



*Campus Opening Plan*  
*Fall 2020 Semester*  
*September 10, 2020*

# OUTLINE

---

- 1) Guiding Principles
- 2) Modeling/Decision Making
- 3) Health Plan
- 4) Move-in Schedule
- 5) Teaching Plan
- 6) Communication Plan



# 1) Guiding Principles

---

- Health and safety of our students and workforce
- Delivery of quality academic content
- Flexibility to adapt to changing severity of the pandemic

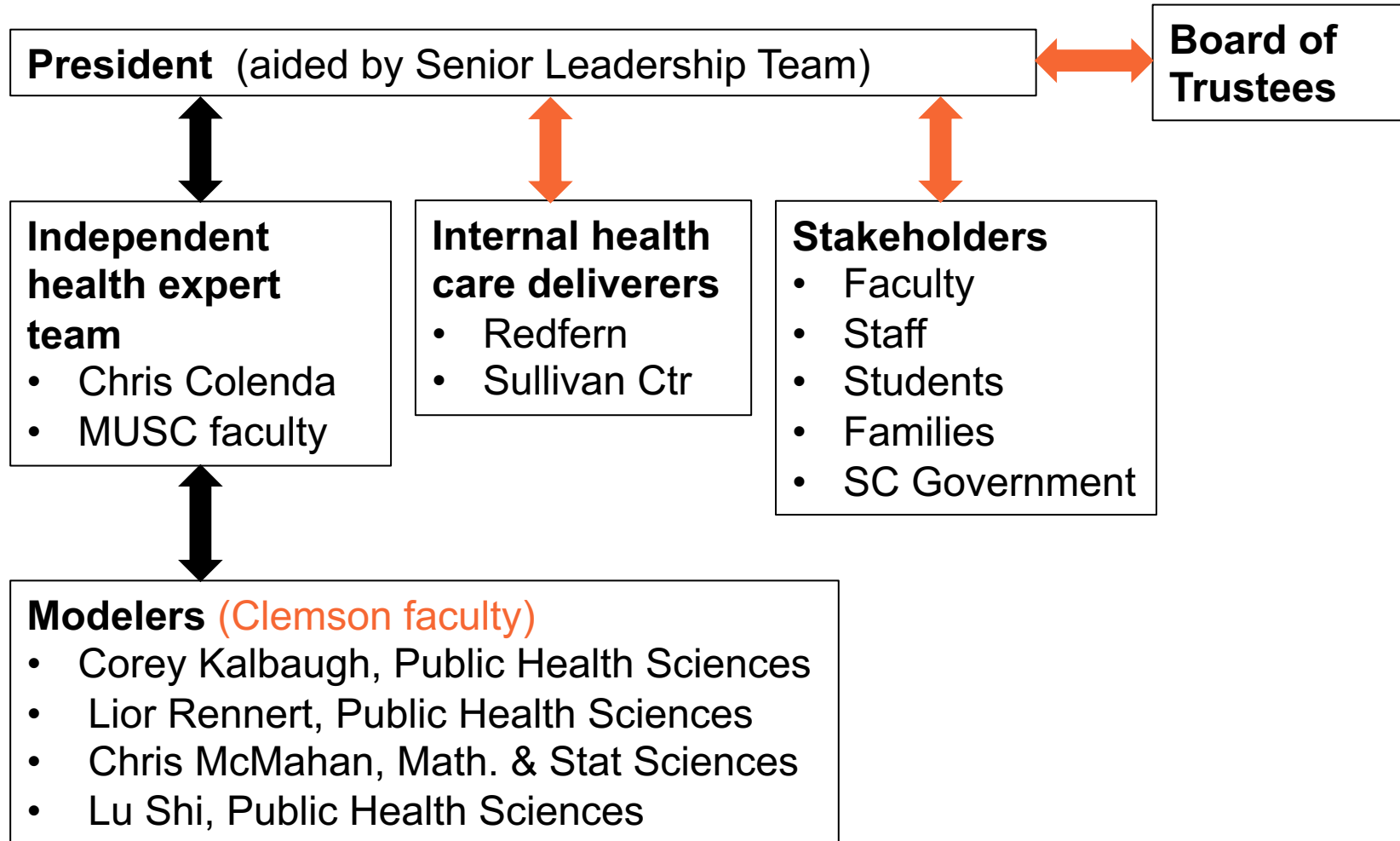


## 2) Modeling and Decision Making

---



# Data-driven Decisions



# Epidemiological Modeling

---

## Key Parameters

- Incidence of disease in population at start of model run
- Total population
- Percent previously infected (presumed immune)
- Percent asymptomatic (infected without showing signs)
- Rate of transmission one person to the next ( $R_0$ )
- Influence of mitigating strategies (testing, isolation, distancing, masks, etc.) that reduce  $R_0$

