We Never Saw That Coming:

Preparing Your Organization for the Unexpected

M. Wargo, HCA Healthcare, Vice President of Emergency Operations & Medical Transport

M. Harvey, HCA Healthcare, Assistant Vice President of Emergency Operations & Medical Transport

March 28th, 2023

Michael Wargo RN, BSN, MBA, PHRN, CMTE
Vice President & Chief, Enterprise Emergency Operations and Medical Transport

Areas of Expertise:

❖ Healthcare readiness governance, strategy, and budgeting

❖ Developing responsible executives and operational leaders

❖ Healthcare readiness for planned events

❖ Tools and technologies for healthcare intelligence and situational awareness

❖ Threat assessments

❖ Training and exercise development and facilitation

❖ Medical transportation strategy

❖ Developing incident management and support teams

➢ Vice President and Chief for Enterprise Emergency Operations and Medical Transport for HCA Healthcare

- Responsible for redesigning and leading the organization's disaster and emergency operations program in readiness, response, and recovery from adverse natural and man-made incidents across both the U.S. and the metro-London area of the UK
- Concurrently serves as the Chair of the Emergency Preparedness Committee for the Federation of American Hospitals
- Chair of the U.S. Health and Public Health Sector Coordination Council of the National Critical Infrastructure Protection Program sanctioned by the U.S. Department of Homeland Security.

➢ More than 25 years of clinical experience in high quality, patient-centered care and nearly two decades in public safety and emergency operations leadership, serving roles throughout some of the nation's largest health systems, transport agencies, and at the state and federal government levels

- Has previously held clinical, administrative, and executive positions within the Lehigh Valley Health Network, KC Incident Management Services, the U.S. Department of Health and Human Services, the Pennsylvania State Medical Assistance Team, and various medical emergency response and critical care transport agencies throughout Pennsylvania. Mike has clinical experience as an emergency/trauma and critical care RN and a paramedic.

➢ Leads healthcare system responses to pandemics, devastating hurricanes, bombings and other mass casualty incidents, and large-scale planned events

➢ Focuses on developing responsible preparedness executives, creating strategic frameworks for readiness, integrating public safety and emergency medical services into healthcare planning and response, and evaluating and implementing technologies to improve situational awareness

➢ Education: American Military University (MBA), Kutztown University of PA (BSN), and St. Luke's School of Nursing (Diploma of Nursing).

- Currently a candidate for a Doctor of Public Health degree at Indiana University Fairbanks School of Public Health.

Melissa Harvey MSPH, BSN, RN

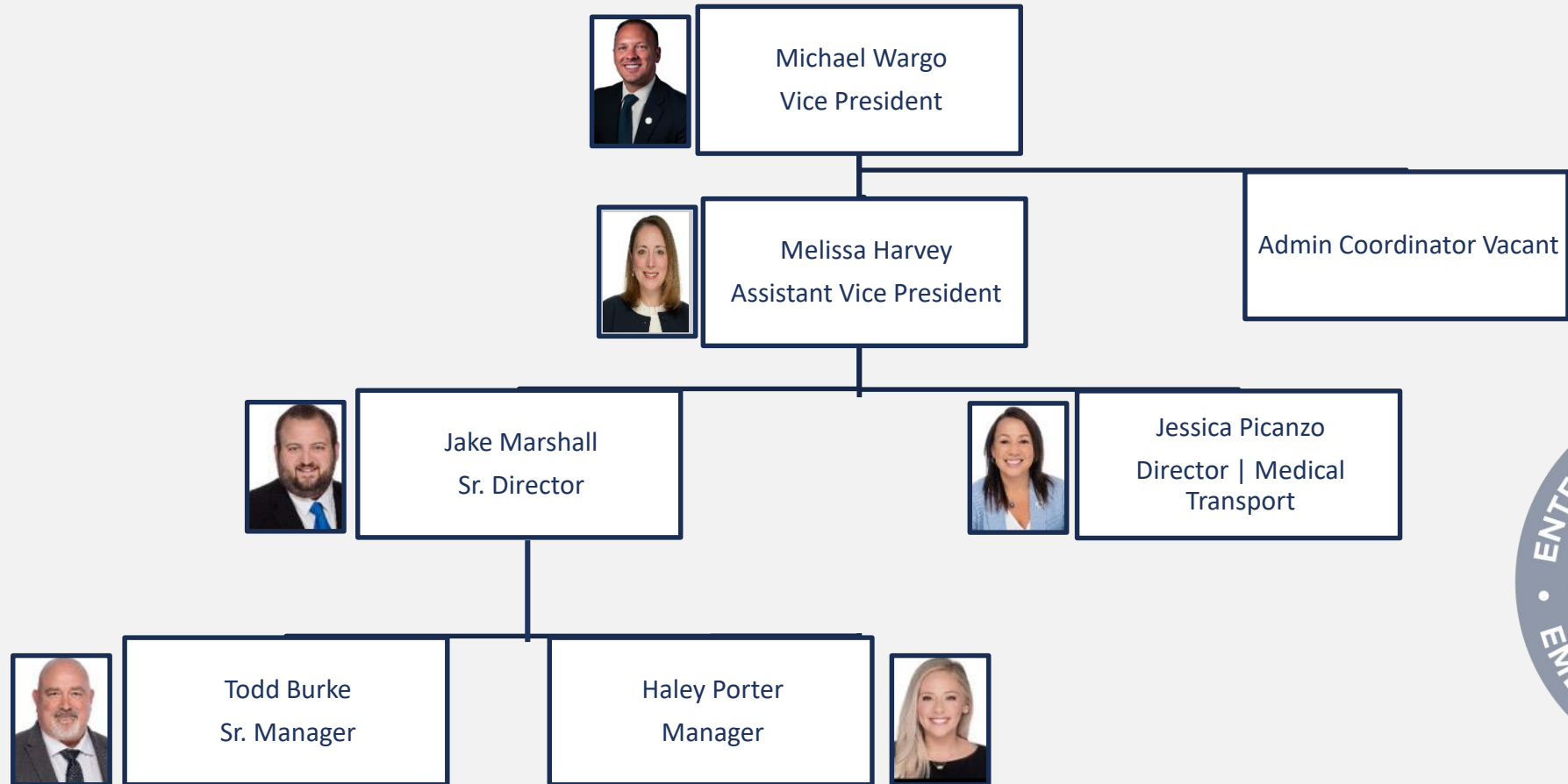*Assistant Vice President, Enterprise Emergency Operations*

