
2.09 Psychiatry	n	one	0	\$335	\$0	\$15,000	0	\$0	\$20	\$0	\$5	\$0	0.5%	\$0	\$0		
2.10 Diagnostic Imaging	y	one	12,400	\$385	\$4,770,000	\$341,111	9	\$3,070,000	\$15	\$186,000	\$5	\$62,000	0.5%	\$23,900	\$347,000		
2.101 Bone Densitometry	y					\$80,000	1	\$80,000									
2.102 CT	y					\$850,000	1	\$850,000									
2.103 Mammography	y					\$90,000	1	\$90,000									
2.104 MRI	y					\$1,200,000	1	\$1,200,000									
2.105 Nuclear Medicine	y					\$140,000	1	\$140,000									
2.106 PET	n					\$2,000,000	0	\$0									
2.107 Ultrasound	y					\$130,000	2	\$260,000									
2.108 X-Ray	y					\$225,000	2	\$450,000									
4.02 Site Development (acres)	y	one	4.3	\$5.74	\$1,070,000	\$0	0	\$0	\$0	\$19,000	\$0	\$0	0.0%	\$0	\$0		
5.0 <b>Hospital (30 IP + 10 OBS beds)</b>	y	two	140,008	\$485	\$72,000,000		40	\$1,400,000		\$2,800,000		\$280,000		\$350,000	\$3,920,000		
5.01 Hospital	y		140,000	\$500	\$70,000,000	\$35,000	40	\$1,400,000	\$20	\$2,800,000	\$2	\$280,000	0.5%	\$350,000	\$3,920,000		
5.02 Site Development (acres)	y		8.03	5.74	2010000.00												

Rightsizing & Lean Operations



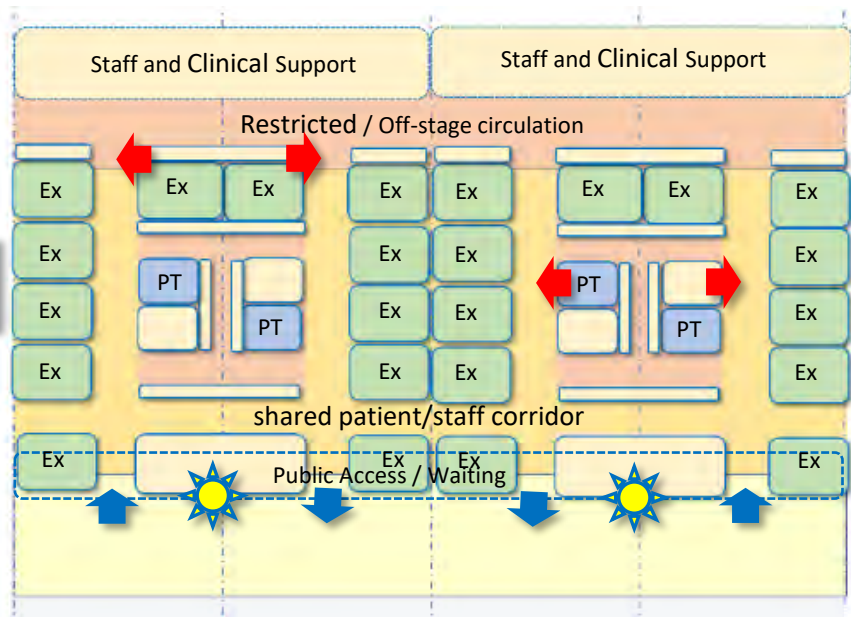
# Analytics that Drives Efficiency and Innovation

- Market Dynamics
- Best Practice Metrics
- Operational Characteristics
- Area Benchmarks
- Capital Investment Data
- Iterative Program Modeling

No.	Service Line/Modality	Include?	Facility & Site Requirements					Capital Investment Estimate
			A1	A2	A3	A4	A5	
			Planned Service Units	Benchmark (SF) per Service Unit	Targeted Facility Area	Parking Ratio (spaces / 1000sf)	Parking Need	
<b>Program Services Summary</b>								
1	Cardiovascular	y	9	922	8,300	3.5	29	\$5.7
2	Diagnostic Imaging	y	6	1,367	8,200	3.5	29	\$11.4
3	Immediate Care	y	8	650	5,200	4.0	21	\$3.1
4	Interventional	y	6	3,133	18,800	3.5	66	\$16.1
5	Physical Rehabilitation	y	9	400	3,600	4.0	14	\$2.1
6	Wound/Chronic Care	y	10	380	3,800	0.0	11	\$2.4
7	Hospital	y	40	3,443	137,700	0.0	0	\$41.5
8	Adult Physician Practices	y	54	502	27,000	5.0	135	\$15.8
9	Building S&C / Infrastructure	y		23%	66,400	0.0	0	\$1.9
<b>Total Health System (rounded)</b>					279,000	2.4	658	\$100.0
10	Retail/3rd Party	y			239,200	1.8	432	
<b>Phase One (rounded)</b>				Site (Acres)	610,000	1.8	1,090	
Health System				11.02	368,000	1.8	658	\$100.0
Retail/3rd Party				8.60	239,000	1.8	432	

