

HHP/HPH COVID-19 Community Webinar Series

Monday, August 31, 2020
5:30pm – 6:30pm

Disclaimer:

- The following is intended as information resource only for HHP/HPH providers, clinicians, administrative and clinical leaders.
- Specific areas may not pertain directly to your clinical practice area and/or may not be applicable to your practice based on your existing workflows, infrastructure, software (e.g. EHR), and communications processes.

Webinar Information

- You have been automatically muted. You cannot unmute yourself.
- You will be able to submit questions via the Q&A section.
 - Due to time constraints, any unanswered questions will be addressed this week and posted on the HHP website
- A recording of the meeting will be available tomorrow on the HHP website and intranet.

How to Claim CME Credit

1. Step 1: Confirm your attendance

- You should have completed a brief questionnaire before joining today's live webinar.

2. Step 2: HPH CME team will email you instructions

- Complete and submit evaluation survey that will be emailed to you within one week of the offering.
- Your CE certificate will be immediately available to you upon completion of your evaluation.
- Questions? Email hphcontinuingeduc@hawaiipacifichealth.org

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- Hawai'i Pacific Health designates this webinar activity for a maximum of 1.0 AMA PRA Category 1 Credit (s) TM for physicians. This activity is assigned 1.0 contact hour for attendance at the entire CE session.



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Disclosures

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COVID-19 Updates

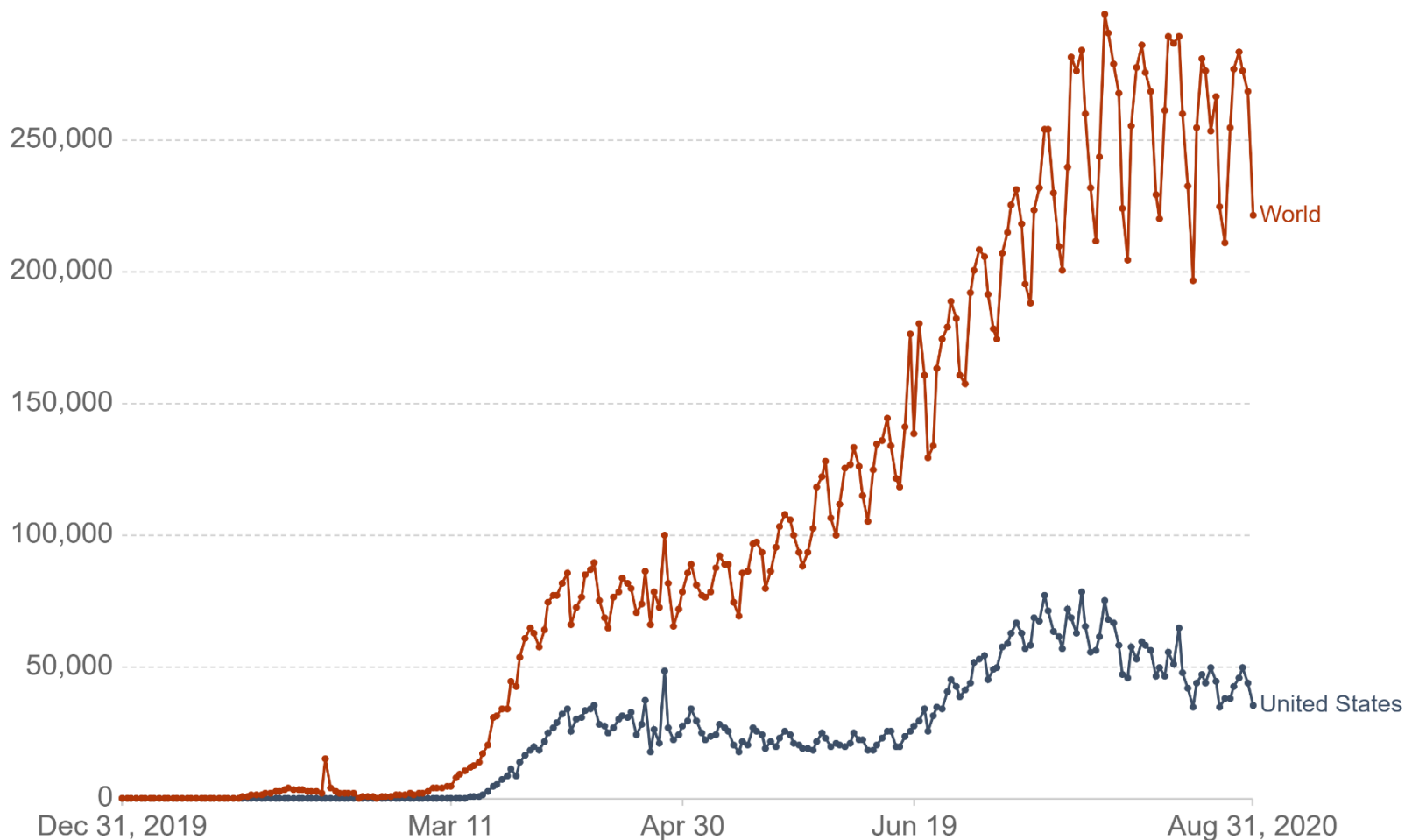
Gerard Livaudais, MD, MPH

Executive Vice President,
Population Health and Provider Networks
Hawai'i Pacific Health

