

Redesigning Healthcare One Patient at a Time

Presentation to Providence Health & Services

September 6, 2022

Trinity:NAC

Trinity:NAC's Healthcare Leadership Team



Dan Kurtz Principal-in-Charge



Jill Kurtz Principal-in-Charge



Bob Gesing National Practice Leader



Amy Wessel Director of Strategy & Finance

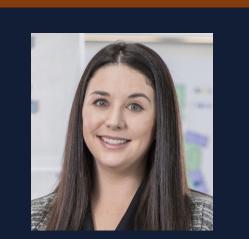


Michael Pinto Design Director

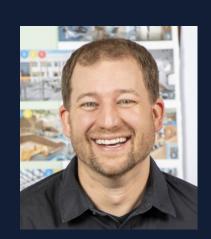


Jill Woods Experiential Planning & Design

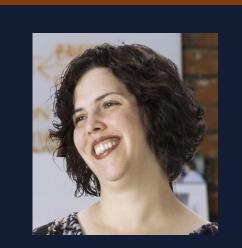
Your Healthcare Team



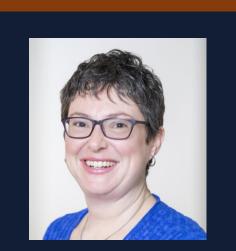
Emily Ruiz



Adam Rouns



Heather Farrell

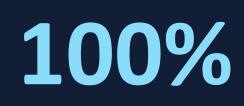


Darcy Durgan

TRINITY:NAC HEALTHCARE STUDIO

BY THE NUMBERS

20+



Years in Business (Trinity Founded 1998) Dedicated to Healthcare Design Work Spans Over 43 States

43

of Work is with Repeat Clients

80%

25% of Clients with 10+ Year Relationship

2,000+ ^H₂ \$6B+ c

Healthcare Engagements with 200 of the Leading Institutions Across the Country

Construction Value of Projects

50+

Staff Dedicated to Healthcare

4

Offices located in Columbus, Los Angeles, Seattle and Spokane

2,000+ ENGAGEMENTS IN ALL CARE SPACES

200	Clinics
185	Acute Care
180	Ambulatory Centers / MOBs
175	Diagnostic Imaging
150	Emergency Centers
140	Surgery Centers
130	Clinical Laboratories
125	Master Plans
115	Critical Care

- 99 Orthopedics
- 90 Ambulatory Surgery
- 90 Pharmacies
- 80 Critical Access / Rural Hospitals
- 75 Cancer Centers
- 60 Women's Centers
- 55 Pediatrics
- 30 New Community Health Campuses

The Trinity:NAC Approach

Taking lessons learned from the retail sector, healthcare can learn how to design solutions to the specific needs of each market segment and by service offering











STRATEGIC PLANNING

- Market Saturation Assessment
- Future Demand Forecasting
- Bed Demand Analysis
- Ambulatory Network Development
- Physician Demand Analysis
- Best Practices Assessment



FINANCIAL PLANNING

- Capital Budget Estimating
- Program Pro Forma Development
- Capital Allocation Modeling
- ROI & Net Contribution Analysis
- Economic Impact Analyses



OPERATIONAL PLANNING

- Operational Analysis
- Capacity Analysis
- Clinical Services Utilization Analysis
- Bed Allocation Analysis
- Process of Care Planning
- Facility Optimization
- Lean Process Analysis



MASTER PLANNING

- Campus Master Planning
- Capital Development Planning
- Parking Analysis
- Facility Master Planning
- Site Analysis & Assessment
- Site Development & Land Utilization



ARCHITECTURE

- Feasibility Study
- Programming
- Medical Planning
- Facility Assessment
- Design Criteria Validation
- Sustainable Design



INTERIOR DESIGN

- Experiential Design
- Space Planning
- Materials Selection
- Furniture Planning & Selection
- Accessories & Artwork
- Wayfinding
- Standards Development

