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COVID-19

The Road to Recovery- How do we safely restart our elective procedures?

Moderator:
Eugene Yang, MD, MS, FACC
Professor of Medicine
Carl and Renée Behnke Endowed Professorship for Asian Health
University of Washington School of Medicine
June 11, 2020

Overview

- Getting the cath lab up and running
  - James McCabe, MD, FACC (University of Washington)
- How to restart the EP lab
  - Byron Lee, MD, FACC (University of California, San Francisco)
- CV Team role in procedural planning
  - Kim Guibone, ACNP-BC, AACC (Beth Israel Deaconess Medical Center)
- Resuming procedures safely- a private practice perspective
  - Toniya Singh, MD, FACC (St. Louis Heart and Vascular)
- Panel Discussion

Getting the Cath Lab Up and Running Again

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Jamie McCabe, MD FACC
Cath Lab Director
University of Washington, Seattle, WA

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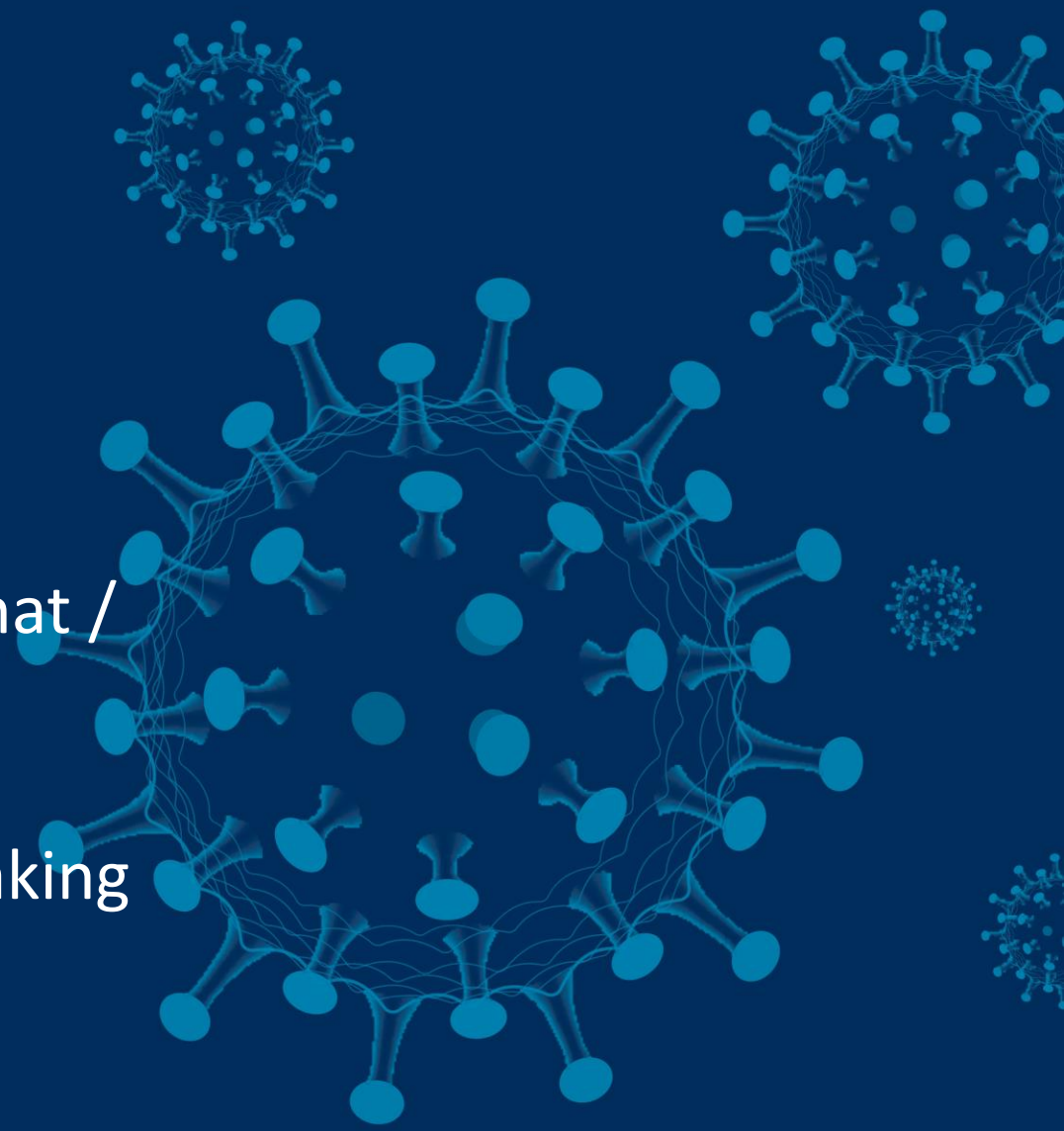

Caveats:

1. All Politics are local
2. What / how one opens is dependent what / how you've closed
3. Regional prevalence affects decision-making

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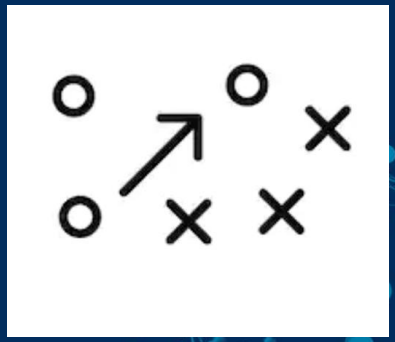

Create your game plan:

1. Current staffing model, bed & PPE availability dictate extent of planned ‘opening’

2. Can strategize opening of elective cases by:
   - Case type
   - “Elective-ness”
   - Resource utilization (e.g. same day d/c vs ICU monitoring)

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Testing for all patients coming to the lab has been fundamental

- Building processes to streamline
- Creating / communicating exclusions & ‘rules of the road’ for staff
- What to do for non-elective scenarios
- Knowing local test characteristics

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Engaging patients

- Many remain frightened and often have specific concerns

- Clarifying institutional policies:
  - Safety & testing rules
  - Are family allowed?
  - Will they need to stay overnight
  - Could they be exposed to COVID+ patients

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Engaging referrers

- Are they seeing patients again?
- If just by video, are patients coming in for stress tests, echos, etc?
- Communicating policies & safety precautions for their patients
- Does your community know what procedures are up & running and what is still on hold?