## Key Outputs

- Change (rates, raw numbers) in # infected and recovered over time
- Influence of changes in parameters and assumptions
- Numbers needing quarantine space and number of tests needed

## Interpretation

- Determine specific strategies to mitigate risk of infection
- Inform decisions to reduce or expand in-person interactions (e.g., the decision to delay opening residence halls and in-person learning)



# Key Data for Public Dashboard

---

## Population Surveillance Testing

- Students (#,% positive)
- Employees (#,% positive)
- All (#,% positive)

## Symptomatic Testing

- Students (#,% positive)
- Employees (#,% positive)
- All (#,% positive)

## All Testing Combined

- Students (#,% positive)
- Employees (#,% positive)
- All (#,% positive)

## Quarantine Utilization

- # beds
- Percent of Capacity





# Clemson University Fall Semester Testing Models of Number of Tests – Student Infections – On-campus Quarantine Resources for Students

## N=22,000 (Residential 7000)

Days After September 21	5% Daily Surveillance Testing of All 22,000 Students (7,000 Residential Students)	
	Residential Students Tested at Time of On-Campus Boarding 85% Asymptomatic	
Day	# Active Infections*	# of the 7k Students Living in Dorms Requiring Quarantine
7	1488	188
14	1359	195
21	1124	134
28	1042	131
35	964	131
42	879	130
49	800	128
56	718	125
63	641	123
70	572	120
77	510	117
84	461	115

### Model Assumptions

1. 22k students
2. 1200 initially infected
3. 85% asymptomatic
4. New infection rate from outside source: 25 introduced every week
5. Sensitivity=0.98
6. Specificity=0.99
7. Test turn around time: 48 hours

### Key Notes:

- This is only a model
- Ranges in some parameters used for sensitivity analysis
- Human behavior will strongly influence actual numbers

\* Active infections include on-campus students quarantined, off-campus students asked to isolate, and all students not yet identified as positive by surveillance tests