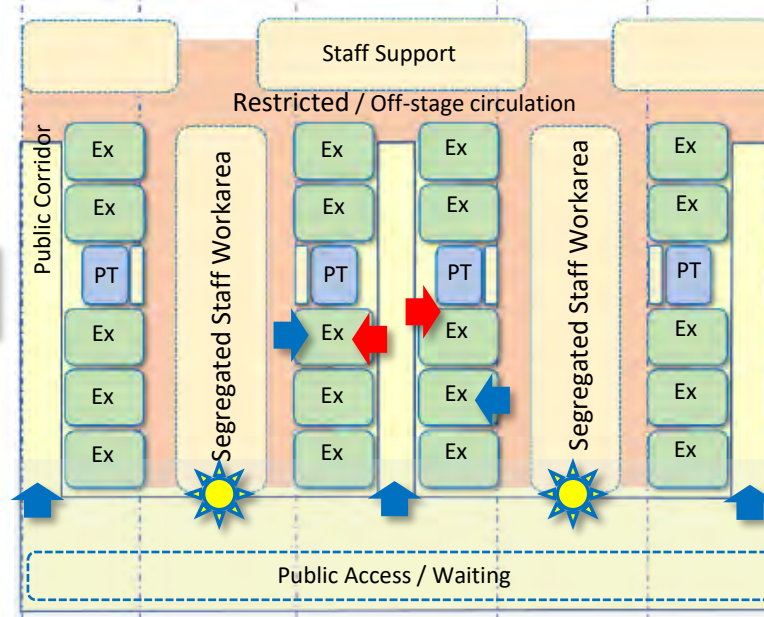
Rightsizing & Lean Operations

# Planning that Drives Efficiency and Innovation



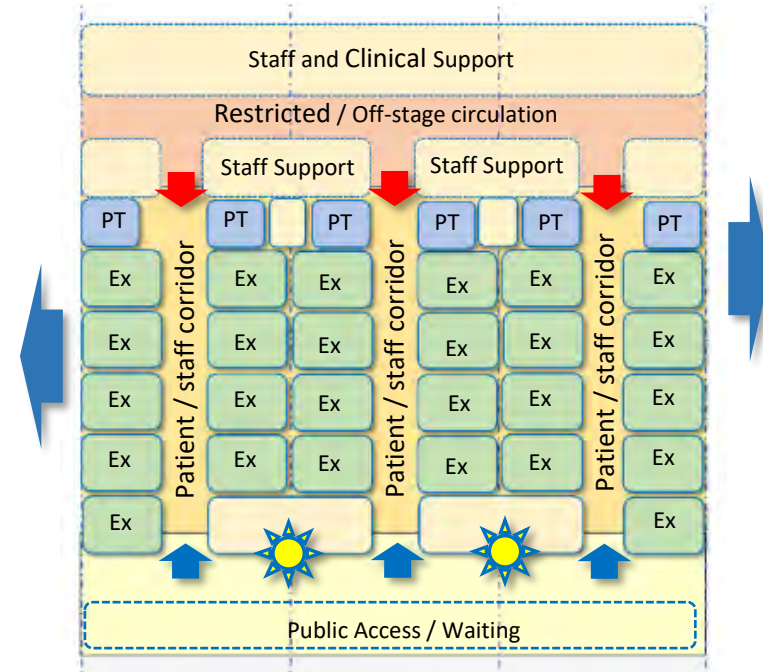
**Center Core**

+/- 480 sf/exam room



**Segregated Core**

+/- 450 sf/exam room



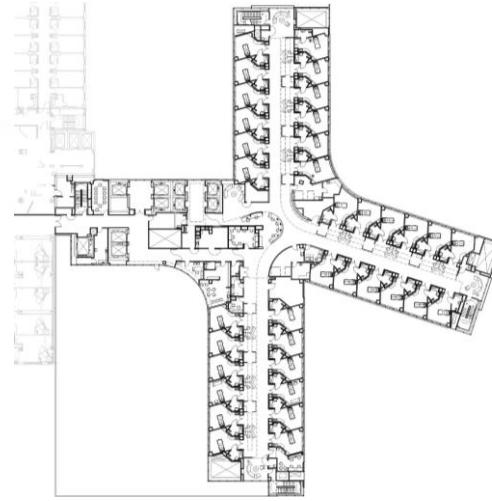
**Backstage Core**

+/- 420 sf/exam room

**Rightsizing & Lean Operations**



# Planning that Drive Efficiency and Innovation



## POINT OF CARE NURSING UNIT

### Total Beds: 32 – ICU

TOTAL FLOOR PLATE 29,000 SF  
SF PER ROOM (32): 906 SF

**CENTRAL SUPPORT SF:** 5,050 SF

**POINT OF CARE SUPPORT SF:** 1,250 SF

TOTAL SUPPORT: 6,300 SF  
SUPPORT SF / ROOM (32) 197 SF

CIRCULATION 6,300 SF  
CIRCULATION SF / ROOM (32) 197 SF

BUILDING SUPPORT 1,300 SF  
BUILDING SUPPORT SF / ROOM (32) 40 SF

## POINT OF CARE NURSING UNIT

### Total Beds: 32 – ICU

TOTAL FLOOR PLATE 31,000 SF  
SF PER ROOM (32): 966 SF

**CENTRAL SUPPORT SF:** 4,650 SF

**POINT OF CARE SUPPORT SF:** 1,220 SF

TOTAL SUPPORT: 5,870 SF  
SUPPORT SF / ROOM (32) 183 SF

CIRCULATION 7,800 SF  
CIRCULATION SF / ROOM (32) 245 SF

BUILDING SUPPORT 1,736 SF  
BUILDING SUPPORT SF / ROOM (32) 54 SF

## POINT OF CARE NURSING UNIT

### Total Beds: 32 – ICU

TOTAL FLOOR PLATE 30,000 SF  
SF PER ROOM (32): 937 SF

**CENTRAL SUPPORT SF:** 4,750 SF

**POINT OF CARE SUPPORT SF:** 1,200 SF

TOTAL SUPPORT: 5,950 SF  
SUPPORT SF / ROOM (32) 185 SF

CIRCULATION 6,680 SF  
CIRCULATION SF / ROOM (32) 209 SF

BUILDING SUPPORT 1,770 SF  
BUILDING SUPPORT SF / ROOM (32) 55 SF

## POINT OF CARE NURSING UNIT

### Total Beds: 36 – ICU

TOTAL FLOOR PLATE 32,000 SF  
SF PER ROOM (36): 887 SF

**CENTRAL SUPPORT SF:** 4,450 SF

**POINT OF CARE SUPPORT SF:** 1,220 SF

TOTAL SUPPORT: 5,670 SF  
SUPPORT SF / ROOM (36) 158 SF

CIRCULATION 7,800 SF  
CIRCULATION SF / ROOM (36) 245 SF

BUILDING SUPPORT 1,420 SF  
BUILDING SUPPORT SF / ROOM (36) 40 SF

## POINT OF CARE NURSING UNIT

### Total Beds: 34 – ICU

TOTAL FLOOR PLATE 25,000 SF  
SF PER ROOM (34): 724 SF

**CENTRAL SUPPORT SF:** 3,200 SF

**POINT OF CARE SUPPORT SF:** 1,125 SF

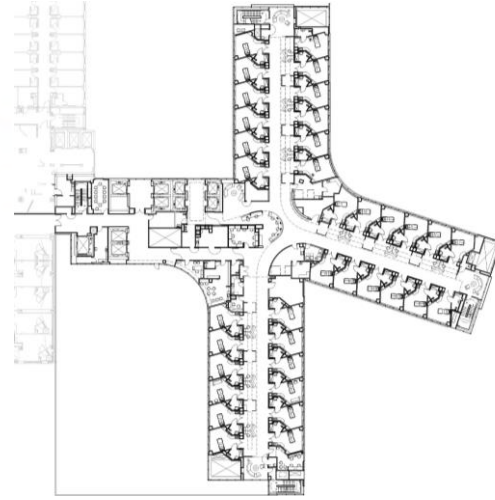
TOTAL SUPPORT: 4,325 SF  
SUPPORT SF / ROOM (34) 127 SF

