South Florida COVID-19 Response

USING SHELLED SPACE TO INCREASE BED CAPACITY FOR COVID-19 PATIENTS

When a pandemic like COVID-19 strikes, health facilities must be prepared to act swiftly to increase bed capacity and maintain safety to patients. A healthcare client in our Southeast Florida market engaged Array to help them prepare a plan to do just that. Array had recently completed a new bed tower with two shelled floors for future growth on one of the client's campuses, and our team identified this a prime opportunity for temporary COVID-19 bed space. With that in mind, we conducted a study of three options for increasing the amount of beds they could make available and presented the pros and cons of each scenario.

Existing Conditions

Each floor is separated into two areas with existing fire walls allowing the hospital to create two units of temporary beds. With minimal construction on the floors currently, they could be easily and quickly built out to bring them available beds in a timely manner. The Array team proposed using existing plumbing stub ups for sinks and toilets and keeping all existing walls in place to help accelerate the schedule as much as possible.

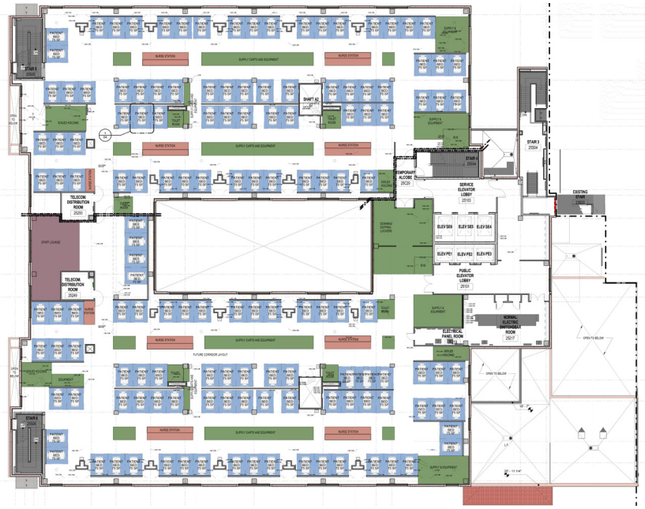
Weighing Capacity Expansion Options

Health systems need fast, intuitive and flexible options for increasing capacity in place or by leveraging other facilities within their system. By defining the benefits of their options exactly, including the number of beds each one provides, the level of infection control enabled, and how much construction each one requires, health leaders are better equipped to make the best decisions for their patients. If our client proceeds with the options outlined below, they will increase their flexibility to respond as their needs evolve during the COVID-19 pandemic.

Donning & Doffing

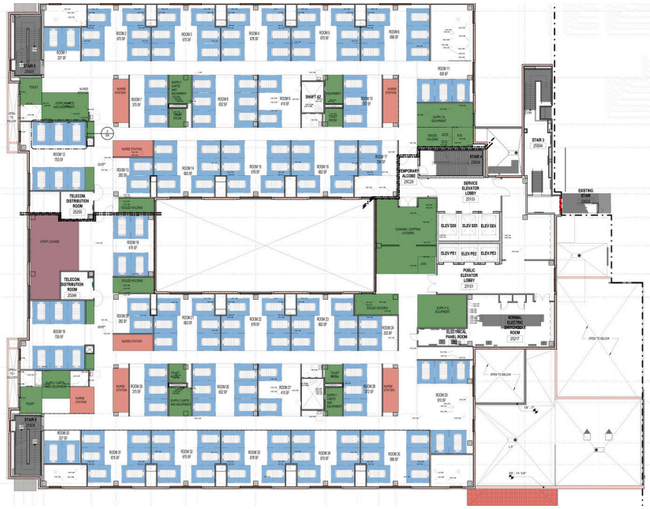
In all options, a donning and doffing area with lockers is provided adjacent to the elevators.

OPTION 1 | 159 BEDS IN OPEN PLAN



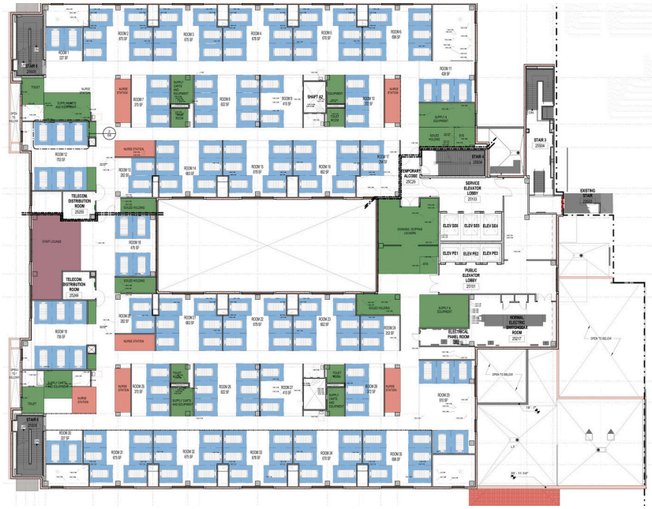
The first option uses a ward-type layout with potential for up to 159 beds. The open floor concept provides the quickest construction schedule due to the small number of walls, and it limits ceilings to only enclosed rooms. Nurse stations located along the center of the corridors allow for direct observation and easy access to all patients.

OPTION 2 | 160 BEDS IN SHARED ROOMS



The second option provides semi-private shared rooms, creating 160 beds. Each room is enclosed on three sides by walls, leaving the option to keep the corridor open or enclosed with plastic sheathing. While the construction time is longer due to the increased number of walls, this option provides a more intimate caring environment and the opportunity to limit exposure of infected patients.

OPTION 3 | 77 BEDS IN PRIVATE ROOMS



The final option provides 77 fully enclosed isolation rooms. This plan layout contains the most construction, but it also provides the highest level of care for patients who are very sick.