### 3) Health Plan

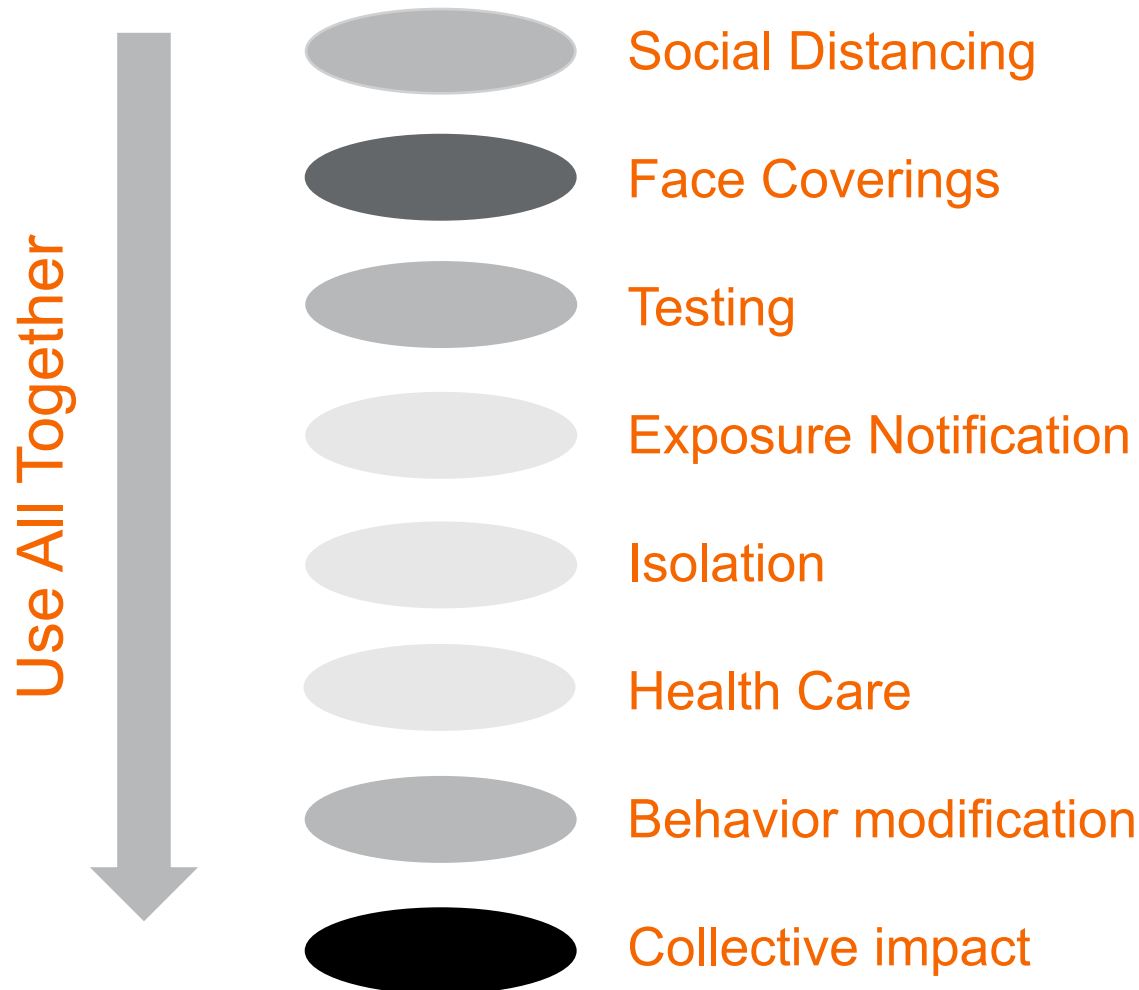
---

- Stacking protocols
- Triggers to change course
- Testing
- Exposure notification
- Isolation
- Health care
- Behavior/student experience



# Stacking Health Protocols to Dampen Infection

---



# Triggers to Change Course

---

- Reach capacity of quarantine/isolation spaces of  $\sim 650$
- Ability to care for students using existing health care providers, including internal and external
- Significant increase in workforce infections
- Loss in the ability to perform essential tasks
  - Academics (teaching, advising, research, etc.)
  - Staff (financial, physical plant, public safety)
- Options to modulate risks
  - Modify percent face-to-face learning
  - Modify allowable crowd sizes and activities
  - Modify level of interventions/education aimed at compliance with health protocols

# Testing

---

- Clemson's strategy based on models showing desired outcomes:
  - **Pre-arrival:** (100% of all students and employees before they are permitted to use campus facilities; all residents tested twice)
  - **Surveillance:** ( $\sim 5\%$  of students and  $\sim 5\%$  of employees daily)
  - **Symptomatic:** Test people reporting suspicious symptoms; surge when hot spots are indicated (e.g., by wastewater samples)
  - **Accuracy:** Use PCR NP tests exclusively at first, supplement and eventually replace with saliva testing
  - **Backup:** Use multiple providers to ensure adequate coverage
- Clemson's strategy relative to other major state universities\*
  - One of a minority using 100% pre-arrival testing
  - Very high rate of surveillance testing ( $\sim 5\%$  daily) compared to others (mostly 1-4%)

\* See e.g., Penn State, UVA, VT, UNC, NC State, USC, Alabama, Auburn, UGA, GT



## Testing: Additional Notes

---

- Added new vendor, Rymedi, to existing MUSC testing to test all students beginning 9/11; priority to on-campus students
  - Capacity ~ 2000/day with 24 to 48 hour turnaround
  - Testing location for Rymedi: Littlejohn Coliseum
  
- All students, whether living on- or off-campus, will be tested prior to access to University facilities and entry into the classroom
  
- Internal saliva testing capacity
  - Being developed by Drs. Delphine Dean and Mark Blenner
  - Athletics a key partner in building initial phases of test lab
  - Goal is to supplement and potentially replace most or all of the Nasopharyngeal testing

# Exposure Notification

---

- Continue largely manual process endorsed by DHEC; will be ramped up as needed to meet demand
- Continue work already underway to explore higher tech solutions which may be deployable later in the semester

# Quarantine & Isolation

---

Current Housing Contracts: 6,881

Current isolation capacity: 629 - 674

- 455 beds off campus
- 174 Beds at Thornhill Village
- 45 beds in Douthit Hills for Surge Capacity



