

POWERING OUR COVID-19 DASHBOARDS

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My Role: I run the Data Core, an incredible group of epidemiologists and data scientists in the Office of Population Health. In March, we were activated to run COVID-19 Dashboards across the health system, in collaboration with our EMR reporting colleagues and our clinical leaders. We now have 13 dashboards tracking COVID-19 at the facility and system levels, updated hourly.

Power in COVID-19 Dashboards: We have a beds dashboard that shows open, occupied and unavailable beds, by department, to improve flow through our inpatient and ICU departments. We have been working with Chief Medical Information Officer Dr. Michael Bouton to convert inpatient departments to temporary ICU departments as our system ramped up to handle the surge. And now, we're beginning to help the system de-escalate.



We also identify our hourly ICU and inpatient census of COVID-19 confirmed or suspected patients, using testing data, infection data, or admitting diagnosis. That work is informing the new COVID-19 registry, which will be the spine of reporting in our electronic medical records system. The census data is reported daily to NYC Health + Hospitals President Dr. Mitch Katz, the Tiger Team and partners across NYC government.

Making Best Use of Data: We made the first round of COVID-19 dashboards to track our progress at the daily NYC Health + Hospitals Tiger Team meetings, led by Chief Medical Officer Dr. Machel Allen and Senior Assistant Vice President for Emergency Management Nick Cagliuso. But globally, we designed the dashboards for everyone.

CMIOs are using the dashboards to bring new beds into census to expand our ICU capacity or to adjust department function. The transfer center used our dashboards to understand which facilities were really under water and which might have capacity.

City Hall and NYC Dept. of Health used our dashboards to understand healthcare capacity across the city. In all, 400 people get our dashboards each day - and we are happy to add more to that list.

Teamwork: We work with researchers at NYU and Columbia to forecast the shape of the epidemic and likely demands for beds, in the next two weeks or two months. We visualize those models on our dashboards, and we feed our ICU and inpatient census data back to them to improve the models. We work with the NYC Dept. of Health to incorporate our health system's needs and stresses into city-wide planning. This collaboration has extended to City Hall, including an indicator of critical care capacity that signals when it may be safe for NYC to lift some social distancing measures.