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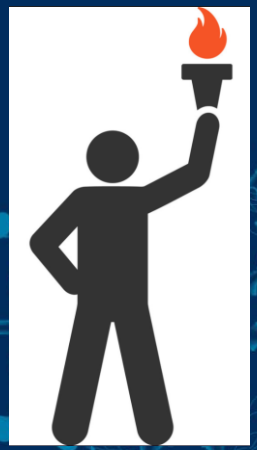

Conclusions

- The modern interventional cardiologist does not work in isolation

- Express leadership through building agreed upon policies that value the health and safety of all constituents and communicate those policies explicitly to help everyone make informed choices

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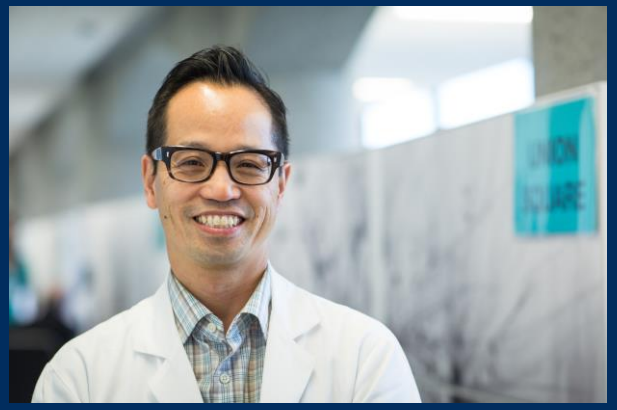
How to Restart the EP Lab



Byron K. Lee MD MAS FACC
Professor of Medicine
Samuel T. and Elizabeth Webb Reeves Endowed Chair in Arrhythmia Research
Director of the Electrophysiology Laboratories and Clinics
UCSF, Division of Cardiology

UCSF Medical Center

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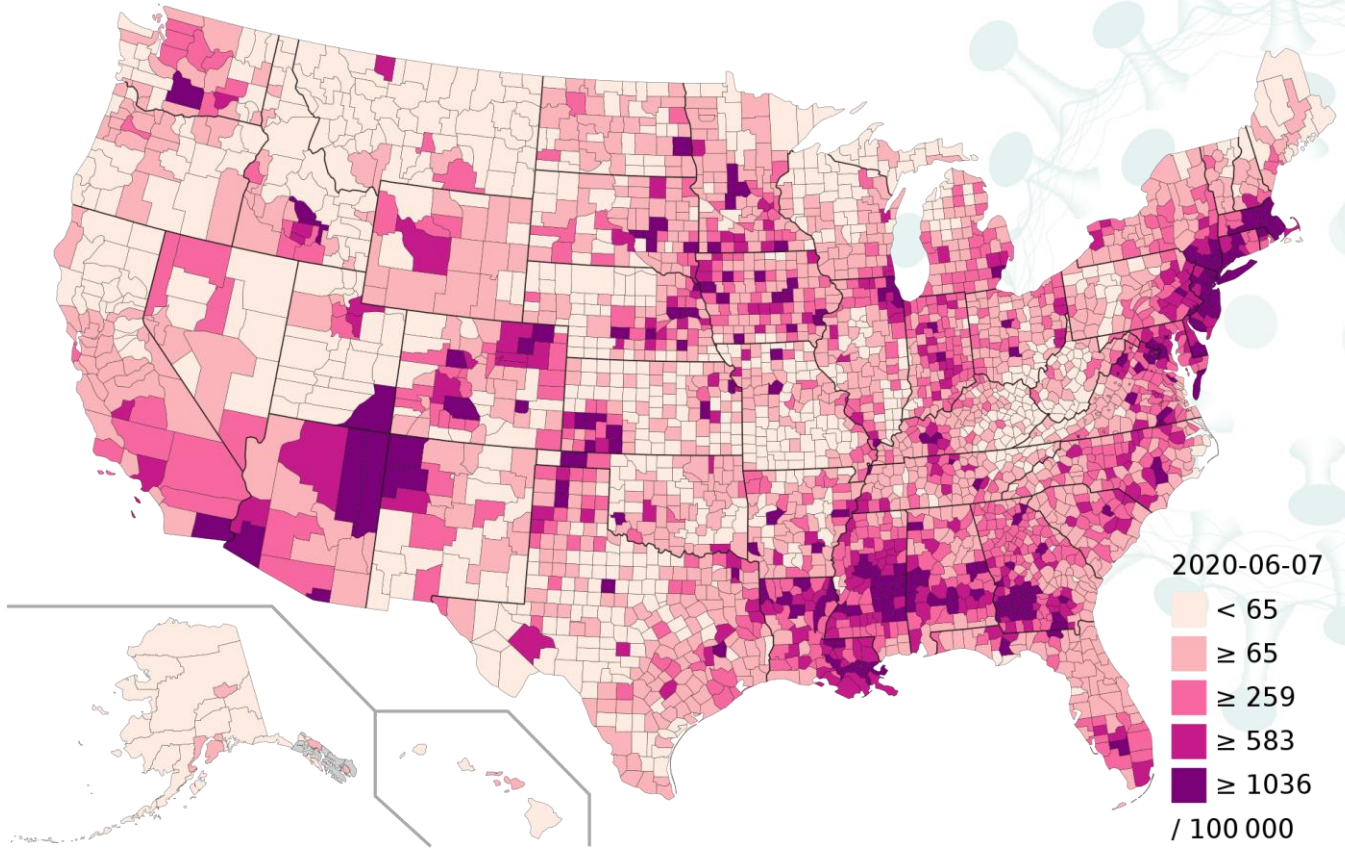
COVID in San Francisco



COVID Shutdown

- March: Only emergent / urgent cases

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N95 necessary for High Risk and Maybe High Risk

Criteria	Mask	Eye protection	Contact Precautions	Room type
High-risk criteria met (Novel Respiratory Isolation)	N95/PAPR	Yes	Yes	Negative-pressure
No high-risk criteria (Droplet and Contact Isolation)	Surgical	Yes	Yes	Private, standard-pressure, door closed
No high-risk criteria but COVID-19 testing sent (Novel Respiratory Isolation, standard room)	N95/PAPR	Yes	Yes	Private, standard-pressure, door closed *Move to high-risk criteria if • aerosolizing procedures • high-flow O2 (adults)

Intubation, Extubation and TEE Requirements

- All unnecessary personnel outside of the room
- 30 minutes waiting period after intubation, extubation, or TEE
- Led to delays in start-time and lab turnover

Pre-procedure COVID Testing Was Transformative

- No N95, PAPRs
- Less face shields
- Usual PPE
- No waiting for intubation, extubation, and TEEs
- Team works more freely and with less stress