CIRCULATION 5,278 SF  
CIRCULATION SF / ROOM (34) 155 SF

BUILDING SUPPORT 400 SF  
BUILDING SUPPORT SF / ROOM (34) 12 SF

# Rightsizing & Lean Operations

# Planning that Drive Efficiency and Innovation



<b>STAFF STATION / PATIENT SERVER</b>	<b>15'</b>
<b>MEDS</b>	<b>45'</b>
<b>EQUIPMENT / SUPPLY</b>	<b>55'</b>
<b>NOURISHMENT</b>	<b>65'</b>
<b>CENTRAL – FROM UNIT</b>	<b>130'</b>
<b>CENTRAL – FROM ELEV</b>	<b>55'</b>

<b>STAFF STATION / PATIENT SERVER</b>	<b>15'</b>
<b>MEDS</b>	<b>55'</b>
<b>EQUIPMENT / SUPPLY</b>	<b>55'</b>
<b>NOURISHMENT</b>	<b>115'</b>
<b>CENTRAL – FROM UNIT</b>	<b>160'</b>
<b>CENTRAL – FROM ELEV</b>	<b>75'</b>

<b>STAFF STATION / PATIENT SERVER</b>	<b>15'</b>
<b>MEDS</b>	<b>115'</b>
<b>EQUIPMENT / SUPPLY</b>	<b>55'</b>
<b>NOURISHMENT</b>	<b>170'</b>
<b>CENTRAL – FROM UNIT</b>	<b>150'</b>
<b>CENTRAL – FROM ELEV</b>	<b>50'</b>

<b>STAFF STATION / PATIENT SERVER</b>	<b>15'</b>
<b>MEDS</b>	<b>55'</b>
<b>EQUIPMENT / SUPPLY</b>	<b>55'</b>
<b>NOURISHMENT</b>	<b>135'</b>
<b>CENTRAL – FROM UNIT</b>	<b>155'</b>
<b>CENTRAL – FROM ELEV</b>	<b>115'</b>

<b>STAFF STATION / PATIENT SERVER</b>	<b>10'</b>
<b>MEDS</b>	<b>75'</b>
<b>EQUIPMENT / SUPPLY</b>	<b>15'</b>
<b>NOURISHMENT</b>	<b>130'</b>
<b>CENTRAL – FROM UNIT</b>	<b>75'</b>
<b>CENTRAL – FROM ELEV</b>	<b>210'</b>



