

Utilizing Nontraditional Healthcare Delivery Practices: Alternative Care Sites During the COVID-19 Pandemic

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I. Introduction/Background

Throughout the COVID-19 pandemic, alternative care sites (ACS) have been utilized as solutions to relieve crowding and mitigate infection risks in hospitals, skilled nursing facilities, and other healthcare facilities.¹ ACS care facilities that are temporarily repurposed for healthcare services during public health emergencies include convention centers, hotels, and dormitories. Besides serving as acute or post-acute care facilities, ACS may also be used as isolation sites for asymptomatic or mildly symptomatic people who are COVID-positive, or for people who are currently under investigation due to potential exposure to COVID.

WHAT IS AN ALTERNATE CARE SITE?

A nontraditional care site that provides care for low-acuity, semi-ambulatory COVID-19 patients when hospitals are at or past capacity

Two types of Alternate Care Sites:

 Federal Medical Station (FMS)	 Other (hotels, arenas, tents, etc.)
<ul style="list-style-type: none">Jointly operated by locals (counties, hospitals) and StatePre-packaged 250 beds and supplies set up in existing covered facility (arena, etc.)	<ul style="list-style-type: none">Leased and/or staffed by State and integrated into local health system

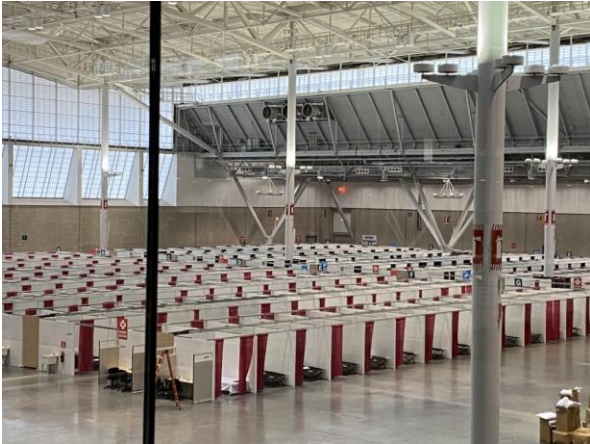
Source: Healthforce Center at UCSF, April 27, 2020.

Conclusions and Policy Implications

Alternative (sometimes seen as alternate) care sites can supplement care gaps during public health emergencies by relieving capacity constraints on hospital and healthcare facilities, delivering care to vulnerable and underserved populations, and utilizing nontraditional care approaches. Use of ACS during public health emergencies requires scaling up and/or diverting the existing healthcare workforce to a new care setting.

II. Methods

We interviewed representatives from three ACS across the United States: (1) the Boston Hope Field Hospital of the Boston Healthcare for the Homeless Program (BHCHP) in Boston, Massachusetts; (2) Operation Comfort in Oakland, California; and (3) the Navajo Nation Indian Medical Center in Gallup, New Mexico. Our key informants included nursing and social support services personnel. Our primary objectives were to learn how different ACS organize their sites and workforces to deliver care to COVID-positive patients, and to capture snapshots of how different nontraditional settings can be repurposed for providing care.



The Boston Hope Field Hospital
Source: Boston Hope clinical staff member, 2020.



Days Hotel in Oakland, one of two Operation Comfort hotels
Source: Google Maps



Comfort Inn and Suites in Oakland, one of two Operation Comfort hotels
Source: Google Maps.

III. Findings

a. *The Sites, at a Glance*

The following infographics summarize the operations of Boston Hope and Operation Comfort. Both ACS prioritized care for patients who were homeless, housing-insecure, or living in congregate living situations.

BOSTON HOPE

AT A GLANCE



Site: Boston Convention and Exhibition Center

Organization(s): Boston Healthcare for Homeless Program (BHCHP)

Active period: April 2020 to May 2020

Number of beds: 500

Patient census: 70 to 120 patients per day. In total, approximately 800 patients were cared for at this site. Most came from shelters, as many shelters conducted mass surveillance and testing to identify patients who had to be quarantined. A small number of patients also came from area hospitals or outpatient clinics.

