Experience of isolation and quarantine hotels for COVID-19 in Hawai‘i

Victoria Y Fan[1,3], ScD; Tiana M Fontanilla[1], MPH; Craig T Yamaguchi[1,2], OMS-I; Stephen M Geib[1], MURP; Joshua R Holmes, MPH; Sunja Kim[1], MPH; Bobby Do[1,3], BA; Thomas H Lee[1,3], PhD; Deveraux K P Talagi[1], PhD; Yara Sutton[3], MS; Amihan Aiona[3], BSW; Amy B Curtis[3], PhD; Edward Mersereau[3], MSW

[1]University of Hawai‘i at Mānoa, Thompson School of Social Work and Public Health, Honolulu, HI
[2]Western University of Health Sciences COMP-Northwest, Lebanon, OR
[3]Hawaii State Department of Health Behavioral Health Administration

ABSTRACT

An essential COVID-19 control strategy stands upon a three-legged stool of testing-tracing-isolation. This project documents the experience of a isolation/quarantine system in Hawaii that was novel in its demonstration that the public behavioral health system had a central role in a state's COVID-19 response. The partnerships coordinated and administered by the Department of Health Behavioral Health Administration, including the City and County of Honolulu, University of Hawai‘i, and other organizations, encompassed a continuum of services for transport, testing, placement, food, case management, etc. The approach to client care was holistic rather than biomedical, with a focus on whole person and whole family well-being. This system has shown that the behavioral health system can be active partners in building a continuum of care, mitigating both COVID-19 and mental health disorders in a pandemic.

OBJECTIVE

To demonstrate that the public health behavioral health system had a central role in a state's COVID-19 response

INTRODUCTION

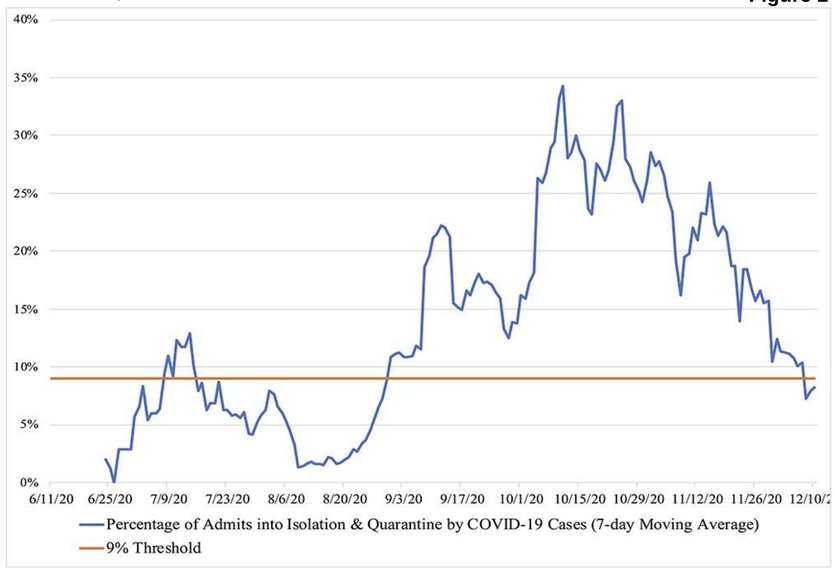
An essential COVID-19 control strategy stands upon a three-legged stool of testing–tracing–isolation. New positive cases are detected and identified through testing, contacts whom the case may have exposed to COVID-19 are traced and both cases and contacts are placed in isolation and quarantine if a confirmed case or suspected case, respectively. Each component is intrinsically dependent on each other for an effective pandemic response.[1]

By July 2020, a second surge of COVID-19 cases in the state of Hawaii began to stress existing test–trace–isolation capacity for COVID-19 control in the Hawaii State Department of Health. By mid-August, the Department of Health (DOH) Behavioral Health Administration was asked to lead the state's Isolation and Quarantine system. This system relied on Hawaii CARES, a 24/7 call center hotline for individuals requesting isolation and quarantine. For residents in Honolulu, the state's most populous urban capital with nearly 1 million residents, Hawaii CARES then triaged those unable to safely isolate or quarantine at home with mild COVID-19 symptoms, close contacts or persons under investigation through dispatching transport to pick them up and transfer to a facility. The client was provided three meals a day, regular case management and wellness check-ins, and check-out services including placement to housing for clients (e.g. homeless clients) and linkage to treatment and recovery services for clients with a mental health or substance use disorder. DOH contracted with several agencies for wrap-around and support services. As 9% of Hawaii's population live in a shared room, DOH set as its goal to provide external isolation placement for Honolulu cases to 9% of those cases.

RESULTS

From 12 August 2020 through 10 December 2020, the state confirmed 14,913 additional positive COVID-19 cases. Over the same period, the Isolation and Quarantine System received 4126 total requests for isolation and quarantine, testing, food assistance and/or other services, with 3248 individuals receiving at least one of these services. Of the 2224 individuals requesting external isolation or quarantine, 77.6% of them were eligible for placement based on CDC criteria and accepted placement (n = 1726), thus well exceeding the 9% target set by the DOH—see Figure 1. 35.6% of individuals (n = 1157) were unable to drive and were, therefore, provided with transportation to and from our facilities. Of the total number of transports completed by our drivers, 94% were daytime transports and 6% were nighttime transports. More than 354 families were placed into an external facility and over 652 families received any service of placement, transportation, food and/or testing. The program serviced 3053 individuals who received food assistance, including 1327 individuals who received food assistance at home. A total of 591 individuals were tested at a facility or at home, of which 212 were confirmed positive.