Rightsizing & Lean Operations



# Planning that Drive Efficiency and Innovation







**EXISTING MODEL:  
BASELINE**

MEDS 	STAFF 
11 MIN	27 MIN
EQUIP 	NOUR 
7.3 MIN	2.7 MIN
MILES WALKED/SHIFT: 2.5 MILES	
TIME SPENT WALKING: 52 MINUTES	






**RACETRACK MODEL:  
9% EFFICIENCY GAINED**

MEDS 	STAFF 
7.1 MIN	15 MIN
EQUIP 	NOUR 
5.7 MIN	2 MIN
MILES WALKED/SHIFT: 2.1 MILES	
TIME SPENT WALKING: 43 MINUTES	



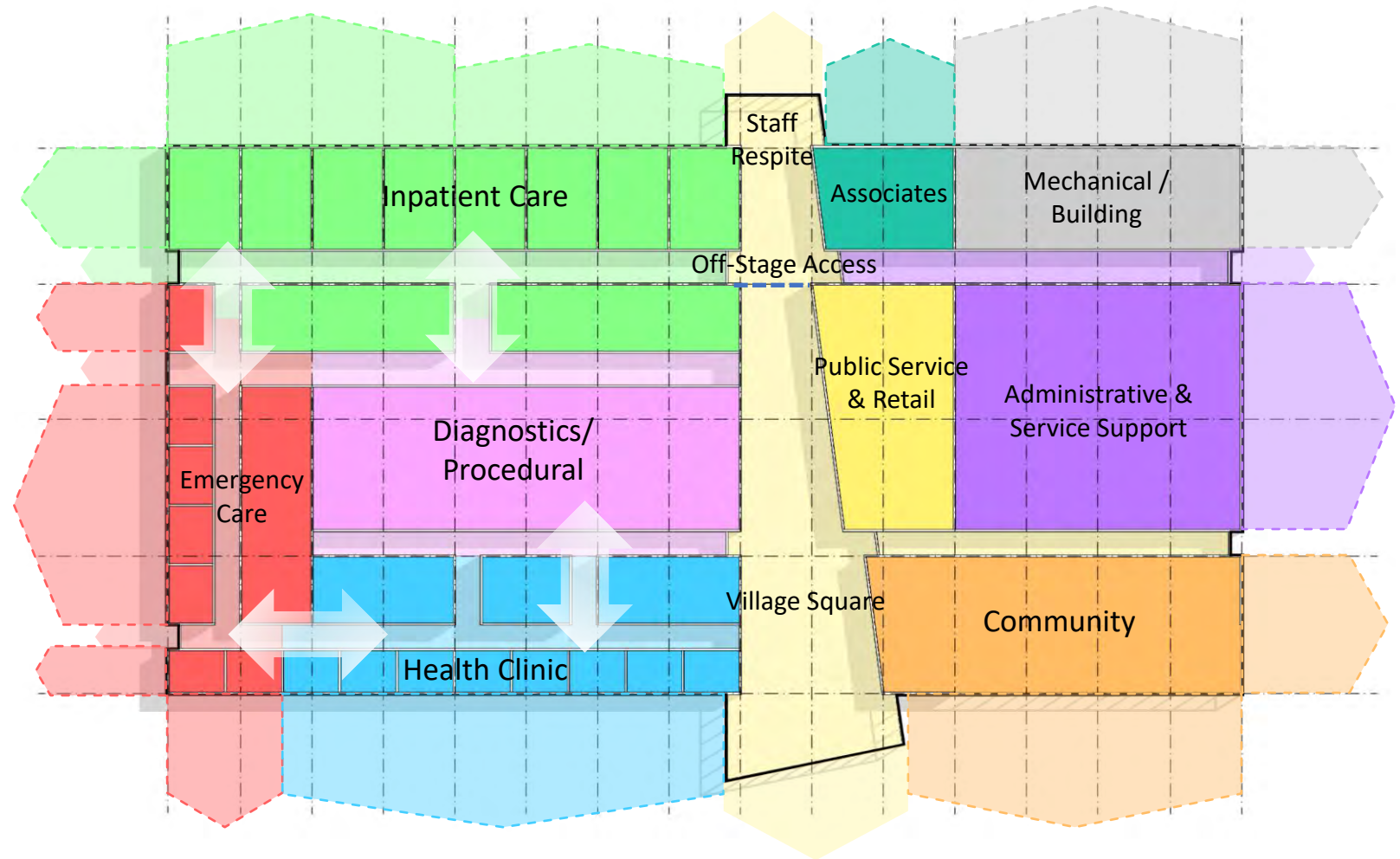
**POINT-OF-CARE MODEL:  
46% EFFICIENCY GAINED**

MEDS 	STAFF 
5.5 MIN	11 MIN
EQUIP 	NOUR 
4.7 MIN	2 MIN
MILES WALKED/SHIFT: 1.4 MILES	
TIME SPENT WALKING: 28 MINUTES	

Rightsizing & Lean Operations

# Bringing it All Together for Adaptability, Efficiency & Growth

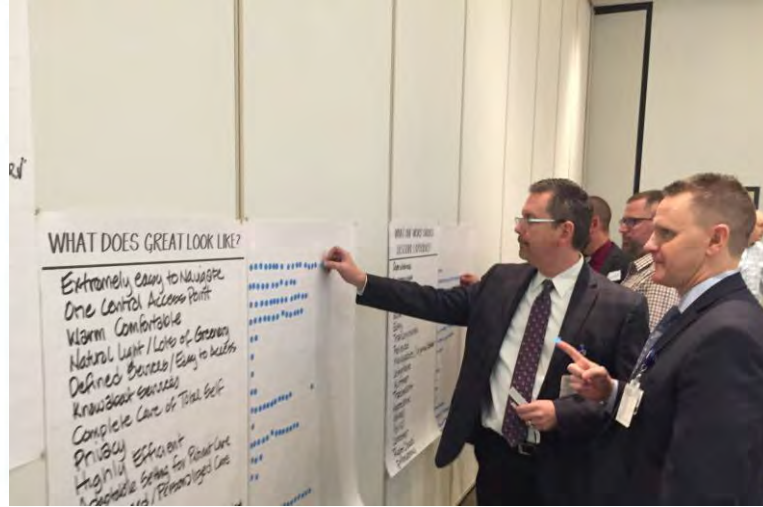
- “Dismantle” traditional departments
- Reduces redundancies
- Leverages staff resources
- Centralize functions
- Modularize organization
- Organize to allow incremental growth



Rightsizing & Lean Operations



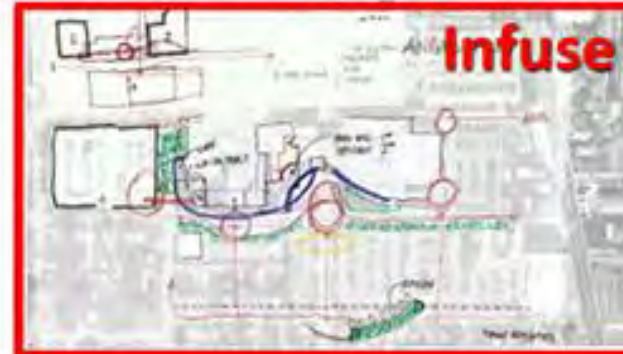
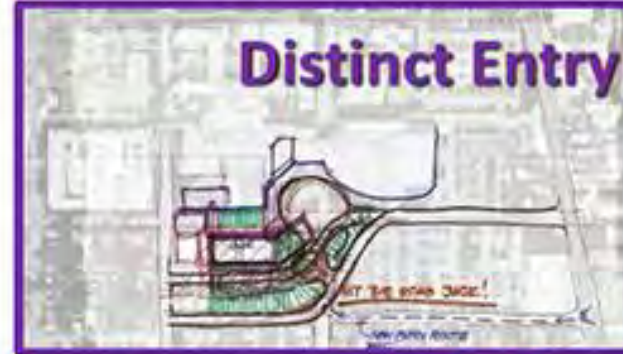
# Process is Interactive & Collaborative - 3P Visioning Workshops