CRITERIA FOR ADMISSION

- Low-acuity cases, symptomatic or with mild symptoms
- Independent with activities of daily living
- Able to self-medicate
- Without active psychosis or significant dementia
- Experiencing homelessness or housing instability who tested positive for COVID prior to admission.



CRITERIA FOR DISCHARGE

Patients who were asymptomatic when admitted or developed symptoms during their stay

- At least 10 days have passed since the date of first positive test result
- No subsequent illness provided they remain asymptomatic

Patients who were symptomatic when admitted

- 72 hours have passed since recovery, defined as resolution of fever without use of fever-reducing medications, AND
- Improvement in respiratory systems, AND
- At least 10 days have passed since symptoms first appeared



STAFFING

The site was staffed 24 hours per day. BHCHP brought in its own clinical, non-clinical, and behavioral health staff. Additionally, it supplemented clinical staff demand through a temporary placement agency as needed.

Unit-specific staff

- Clinicians
 - Registered nurse (RN)
 - Nurse practitioner (NP)
 - Physician assistant (PA)
 - Physician (MD, DO)
- Clinical assistants
 - Medical assistant (MA)
 - Certified nursing assistant (CNA)
- Non-medical runner (e.g., case manager, social worker, volunteer)



Facility-wide staff

- Staff greeter and personal protective equipment spotter (preferably, an RN)
- Patient intake coordinator
- Behavioral and mental health care staff
 - Harm reduction staff providing services for substance use disorders (provided by Supportive Place for Observation and Treatment (SPOT) and Access, Harm Reduction, Overdose Prevention and Education (AHOPE))
 - Psychiatric health providers
 - Social workers
 - Mental health counselors
- Central supply coordinator
- Delivery coordinator
- Outdoor door monitor
- Prescribing nurse (on-site at all times, responsible for managing complicated care)

SUPPORT SERVICES

- Laundry
- Food
- Hazardous waste removal
- Personal protective equipment
- Security (provided by the National Guard)



SOURCE

Clinical staff member

OPERATION COMFORT

AT A GLANCE



Site: Two hotels in Alameda County in California

Organization(s): Alameda County, Abode Services, Project Roomkey

Active period: May 2020 - present*

Number of beds: 100

Patient census: Hotel 1: 40 patients, Hotel 2: 49 patients (at the time the interview was conducted in late August 2020).

*As of March 8, 2021, some Project Roomkey hotel leases in Alameda County have been extended with a ramp down plan ending in September.

CRITERIA FOR ADMISSION

- **Hotel 1:** Formerly or currently homeless individuals, or individuals who are currently on probation or parole
- **Hotel 2:** Symptomatic COVID-positive individuals living in congregate settings or with someone who is COVID-positive; includes children and babies
- Meet at least one of the following:
 - Positive COVID-19 test
 - Recent contact with someone who has tested positive for COVID
 - Suspected case based on symptomatic presentation and or pending test results
 - In a high-risk group:
 - Age 65 or older
 - Individuals with one or more of the following health conditions:
 - Blood disorders
 - Chronic kidney disease
 - Chronic liver disease
 - Compromised immune system
 - Current or recent pregnancy in the last two weeks
 - Endocrine disorders
 - Metabolic disorders
 - Heart disease
 - Lung disease
 - Neurological, neurologic, and neurodevelopment conditions
 - Body weight greater than 270



CRITERIA FOR DISCHARGE



The isolation period ends when a patient meets all of the following criteria:

- At least 3 days (72 hours) have passed since recovery, which is defined as:
 - Resolution of fever without the use of fever-reducing medications AND
 - Improvement in respiratory symptoms (e.g., cough, shortness of breath)
- At least 7 days have passed since symptoms first appeared

STAFFING

The site was staffed 24 hours per day, split into three shifts per day. Most roles were temporary positions, but some personnel were eventually considered for permanent positions. Recruiting was primarily conducted through postings on glassdoor.com, but some positions were also filled through word of mouth.