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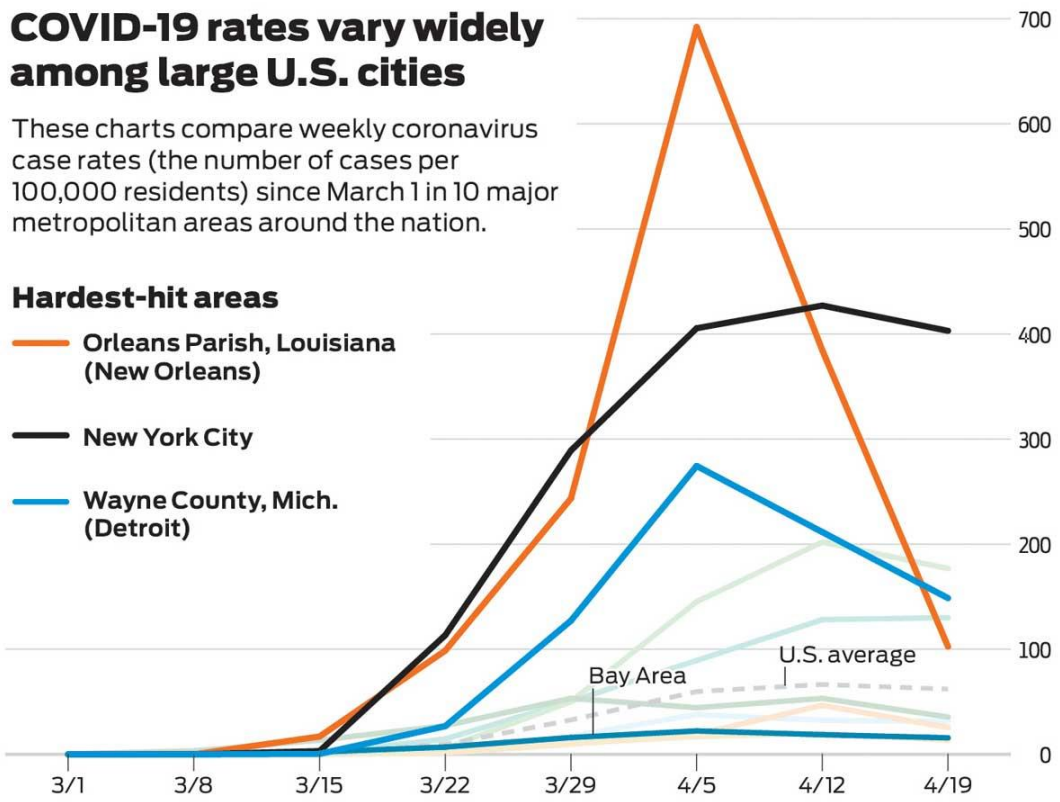
SF Bay Area Crushed the Curve



LOCAL // BAY AREA & STATE

Stanford hospital system to cut pay 20%, furlough workers during coronavirus pandemic

Rusty Simmons | April 26, 2020 | Updated: April 27, 2020 6:24 a.m.

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Phased Reopening

- March: Only emergent / urgent cases

- April: 1 EP lab open / 1 EP case per day
- May: 2 EP labs open

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Fear of Covid-19 Leads Other Patients to Decline Critical Treatment

Psychologists say anxiety and uncertainty prompt irrational decisions — like turning down a transplant when an organ becomes available.

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Scheduling Script For Inquiries about COVID

- I have communicated with Dr. XX and he/she believes it's safe for you to undergo your procedure at this time.
- The hospital has generally always had fewer than XX (25 right now) inpatient cases of Covid-19 during this outbreak.
- Patients coming for elective procedures are all being tested for Covid-19 beforehand.
- We will take precautions to lower the risk of Covid-19 transmission while you are here.
- Dr. XX can talk to you about the risk of Covid-19, if you have additional questions.

Screening of Staff at the Door

- Symptoms
- Contacts
- Travel
- Testing

- Prepared to isolate any staff who tests positive and their contacts

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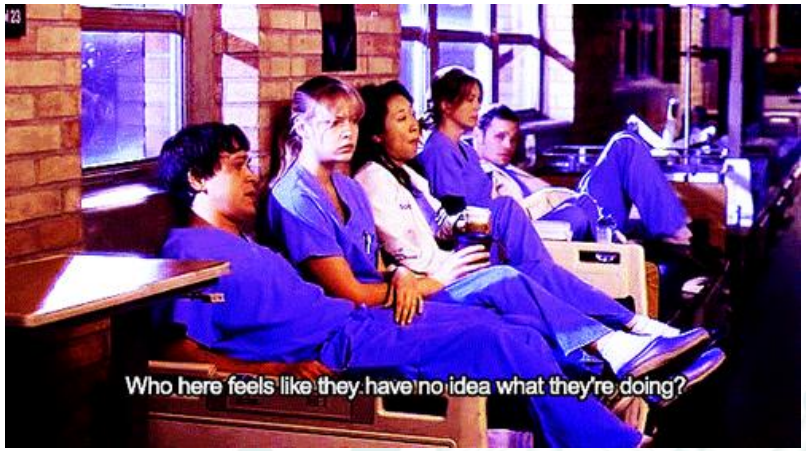

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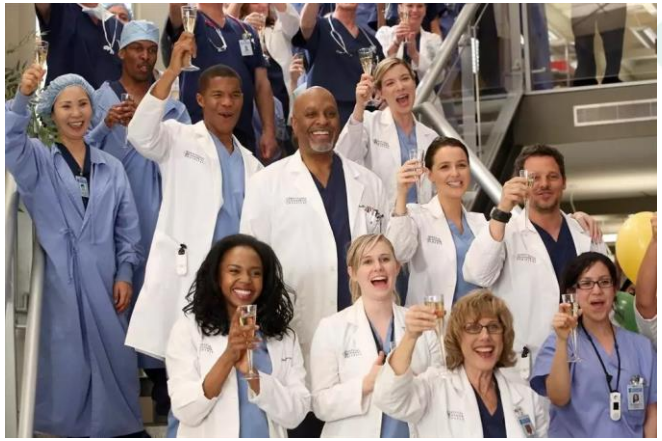

- June: 3 EP labs open

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Kim Guibone ACNP-BC, AACC
Beth Israel Deaconess Medical Center
Boston, MA