Rightsizing & Lean Operations



# Builds Synergy...Challenges Preconceived Notions...Drives Innovation






Rightsizing & Lean Operations



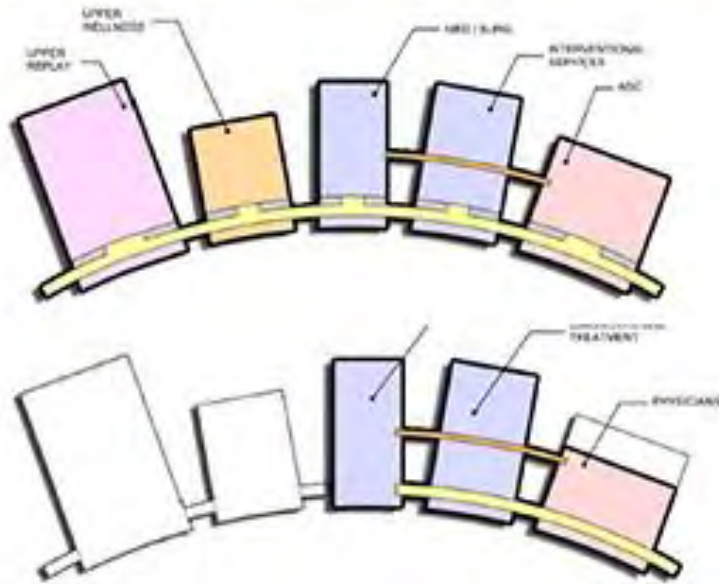
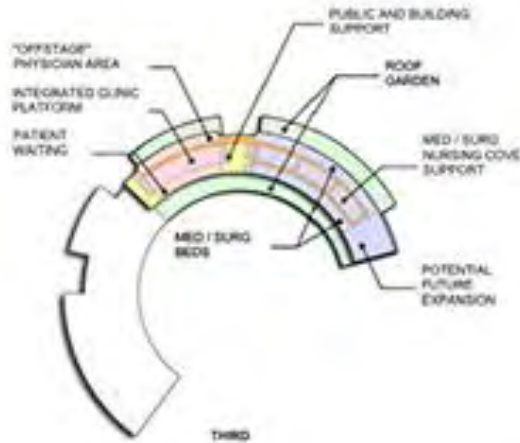
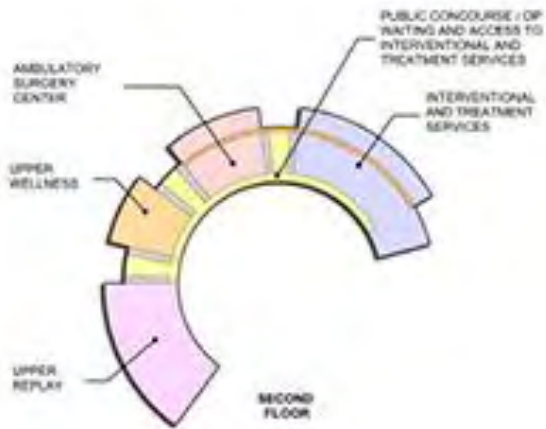
# Builds Consensus...Solution presents itself!

## Rapid Storming Scenarios

		Rapid Storming Scenarios				
		1	2	3	4	
Conceptual Plan		Criteria Importance	Infused Addition "Angel Hug"	Integrated Addition "Juliette"	Connective Entry "The Wrap"	Distinct Entry "Looking in"
						
Evaluation Criteria						
1	Creates Campus Feel	1	1	3	3	3
2	Does not complicate Main Entry	3	3	2	2	3
3	Infuses Nature into Campus and Facility	2	1	3	3	3
4	Creates Distinct Center	3	1	2	3	3
5	Easy Access + Intuitive Wayfinding	3	2	3	3	2
6	Feels Integrated + Comprehensive	2	3	2	2	1
7	Completes Image of Hospital	1	3	2	2	2
8	Incremental & Expandable	2	1	2	3	3
9	Impact during Construction	3	1	2	2	3
10	Cost	2	2	1	3	2
<b>Total Score</b>			<b>39</b>	<b>48</b>	<b>57</b>	<b>56</b>
<b>Scenario Ranking</b>			<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>

Rightsizing & Lean Operations

# Creates a Foundation for a Holistic and Responsive Design...



Rightsizing & Lean Operations



A top-down view of several hands of different skin tones holding a small green plant seedling in a circle of dark soil. The hands are arranged in a circle, with fingers pointing towards the center where the plant is growing. The soil is dark and textured. The overall image conveys a sense of global unity and environmental care.

**A collaborative, integrated approach  
to a sustainable future.**



## Planning



Assessment Galleries

One-way flow

**Adaptable Segregated**

Waiting Options

## Technology



**Modularity** for walls,  
casework & work areas

Motion & Voice-activated  
components

## Materiality



Products & details that prevent  
bacterial growth

Durable & easily maintained

**Lessons learned**



Resiliency



## Design that:

- Creates a **Sense of Place**  
Unique to Petersburg
- Invites the Community
- Elevates the **PMC Brand**
- Orchestrates & Enhances Experiences
- Promotes “Be Well”
- **Catalyzes Renewal**





