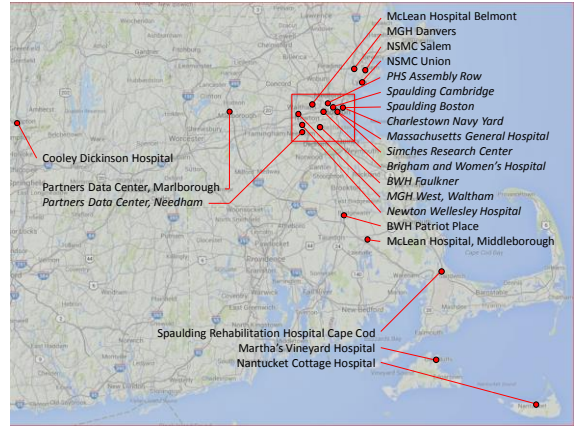


John Messervy AIA Hospital Resiliency Study



STEP 1

Climate Scenarios

Implications
Time Horizons

STEP 2

Prioritize Risk

Identify Critical Facilities and Operations
Vulnerability & Risk Assessment
Prioritize Need Across System

STEP 3

Adaptation Strategies

Facility Resilience
Short-term Adaptation
Operations Impact
Capital Prioritization
Long-term Adaptation

STEP 1

Temperature

Number of days > 90°F

STEP 2

Precipitation

Extreme events

STEP 3

Sea level rise

Implications

STEP 1

Immediate

- Emergency Response
 - in-house & incoming patients
 - critical research
 - full functionality of facilities

Time Horizons

2015 2030 2070

(2015-2045) (2055-2085)

Operations focus Capital Investment focus

STEP 2

Identify Critical Facilities & Operations

Facilities

- 30 Campuses
- Hospitals
- Clinics
- Research Labs

Key operations

Internal Supporting Services

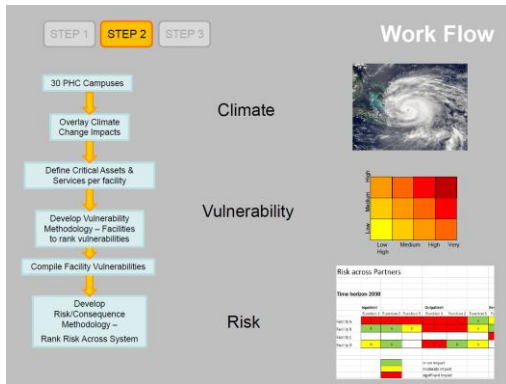
- Operational impacts
- System Impacts
- Health and Safety Impacts
- Research Impacts

Key vulnerabilities outside the fence

External Systems/Resources

- Energy
- Transportation
- Telecommunications
- Water
- Wastewater

Leveraging information from existing emergency response plans



Considerations

- What baseline climate data can we count on being available in support of resiliency studies?
- How do we know the climate data input and assumptions used by our consultants are reasonable and the appropriate models are being used?
- The cost of site specific climate modeling is significant - almost 50% of study cost. This is a huge barrier to entry.