



# HOSPITALity

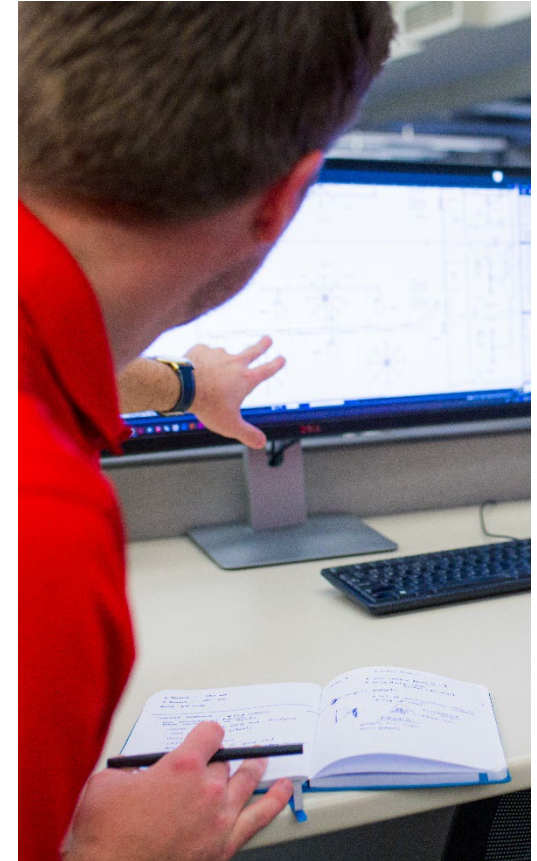
Repurposing a Hotel to a Hospital

March 2020

LEO A DALY

## Why LEO A DALY?

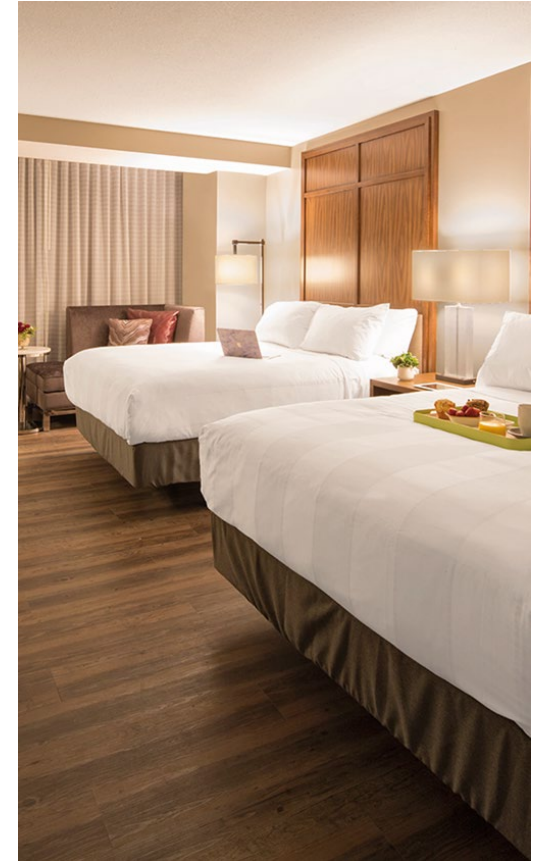
- **National expert** on Infection Control and Biocontainment
- Best **aligned to leverage** both Healthcare and Hospitality expertise
- **Partnering capabilities** with national healthcare systems and Construction Management firms



# Why a Hotel?

## Aligned building typology

- Comprised of **private, individual rooms** with **dedicated toilet**
- Dedicated **HVAC system per room**
- Operationally and functionally compatible:
  - **Food** service
  - **Cleaning** service
  - **Waste** removal
  - **Laundry** services



# Why a Hotel?

## Quick to market

- Many **properties relatively available** due to ban on travel
- Secure and **controlled access** and exiting
- Can house **up to 80 patients** per average building size
- Often several are located **near existing hospitals**



# What Level of Patient Acuity?

## Re-use Model 1

COVID-19 **Quarantine** – societal **isolation**  
(China example)

## Re-use Model 2

COVID-19 **Symptomatic** – including underlying health risk factors requiring care (e.g., Tom Hanks and Rita Wilson) – but **not seriously acute** nor requiring ICU

## Re-use Model 3

Non-COVID-19 **Uninfected** – patients requiring an inpatient stay to free up beds in existing hospitals (e.g., ortho patient)