Institutions Our Team Members Have Worked With

BaylorScott&White	MAYO CLINIC	# 非 能 一 OhioHealth	Sutter Health
BJC HealthCare	MedStar Health	THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER	TGH General Hospital.
Children's Hospital of Philadelphia	Mercy	SSF HEALTHCARE	Texas Children's Hospital [®]
Cleveland Clinic	Mount Sinai MEDICAL CENTER	C PeaceHealth	Trinity Health
JOHNS HOPKINS	MultiCare д	Pennsylvania	UChicago Medicine
	NATIONWIDE CHILDREN'S		UPMC LIFE CHANGING MEDICINE
KootenaiHealth	NewYork-Presbyterian The University Hospital of Columbia and Cornell	PRISMA HEALTH	University of Wisconsin Hospital and Clinics
LEGACY H E A L T H	NUMBERSEY HEALTH CARE FACILITIES FINANCING AUTHORITY	SSMHealth.	VAR Defining EXCELLENCE in the 21st Century

Does the Design Deliver?





Consumers



Beyond COVID



4 Staff Environments



Full Person Care



2



5 Workforce Challenges





3 Health Equity



6 Healthier Planet



9

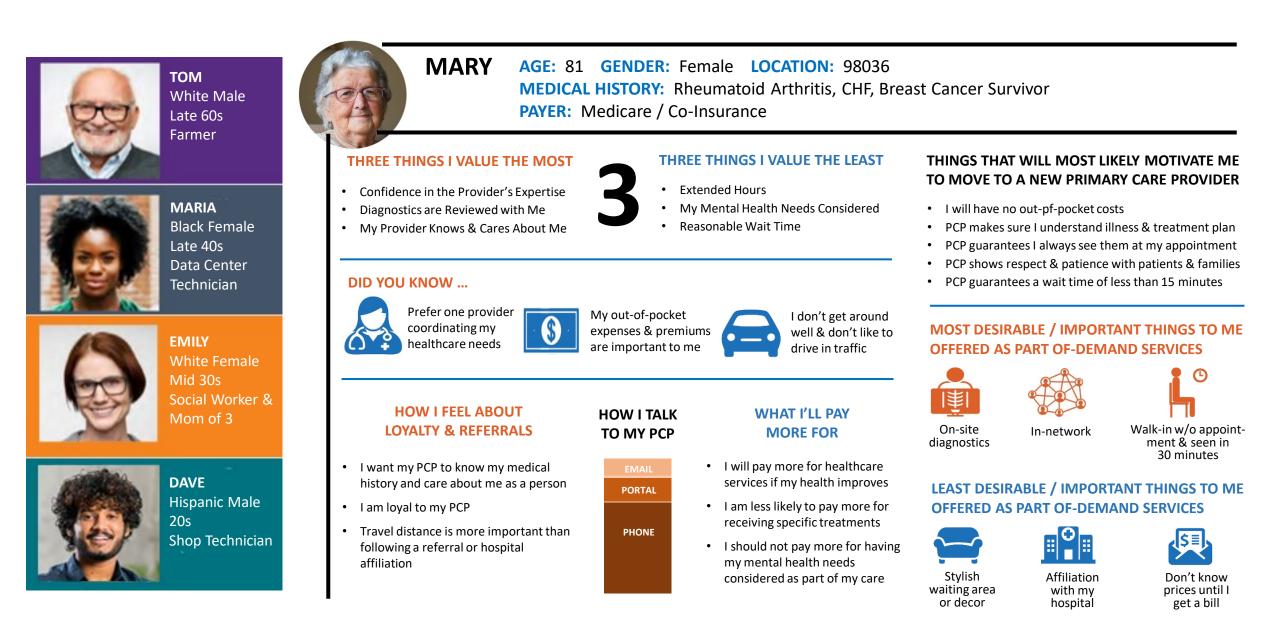
Collaboration



1

A one-size-fits-all approach to healthcare design, delivery, and operations does not work.