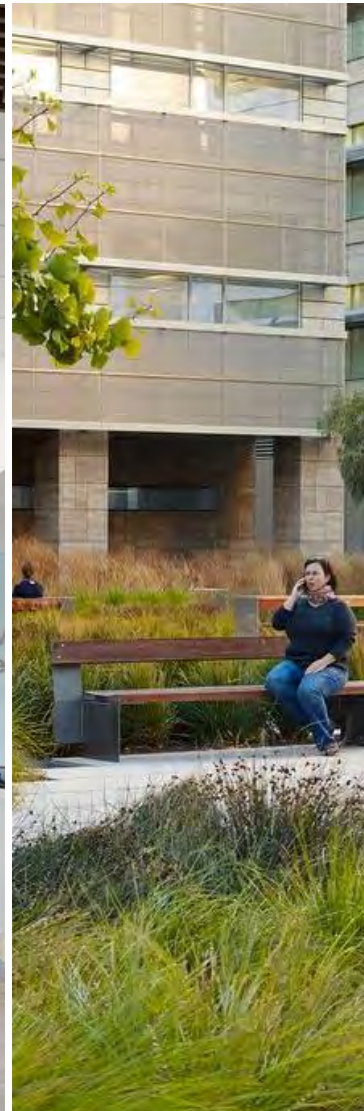
WELCOME



LOBBY



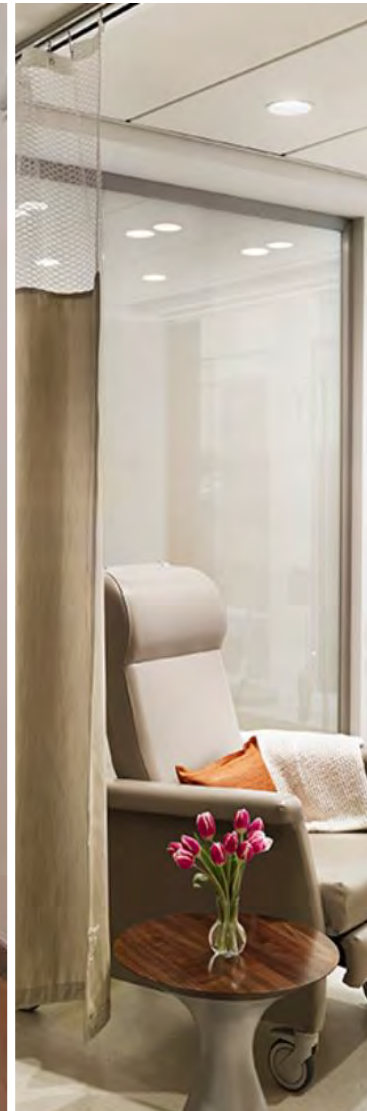
CIRCULATION



GARDEN



RESPIRE



PATIENT



CAREGIVER



# Design





**Welcome for the Community**  
**From arrival to the site**

- Reassuring
- Familiar

- A Petersburg Landmark
- Reaffirming Brand



**Design**





## Welcoming Arrival Humanizing the experience

- Reassuring
- Familiar
- A Petersburg Landmark
- Reaffirming Brand



Design





**Welcoming Arrival**  
**Humanizing the experience**

- Reassuring
- Familiar
- A Petersburg Landmark
- Reaffirming Brand



Design





## Welcoming Arrival Authentic to Petersburg

- Reassuring
- Appropriate Scale
- A Petersburg Landmark
- Reaffirming Brand

Design







## Welcoming Arrival Authentic to Petersburg

- Reassuring
- Maximizing land use
- Appropriate Scale
- Reaffirming Brand



Design





**Welcoming Arrival**  
**Authentic to Petersburg**

- Reassuring
- Appropriate Scale
- Maximizing land use
- Reaffirming Brand



Design





## Welcoming Site Experience Developing Site Assets

- Climate comfort
- Human experience
- Familiar landscape
- Calming and relaxing



Design



## Welcome

- Reassuring
- Familiar
- Active
- Orientation Point
- Education
- Reaffirming Brand



Design





## Lobby

- Sense of Arrival
- First Impression
- Multi Use
- Connection
- Community
- Establishing Character & Brand



Design



# Circulation

- Clear Path
- Views
- Respite
- Engaging
- Intuitive



Design



# Garden

- Connection
- Healing & Growth
- Views
- Orientation Point
- Organizing Element



Design



# Respite

- Promote Relaxation & Meditation
- Inviting Seating
- Calming Sounds
- Imagery
- Private Outdoor Garden



Design



# Patient

- Comfort
- Control
- Connection
- Inclusion
- Positive Distractions
- Family Inclusion



Design



# Patient Caregiver

- Calming
- Relaxation
- Connection to nature:
- Inside and outside



Design



# Caregiver

- Recharge & Refresh
- Daylight & Views
- Off Stage
- Variety
- Positive Distractions
- Recruit & Retain



Design



# Caregiver

- Recharge & Refresh
- Daylight & Views
- Off Stage
- Variety
- Positive Distractions
- Recruit & Retain

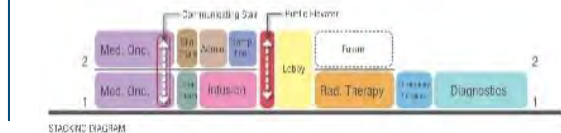
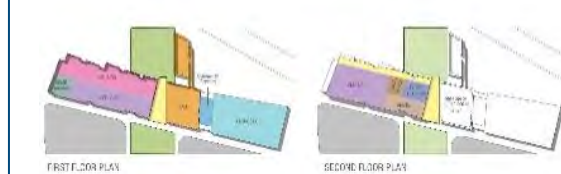
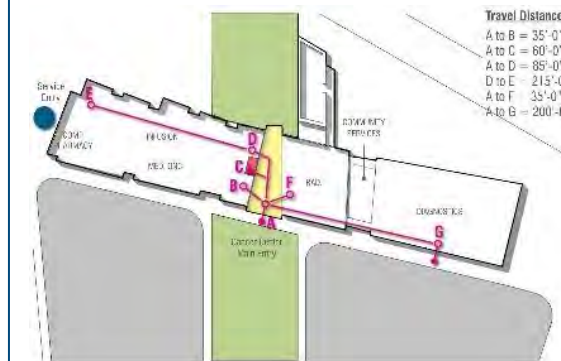
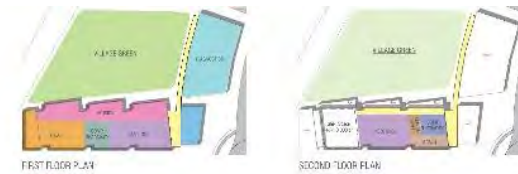
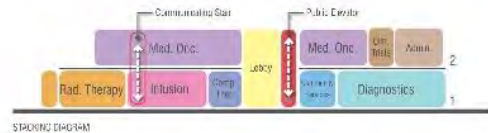
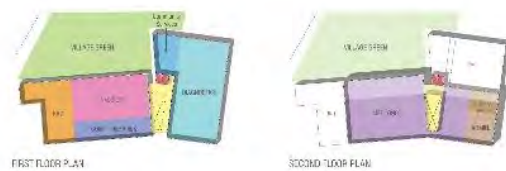
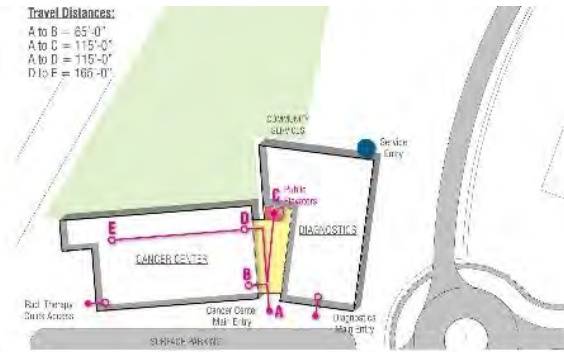
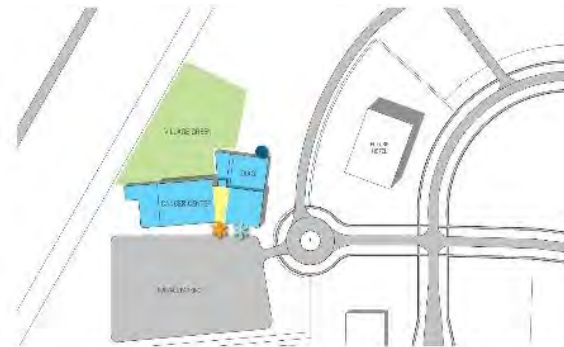