Areas of Expertise:

❖ Regional coordination for disaster preparedness and response
❖ Healthcare preparedness metrics and evaluation
❖ Infectious disease planning and response
❖ Mass casualty hospital response
❖ Federal preparedness grant requirements and funding

➢ Assistant Vice President for Enterprise Emergency Operations for HCA Healthcare

- Responsible for advancing healthcare system preparedness across the organization and developing next-generation response capabilities to ensure a more resilient healthcare enterprise
- Leads HCA's readiness strategy portfolio

➢ More than 20 years of experience in healthcare emergency preparedness, serving in roles throughout some of the nation's largest health systems and at the local and federal government levels

➢ Has led large-scale federal responses to infectious disease emergencies, mass casualty events, and natural disasters

➢ Developed the nation's regional, tiered

➢ Demonstrates the ability to develop preparedness leaders, create public-private disaster preparedness and response partnerships, develop and implement health system preparedness plans, and design preparedness metrics and evaluation systems

➢ 15 years experience in health security leadership positions within the U.S. Department of Health and Human Services, the Department of Homeland Security, and the Central Intelligence Agency.

➢ 5 years of health system emergency management experience at Northwell Health and the University of Nebraska Medical Center/Nebraska Medicine.

➢ Clinical experience as an RN and an EMT.

➢ Education: Harvard University (MSPH), Boston College (BA), and George Mason University (BSN).

Meet the Team

```
                    ┌──────────────────────────┐
                    │      Michael Wargo        │
                    │      Vice President       │
                    └──────────────────────────┘
                                 │
            ┌────────────────────┴────────────────────┐
┌──────────────────────────┐              ┌──────────────────────────┐
│      Melissa Harvey        │              │  Admin Coordinator Vacant │
│  Assistant Vice President  │              └──────────────────────────┘
└──────────────────────────┘
            │
   ┌────────┴──────────────────────────┐
┌──────────────────────────┐   ┌──────────────────────────┐
│       Jake Marshall        │   │     Jessica Picanzo       │
│        Sr. Director        │   │   Director | Medical      │
└──────────────────────────┘   │        Transport          │
            │                   └──────────────────────────┘
   ┌────────┴────────┐
┌──────────────┐  ┌──────────────┐
│  Todd Burke   │  │ Haley Porter  │
│  Sr. Manager  │  │   Manager     │
└──────────────┘  └──────────────┘
```

ENTERPRISE PREPAREDNESS · EMERGENCY OPERATIONS

HCA+ Healthcare®

HCA Healthcare

*Hospital locations as of June 30, 2022

◆ Distribution Centers

Asheville, NC	El Paso, TX	Nashville, TN	Salt Lake City, UT
Atlanta, GA	Houston, TX	New Orleans, LA	San Antonio, TX
Austin, TX	Jacksonville, FL	Portsmouth, NH	San Jose, CA
Charleston, SC	Kansas City, KS	Southern California	Tampa, FL
Dallas, TX	Lakeland, FL	Richmond, VA	
Denver, CO	Las Vegas, NV	Rio Grande Valley, TX	