Health for a Better World Builds Self-Sufficient Communities That Thrive



	In	trodu	ction &	& Plan	ning		rrival	& Wel	come	F	inal P	repara	ations	v	Vaiting	g Gam	e	Post-	Op Re	cover	y 🔪	Goin	g Hor	ne
Phases & Subphases	Referral Appointment	Surgery Scheduling	Pre-Op Instructions	Pre/Post Op Appointment Scheduling	Surgery Day Preparations	Travel & Parking	Arrival	Registration / Check In	Admitted to Pre-Op	Consultation & Prep	Family is Take to Waiting	Anethesia	Travel to OR / Transfer to Table	Surgery or Waiting	Post Surgery Consultation	Travel to Post-Op	Patient Wakes Up / Family Brought Back	Recovery From Anesthesia	Discharge Instructions	Leave Facility	Pickup Perscriptions	Arrive Home	Follow-up Call	Post-Op Appointments & Therapy
Emotional Journey			Care	giver			1																	
Positive				Patie	ent			•															-	
ee Neutral							•		-	•		-				•	-	•			•			
Negative						•				•	•							•		•	•			
Touchpoints																								
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Medical Professionals	0								0			0		0			0							
Admin & Scheduling		Ż	Ż	Ż	Ż			Ż											Ż					
Technology					0																			
Built Environment	ŵ					â	â	â	â	â	ŵ			â		Â			+	ŵ				

Kootenai Health East Expansion Coeur d'Alene, Idaho

Patient rooms deliver an air of elegance and sophistication in a space that supports safety, encourages healing, offers a quiet respite and provides the conveniences of home.

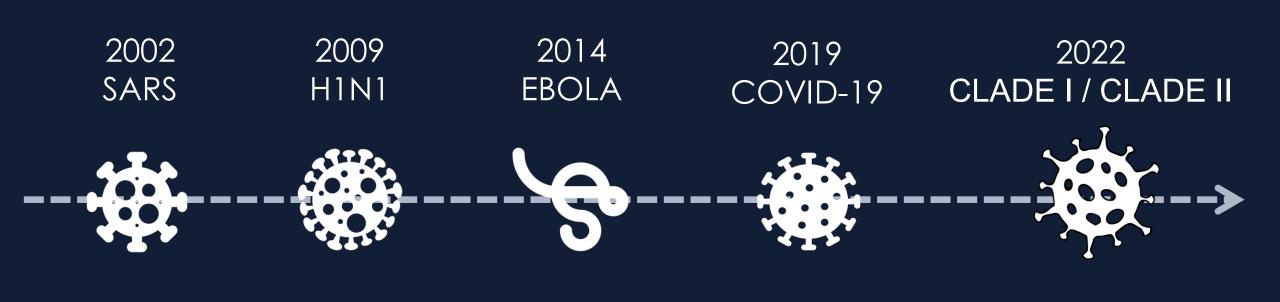






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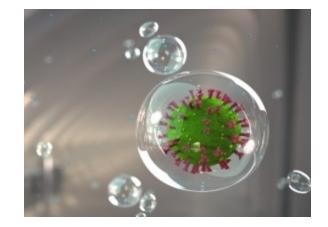
Planning healthcare environments to be Covidready is not enough.



