4th Atlanta
Hospital, Outpatient Facilities & Medical Office Buildings Summit
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RECAP & TAKEAWAYS

Piloting Healthcare's Road to Recovery

Planning, Real Estate, Design, Construction, and Operation of
Hospitals | Clinics | ASCs | MOBs | Retail | Telehealth
Home Health | Non-Clinical | Research Facilities

This In-person Education and Networking Event is Presented by
Corporate Realty, Design & Management Institute
Association of Medical Facility Professionals – Atlanta Chapter
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Executive Summary:

- Revolutionizing Healthcare Investments: Blending Today's Capital Planning with Tomorrow's Digitally Enabled Care Landscape
- Navigating the Growth in Metro Atlanta's North Counties: A Tale of Two Projects
- Spotlight Sessions – Money Saving Solutions
- What's in the Cards for Healthcare Real Estate: 2024 and Beyond
- How Planning Design and Construction and Facilities Collectively Met the 2020 Challenge – A Discussion in Overcoming Challenges in a Pandemic Environment
- Designing for Security in an Era of Increased Violence
- Integrating Security, Technology, and Hardware
- Digital Tethering in Healthcare
- Navigating the Annual Budget Process: CapEx, OpEx, and Other Priorities

Corporate Realty, Design & Management Institute, AMFP, and AMFP Atlanta want to thank these sponsors for making this educational and networking program possible

Reported by Mary Loftus, an Atlanta-based healthcare and medical writer/editor

Revolutionizing Healthcare Investments: Blending Today's Capital Planning with Tomorrow's Digitally Enabled Care Landscape

Laura Jones, Healthcare Strategist, DPR Construction

Carl Fleming, Healthcare Strategy and Digital Transformation, DPR Construction

Laura Jones:

- The US economic forecast is cautiously optimistic, and inflation is slowing down, but health care remains a tough market. Atlanta continues to be a fast-growing city, with 5.6% growth over five years.
- Three future scenarios include a soft landing with a stable labor market despite slow job growth; a return of inflation with strong labor market pushing up wages and costs; a recession due to Fed's reaction to inflation leading to other risks.
- Atlanta's current nearly 6.5 million population is dispersed among several metro counties, with Forsyth leading in growth.
- Atlanta's population is graying/aging, fastest growing demographic is 65+. The Boomers are transitioning onto Medicare (complete by 2030).

Carl Fleming:

- It's the fully insured patient who keeps the healthcare system afloat.
- Addressing the tech side of healthcare: the future is 'phygital,' (blending physical + digital worlds). The pandemic accelerated adoption. Enhancing human interactions with technology.
- Sometimes referred to as "omnichannel," this is a seamless connection between digital and physical channels to unify customer experience. It's all about convenience, autonomy, and immersion.
- Competition is tough. There are outside disruptors – Amazon and Walmart, Big Tech, private equity, all competing for these patients.
- Who's doing 'phygital' well? NFL, sports teams in general. Multiple touchpoints with wide range of customers (biggest touchpoint: people's smartphones, personalized feeds). Healthcare and sports teams are facing the same challenges. Fans and brands, patients and providers.
- Six generations, six sets of expectations: In 2030: 83+, "the Silents," hospital affiliation a priority, rely on word of mouth, tech-adverse, travel-avoidant; "Baby Boomers," 64-82, loyal, want continuity, resistant to virtual care; "Gen X," 48-63, timely access, quality over price; "Millennials," 34-47, influencers, cost conscious, alternative care sites; "Gen Z," 17-33, on demand, low-cost, online shoppers, digitally fluent; "Gen Alpha," 0-16, smaller families, older parents, positive distractions, tech immersed.
- Consumer only a patient a small part of the time. Patients no longer passive spectators, but active participants.
- Align initiatives and resources. Facilities management, medical planners, a lot of organizations hiring leaders in digital AI. Creating a blended reality.
- What's on road map? Ambient Intelligence, Zero UI, altering care models, creating new workflows, conversational experiences. Innovation hubs, tech incubators, seeking venture capital. Patient-centric and clinician-optimized. Human, physical and digital all coming together. Frictionless experience within and beyond the hospital's walls.