Largest Private Healthcare System in World

330K Employees and Affiliates

28+ Million Patients Annually

123 Surgery Centers

90k Nurses

182 Hospitals

23 US States

104 Free Standing Emergency Rooms

HCA✦Healthcare®

Enterprise Preparedness & Emergency Operations for a Resilient Healthcare System
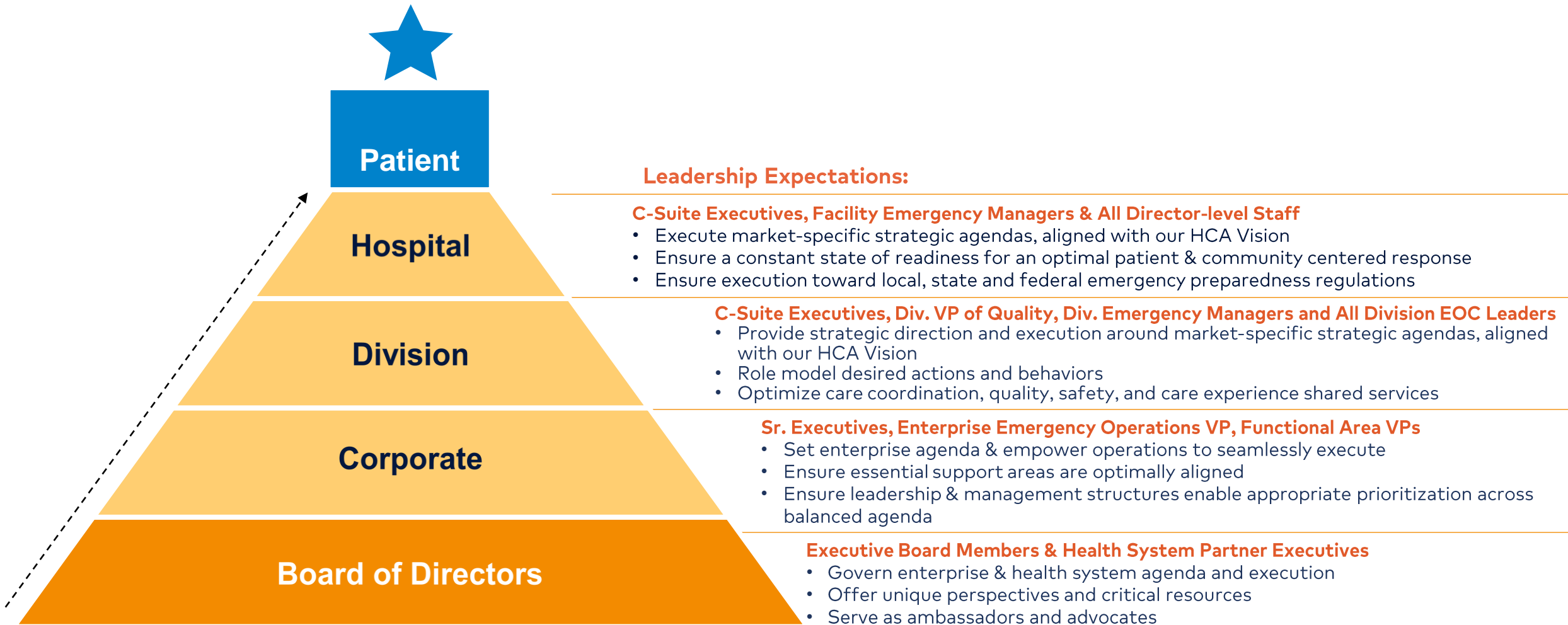
EPEO is focused on our patients, staff and the communities we serve to ensure the integrity and continuity of healthcare operations in the face of anticipated and unanticipated threats.

Objectives & Priorities:

➢ *Responsible Leadership*
Achieve a culture of safety and unwavering support toward ensuring a comprehensive emergency operations program

➢ *Readiness*
Ensure safe, uninterrupted quality patient care within a safe working environment

➢ *Response*
Prevent damage and protect our patients, staff, facilities and equipment from both natural and man-made events

➢ *Resilience*
Sustaining the core operations of the organization, while facing additional or long-term adversities, and building internal organizational strength to overcome challenges

➢ *Recovery*
Maintain continuity of healthcare and business operation

Ownership of Emergency Management at Every Level
Leadership Expectations to Maintain a Resilient Healthcare System

Patient

Hospital

Division

Corporate

Board of Directors

Leadership Expectations:

C-Suite Executives, Facility Emergency Managers & All Director-level Staff
- Execute market-specific strategic agendas, aligned with our HCA Vision
- Ensure a constant state of readiness for an optimal patient & community centered response
- Ensure execution toward local, state and federal emergency preparedness regulations