Contact



Droplet



Airborne



The Trinity:NAC Approach

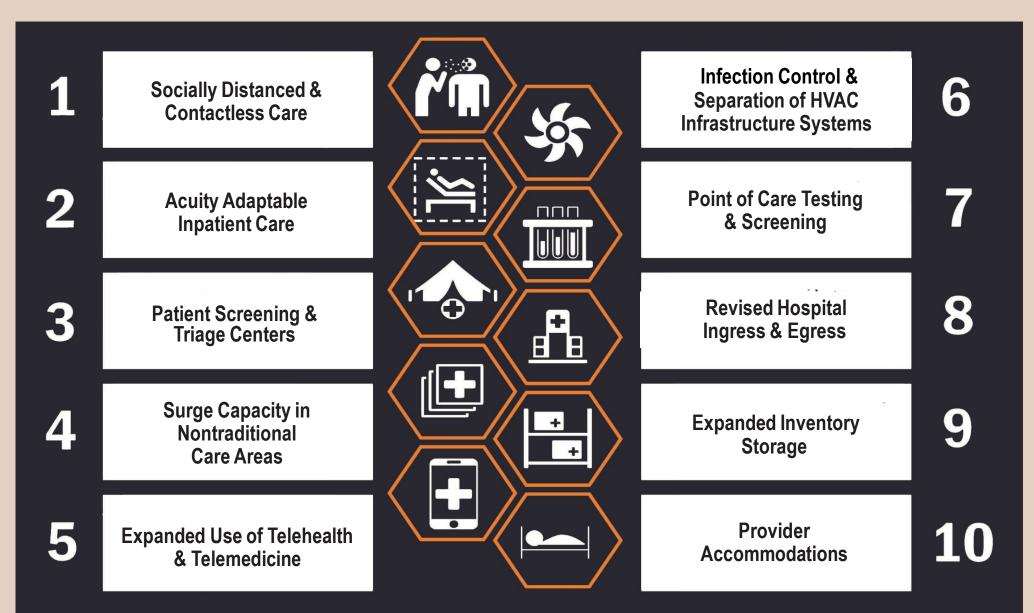
Facility planning needs to take a pan-pandemic approach to design for multiple transmissionbased diseases, and natural and man-made disasters







Applying Lessons Learned From COVID



Toledo Clinic Karmanos Cancer Center

Maumee, Ohio

Designed as a calming start and end of the patient journey, the arrival gallery was also designed for controlled separation between patients, visitors and staff. The open space of the gallery is highly adaptable to assist with health screening and safe social distancing and can be subdivided or used as a triage area if there is a high risk of disease transmission.







3

Covid exposed the inequities in healthcare delivery.



metro areas with populations over 1 million had vulnerable communities that were underserved by COVID testing sites



2.0x

increased risk of COVID death for Black Americans

2.3x

increased risk of COVID death for Hispanic Americans



2.4x

increased risk of COVID death for Native American and Alaska Natives



1.2x

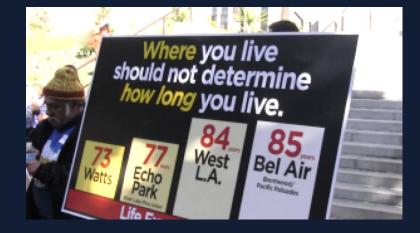
increased risk of COVID death for rural Americans



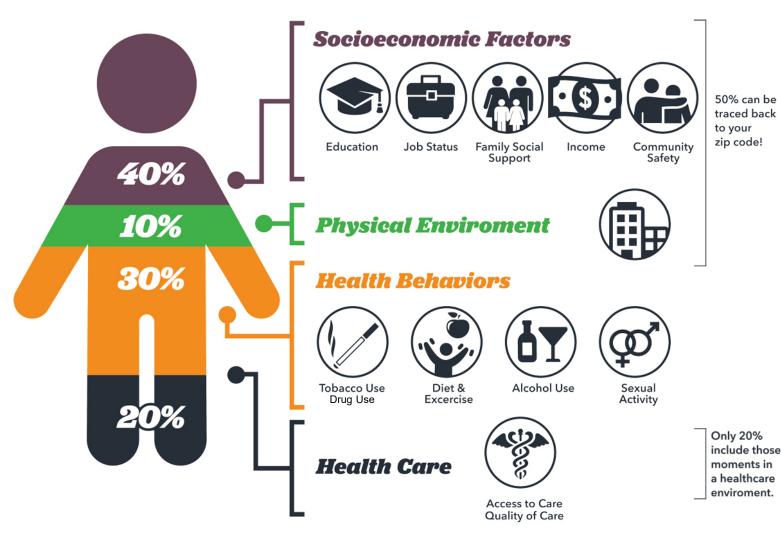


The Trinity:NAC Approach

Balancing design with the needs and wants of different demographics is critical to creating spaces that can impact people and places to address the realities of health disparities



