


## Research Letter

# Experience of isolation and quarantine hotels for COVID-19 in Hawaii

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## Text

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.<sup>1</sup>

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 centre 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.

Past work on facility-based isolation and quarantine has shown its importance in mitigating the spread of COVID-19<sup>2</sup> along with focusing on the use of medicalized hotels for COVID-19<sup>3–5</sup> or with a specific focus on homeless populations.<sup>6,7</sup> 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 centres, family guidance centres, case management units, the Hawaii State Hospital and a contracted network of behavioural health and homelessness providers. BHA is also the only entity in the DOH with a 24/7 call centre, Hawaii CARES, operated by the state’s flagship public university for access to crisis support, treatment and recovery services.

As COVID-19 cases increased during the second wave, the need to increase capacity to offer services climbed as well. In order to manage the volume of requests for placement and ensure proper triage and continuum of integrated care, Hawaii CARES relied on a Qualtrics form that was either completed by call operators during a call or directly completed by a patient, case manager, or other referring agency or healthcare provider. Data were then routed to the triage team which coordinated care and ultimately designated facility placement, testing, food service and transportation depending on the needs of the case. When placed at a facility, the client would then be connected with a case manager on-site who will be responsible for their care and connect them to further services if needed. Data were tabulated by race, homelessness status, age and health conditions.



**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 centre. 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 behavioural 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.

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.

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.

The partnerships coordinated and administered by the DOH BHA, including the City and County of Honolulu, University of Hawaii 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 approach to COVID-19 control has demonstrated that the public behavioural health system had a central role in a state's

COVID-19 response. This Isolation and Quarantine system has shown that the behavioural 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)—behavioural 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.

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 behavioural changes that may have helped to reduce spread.

The psychological impacts of COVID-19 are more pervasive than COVID-19's biological impacts.<sup>8,9</sup> According to the Household Pulse Survey conducted by the US Census Bureau, as many as 400 000 and 300 000 adults in Hawaii are experiencing symptoms of anxiety and depression, respectively, during the COVID-19 pandemic.<sup>10</sup> It is also imperative to understand the knowledge behind how the public perceives various prevention measures in order to properly educate on the overlapping recommendations to prevent further spread of a pandemic. There may be untapped potential and value in integrating behavioural health into the continuum of care for COVID-19, and vice versa to integrate COVID-19 into the continuum of care for behavioural health.

### Authors' Contributions

V.Y.F., T.M.F., C.T.Y., S.M.G., J.R.H., S.K. and D.K.P.T. conducted the main analysis and data visualization. V.Y.F., T.M.F. and C.T.Y. wrote the first draft. T.M.F., C.T.Y., S.M.G., J.R.H., S.K., Y.S., A.A., A.B.C. and E.M. helped arrange for and collect data. All authors participated in refining analyses and interpreting results.

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### Conflicts of interest

The authors have declared no conflicts of interest.

### Ethical approval

Ethical approval for this evaluation has been waived as exempt (UH Human Studies Program 2019-00560).

Previous presentations.

None.

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