# Re-use Model 1

## COVID-19 Quarantine

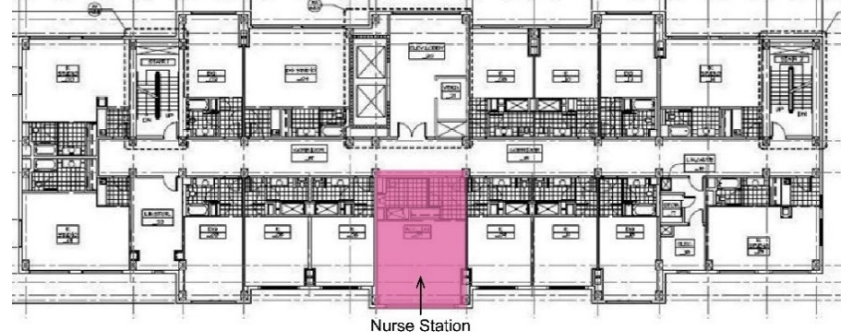
Isolation of otherwise healthy patients

### Guest room modifications:

- Minimal, if any

### Guest floor modifications:

- Create Nurse Station in room opposite elevator core



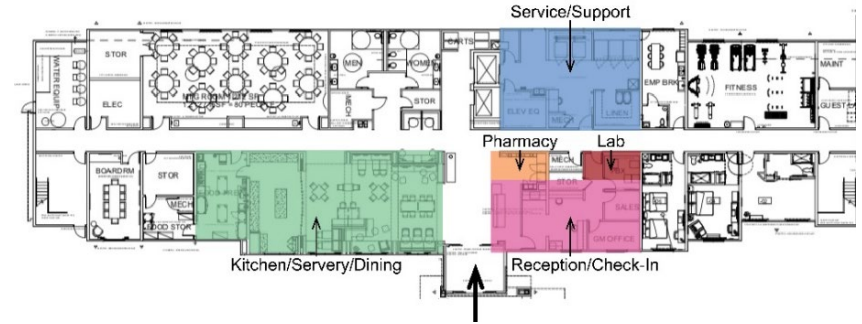
# Re-use Model 1

## COVID-19 Quarantine

Isolation of otherwise healthy patients

### Lobby level modifications:

- Repurpose Reception/Office area as check-in
- Reuse retail area as Pharmacy
- Convert office into Lab



# Re-use Model 1

## COVID-19 Quarantine

Isolation of otherwise healthy patients

### Infrastructure modifications:

- Add exhaust fan to exhaust duct on roof to create negative pressure in guest room

### Staffing requirements:

- Potentially nursing and providers that have tested positive for COVID-19 but are **asymptomatic** (*if legal to do so*)



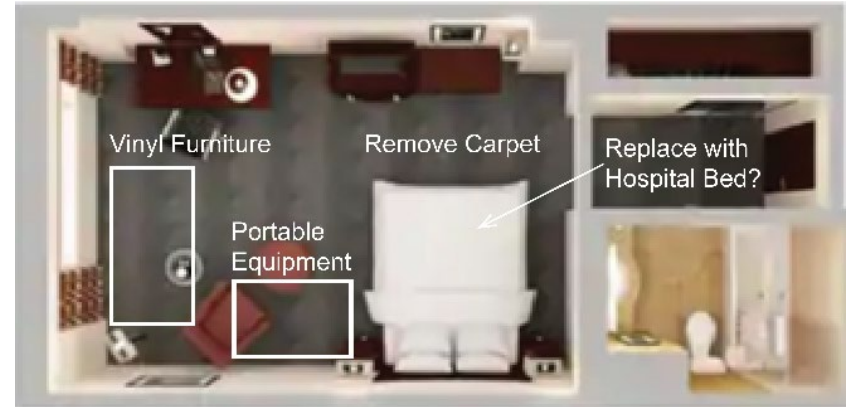
## Re-use Model 2

### COVID-19 **Symptomatic**

Patients with underlying health risks requiring higher level of care

#### Guest room modifications:

- Remove carpet, polish and seal concrete floor
- Replace fabric covered furniture with hospital grade vinyl
- Replace curtains with Mecho shades
- Provide mobile headwall unit and portable med gas bottles
- Modify existing guest bed or replace with hospital bed if feasible