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

Hilda L. Solis Care First Village

Los Angeles, California

The Hilda L. Solis Care First Village provides interim housing for the vulnerable homeless population in Los Angeles. It serves as a safe space to address housing, mental and behavioral health and wellness, and employment.







4

Flexible environments don't work without the staffing to operate them.

Challenge: Shortages

University Hospitals in Cleveland, Ohio currently has 1000+ job openings for bedside nurses. Two of their hospitals closed due to staffing shortages



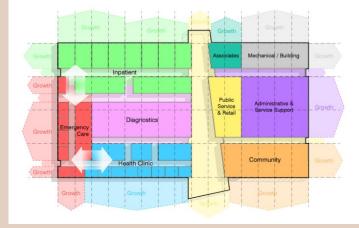


- Over 20% of all hospitals in the U.S. are reporting **CRITICAL** nurse shortages.
- The majority of U.S. hospitals report that nurses are currently resigning as fast as they are hiring new nurses.

Sistersville General Hospital

Sistersville, West Virginia

Sistersville's Critical Access Hospital is being designed for flexibility, allowing Inpatient, Emergency, and Clinic spaces to flex up or down into contiguous spaces based on need.







5

Workforce challenges cannot be solved with higher compensation and bonuses alone.

4

Generations of nurses currently in the healthcare workforce





- Labor costs are **41%** of a hospital's total operating costs
- Every travel nurse hired by a health system increases annual labor costs for that position by as much as **\$150K**

The Trinity:NAC Approach

Caregivers are the new consumer for health systems – they can choose when and where they work; we need to design solutions that increase satisfaction and wellness.



BOOMERS	GEN X	MILLENNIAL	GEN Z				
Ambitious, Loyal, Work-Centric	Entrepreneurial Spirit	Socially Aware	Practical and Have High Expectations				
Goal-Oriented	Independent Mindset	Culture Extremely Important	Motivated By Ensuring a Secure Life Out of Work				
Value Expertise Over All Else	Work-Life Balance	Seek Team-Based Collaboration	Seeking Something Outside of Themselves				
Late Technology Adopters			Digital Natives				
Dedicated, Assigned Environments, Hierarchy			Shared Spaces, Egalitarianism				

PeaceHealth Ketchikan Medical Center

Ketchikan, Alaska

Caregiver Spaces

- Recharge and Refresh
- Connectivity to Nature
- Off Stage
- Variety
- Positive Distractions
- Recruit and Retain







6

The realities of climate change are altering the way we design for the health of our planet and people. The healthcare sector is responsible for 8.5% of U.S. greenhouse gas (GHG) emissions; hospitals generate 1/3 of these emissions

SCOPES OF GREENHOUSE GAS EMISSIONS



SCOPE 1: DIRECT EMISSIONS

Emissions coming from a generator owned and used by the healthcare facility.



SCOPE 2: INDIRECT EMISSIONS

Emissions coming from electric, gas, and other utilities paid for by the facility.



SCOPE 3: ALL OTHER EMISSIONS

Emissions from manufacturing and shipping medical supplies to the facility and emissions from patients traveling to and from the facility.

The Trinity:NAC Approach

Design must be a leader in helping hospitals reduce their carbon footprint during both construction and operation.





Marietta Memorial Hospital Athens Athens, Ohio

Solar panels will lower the utility costs, increase energy reliability, and promote a healthier planet for this rural hospital.







Learn from the present but focus on the future.