Navigating the Growth in Metro Atlanta's North Counties: A Tale of Two Projects

Tim McCurley, Director, Turner and Townsend Healthcare

Justin Gentzke, Project Manager, Turner Construction Company

Jim Crabb, PE, LEED AP, Principal, Director, Mechanical Engineer, Mazzetti

Tim McCurley:

- Remember all the hospitals with tents set up in their parking lots during the pandemic? The COVID-19 pandemic has occurred, we're in the middle of schematic design, and the hospital comes to us and says, "What can we do so this doesn't happen?"
- A disease we don't know where comes from, how spread, or how to treat. Yet, we need to have a pandemic design response for our clients.
- We looked at all design elements, inpatient floors, ED exam rooms, emergency department waiting spaces and triage, treatment and imaging rooms.
- Which rooms should be made into negative pressure areas?

Jim Crabb:

- Our approach was to look at what we were trying to achieve with this system: Prevent cross contamination from a patient room to other spaces; prevent leakage of contaminants through the door; and prevent distribution of contaminants through the HVAC system. Reduce risk to caregivers within patient rooms.
- Ventilation goals for reducing infectious aerosols: 12 air changes, dilution, reduce concentration. Recommended 12 over 6. But is that necessary? Size of patient rooms 30 years ago was half of what they are now. One patient in room now, two in past. And negative air pressure only works while the door is closed.
- Air changes per hour the wrong metric. Concentration is how many particles vs. air flow, not room volume. (Fly in soup analogy, just blend it up, so there's not that many parts of fly per spoonful. That's the concept of the dilution model. What if you were to remove the fly, not disperse it?)
- We proposed moving air return down to headwall, where patient is breathing out. Improve capture of source of disease. Six air changes per hour sufficient with new model (not mixing but directing uptake.)
- Air change per hour is the right metric for purging a room after infectious patient leaves, but steady-state infection risk depends on generation rate and ventilation rate. Room volume is irrelevant.

Justin Gentzke

- During the pandemic there were supply shortages, so you have to be prepared for that.
- Schedule Considerations: Air handling units need released early to accommodate overall project schedule; switched to micro drive VFDs on each fan to release units prior to full design completion.
- Take an integrated team approach, involving the client, program manager, vendors, user group meetings, cost scenarios. Allows for timely decisions, and everyone has ownership of final design.

Money-Saving Solutions You Can Use Tomorrow

Glen Buckner, AD Systems, Allegion

Michael Luca, STARC Systems

David Harris, Camfil USA

Glen Buckner: Sliding Doors

- Designing sliding doors, AD Systems Door Visualization allows you to see all the potential doors needed, from procedure and OR rooms to exam rooms to administrative areas to imaging rooms, medication rooms, and utility rooms to restrooms.
- Interior sliding doors can satisfy safety requirements and security needs while being aesthetically pleasing. Also they take less space: a small clinic they outfitted was able to put an extra exam room on each floor due to use of sliding vs. swing doors.
- Some areas need to limit contamination and seepage of airborne particles; increase security; or maximize usable space. Sliding doors can be the answer.
- Sliding doors can be automated, touchless, and provide access control through automatic or manual locking.

Michael Luca: **Hard Barriers**

- Speedy installation, can put up hundreds of feet of wall in an hour.
- Protect patients and staff from dust and noise of renovation
- Reusable, sustainable (vs. drywall)
- STARC: simple, telescopic, airtight, reusable, containment

David Harris: Clean Air Solutions

- High performance air filters protect our most important resource.
- We consume 48 pounds of air a day; its cleanliness is important.
- MERV-A is what to look for. “A” stands for “actual” or “always.” Fine fiber vs. coarse fiber. Electrostatic charge degrades over time.