C-Suite Executives, Div. VP of Quality, Div. Emergency Managers and All Division EOC Leaders
- Provide strategic direction and execution around market-specific strategic agendas, aligned with our HCA Vision
- Role model desired actions and behaviors
- Optimize care coordination, quality, safety, and care experience shared services

Sr. Executives, Enterprise Emergency Operations VP, Functional Area VPs
- Set enterprise agenda & empower operations to seamlessly execute
- Ensure essential support areas are optimally aligned
- Ensure leadership & management structures enable appropriate prioritization across balanced agenda

Executive Board Members & Health System Partner Executives
- Govern enterprise & health system agenda and execution
- Offer unique perspectives and critical resources
- Serve as ambassadors and advocates

Learning Objectives

By the end of this session, participants will be able to:

➢ Create a culture of readiness within a healthcare organization

➢ Compare and contrast incident command structures, including possible alternatives to the Hospital Incident Command System (HICS), to best meet your healthcare facility's needs.

➢ Understand the participation necessary, from community partners and healthcare facility representatives, to conduct a comprehensive and realistic Hazard Vulnerability Analysis.

➢ Interpret and maximize the results of your Hazard Vulnerability Analysis by prioritizing action plans for known and previously unknown threats.

Overview

- Patient census 225; 40 ICU

- Lightening strike damaged electrical system, causing full primary and secondary power outages

- EMS initiated evacuation / MCI response

- Enterprise, Division and Facility EOCs pre-activated in anticipation of tropical storm making landfall in 48 hours

- Occurred overnight; limited on-site leadership

- All patients safely transported to neighboring facilities
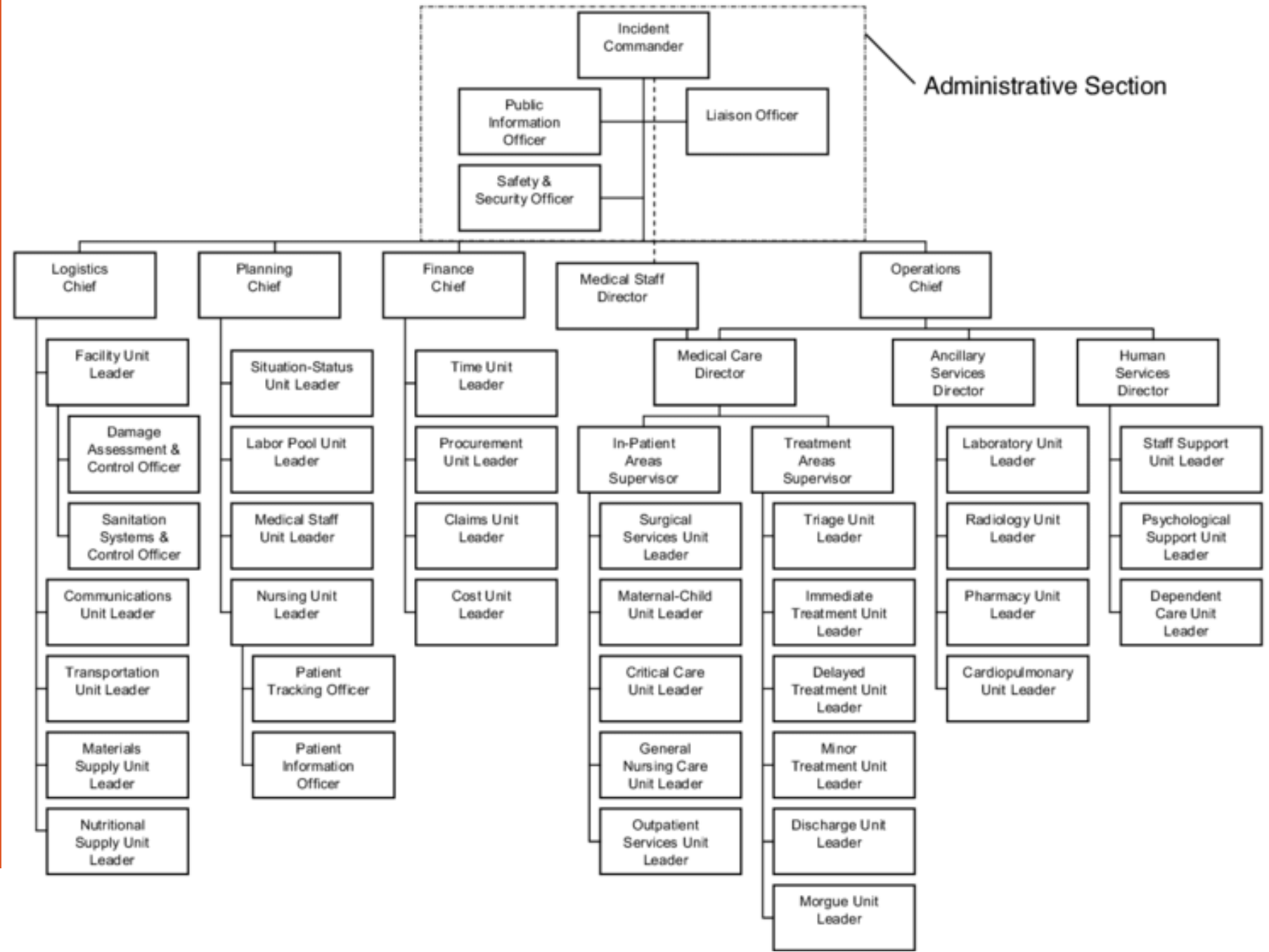
Lesson Learned #1: Hospital Incident Command