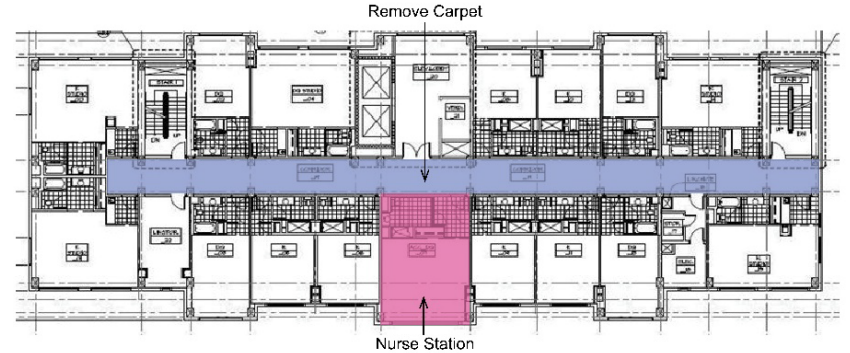
# Re-use Model 2

## COVID-19 Symptomatic

Patients with underlying health risks requiring higher level of care

### Guest floor modifications:

- Create Nurse Station in room opposite elevator core
- Remove carpet in corridor, polish and seal concrete floor
- Add electronic, wireless patient surveillance and monitoring devices and infrastructure



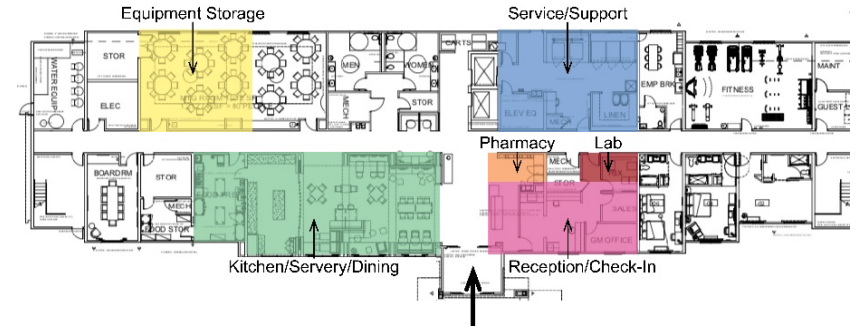
# Re-use Model 2

## COVID-19 Symptomatic

Patients with underlying health risks requiring higher level of care

### Lobby level modifications:

- Turn Reception/Office area into check-in
- Reuse retail area as Pharmacy
- Convert office into Lab
- Create Equipment Storage area for portable devices, including X-ray, ventilators, IV, patient monitors, etc.



## Re-use Model 2

### COVID-19 **Symptomatic**

Patients with underlying health risks requiring higher level of care

#### Infrastructure modifications:

- Add exhaust fan to exhaust duct on roof to create stronger negative pressure in guest room
- Provide generator and fuel tank outside main Electrical Room, tie into existing panel via new Transfer Switch