Design



# Synthesizing of Thought

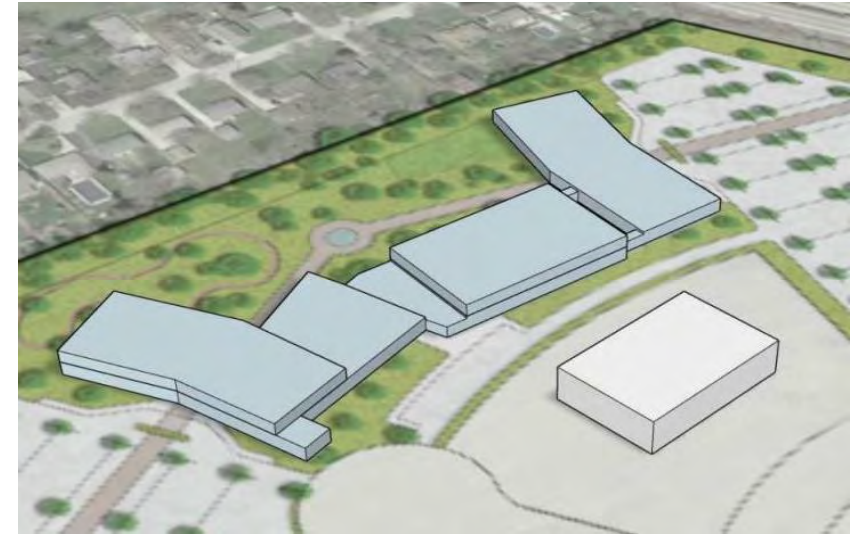
- Most fluid phase
- Focus on flow & efficiency
- Explore options
- Exam room mock-ups



Design

# Working on Form

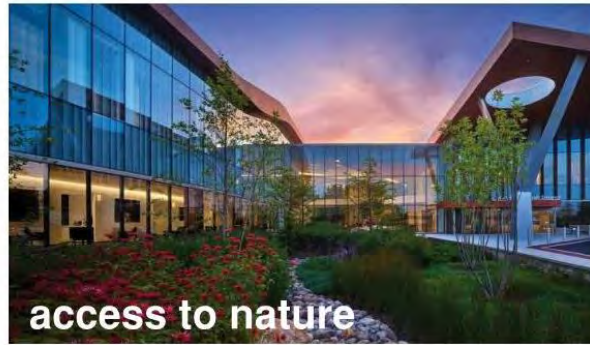
- Exploring your story
- Site context
- Studying the masses





# Your New Hospital Takes Shape:

- Create an experience
- Define the character
- Develop the vision



Design

# Working with the Petersburg Medical Center Wellness Committee to Balance all Dimensions of Wellness








- Physical – Holiday Hustle
- Social – Community Health Series
- Spiritual – Gratitude Challenge
- Emotional – BetterHealth partnership
- Mental – YouTube channel
- Vocational – Paddle Battle
- Environmental - ??
- Financial - ??



Moving from “Get Well” to “Be Well”



# Meeting the Needs of Your Community

<b>c</b> Population Growth Rate 2020	<b>0.05%</b>	
Population 65 or Older	<b>21.4%</b>	
American Indian or Alaska Native	<b>10.6%</b>	
Households with Broadband Internet	<b>79.9%</b>	
Population with Healthcare Coverage	<b>91.2%</b>	
Native Poverty Rate	<b>15.6%</b>	
Islander Poverty Rate	<b>50.0%</b>	



Moving from “Get Well” to “Be Well”

## Focus on Wellness

- Primary care is at the center
- Your greatest impact is outside the exam room

*“Wellness is an active process through which people become aware of, and make choices toward, a more successful existence.”*

- The National Wellness Institute



Copyright Wild Iris Photography



Moving from “Get Well” to “Be Well”





# Seeing it Through



## Making your Replacement Hospital a Reality:

- Designed to support your vision and model of care
- Break down the process
- Establish effective project management process
- Have fun along the way



Seeing it Through



## It starts with Collaboration

- Journey Management
- Team Approach
- Open Communication



Seeing it Through



## Beyond Responsible Stewards

- Clearly define the project scope
- Understand the constraints
- Pre-plan with all team members
- **Do, check & adjust!**
- Develop a total project budget as early as possible
- **Outline a Risk Management plan**
- Clear & complete project design
- Real-time tracking



Seeing it Through



# Project Controls to Minimize Schedule Delays, Revenue Loss and Construction Overruns

LONG-LEAD ITEM WATCH LIST	
52–65 WEEKS	Firestone, Carlisle, and John Manville Roofing materials, including Polyiso insulation and fasteners
49 WEEKS	York custom and semi-custom air handling units
48–54 WEEKS	Caterpillar and Cummins Emergency Generators
32–52 WEEKS	Elevators
45 WEEKS	GE Electrical distribution panels
42 WEEKS	Johnson Controls air cooled chillers
42 WEEKS	UPS equipment
38 WEEKS	Glass curtain finish depending on coating
24-32 WEEKS	Steel
27 WEEKS	Armstrong flooring
24 WEEKS	ASCO paralleling switchgear



Seeing it Through

# Let's Talk Details

- Focus on the details
- Design each room
- Furniture & equipment
- Graphic communication