Figure 1



Notes: The system was financially supported by the DOH Behavioral Administration to contract with providers for food assistance, transportation, testing, facility placements as well as the coordination call center. In terms of specific types of assistance to individuals who are isolating, food, transport, testing and room and board accommodation assistance were provided free and complimentary to participating individuals. Referral post-discharge to behavioral health services for treatment may be free if the individual qualifies for Medicaid or lacks private insurance. The BHA referred the individual to the emergency department for care if urgent medical attention was needed, but otherwise provided complimentary and free daily case management and wellness checks for individuals during their stay.

This Isolation & Quarantine System provided services to indigenous and vulnerable populations. Of the individuals who received any services, 397 (12.2%) reported that they were Native Hawaiian and 739 (22.8%) reported being Other Pacific Islander. More than 266 homeless individuals received external placement; after discharge, 19 (7.1%) individuals were connected to shelters. Of those who were placed, 71 (4.1%) individuals were 65 years or older, 317 (18.4%) individuals had at least one medical condition and 214 (12.4%) individuals reported having a mental health or substance use disorder. There were 726 (42.1%) individuals who were externally placed also received on-site crisis counselling and/or psychological evaluation.

DISCUSSION

This account of the experiences in Hawaii is not an assessment or evaluation of its effectiveness. Prior to this new system being implemented, there were few services for external isolation and quarantine. The state's response to the growth in cases during the second wave included not only the isolation and quarantine system but increased testing and contact tracing as well as the public's behavioral changes that may have helped to reduce spread.

Past work on facility-based isolation and quarantine has shown its importance in mitigating the spread of COVID-19[2] along with focusing on the use of medicalized hotels for COVID-19[3-5] or with a specific focus on homeless populations.[6,7] This letter offers an account of an isolation and quarantine system novel in its coordination by the statewide Behavioral Health Administration (BHA) as part of the Department of Health's infrastructure with more than 600 units at its peak. The state's BHA is one of three major administrations in the DOH and provides direct clinical services through community mental health centers, family guidance centers, case management units, the Hawaii State Hospital and a contracted network of behavioral health and homelessness providers. BHA is also the only entity in the DOH with a 24/7 call center, Hawaii CARES, operated by the state's flagship public university for access to crisis support, treatment and recovery services.

CONCLUSION

This approach to COVID-19 control has demonstrated that the public behavioral health system had a central role in a state's COVID-19 response. This Isolation and Quarantine system has shown that the behavioral health system can be active partners in building a continuum of care, mitigating both COVID-19 and mental health disorders in a pandemic. While the BHA system typically works with the most vulnerable individuals in our community—individuals who are homeless with co-occurring chronic mental illness or substance use disorders (including older adults)—behavioral health can mitigate COVID-19 for broader populations and society as a whole. Infectious disease and mental health need not be siloed based on biomedical sequelae.

References

1. Nussbaumer-Streit B, Mayr V, Dobrescu AI et al. Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. Cochrane Database Syst Rev 2020; 4:CD013574. doi:10.1002/14651858.CD013574.
2. Chen S, Zhang Z, Yang J, et al. Fangcang shelter hospitals: a novel concept for responding to public health emergencies. Lancet Lond Engl 2020;395(10232):1305–14. doi:10.1016/S0140-6736(20)30744-3
3. Ramírez-Cervantes KL, Romero-Pardo V, Pérez-Tovar C et al. A medicalized hotel as a public health resource for the containment of Covid-19: more than a place for quarantining. J Public Health Oxf Engl 2021;43(1):89–97. 10.1093/pubmed/fdaa129.
4. MacKenzie OW, Trimbur MC, Vanjani R. An isolation hotel for people experiencing homelessness. N Engl J Med 2020;383(6):e41. doi:10.1056/NEJMc2022860
5. Jordan-Martin NC, Madad S, Alves L, et al. Isolation hotels: a community-based intervention to mitigate the spread of the COVID-19 pandemic. Health Secur 2020;18(5):377–82. doi:10.1089/hs.2020.0123
6. Fuchs JD, Carter HC, Evans J, et al. Assessment of a hotel-based COVID-19 isolation and quarantine strategy for persons experiencing homelessness. JAMA Netw Open 2021;4(3):e210490. doi:10.1001/jamanetworkopen.2021.0490
7. Baggett TP, Racine MW, Lewis E, et al. Addressing COVID-19 among people experiencing homelessness: description, adaptation, and early findings of a multiagency response in Boston. Public Health Rep Wash DC 1974. 2020;135(4):435–41. doi:10.1177/0033354920936227

Acknowledgements

We are grateful for leaders and administrators in Hawaii Department of Health and the partnerships and agencies coordinated by the Department of Health including the City and County of Honolulu Sharyn Ganigan, Marc Alexander, Jennifer Walter, James Hardway of the Hariett Group and many others. We are appreciative of all the contributions from the Hawaii CARES call operators.