June 11, 2020

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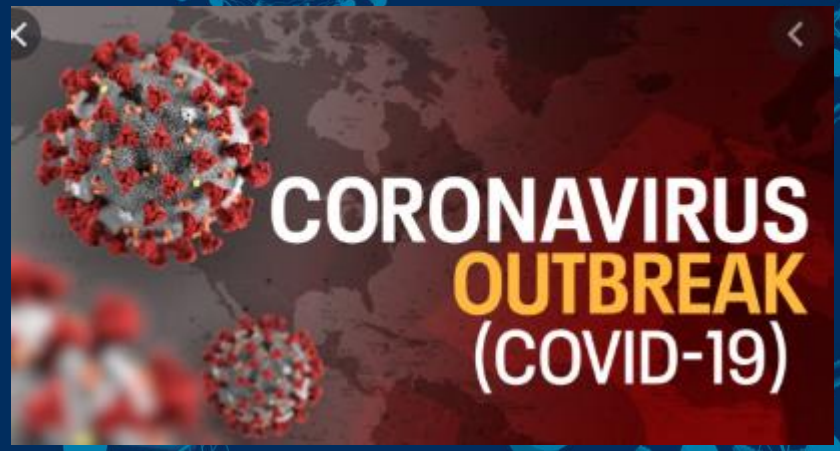
70% Cathlab Staff Redeployed
- Nursing – COVID ICU/Floors
- Techs – COVID Floors "runners/helpers"

Remaining Staff
- Served in multiple roles
- Split all of the Call Schedule

Cardiology Clinic NPs/Structural NPs/ HF NPs redeployed to cover all cardiology inpatients

Residents/Interns redeployed to Medicine floors

Daily leadership meeting/ institutional updates



Index case	Boston
Arrival date	February 1, 2020

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Structural Heart:

Patient triage
Activate remote work protocol
Weekly triage/New patient triage
Onboarding of telemedicine

Cathlab Scheduling:

Cath urgency triage
Patient transfer triage
Remote work

Triaging Structural Heart Disease Patients

Tier 1 Emergent/Urgent	Tier 2 Semi-Urgent	Tier 3 Elective
SEVERE AORTIC STENOSIS • Cardiac arrest or cardiogenic shock • NYHA Class IV symptoms • Recurrent Syncope • New or unstable chest pain • Acute bioprosthetic regurgitation	SEVERE AORTIC STENOSIS • NYHA Class III symptoms with progression • Critical AS (PV > 5.0 m/s) with > NYHA Class II symptoms • Heart failure with recent decline in ejection fraction • Near syncope	SEVERE AORTIC STENOSIS • NYHA Class I-II symptoms • Critical AS (PV > 5.0 m/s) with mild or no symptoms
SEVERE MITRAL REGURGITATION • Refractory heart failure requiring balloon pump • NYHA Class IV symptoms • Acute MR due to flail leaflet • Refractory MR requiring inotrope/pressor support • Acute bioprosthetic valve failure	SEVERE MITRAL REGURGITATION • NYHA Class III symptoms with progression • Escalation of medical regimen including diuretics • Recent drop in ejection fraction	SEVERE MITRAL REGURGITATION • NYHA Class I-II Symptoms • Stable medication regimen
	SEVERE TRICUSPID REGURGITATION • Worsening NYHA Class IV symptoms and progressive organ system dysfunction	SEVERE TRICUSPID REGURGITATION • NYHA Class I-III symptoms without evidence of end organ damage

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Volume 75, Issue 23, June 2020
DOI: 10.1016/j.jacc.2020.04.009

PDF Article

JACC REVIEW TOPIC OF THE WEEK

Restructuring Structural Heart Disease Practice During the COVID-19 Pandemic
JACC Review Topic of the Week

Christine J. Chung, Tamim M. Nazif, Mariusz Wolbinski, Emad Hakemi, Mark Lebehn, Russell Brandwein, Carolina Pinheiro Rezende, James Doolittle, Leroy Rabbani, Nir Uriel, Allan Schwartz, Angelo Biviano, Elaine Wan, Lisa Hathaway, Rebecca Hahn, Omar Khalique, Nadira Hamid, Vivian Ng, Amisha Patel, Torsten Vahl, Ajay Kirtane, Vinayak Bapat, Isaac George, Martin B. Leon and Susheel K. Kodali

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Structural Heart:

COVID testing
Full PPE in Hybrid
Hybrid designated clean room
Clean pathway
Minimal staff

Cathlab:

STEMIs treated as PUI
Designated COVID lab
Delineation of "clean" vs. "dirty" roles
Clean room set up – closed drawers
Minimal staff

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CURRENT STATUS - PHASE 2: CAUTIOUS

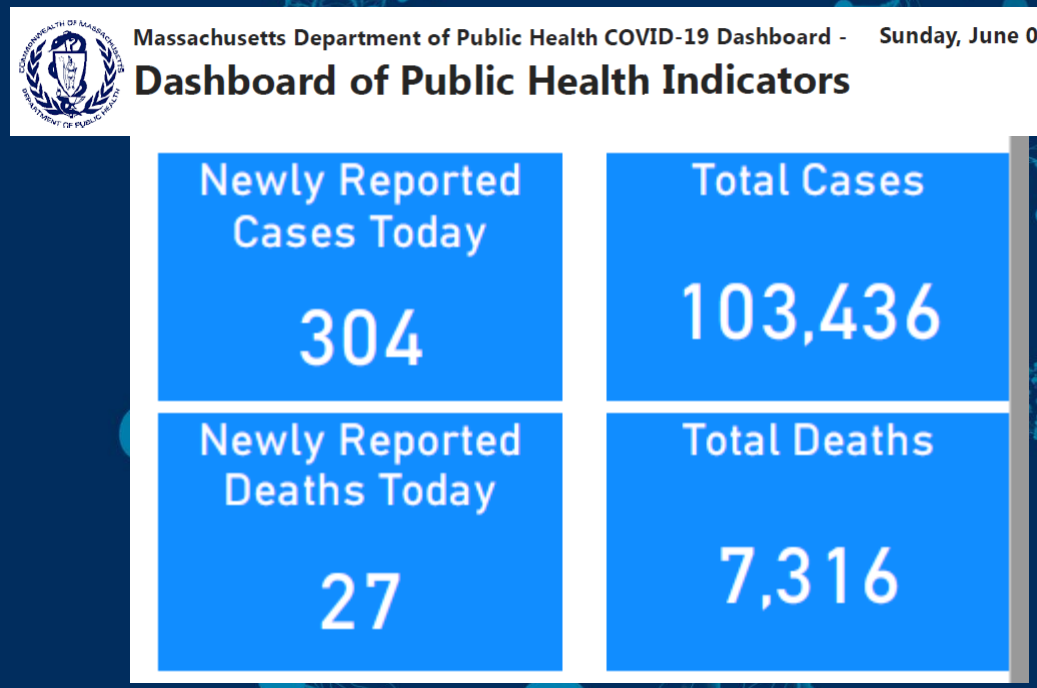
"Consider deferring non-essential elective procedures and services that would have a high likelihood of requiring subsequent hospitalization or post-acute rehabilitation"