What's in the Cards for Healthcare Real Estate: 2024 and Beyond

Jeff Brown, partner and chief strategy officer, Meadows and Ohly

Dan Maxwell, VP of Development Services, Realty Trust Group

Sabrina Solomiany, Senior Managing Director/Head of Medical and Life Sciences, Berkadia

Moderator: Alan Whitson, RPA, President, Corporate Realty, Design and Management Institute

Moderator: The bottom line is tight for healthcare systems, and patients are becoming less healthy (88% of U.S. population is metabolically unhealthy.) What's in the cards for healthcare real estate?

- Jeff: Our society has gone through a disconnect, healthcare systems followed suit. Excited that real estate leaders now have a strong seat at the table. 2024 is looking up, better than last year.
- Sabrina: Lots of issues at play. Capital markets. Interest rates and availability of capital. The worst feels like it's over. Not sure when rates are coming down; projects are more difficult to get done. But fundamentals are strong: occupancy growth, positive absorption. Loans coming due this year. Caps on rates are expiring. A lot of groups are now moving over to sell.
- Dan: There's an appetite for more investment this year, higher than in the past couple of years. Merger acquisition, more scrutiny from federal regulatory agencies. Banks coming into the market. AI is having an impact on site selection. Lot of good demographic data as to what's happening with patient patterns.
- Jeff: Insurance companies are still major players. Some won't pay even after services are rendered. United/Optum biggest player. Ambulatory surgery/urgent care white hot. Doing things more efficiently. Impacting margins for healthcare systems. Pause on some projects. Atlanta's a hotbed for strong health systems. In Florida, can't build quickly enough, Texas. Non-regulated areas.

Moderator: What are you doing differently?

- Dan: Between my wearables and my sleep number bed, my insurance carrier knows exactly how unhealthy I am. We are using data analytics to track and predict. Generative AI will play a big part moving forward.
- Sabrina: Clients are getting creative. Focusing on space already have, for behavioral health and rehab expansion, because construction costs so high. Look for existing facilities. Pretty easily converted (assisted aging facility, senior housing), but getting financing difficult. Find better ways of finding capital. Gone are the days of just going to the bank and getting a million quotes.

Moderator: Biggest pitfalls to avoid?

- Dan: Our clients who aren't looking at the holistic continuum of care, master planning on campuses. How do you want to play into strategy with Ambulatory Care? Analyzing space and how impacts your campus and healthcare network. Not reactive to get buildings built, but right buildings in the right place. Adaptability.
- Jeff: Pitfall would be to not plan. Focus on market. Those who win are aggressive during downcycles. Have to validate capital funding strategy. Escalation could hit. Maintain your

facilities. Assets can be of value, don't let them deteriorate. Where is the puck going? Ambulatory care. Please plan, don't delay, but don't just react.

- Sabrina: Anyone who's signing leases, pay close attention to how they are structured. Ability to request financials from tenant, landlords need that to make sure tenants are performing. Sellers and buyers want to know. Renewal options, fair market value can be a problem down the line. Look to future and see what's going to make sense in the long run.

Moderator: Final thoughts?

- Dan: Consult all your resources, a lot of data out there. Forecasting future use. Don't go it alone. FGI guidelines, behavioral health opportunities in the future. Emergency response. New guidelines -- 2026 will be here before you know it. Make sure you're reaching out and getting all the data you can. Public/private partnerships are here.
- Sabrina: Do your research, know your location, know your tenants; what does this project look like 3 to 5 years from now? How am I going to get out (even if you don't think you will want out). Have a plan. Shore up cash, no need to keep all those assets. Monetization. Partnerships.