Creating Solutions for What is Today ... and Tomorrow



The Trinity:NAC Approach

Hospitals/health systems need to create more sustainable, future-ready care models that include on-site care delivery, IT integration/patient monitoring equipment, ambulatory access and remote/home care.





Piedmont Athens Regional Medical Center

Athens, Georgia

Patient rooms at Piedmont use a high-tech patient care environment that enhances comfort and quality of care while allowing caregivers to focus more personal attention on the patient.









Preparing healthcare spaces for tomorrow is a holistic design challenge.



UNDERSTANDING A UNIQUE POPULATION

Trinity:NAC is invested in making a difference in the communities our clients serve. Every community has its own unique identity with unique challenges and opportunities. Understanding your community's needs enables you to further your impact.



BEING HEALTHY AT HOME

From apps to robots and virtual reality to artificial intelligence, patients and providers are embracing the integration of technology into the care process and driving healthcare out of the hospital into the office, the home, or anywhere in between. Providers must make the experience seamless and adaptable to different environments to keep patients engaged.



PROVIDING A COMMUNITY DESTINATION

When your patients think of a healthcare campus, what do they think of? Long lines, long walks from the parking lot to navigating a confusing collection of long hallways? Long waits in uncomfortable chairs? White coat syndrome? Make your patients think of your campus as more than a place for healthcare – make it a place for community wellcare.



DESIGNING A BETTER PATIENT JOURNEY

Prior to the pandemic, health systems spent many years and countless dollars trying to evolve and develop telemedicine with limited success. The pandemic forced healthcare to quickly pivot to a world of virtual care. But patient demands and expectations go beyond telehealth to focus on the entire healthcare journey, whether in-person or virtual.



DESIGNING BEYOND THE IMAGINATION

Our research team focuses on SDoH, the patient experience, and evolving care models and has developed numerous solutions that positively influence and improve the patient, family, and caregiver experience to meet today's high expectations. Many of these solutions are directly linked to improvements in safety and quality.



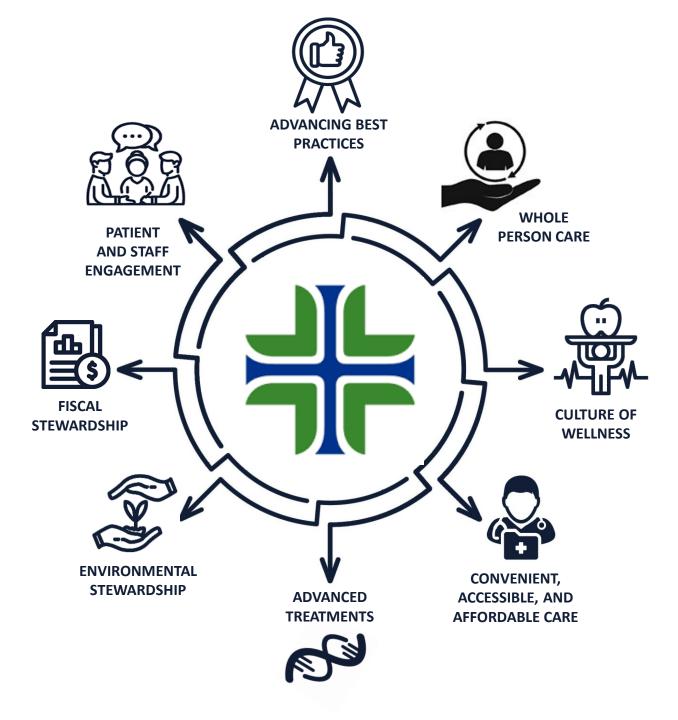
CARING FOR MORE THAN HEALTH

Until recently, healthcare systems have struggled with their role in addressing and supporting the psycho-social needs of their communities. High-risk populations place a tremendous strain on the healthcare system. But moral compasses and value-based reimbursement have united to make the Social Determinants of Health a significant priority.