Daily new confirmed COVID-19 cases

The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

Our World
in Data



Source: European CDC – Situation Update Worldwide – Last updated 31 August, 10:34 (London time)

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https://ourworldindata.org/coronavirus-data-explorer?zoomToSelection=true&country=USA~OWID_WRL&casesMetric=true&interval=daily&hideControls=true&smoothing=0&pickerMetric=location&pickerSort=asc

CREATING A HEALTHIER HAWAII

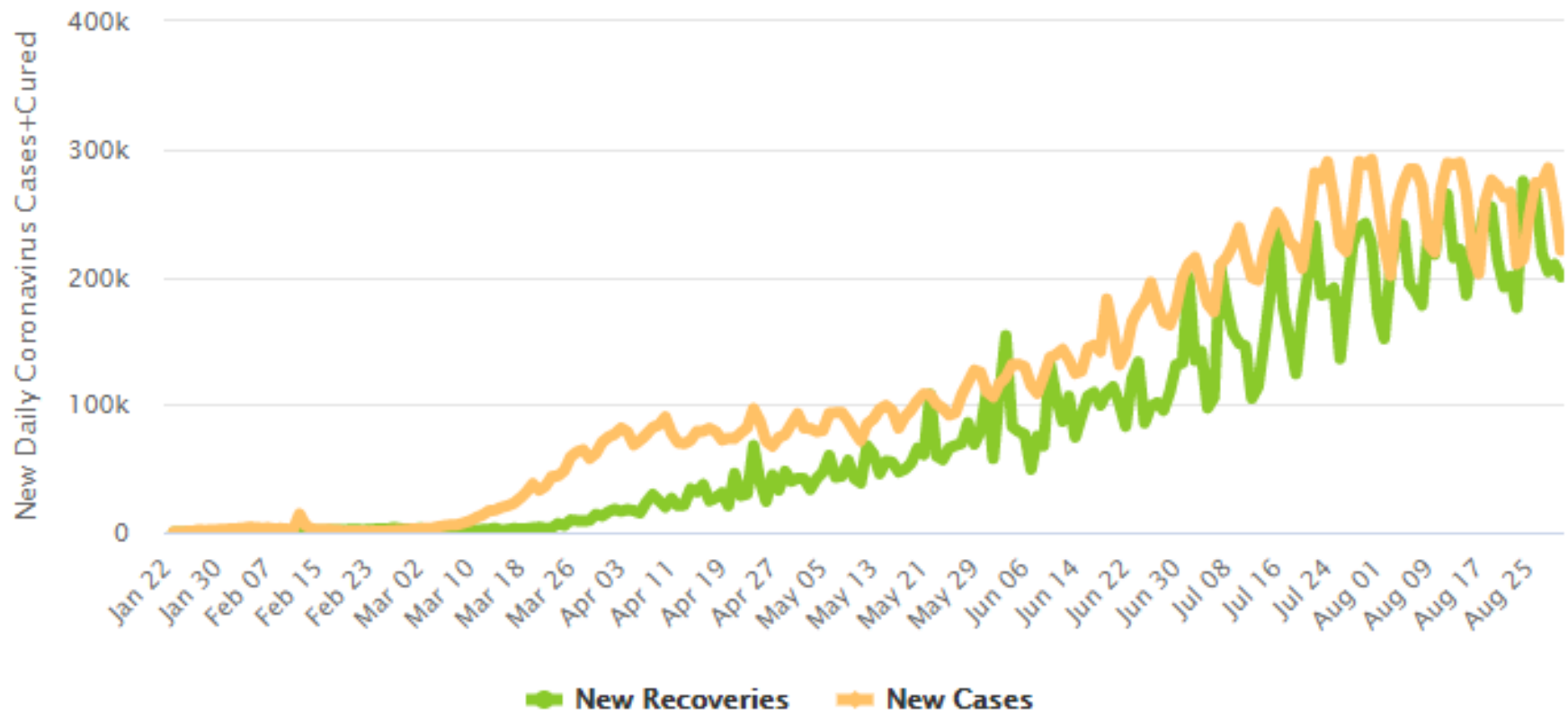
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Newly Infected vs. Newly Recovered