How Planning Design and Construction and Facilities Collectively Met the 2020 Challenge – A Discussion in Overcoming Challenges in a Pandemic Environment

Mark Schultz, Regional Director of Facilities, Medxcel

Mike Wood, MD, SASHE, CHC, MSM, ARRT, VP Planning, Design, Construction, and Energy

Mark Schultz:

- We didn't know much when the pandemic hit. How long would the virus survive on a hard surface? Create more isolation rooms? Negative air flow rooms? Would HEPA filters suffice? Spraying/sanitizing all surfaces, beds, medical equipment.
- L&D, baby hospital, 20 to 25 births a day, isolation rooms, had 2, wanted 5. Thought there was no way we'd have two mothers testing COVID-positive at a time. Wrong, 7 to 8 at a time.
- Patient care was being provided in parking lots, in drive-throughs. People didn't want to come inside hospitals.
- Big question: How to treat safely, not only COVID positive but healthcare staff. Essential worker letters. Writing policy for PPE we had available. Face shield? Booties? Gowns? Burning through them on a daily basis.
- Incredibly high stress environment. Making decisions in real time, in hallways, no SMEs. Codes were lacking in guidance. Temporary measures ad hoc at best.
- Nationwide solutions as things began to work. Daily command center calls. All about sharing what was working.
- We set up clinics, told people to come to hospital if COVID possible, infusion treatment. Creating ante rooms, passages in and out, to ER. Use side doors, bring in a safe protected way.

Mike Wood, MD:

- What did we learn as a system? The art of pivoting became a core skill.
- The pandemic changed our culture from exclusive to inclusive. Leverage a multi-disciplinary SME approach. Solo doesn't work anymore.
- Know the business side of healthcare, the drivers, Finance 101. Without that won't be able to go forward in this environment.
- Tighten the ship. We had to change our language and lexicon. If you want something funded, talk about its added value. Articulate what you want to the CFO in the right language.
- Know the difference between collaboration and integration? They are not the same.
- Take the time. This is the pause.
- We have multiple campuses. The backlog is coming: facility infrastructure investments, delayed purchases/maintenance/projects. Chiller, boilers, plants, VFDs, entire system. Are you ready? Jumpstart when you can.
- Spend time educating your administrative and healthcare leaders. Create a library/data base of shared team values.

Designing for Security in an Era of Increased Violence

Adrian Arriaga, MBA, CHPA, HSEM, Senior Manager Enterprise Security Operations, City of Hope

Nora Colman, MD, Assistant Professor of Pediatrics, Emory, Pediatric Critical Care Medicine, Children's Healthcare of Atlanta

Sarah Walter, AIA, Principal/Senior Medical Planner, Page

Moderator, Mary Loftus, Emory University, Editor of Emory Health Digest and Emory Medicine magazines

- Modern healthcare environments strive to be inviting, warm, colorful, comforting, and open. Secure environments, however, often have security guards, cameras, barriers, locks, ID checks, badges, and other methods to control visitors. How do we maintain both priorities – a warm, inviting place of healing that is also safe and secure? This is the challenge facing hospital and clinic designers today.
- The future of healthcare facility security is an integrated model. Advances in predictive analytics will add to the security toolbox. Elements include design strategies, physical security, technology, training and protocols, and command centers.
- Open spaces are hard to secure. So why have them in healthcare facilities? They have been proven to create a sense of welcome, reduce stress and anxiety, and promote community wellness through educational gatherings and special events.
- We encourage healthcare facilities to determine a security philosophy as well as supporting policies for their campuses, buildings, and spaces within buildings.
- Children's hospitals present unique challenges, as family-centered care is a hallmark of pediatric healthcare facilities, with lots of child- and family-friendly spaces.
- Areas of high risk for patient and staff safety: the broader campus, parking lots and garages, main entries and waiting spaces, emergency rooms, and patient units (labor and delivery as well).
- Strategic security for healthcare facilities ideally involves early engagement and input from a multidisciplinary stakeholder team that includes: facilities team, front desk personnel, clinical representatives, and security staff (physical/cyber/IT).
- How public will public spaces be? This involves security, access, and access control, and ranges from "Everyone is Welcome!" to fully restricted (only select hospital patients, staff, and guests). Plan the spatial sequence of lobby elements, to support this desired level of security/openness. For example, how accessible will dining areas be? Elevators?