The Trinity:NAC Approach

Design is not about the building; it is about visualizing how the strategy, operations, technology, patient, workforce experience, and built environments come together to create Health For A Better World.





Wayne HealthCare

Greenville, Ohio

This new facility promotes patient care through advanced technologies and streamlined workflows while integrating natural elements and wellness concepts into a healing destination.





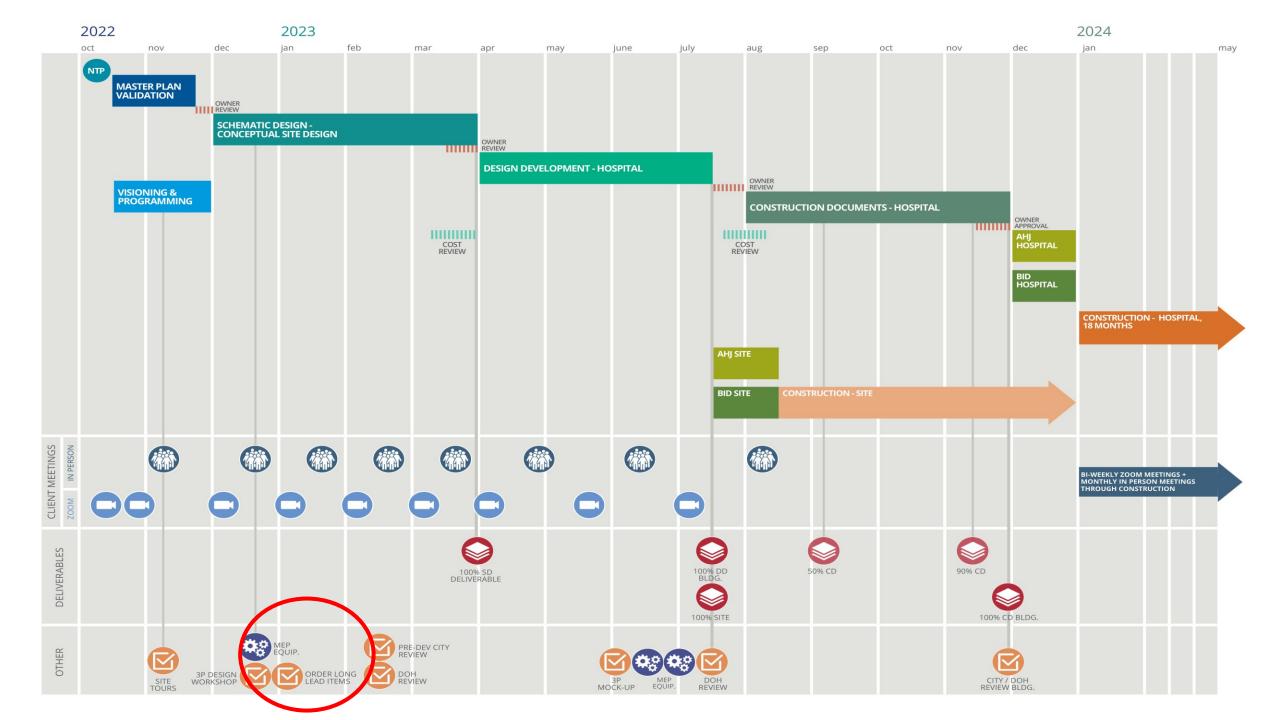


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Surprises are meant for birthdays – NOT for construction.

Trinity:NAC Has Project Controls Dedicated 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



The Trinity:NAC Approach

It starts and ends with collaboration:

- Journey management
- Team approach
- Open communication





Inland Northwest Behavioral Health

Spokane, Washington

Providing comprehensive inpatient and outpatient behavioral health services in a tranquil, thoughtfullydesigned environment. Split into four units, one unit is reserved especially for adolescent patients.







Questions?

Thank You.

Trinity:NAC