# Healthcare Capacity

---

- Redfern is providing primary care medical visits in addition to COVID-19 related medical visits
- Majority of COVID-19 cases have been asymptomatic or mildly symptomatic
- Capacity:
  - 40 virtual visits/day
  - 60 in-person visits/day
  - 125 COVID-19 tests/day
- Virtual urgent care visits (in partnership with MUSC) has increased overall service capacity and expanded access to care after hours and on weekends
- Redfern is prepared to increase capacity by 35%, if needed

## Behavior/Student Experience

In adherence with the University's precautionary directives — designed to ensure the health, safety and welfare of our campus community — the Fall 2020 Clemson experience will look and feel *vastly different* for students.

The Division of Student Affairs and other campus partners are firmly committed to continuing unparalleled support for students — especially those new to Clemson or college life — inside and outside of the classroom by providing resources to navigate this experience under unique and challenging circumstances.





# WHAT'S DIFFERENT

## Behavioral Expectations

- ✓ Mandated face coverings
- ✓ Physical distancing guidelines
- ✓ “United as Tigers” compact
- ✓ Code of Conduct addendum

## Academic Operational Adjustments

- ✓ Classroom modifications
- ✓ Classroom and building cleaning protocols
- ✓ Conversion of non-traditional spaces
- ✓ Condensed study spaces
- ✓ Revised University policies for events, meetings and visitors

## Campus Life

- ✓ Virtual engagement opportunities
- ✓ Housing and dining adjustments
- ✓ Public transportation
- ✓ Student health
- ✓ Student organizations
- ✓ Testing requirements

## 4) Move-in Schedule

---

- Residence halls: 6884 students
- Estimated off-campus: 15,000





# Housing

---

- Staggered Approach
- September 6-7: RAs Move-In
- September 11-14: First-Year Students Move-In
- September 12-13: Bridge Move-In
- September 17-18: Upper Move-In
- September 21: In-Person Classes Begin

## Dining:

- Appointment system created for dine-in service based on class schedule and resident location
- No appointment times to go through To Go lines at McAlister & Schilleter; areas open all day for multiple visits

CLEMSON<sup>®</sup>  
*home*



## 5) Teaching

---



# Transitioning to In-Person Learning

---

- Current plan (1,818 instructors, >400 classrooms):
  - Sections (7,324):
    - 2,287 Fully online (31.23%)
    - 5,037 Blended (68.77%)
- Ramp up on-line to blended learning Sept. 21 – October 2
  - Instructors develop and implement a robust engagement plan to achieve learning outcomes
  - Instructors permitted to phase in face-to-face learning
  - Instructors communicate their modality plan to students and department chairs
- Participate with Student Affairs in student *mental health* and quality life/extracurricular experiences
  - Consider class time dedicated to non-class related discussions



# WHAT'S NEXT

## Health, Safety and Wellness

### Online Training

- ✓ Coordinated by Healthy Campus, students will be required to complete an online COVID-19 educational module, similar to employees, through Tiger Training

### Student Health Services

- ✓ Launch of MUSC Virtual Urgent Care will provide students opportunity to avoid long wait times at Redfern Health Center

### Campus Recreation

- ✓ Students will be required to make appointments to access facilities for in-person workouts and group fitness
- ✓ Maximizing use of outdoor and other student activity space for appropriate Club and Intramural Sports and other engagement activities

We are getting ready for you, anticipating our facilities to reopen during the Fall 2020 semester. In the meantime, we continue to host virtual offerings and encourage you to engage with us wherever you are — [click here to stay up to date](#).



## 6) Communication Plan

---

- COVID-19 site/dashboard
- Town halls/zoom updates
- Regular email updates
- Large and sophisticated social media plan for students and parents



# Communicating w/students

## Planned Engagement Opportunities

### New Student Digest

- ✓ Plan to move from weekly to *daily* distribution to incoming students from Sept. 11 (first day of move-in) to Sept. 21 (first day of in-person classes)

### Online Event Calendar

- ✓ Continuation of this mechanism as a one-stop shop for logging all virtual and in-person campus experiences

### Social Media

- ✓ Amplification of relevant content and resources for incoming students on the University brand channel (@ClemsonUniv) and supporting channels (@ClemsonSA, etc.)

### Other Channels

- ✓ Student Affairs newsletters
- ✓ Campus ESP – online family portal