KEY TAKEAWAYS:

Campus: define security philosophy, establish campus boundaries, plan for after-hours and night shift, minimize building entry points, outdoor space = "outdoor rooms";

Public Spaces: define level of openness desired, plan for future security add-ons, prioritize visibility, desk design, escape routes, include security-calming attributes, consider barrier materials at high-risk areas;

Departments: define points of access and control, prioritize anti-abduction and elopement measures, prioritize and standardize care team station safety features, avoid areas of isolation and entrapment.

Integrating Security, Technology, and Hardware

Melanie Wright, Business Development Manager Healthcare, ASSA ABLOY

- The security market has changed; customers' needs are complex and ever changing.
- Identify what your security goals are, what options exist to reach those goals, and what budget constraints exist. Incorporate consultants and field experts in coordination with the design team, end user, and facilities.
- Your strategy determines your choices. Identify vulnerabilities, areas where you need to limit access, areas where you need additional visibility and audit capabilities, and next steps if that security layer is breached.
- What technologies exist to help you reach your goals?
    - Key control software?
    - Visitor management/tracking?
    - Weapons detection?
    - Remote or centralized lockdown capability?
    - Alert system?
    - What types of locks and keys?
    - Wireless hardware solutions?
    - Coordination is key to making it all work.

Digital Tethering in Healthcare

Gary Hamilton, Senior VP and USA Healthcare Director, WSP

Jim Vun Cannon, National Healthcare Segment Manager, Schneider Electric

Donny Walker, PE, RCDD, Partner, Newcomb & Boyd

Moderator: Braheem Santos, Healthcare Strategic Account Executive, Schneider Electric

Moderator: What are you seeing when it comes to facilities?

Gary: Connecting buildings and the ability to understand what's going on in real estate and healthcare. A lot of emphasis on digital in healthcare. Educating our owners. Bring to the table on Day 1: planning, RFP, weave into the design process, multidisciplinary approach.

Jim: About 70 percent of my customers are unprepared. Myself and my staff, a fair amount of times we're doing audits. Bringing in engineering early in the game. If we don't know what's meaningful to you up front, it might be too late at the end. We are facing a paradigm shift -- the digitization of everything. Focused on patient engagement. But digitization of operations is important, managing in a holistic, smart way.

Moderator: Are you empowered as engineers?

Donny: It's the stakeholder that's driving it. On the operations side, we are just trying to put out fires.

Gary: Innovation advisory group: How to do a smart hospital. We're not telling you to do a digital hospital, but we can talk to you about what you would like, give you a road map, advise; specs and recs.

Jim: We can help with capacity, energy savings, protection from power outages, operational efficiencies. Value of being able to do that. Remote center, becomes expensive to maintain. Other experts are digitally connected. Geographically dispersed but can still consult. A big problem operations has is making sure alarms mean something. If you can't attach someone's name to an alarm, it's an event. It shouldn't be an alarm.

Gary: You can provide an app to navigate the hospital space, from parking lot to digital record, pathway to navigate to exact exam room. Remote control operation centers, controlling multiple hospitals. It helps you figure out exactly what's going on, and how to staff these facilities, how to support a reduced staff. Temperatures within patient rooms, for example, you have a dashboard where you can actually see the changes going on, when a patient isn't comfortable. We are finding innovative ways of using less to do more. It's not that scary, you deal with it everywhere: airports, sports arenas, etc. Tech changes year by year. Educate owners, push the envelope, keep patient care at the center.

Moderator: What didn't work?

Donny: Cybersecurity. Want the environment to be inviting, bring visitors in, but really have to have the right cybersecurity paradigm. People, planning, and process.

Gary: There is a right and wrong approach to making a hospital digital. Planning has to be from Day 1. Convert into an actionable plan. Have tried incorporating when half done, not a great

result. Fibers are already in the ground. You have to have the right people at the table from the start.