Seeing it Through

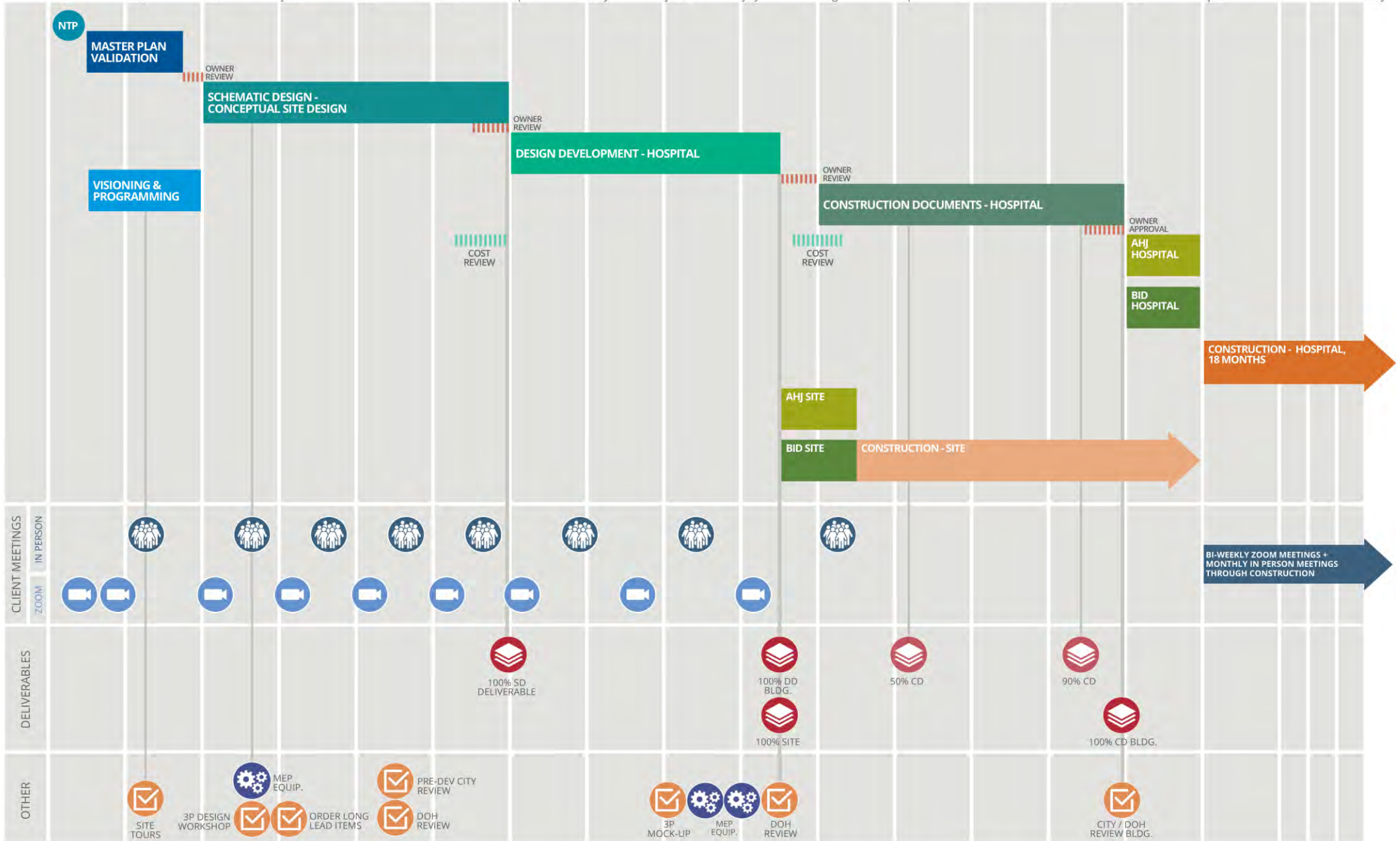


2022

2023

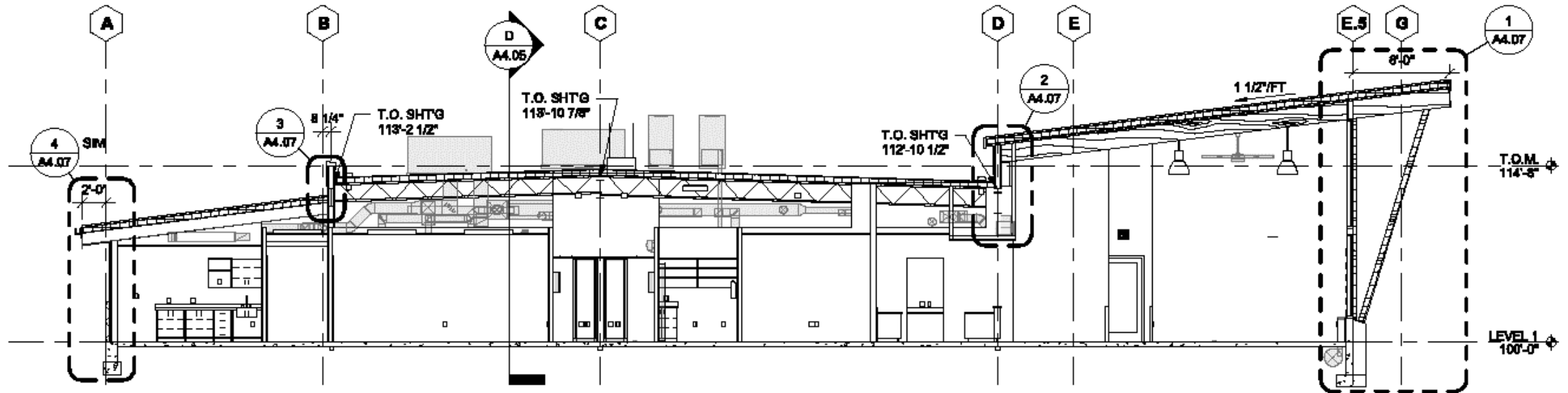
2024

oct nov dec jan feb mar apr may june july aug sep oct nov dec jan may



# Quality Control is built into everything we do

- Coordinated Drawings = Fewer Change Orders
- Follow-Through from Start to Finish
- Weekly Meetings Including GC-CM



Seeing it Through



# Why Trinity:NAC?

- We Know CAH & Rural Health!
- Consulting, Design & Operational Team Experience
- Unique Analytics and Lean Operational Approach
- Focus on Creating Experiences & Environments that HEAL
- Crafting a Design that is Yours
- Passionate About What We Do...



**Petersburg Medical Center**





# In Pursuit of a More Humane World...

We will cultivate experiences and environments where everyone is:

- Important
- Included
- Inspired

## Questions?





A scenic landscape photograph capturing a sunset over a coastal town. The sky is filled with vibrant, streaked clouds in shades of orange, yellow, and pink, transitioning to a pale blue at the top. The sun is low on the horizon, casting a warm glow across the scene. In the foreground, the calm water of a bay or fjord reflects the colors of the sky, with gentle ripples on the surface. The middle ground shows a row of houses and buildings nestled along the shoreline, their silhouettes softened by the twilight. Behind the town, a dense forest of evergreen trees stands against the backdrop of dark, rugged mountains. The overall mood is peaceful and serene.

**Thank you!**