New Cases vs. New Recoveries

(Number of newly infected vs. number of recovered and discharged patients each day)



<https://www.worldometers.info/coronavirus/worldwide-graphs/#newly-infected-newly-recovered> accessed 08.31.20

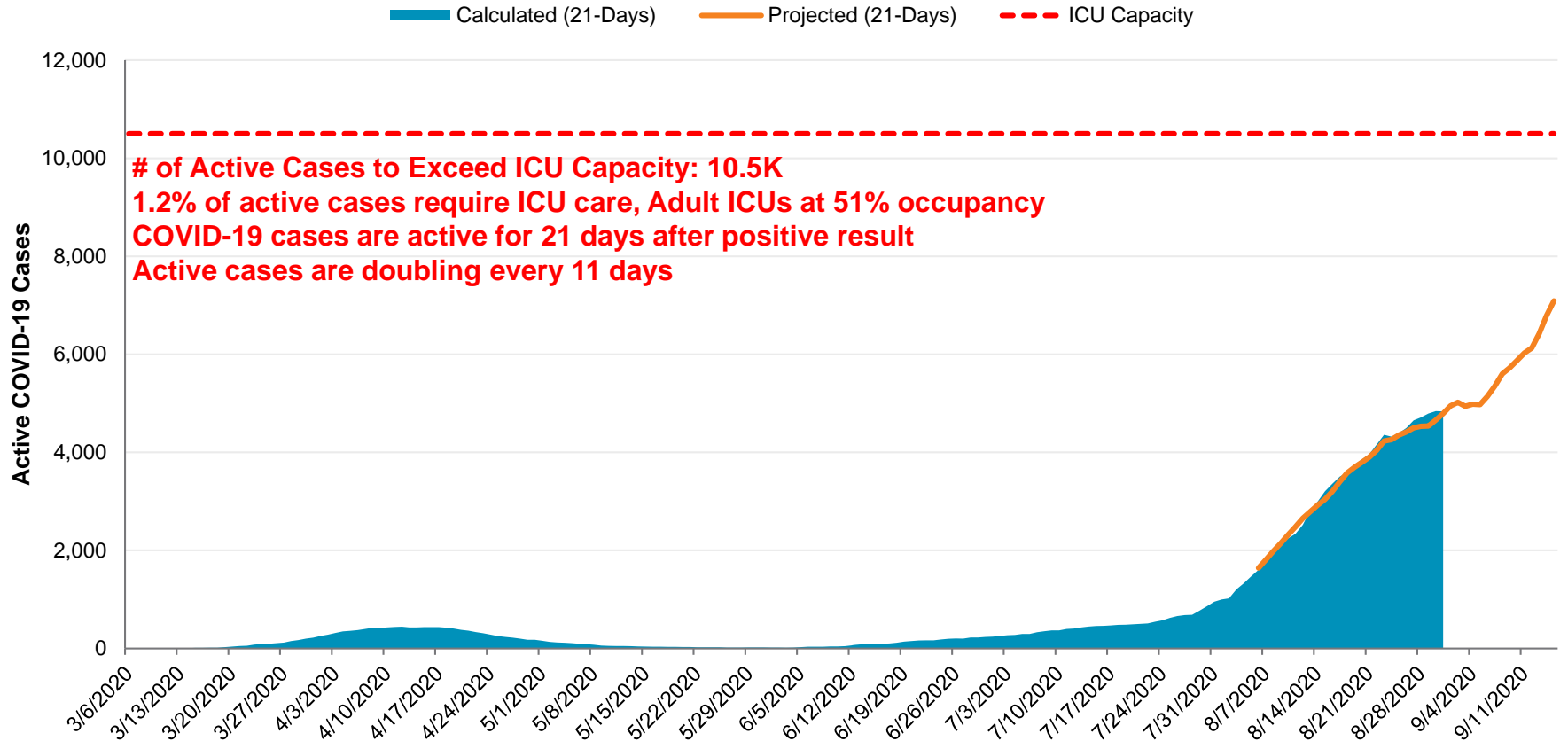
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Projected Active COVID-19 Cases