Continue remote work

Cathlab/EP Staffing Model for Re – Entry

Itemized FTE's required to recall staff:
25% capacity
50% capacity
75% capacity

June 8 – First week return of staff



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Time off prior to full return

Debriefing sessions

Mental health support services

EAP

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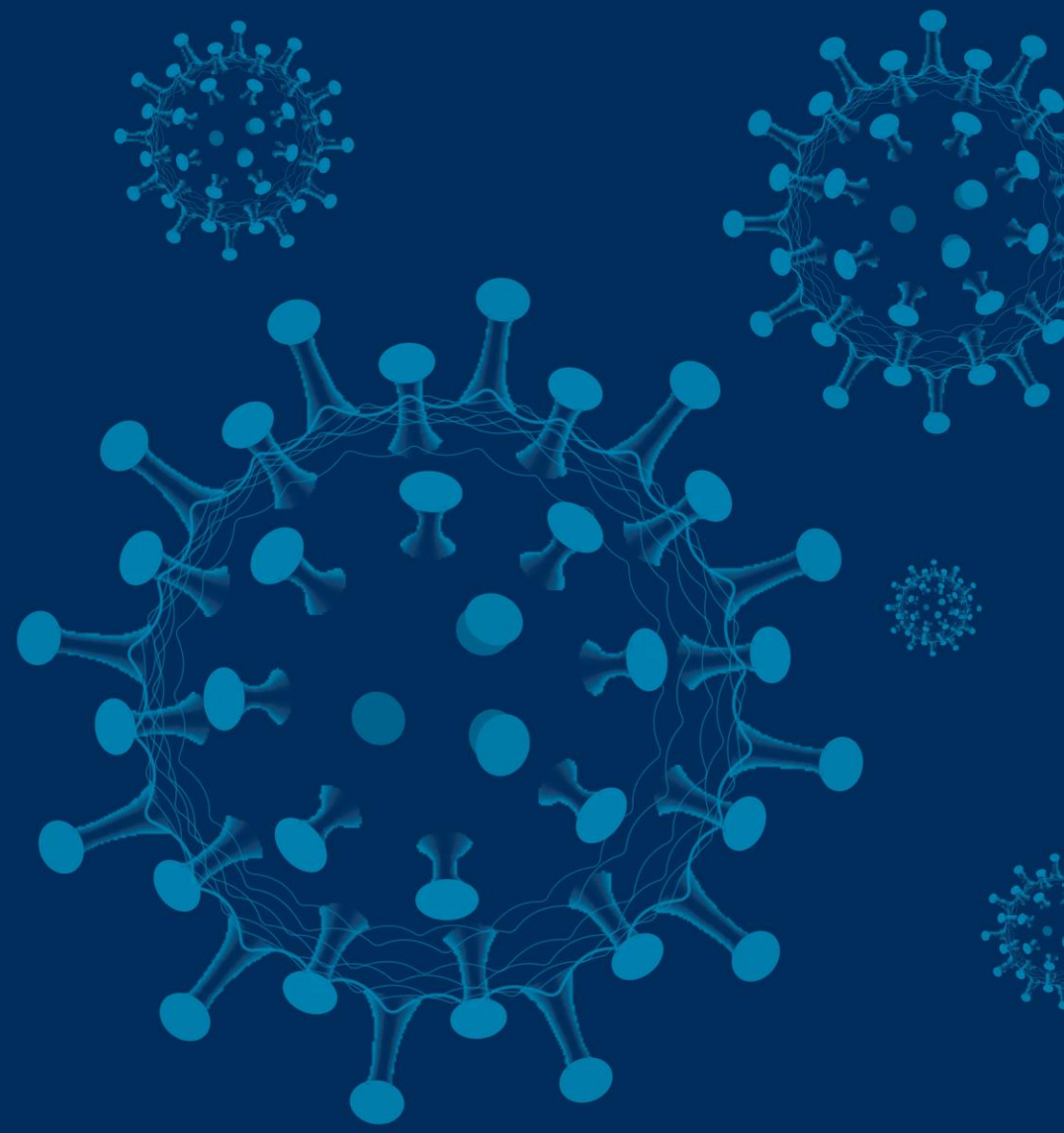
SUCCESSES CARRYING FORWARD:

- Team awareness – anticipating needs, improved efficiencies
- Staff cross training
- Designated COVID pre/post procedural care areas
- Pre-procedure COVID testing
- Maintain triage and case urgency tracking tools
- Optimize telehealth
- Formalize protocols for re-surge



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The Road To Recovery

Toniya Singh MBBS FACC
Managing Partner, St Louis Heart and Vascular
Chair, Women in Cardiology Council of the American College of Cardiology

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ABOUT SLHV

We are an independent 14 physician practice - 2 EPs, 8 interventionalists and 4 invasive physicians

We have a freestanding lab that functions as a Surgery Center on Monday and Saturday, and as a Cath Lab on Tuesday-Friday