#### Staffing requirements:

- Providers use special precautions during and after giving care

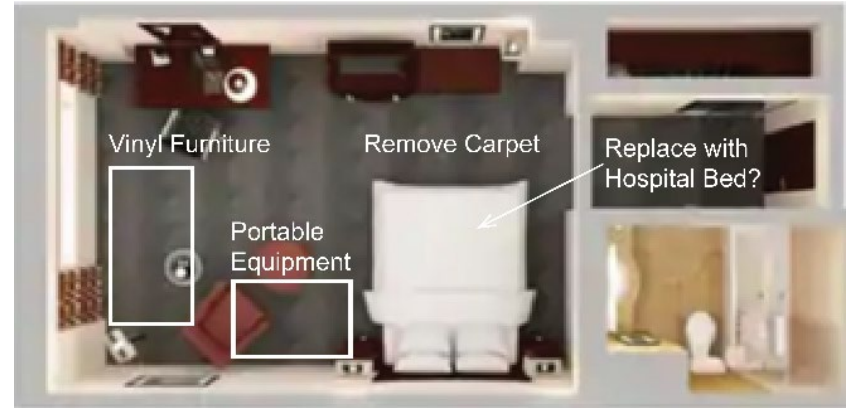
## Re-use Model 3

### Non-COVID-19 **Uninfected**

Patients requiring an inpatient stay to free up beds in existing hospitals

#### Guest room modifications:

- Remove carpet, polish and seal concrete floor
- Replace fabric covered furniture with hospital grade vinyl
- Replace curtains with Mecho shades
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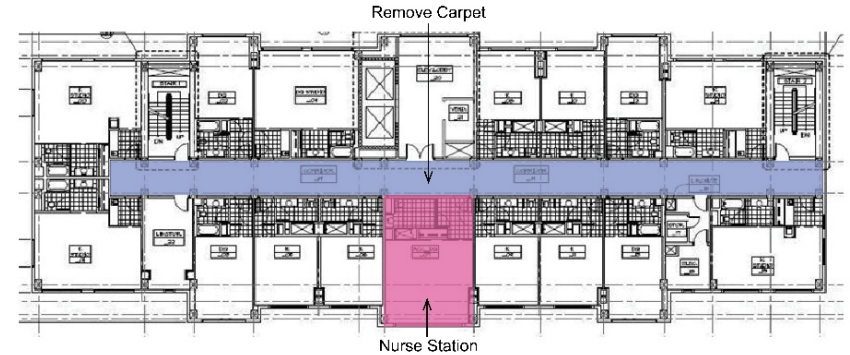
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Patients requiring an inpatient stay to free up beds in existing hospitals

### Guest floor modifications:

- Create Nurse Station in room opposite elevator core
- Remove carpet in corridor, polish and seal concrete floor
- Add electronic, wireless patient surveillance and monitoring devices and infrastructure
- Traditional nursing and provider staff



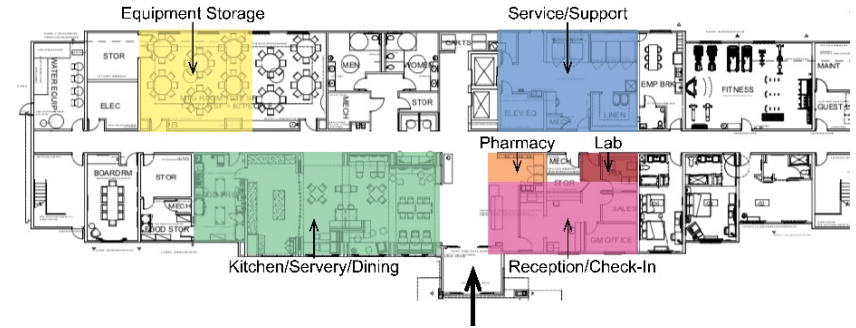
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### Lobby level modifications:

- Turn Reception/Office area into check-in
- Reuse retail area as Pharmacy
- Convert office into Lab
- Create Equipment Storage area for portable devices, including X-ray, ventilators, IV, patient monitors, etc.



# Re-use Model 3

## Non-COVID-19 **Uninfected**

Patients requiring an inpatient stay to free up beds in existing hospitals

### Infrastructure modifications:

- Modify thru-wall HVAC unit to create positive pressure in guest room
- Provide generator and fuel tank outside main Electrical Room, tie into existing panel via new transfer switch

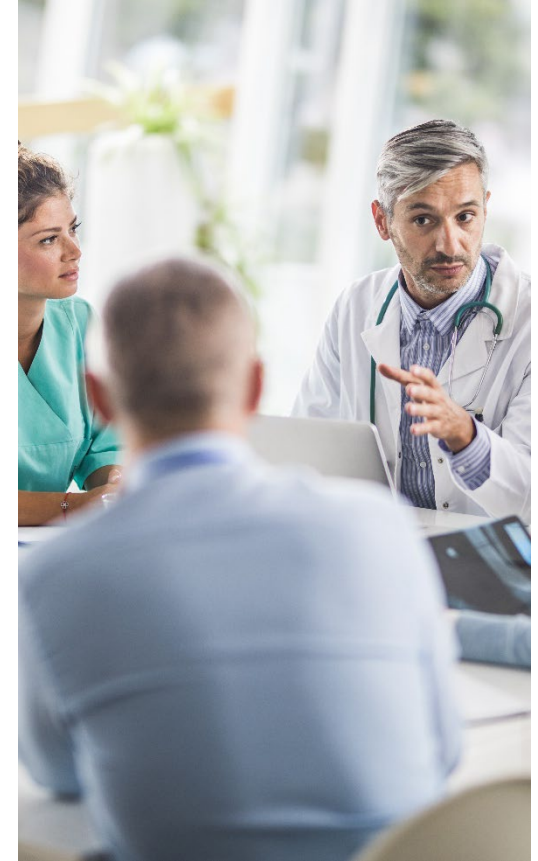
### Staffing requirements:

- Traditional nursing and provider staff



## Hurdles to Overcome

- Medical and provider **staffing**
- Existing hotels not built to healthcare **HVAC system requirements**
- Hospital **bed connection** and movement ramifications
- **Cleaning** and support
- Supplies and **medical equipment** management



## Hurdles to Overcome

- Major equipment **lead times**
- Existing **power infrastructure**
- **Emergency power** would not have healthcare safety systems built in; secondary grounding, etc.
- **Legal and code** requirements