Utilized standard HICS model, no Enterprise structure in place

Leaders asked to make uncomfortable decisions due to inexperience
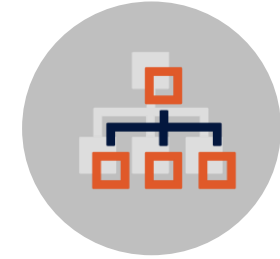
Shifted from HICS structure to Functional Area Model

HEALTHTRUST®
Performance Group

The National Incident Management System (NIMS) Hospital Incident Command System (HICS) Structure

# HCA Healthcare's Enterprise Incident Management Structure

Executive Leadership

Senior Officers

Group Operators

Systematic

Enterprise *Emergency Operations Center* → **Division** *Emergency Operations Center* → **Facility** *Emergency Command Center*

Coordinated

Clinical	Infrastructure	Support	Admin	Intel
CSG	Engineering	HT-Supply Chain	Communications	Current Situation Monitoring
PSG	ITG	HT-Work force solutions	Legal	Division Liaisons
Transfer Center & ARC	Cyber Defense Center	Parallon BPG	Govt. Relations	External Liaisons
OSG	Construction	Business Continuity	Human Resources	PSOC
		Physical Security	Finance/Treasury	GIS & Data Analytics
		Mass Transport	Ethics & IPS	
		Aviation Services	Insurance/Risk	
		Incident Support Team	Travel Services	
		Mass Care		

Lesson Learned #2: Command Locations

Multiple command locations established; no coordination

➢ Local Facility, Fire, Police, and EMS all had their own individualized command

➢ No cross-collaboration and coordination
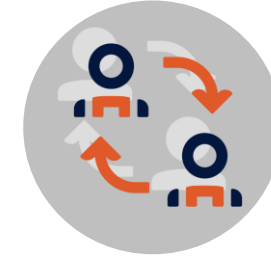
Pre-designated unified command sites established with statements of authority

HEALTHTRUST
Performance Group

Lesson Learned #3: Public-Private Collaboration

Integrated & Intentional Partnerships at Every Level for Industry-Best Readiness and Resilience

Systematic — **Coordinated**

Enterprise — *Emergency Operations Center*
Division — *Emergency Operations Center*
Facility — *Emergency Command Center*
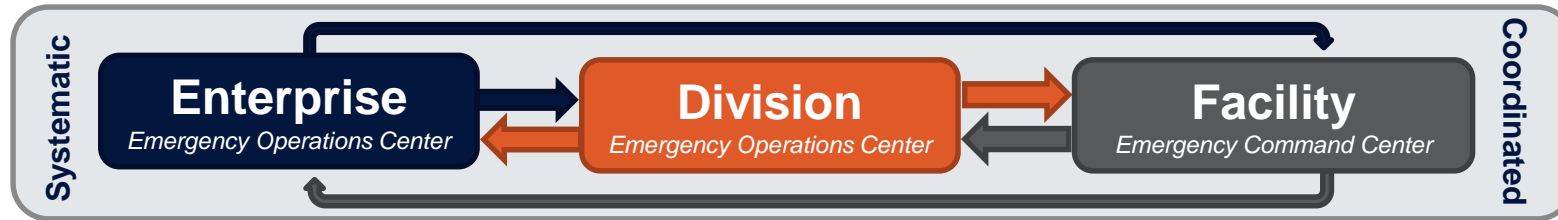
- **Federal-Level Government Agency Relationships**
  - FEMA, HHS/ASPR, etc.

- **National/International VOADs**
  - Red Cross, etc.

- **National Organizations**
  - TJC, AHA/FAH

- **State-Level Government Relationships**
  - State EOC

- **State- Level VOAD Offices**
  - Red Cross, etc.