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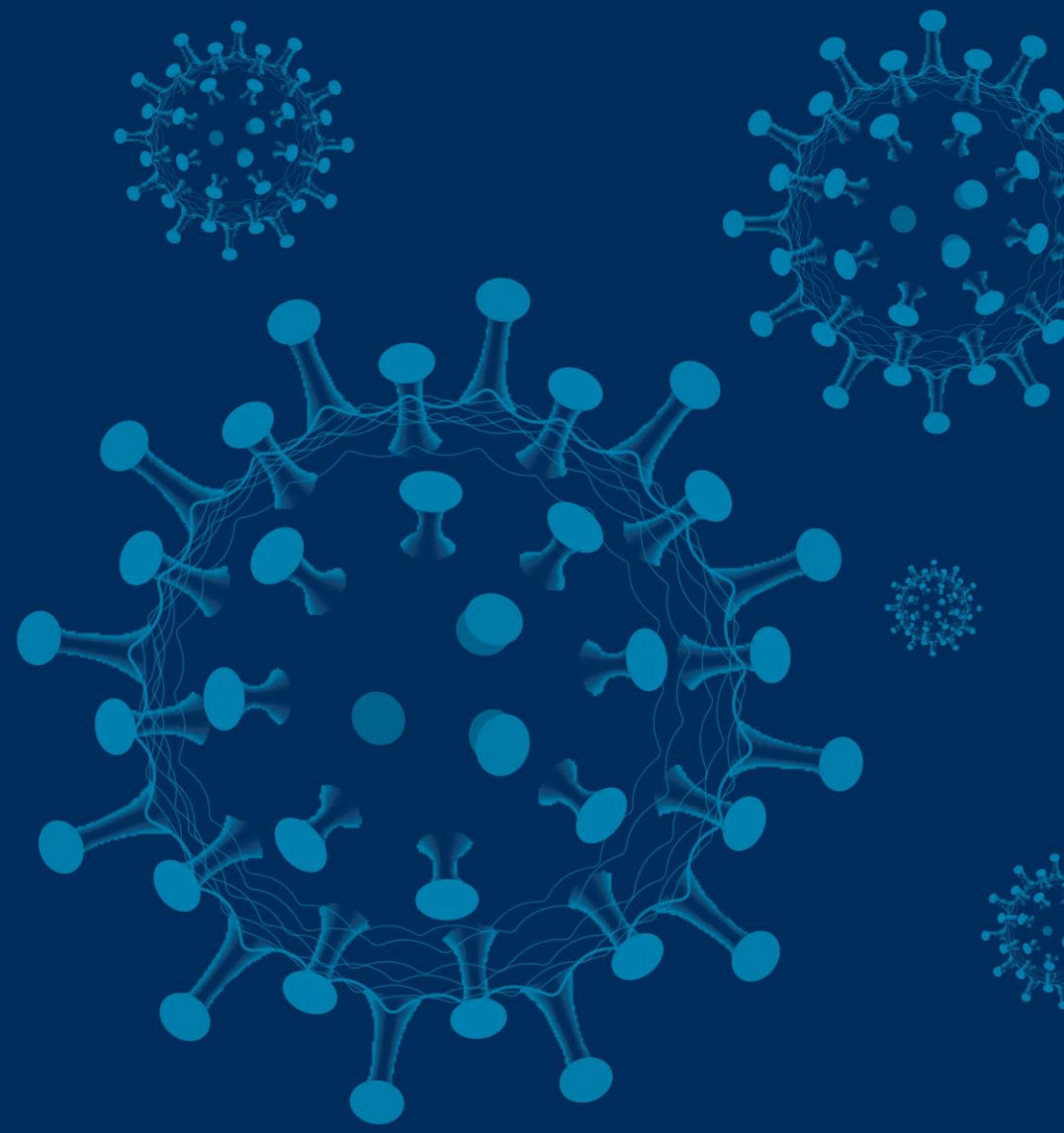
AT THE BEGINNING

-The Lab remained open

-Elective cases were delayed until we had further guidance

-We did urgent cases based on discussion with the physician and patient



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MARCH/APRIL 2020

-All cases reviewed
-Proceeded with urgent cases
-Full PPE
-Universal precautions including temp checks
-Testing not easily available

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WAYS WE ADJUSTED

-Patients felt more comfortable coming to a free-standing facility

-The facility has 8 closed bays that allowed for social distancing

-We had access to adequate PPE

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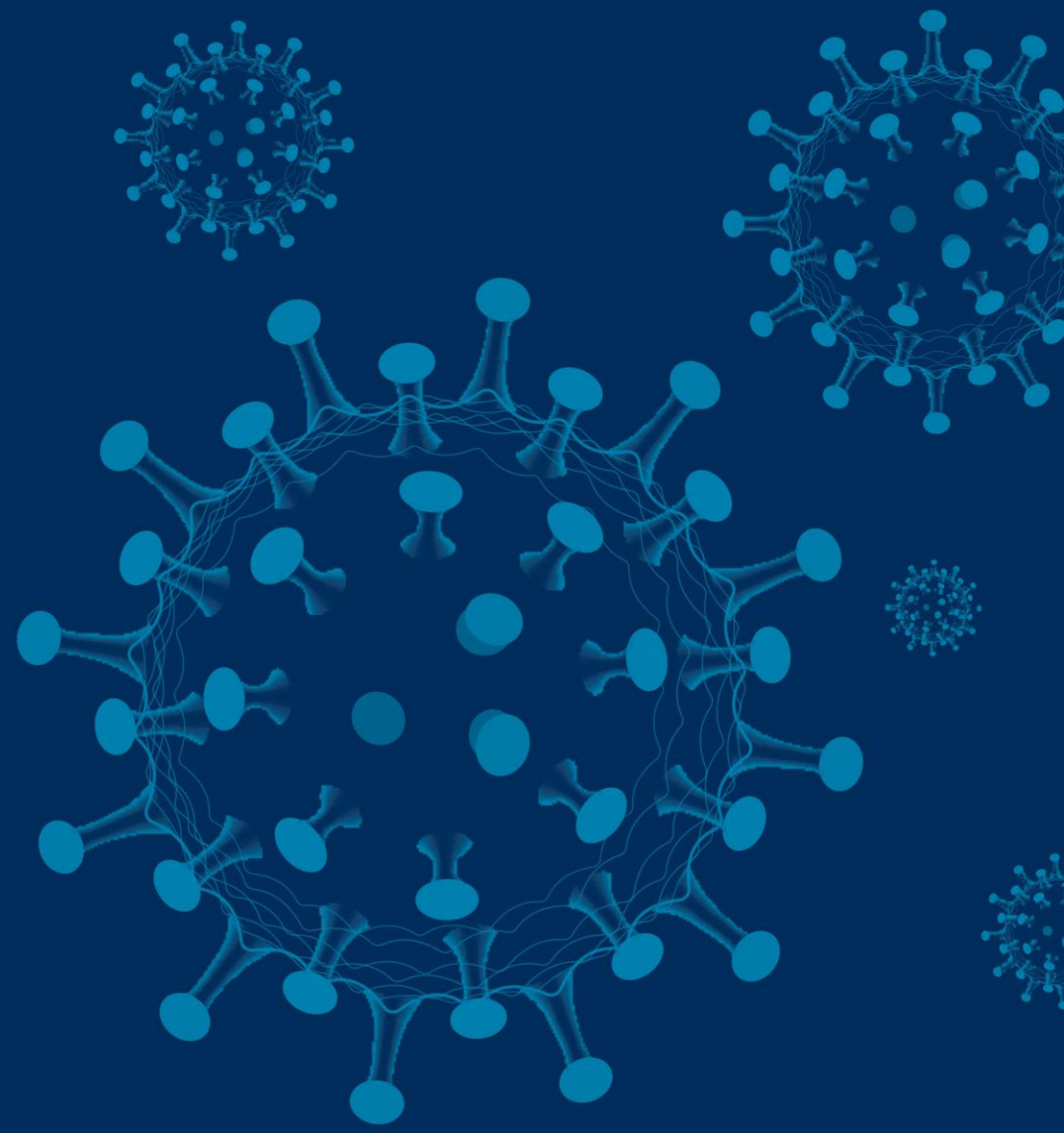
CHALLENGES

