The Health Collaborative Situational Dashboard: Slide Descriptions

Hospital Demand

Slide 4: Number of positive COVID-19 patients in Region 6 ICUs, I-Chart
Slide 5: Number of positive COVID-19 patients in Region 6 hospitals, I-Chart
Slides 4 and 5 present the daily number of positive COVID-19 patients in ICU (slide 4) and hospital beds (slide 5) in Region 6, which includes 8 counties in Southwest Ohio: Hamilton, Butler, Warren, Clermont, Clinton, Brown, Highland, and Adams. An I-Chart is a type of chart that tracks data over time. The y-axis is the number of patients in beds and the x-axis is time measured in days. These data are reported to the Ohio Hospital Association.

Slide 6: Percentage of beds in use
Slide 6 shows the daily percentage of Region 6 hospital (“adult medical-surgical beds”) and ICU (“adult critical care”) beds that are currently occupied. Hospitals report these data to the SurgeNet database every four hours, and the last value reported each day is used to construct this chart. Colored bars are used to mark <80% (green), 80-90% (yellow), 90-95% (orange), and >95% (red) occupancy levels at standard capacity. The gray zone illustrates capacity for additional surge.

Forecast Demand

Slides 8-11 present:
1. The daily positive SARS-CoV-2 (virus that causes COVID-19) cases measured per 100,000 per day (7-day moving average);
2. An estimate of Reff (effective reproductive ratio) for Hamilton County and for Greater Cincinnati (slide 8), as well as local counties where Reff>1 (slide 9), and for Ohio, Kentucky, and Indiana (slide 11). Slide 10 illustrates these two values in map form.

The 14-county Cincinnati region includes 3 counties in Southeastern Indiana, 3 in Northern Kentucky, and 8 in Southwest Ohio. The daily incidence is calculated from the cumulative number of COVID-19 cases in each county, which is tracked by the New York Times. Reff estimates the number of SARS-CoV-2 cases generated by one case in the current state of a population (e.g., Reff of 1.0 means that someone with COVID-19 infects, on average, one other person). If Reff<1, the number of cases slowly declines and the epidemic decays. Reff is calculated using open-source software, data on laboratory-confirmed cases, and an estimate of the time between someone becoming infected and infecting a second person.

Slide 12: Number of COVID-19 deaths in 14 county area
Slide 12 shows the daily number of COVID-19 deaths in the 14-county Cincinnati region. These data are tracked by the New York Times using reports from state and local health agencies.

Slide 13: Percentage of test results returned positive
Slide 13 shows the daily number of SARS-CoV-2 (or COVID-19) tests completed by labs from Greater Cincinnati health systems, and the percentage of tests that were positive for the virus. Studies suggest that we should be testing enough to see a positive rate at or below 5%.

Slide 14: Daily positive SARS-CoV-2 (virus that causes COVID-19) cases measured per 100,000 per day (7-day moving average per county)
Slide 14 shows this value for each county. Data are, again, obtained from the New York Times public feed. Cut points are defined according to expert opinion using the Massachusetts Testing, Tracing, and Supported Isolation Collaborative (https://ethics.harvard.edu/ttsi-technical-handbook).

Slide 15, 16: Percentage of test results returned positive by age of patient
Slides 15 and 16 show the percentage of daily SARS-CoV-2 (or COVID-19) tests from Region 6 that were positive for SARS-CoV-2 for different age groups. Open dots suggest data that may still be subject to change. The bottom panels illustrate the average daily testing number by age of patient. Open bars indicate values that are still subject to change.
**Slide 17: Case incidence by age group**
Slide 17: This displays the daily case incidence rate by age group. The numerator is the number of positive tests as identified in The Health Collaborative dataset. The denominator is number of children with each age group within Hamilton County as captured in the US Census 2019 population estimates. The rate is normalized by 100,000 individuals. It uses a 7-day moving average to estimate each day's count.

*Mobility*

**Slide 19: Percentage change in weekday mobility in Hamilton County**
Slide 19 uses data from Google to show how movement of Hamilton County residents has changed since the start of the pandemic across four different types of activity: grocery/pharmacy, residential, retail/recreation, and workplace. You can read more about these reports [here](#).