- **State Organizations**
  - State Hospital Orgs

- **Local Government**
  - County/City EOC

- **County, City, Local Healthcare Coalition**
  - Texas RACs

- **Local Organizations**
  - Red Cross, VOADs, etc.
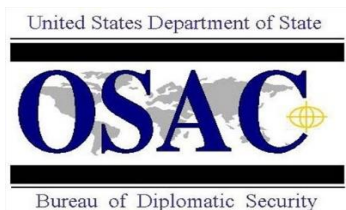
EEOC Activation Levels

Level	Description	Actions
Routine/ Normal	EEOC is in standard ready state	Standard Readiness
Advisory	EEOC has been notified of an incident potentially impacting HCA Operations	Ensure your area maintains enhanced situational awareness and readiness
Alert	EEOC has been alerted to an event that is impacting HCA Operations	Be Ready to Support Limited Operations or Needs
Partial	EEOC has been alerted to an event that is impacting HCA Operations – requiring multiple coordination touchpoints to remedy	Active Operational Support Needed from part of the EEOC
Full	EEOC has been alerted to an event that is significantly impacting HCA Operations – requiring a full multidisciplinary leadership response	Active Operational Support Needed from all EEOC Areas All areas should maintain 24/7 on call coverage until otherwise notified

Playbook Development

Objectives:

- Protect patients, staff and visitors.
- Maintain the highest possible quality care for patients.
- Maintain the safest environment of care for patients, family and staff.
- Protect property and assets.
- Prioritize tasks to be performed utilizing available resources and personnel.
- Assure self-sufficiency before the storm hazards strike in order to operate without relief for at least 72 hours after the storm passes.
- Maintain business continuity and return to normal operations quickly.

Current list of playbooks:

Enterprise/Division
➢ Enterprise Mass Casualty Response
➢ Division Hurricane / Facility Hurricane
➢ Engineering Disaster Planning & Response
➢ DMAT Integration

Facility Playbooks
➢ Patient Evacuation to include Behavioral Health
➢ Flooding Response
➢ Shelter-in-Place
➢ Wildfire Response
➢ Hurricane Response

Shelter-in-Place Facility Playbook

July 2020
Facility Emergency Shelter-in-Place Playbook-v30.Jul.20-HCA Emergency Operations.docx

FACILITY: HURRICANE RESPONSE PLAYBOOK

Hurricane Preparedness and Response Playbook – May 2020
The HCA Facility Hurricane Response Playbook is a standard of practice guide to assist the facility incident management team (IMT) in rapidly organizing and responding to a potential and actual severe storm event (hurricane). The intent of this Facility Playbook is to augment your facility's emergency management plan for hurricane preparedness and response, and not to take the place of a comprehensive facility plan. Included in

Enterprise Mass Casualty Response Playbook

January 2021- Final
Enterprise Mass Casualty Response Playbook- -HCA Emergency Operations.docx

For Official Use Only/Confidential and Proprietary
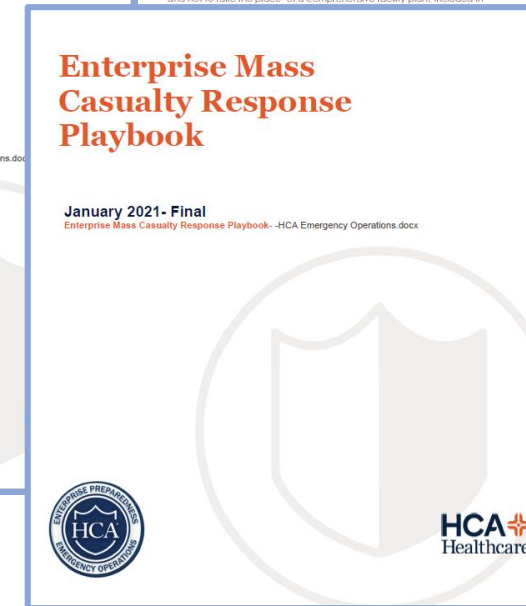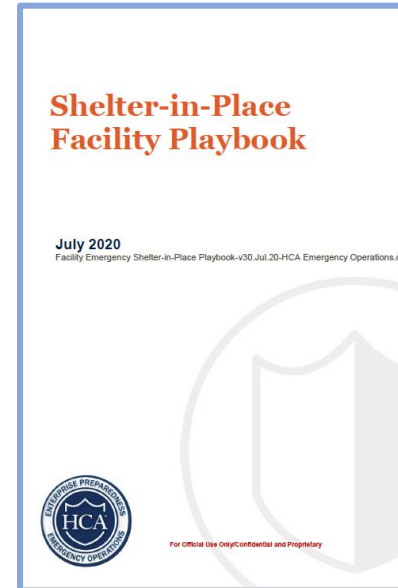
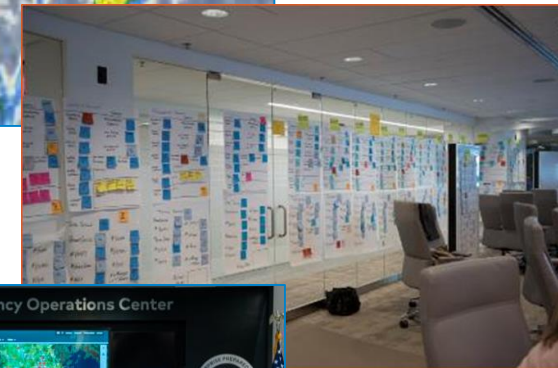# Case Study 2: Hurricane Harvey
2017