-Last minute cancellations

-Some patients were very fearful

-Some patients and family members did not want to wear masks

-Controlling the number of family members who wanted to come in with the patient was challenging despite clear instructions



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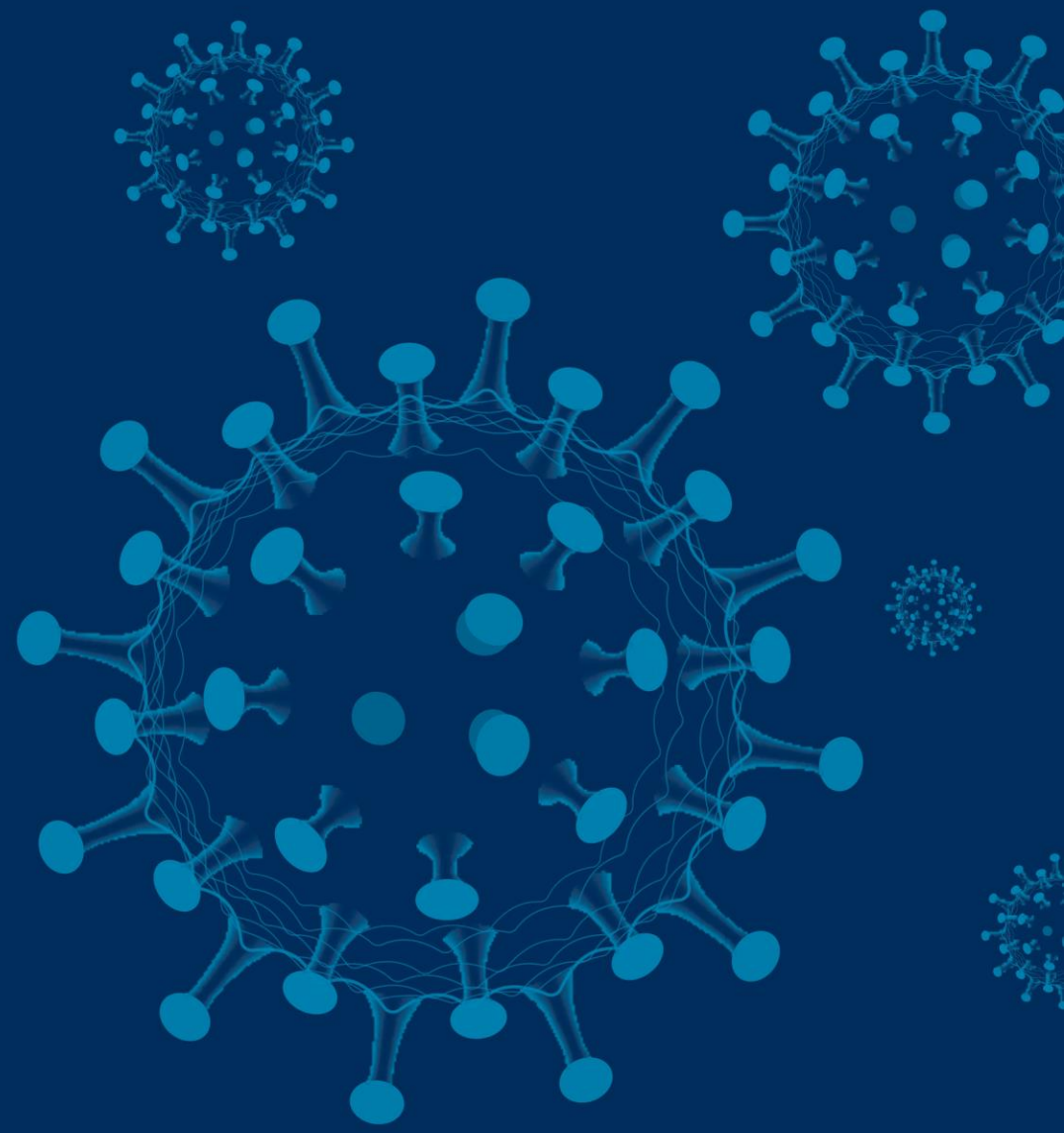

MAY 2020

-Open for normal business

-All TEEs pre-tested for Covid-19 3 days in advance of procedure and asked to self Quarantine

-Physician choice on whether they want patients for other procedures pretested (only 1 physician elected to have all patients pre-tested)