Facility-wide staff

- Screening and approval personnel (Registered nurse (RN) or higher)
- Medical admission team (RN or higher)
- Administrative and operations support staff
- Program manager
- Peer support
- Community health outreach worker/housing navigator
- Security
- Janitorial staff (provided by hotel)
- 2 shift monitors per day, responsible for*:
 - Distributing meals
 - Distributing alcohol and tobacco
 - Conducting temperature checks
- Pharmacy consult (on-call)
- Behavioral health clinician (provide consultation and support via telemedicine)



*To fill these positions, the site recruited individuals who have previously experienced homelessness or substance abuse issues.

SUPPORT SERVICES

- Meals
- Alcohol and tobacco
- Mental health counseling and support
- Peer/social support (e.g., phone- and video-conferencing, online chat groups)



SOURCE

Administrative site personnel

b. Navajo Nation

ACS techniques were used by the University of California, San Francisco's HEAL (Health, Equity, Action, and Leadership) Initiative in partnership with major Indian Health Service and tribally run hospitals to provide services in the Navajo Nation.^{2, 3} We spoke with a member of the UCSF delegation to the Navajo Nation at Gallup Indian Medical Center in Gallup, New Mexico. Our interviewee shared that Navajo Nation hospitals are typically smaller and under-resourced, and described how non-traditional, ACS techniques were utilized to expand the local health system's capacity to provide care. For example, one hospital expanded their emergency department by using industrial tarps to create additional rooms for screenings, triage, registration, and medication dispensing. Mildly symptomatic patients who tested positive and were capable of self-monitoring were sent to hotels to quarantine. A local high school gymnasium was used as a COVID-monitoring unit and was staffed by the National Guard.



Gallup Indian Medical Center
Source: New Mexico In Depth, 2020.

c. How Alternative Care Sites Implement Nontraditional Care Approaches

Interviews with leaders of organizations that established ACS revealed several nontraditional care approaches used to deliver healthcare and supportive services. Below are some key examples.

a. Respite Shelter

Under this model, patients experiencing homelessness recuperate from acute illness before going or returning to shelter.⁴ This model is more lightly staffed than hospitals or subacute rehabilitation facilities, and patients are typically less sick and more independent. For example, Boston Hope-BHCHP patients could safely return to a shelter or other congregate living situation after they met discharge criteria and were determined by the Boston Public Health Commission to be non-infectious. For guests at Operation Comfort who came from a shelter environment, the agency that referred them to the site was expected to hold their bed so that they could be transported back to the shelter once their medical isolation period ended.

b. Managing Patient Information and Medications

At the Boston Hope-BHCHP site, no electronic health records (EHR) were used. Instead, each cot-room contained a clipboard consisting of a brief patient intake form, list of emergency drug kit medications, pharmacy order forms, detox needs, daily vital sign tracking sheet, and nurse assessment. All documents were

scanned before the patient left. Providers writing Schedule 2 and 3 prescriptions could use laptops to access the EPIC Offsite EHR system.

Providers were encouraged to order only medications that were absolutely necessary. Except for the detox kit, emergency drug kit, and one-time non-controlled medications (e.g., insulin), patients provided and kept their own medications in a locker and self-administered them.

c. Disaster Behavioral Health

Boston Hope-BHCHP implemented a mental health disaster response that applied the principles of psychological first aid (PFA).⁵ PFA emphasizes both emotional and practical support for trauma survivors while taking a non-pathologizing stance and allows people to recover at their own pace. Although PFA is typically applied when providing acute care for individual trauma survivors, its principles are also applicable to delivering a population-based mental health care response by leveraging mental health providers experienced in trauma-informed care, supportive psychotherapy, and crisis de-escalation to support community medical teams.

The Boston Hope mental health team sought to create a “therapeutic social environment with regular groups and daily activities, and [prevent] undesirable outcomes such as overdoses and suicide attempts.” Our interviewee described how Boston Hope-BHCHP staff and patients, outfitted in personal protective equipment (PPE), played cornhole together. Additionally, the site placed strong emphasis on harm reduction. For example, it hired workers to stand outside bathroom stall doors, prepared with naloxone and Narcan, to time how long patients were in the stalls and check up on them as needed.

d. Telehealth for Behavioral Health Care Delivery

At the time of our interview, there was no dedicated behavioral and mental health care team at the Operation Comfort site. However, mental health professionals screened guests at the referral and intake periods for mental health needs and checked relevant databases for their mental health history. If guests were identified as needing mental health support, Abode services and its mental health staff created a mental health monitoring plan for regular mental health check-ins and counseling by mental health professionals during the guest’s stay at the hotel. Mental health services received on site included telepsychiatry and phone- and video-conferencing peer and social support.