Overview

- First test of division-wide catastrophic Enterprise-level response
- First storm mass transport AirMethods agreement used
- Innovative response solutions for patient movement during response
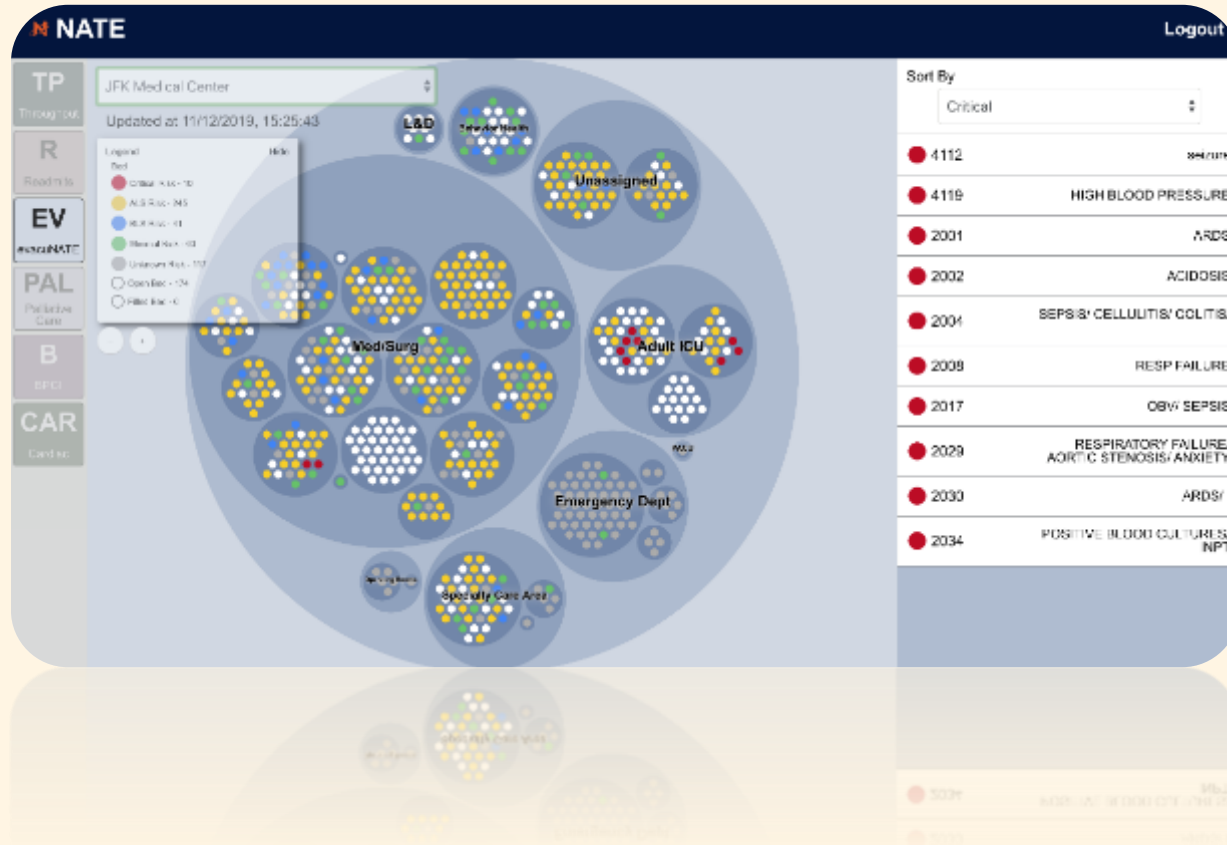- Large scale relief staff movement

Lessons Learned

- You are only as prepared as your community
- Clear benefits and efficiencies of a system wide standardized response plan (i.e. The Facility Hurricane Playbook)
- Realized the advantage of having all of your service lines and functions of your organization in one coordination center
- The need for a tool that provides access to a real-time information and patient census within a facility for effective and timely decision making
- Maintaining residual organizational capacity to respond to simultaneous events

Hurricane Harvey
- ✓ 50 Hospitals affected
- ✓ 55K Colleagues supported
- ✓ **0 Patients harmed**
- ✗ Manual running of transport "tickets"
- ✗ Sticky note patient tracking
- ✗ Scanned census reports

HARVEY LANDFALL
AUGUST 25, 2017 at 10:00 PM CT
Near Rockport, Texas
Category 4 Hurricane
130 mph winds

HCA Healthcare Enterprise Emergency Operations Center

evacuNATE: Real-time Evacuation Planning

- Uses near real-time facility and clinical data
- Triages patients based on clinical criteria
- Estimates evacuation resources by patient
- Displays local and neighboring facility capacity

The Unknown

"As we know, there are known knowns. There are things we know we know. We also know there are known unknowns. That is to say we know there are some things we don't know. But there are also unknown unknowns, the ones we don't know we don't know."