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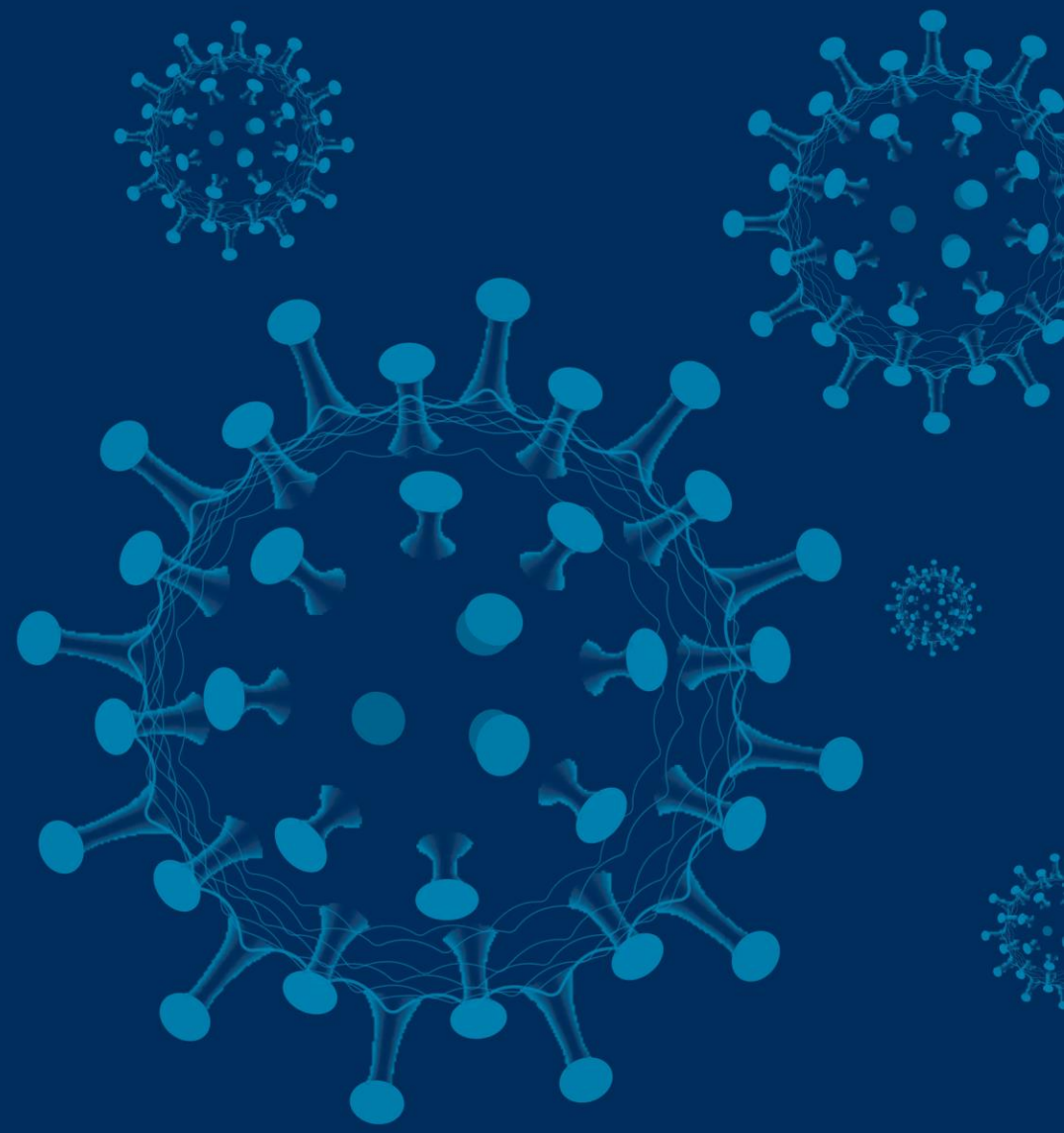
PROTOCOLS

-All patients, staff and family members have their temperatures checked and respond to a questionnaire regarding contacts and exposure and wear masks

-Patients can have one family member accompany them

-Universal precautions are followed



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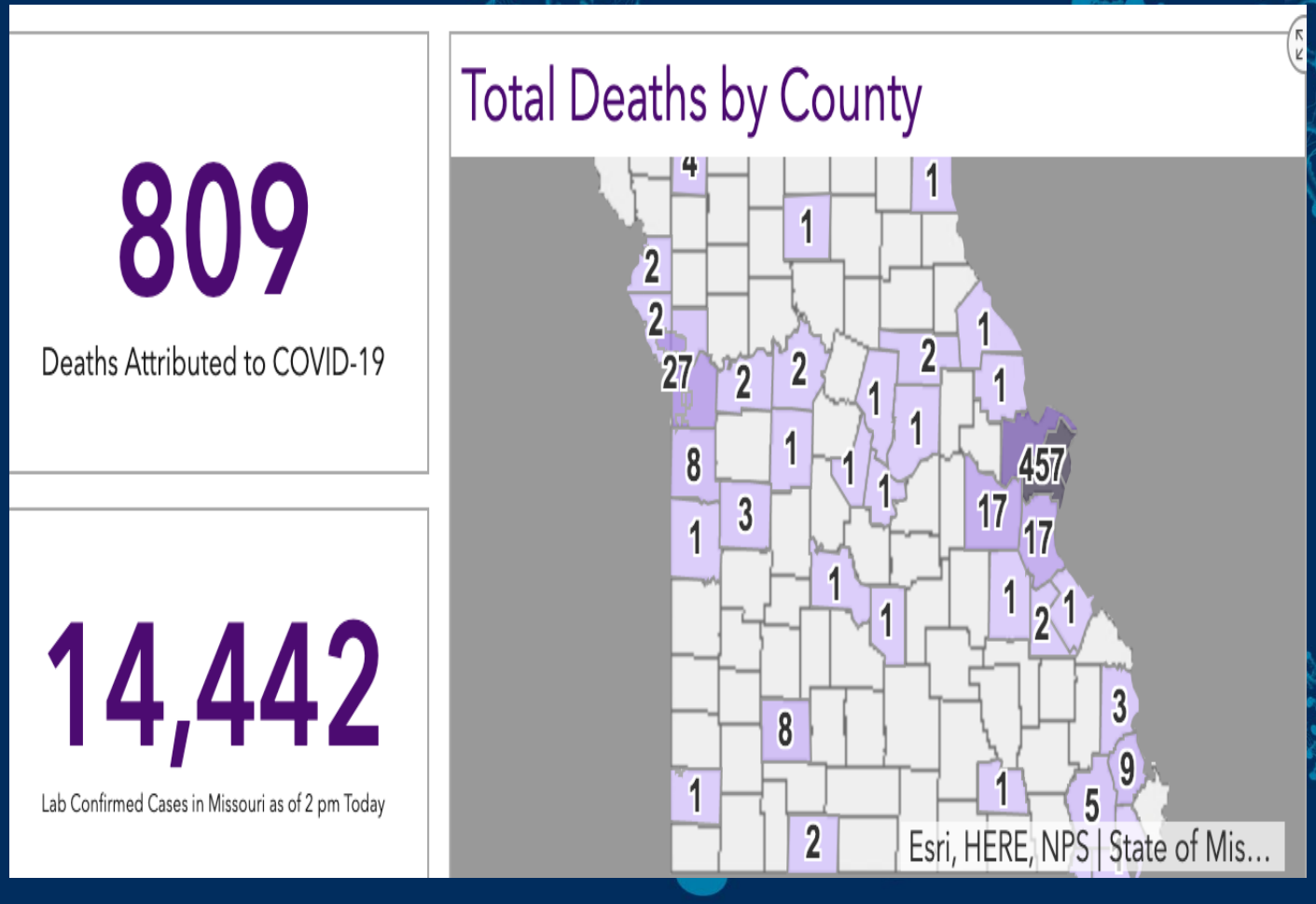
COVID-19 MISSOURI STATISTICS

We have had no patients, physicians or staff members test positive before the procedure or since the procedures at our outpatient lab



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