Jim: Where failed? You have to think about your people. They're different ages, from different walks of life. To learn something new, deal with advancing technologies, some fear it will expose a lack of skill or knowledge. You need a vision, ideation sessions; get engineering involved first. Can do so many more things than you think, for less cost. You're going to change process and that requires people.

Navigating the Annual Budget Process: CapEx, OpEx, and Other Priorities

Jason Cash, VP, Planning, Design, and Construction, Piedmont Healthcare

Keeli John, Director, Strategic Operations, Emory University Hospital

Gerard Smith, Director, Planning, Design and Construction, Children's Healthcare of Atlanta

Doug Straughan, Senior Project Manager, Northeast Georgia Health Systems

Carlos Washington, System Director of Construction Services, Northside Hospital

Moderator: Carla Bowron, Healthcare Group Manager, JE Dunn.

Moderator: The budget seems cast in stone, although business conditions are always changing. Biggest mistake?

Jason: You can't go too far right or left of your executive team, you have to educate them.

Keeli: Missing the big picture or getting the wrong picture. Comprehensive budget and process.

Doug: Don't throw out a bunch of numbers too early. Variables, pressures on our budgets these days. A lot more than even five years ago.

Gerard: Not having a defined plan.

Carlos: Not asking enough questions or the right questions. Clarify what your budget is based on.

Moderator: Where in the world do you start?

Carlos: For me, it starts with the leadership at your campus. If we don't have the information we need, guardrails, then the project can go awry and we're taking steps backward to redo what we've already done. CEOs, BPs, having vision in the beginning.

Doug: Programmatic needs, see whether space is adequate. Clinical staff: something visually they can look at, react to. We use a lot of A3s, have user groups fill those out. Cost and benefit to what they're asking for. Then we have a document that we can sink our teeth into. Good cost analysis.

Keeli: Clear and transparent processes. Emory is a large organization, with many layers of people who need to understand the process. Anchor back to mission. Clearly defined criteria for assessing system. Looking at innovation to deliver patient care.

Jason: Are you actually getting direction from leadership? Asking the right questions of the right people, so you don't have to redo work. Piedmont, big footprint. There are projects that make a lot of sense for patients and their families, but also have to bring in a financial return, crucial for running a business.

Carlos: Ensuring we are good stewards of resources. How do we build or renovate for less? A lot of asks. Consid where we are in healthcare: Demand is greater, ED is jam packed. There is a great need. At the end of the day, it's one pool of money. OpEx effects CapEx. How do you help us through streamlined project? Incorporate tech while stretching dollars. Need for beds, from design/consultant standpoint, putting the time in. Take slow and do right so contractors can speed up on back end.

Doug: Always negotiating costs with our vendors. Sometimes this just shifts the costs to capital. Not just costs, but time as well. Rely on you to set timelines. Collaboration of teams. More streamlined.

Moderator: How do you address the unknowns?

General answers: It's important to have contingencies in your contracts. Talk about issues as soon as you can to try to fix them. Be fluid and flexible. The unknown will happen; you need experienced, knowledgeable teams that are able to pivot. Make sure teams have the tools and recourse they need. Difference between a good and bad project: how you deal with the unexpected. Leadership may have the big, national picture, it's up to us to bring detailed information to them. Creating a proposal that's profitable for the system is a conversation. Service lines you want to grow, going to focus on those. They ID the need then come to us for budget and cost analysis. We would love to build the most efficient system every time but if there's a 30-year payback, leadership's not going to go for that. But a payoff a few years later? Definitely. We work closely with our design team. Durable items, try to lower operational costs.

Moderator: What's keeping you up at night?

General answers: All of it. Escalation. New normal. The prices have gone up and they're going to stay up. On time, on budget, no going back to the board. Last resort, reduce scope, which no one wants to do. Staffing and safety. Ensuring that the guy on the construction site is going home, healthy and whole, to his two kids.

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