- SecDef Donald Rumsfeld: DoD News Briefing 12 Feb 2002

Defining Threats: What are we preparing for?

Global

Regional

Local

Internal
Organizational

External
Community

Combined

Defining the Threat

➢ Conventional – "The Expected"

➢ Unconventional – "The Unexpected"

Anticipating Threats: An All-Hazards Approach

Expected
"Known Knowns"

- Hurricane Michael 2019
- Helicopter Evacuation
- Hurricane Katrina – 2005
- Tulane Medical Center

Anticipated
"Known Unknowns"

- 1-Oct Las Vegas Incident
- Pentagon Attack September 11, 2001

Unanticipated
"Unknown Unknowns"

- Global Pandemic with no known countermeasures (COVID19)
- Fungal Meningitis Outbreak in Compounding Pharmacy (2012)
- Potential Cyber Attack

*HCA has developed a **practiced all-hazards response** that is deployed to all threats, not just unique threats.*

Incident Support & Management Teams

- 45 Operational leaders & executives from across the HCA enterprise

- Cross-trained as response personnel

- IMT [Incident Management Team]: Executives that focus on response to relieve facility executives in the impacted areas

- IST [Incident Support Team]: Skilled leaders that focus on response to the impacted facility to support internal operations (Security, Engineering, ITG, etc.)

- Deployments: Hurricane Ian, Hurricane Ida, Covid-19, Alaska earthquake, California wildfires, Clinical Surges, etc.

Understanding Your Risk

It's important to understand **how to assess your risk**

- ➤ Identify the hazards
- ➤ Identify those at risk
- ➤ Identify existing control measures
- ➤ Evaluate the risk
- ➤ Decide/Implement control measures
- ➤ Record assessment
- ➤ Monitor and review
- ➤ Inform

Understand **impacts of risks**

- ➤ Impacts on *people*
- ➤ Impacts on *organization*
- ➤ Impacts on *environment*
- ➤ Impacts on *community*

?

Now what do we do with this information?

Enterprise Preparedness & Emergency Operations

Managing Your Risk

Ensure you have effective plans in place to mitigate known risks

- Playbooks
- Checklists
- Staffing plans
- Emergency Operation Plans
- Communication redundancies
- Community relationships
- Local and state collaboration

Enterprise Preparedness & Emergency Operations

Conclusions

❑ **Responsible Leadership begins with you**

- o As a leader your goal is to promote and encourage a culture of safety
- o Assure that emergency readiness is woven into the fabric of your organization
- o Ensure your facilities are assessing, preparing and understanding the risks to your organization
- o Mimic daily roles or practice/utilize incident command **routinely**

❑ **Planning is important outside of the knowns**

- o Redundant systems often plan for the expected, but even back-up systems fail. Plan for the unexpected

❑ **Understand the processes and drivers for a range of hazards**

- o Planned, emergent, urgent
- o Flexible solutions

❑ **Situational awareness facilitates good decision-making**

- o Understand all aspects of the risks to your organization

Above all else:

HCA Healthcare teams come together in response to support our Patients & Families, Staff & Families and Communities
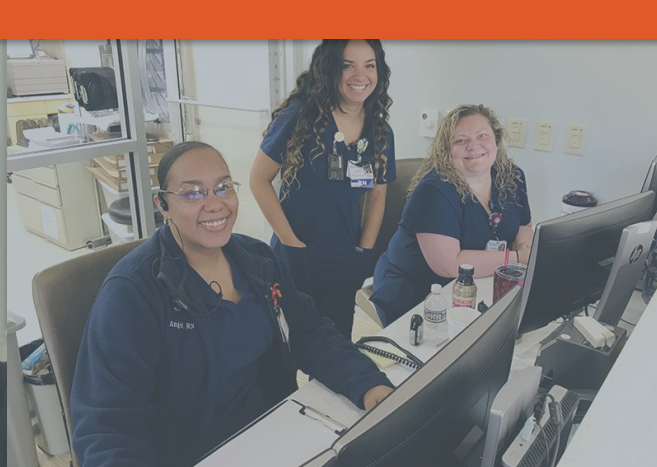
Thank you

HealthTrust Advisory Services
solutions@healthtrustpg.com

Committed to Making Missions Possible