IV. Conclusion

The ACS where our interviewees worked provided care to vulnerable and underserved populations; specifically, COVID-19 patients who are experiencing homelessness or indigenou. Facilities included a convention center, hotels, and temporary tent housing. The three sites varied with respect to patient admissions processes, patient discharge processes, staffing policies, and support services offered to patients. Nontraditional care approaches were used, such as disaster medicine and telehealth.

V. Policy Implications

ACS can supplement care gaps during public health emergencies by relieving capacity constraints on hospital and healthcare facilities, delivering care to vulnerable and underserved populations, and utilizing nontraditional care approaches. Use of ACS during public health emergencies requires scaling up and or diverting the existing healthcare workforce to a new care setting.

VI. Resources

To learn more about alternative care sites, we recommend browsing through the following resources.

a. *Boston Hope*

The resources listed below can be accessed in this [Box folder](#).

- Boston Hope Clinical Handbook
- Boston Hope Introduction Orientation Slides for Staff
- Boston Hope Wrap Around Services Guidelines for Staff
- Boston Convention and Exhibition Center (BCEC) Provider Admission Note
- Boston Hope Daily Patient Medical Monitoring Form
- Boston Hope Guidance on Emergency Drug Kits
- Boston Hope Pharmacy Order Form
- Boston Hope Pharmacy Order Form for Non-Controlled Emergency Drug Kit Medications
- Boston Hope Medication Administration Record Form for Detoxification Medications

b. *Operation Comfort*

The resources listed below can be accessed in this [Box folder](#).

- Alameda County Operation Comfort and Operation Safer Ground Handbook
- Operation Comfort Checklist for Guests
- Operation Comfort MD Screening Tool
- Operation Comfort Online Screening and Referral Form
- Operation Comfort Referral Packet
- Operation Comfort Training for Housing Screening and Referral Providers

c. *Healthforce Center at UCSF*

At the beginning of the COVID-19 pandemic, the Healthforce Center at UCSF developed training and guidance materials on alternative care sites and curated its own list of alternative care sites resources.

These materials are available here: <https://healthforce.ucsf.edu/covid19> (“Alternate Care Sites”).

¹ Baughman, A. W., Hirschberg, R. E., Lucas, L. J., Suarez, E. D., Stockmann, D., Hutton Johnson, S., Hutter, M. M., Murphy, D. J., Marsh, R. H., Thompson, R. W., Boland, G. W., Ives Erickson, J., & Palamara, K. (2020). Pandemic Care Through Collaboration: Lessons From a COVID-19 Field Hospital. *Journal of the American Medical Directors Association*, 21(11), 1563–1567. <https://doi.org/10.1016/j.jamda.2020.09.003>

² *COVID Solidarity*. HEAL Initiative. (2020, July 29). <https://healinitiative.org/covid-19-response/>

³ *UCSF Sends Second Wave of Health Workers to Navajo Nation*. UCSF Sends Second Wave of Health Workers to Navajo Nation, UC San Francisco. (2020, May 21). <https://www.ucsf.edu/news/2020/05/417506/ucsf-sends-second-wave-health-workers-navajo-nation>.

⁴ *Medical Respite/Recuperative Care*. National Health Care for the Homeless Council. (n.d.). <https://nhhc.org/clinical-practice/medical-respite-care/>

⁵ Dotson, S., Ciarocco, S., & Koh, K. A. (2020). Disaster psychiatry and homelessness: creating a mental health COVID-19 response. *The Lancet. Psychiatry*, 7(12), 1006–1008. [https://doi.org/10.1016/S2215-0366\(20\)30343-6](https://doi.org/10.1016/S2215-0366(20)30343-6)