Hawaii Actual v. Projected Active COVID-19 Cases Updated 8/31/2020



As of 08/31/20	Total Census	ICU beds occupied	# Ventilators in use	# New Admissions w/ COVID- 19 screening	# New Admissions w/ positive COVID-19	# Patients currently hospitalized w/ suspect or confirmed COVID-19	# Patients currently on a ventilator w/ suspect or confirmed COVID-19	# Patients currently in ICU w/ suspect or confirmed COVID-19
KMCWC	146	AICU: 1 NICU: 67 PICU: 10	AICU: 0 NICU: 22 PICU: 6 Wilcox: 0	0	0	S: 0 C: 2	S: 0 C: 0	S: 0 C: 0
PMMC	102	7	7	14	1	S: 1 C: 24	S: 0 C: 6	S: 0 C: 7
SMC	131	15	9	1	6	S: 1 C: 36	S: 0 C: 8	S: 1 C: 10
WMC	43	1	0	1	0	S: 3 C: 0	S: 0 C: 0	S: 0 C: 0

S = Suspected; C= Confirmed



Coronavirus Disease 2019 (COVID-19)



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Testing

Overview of Testing for SARS-CoV-2 (COVID-19)

Testing Overview

Updated Aug. 24, 2020

Print



Performing Broad-Based

Considerations for COVID-19 Diagnostic (Molecular or Antigen) Testing

- If you have been in close contact (within 6 feet) of a person with a COVID-19 infection for at least 15 minutes but do not have symptoms:
 - You do not necessarily need a test unless you are a vulnerable individual or your health care provider or State or local public health officials recommend you take one.
 - A negative test does not mean you will not develop an infection from the close contact or contract an infection at a later time.
 - You should monitor yourself for symptoms. If you develop symptoms, you should evaluate yourself under the considerations set forth above.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/testing-overview.html> accessed 08.30.20

Hawaii

Thousands Turn Out For Free COVID-19 Tests On Oahu

Anyone on the island can get tested — even if they don't have symptoms — as part of a new effort to halt the spread of the virus.



By Eleni Avendaño



August 26, 2020

🕒 Reading time: 5 minutes.



At the free COVID-19 testing site at Kaneohe District Park on Wednesday, traffic backed up in three directions within hours of opening and the line of people waiting in cars snaked across the Windward Community College campus.

<https://www.civilbeat.org/2020/08/honolulu-is-taking-contact-tracing-into-its-own-hands/> accessed 08.30.20

Coronavirus (COVID-19) Test Report

PATIENT INFORMATION

First: Sample
Last: Quick
Gender: Female
DOB: Dec 25, 1998

SAMPLE INFORMATION

Collected: Aug 26, 2020
Received: Aug 27, 2020
Reported: Aug 28, 2020
Provider: eTrueNorth

LABORATORY

Name:
Address:

CLIA:

POSITIVE

Test Overview - U0003: SARS-CoV-2 Infectious agent detection by nucleic acid (DNA or RNA) - RT-PCR

This test checks for SARS-CoV-2, the new virus that causes coronavirus disease (also called COVID-19), a respiratory illness.

Your Results: POSITIVE

Your results detect SARS-CoV-2. A positive test means that you are infected with COVID-19.

Most people with COVID-19 have mild symptoms. You can pass the infection to others through coughing, sneezing, and exhaling. It is very important to stay home and limit your interaction with others in your household and in public.

Next Steps

- Please see the CDC recommendation on what to do if you are sick and continue to monitor your symptoms closely.
- We recommend that you call your healthcare provider if your symptoms are severe, do not improve, get worse, or you develop new or concerning symptoms.
- If you are a healthcare professional trying to return to work, contact your place of employment or local health department about discontinuation of in-home isolation.

Emergency Warning Signs

If you develop emergency warning signs for COVID-19 get medical attention immediately. Emergency warning signs include*:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

*This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning.

Questions

Questions about this laboratory report? Please contact Customer Support: 1-800-635-8611

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First Covid-19 reinfection documented in Hong Kong, researchers say

By ANDREW JOSEPH [@DrewQJoseph](#) / AUGUST 24, 2020

[Reprints](#)



Scientists are reporting several cases of Covid-19 reinfection — but the implications are complicated

By ANDREW JOSEPH @DrawJoseph AUGUST 25, 2020

Reprints



SCOTT SONNER/AP

Following the news this week of what appears to have been the [first confirmed case](#) of a Covid-19 reinfection, other researchers have been coming forward with their own reports. One in Belgium, another in the Netherlands. And now, [one in Nevada](#).

What caught experts' attention about the case of the 25-year-old Reno man was not that he appears to have contracted SARS-CoV-2 (the name of the virus that causes Covid-19) a second time. Rather, it's that [his second bout was more serious than his first](#).

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FDA NEWS RELEASE

FDA Issues Emergency Use Authorization for Convalescent Plasma as Potential Promising COVID-19 Treatment, Another Achievement in Administration's Fight Against Pandemic

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For Immediate Release: August 23, 2020



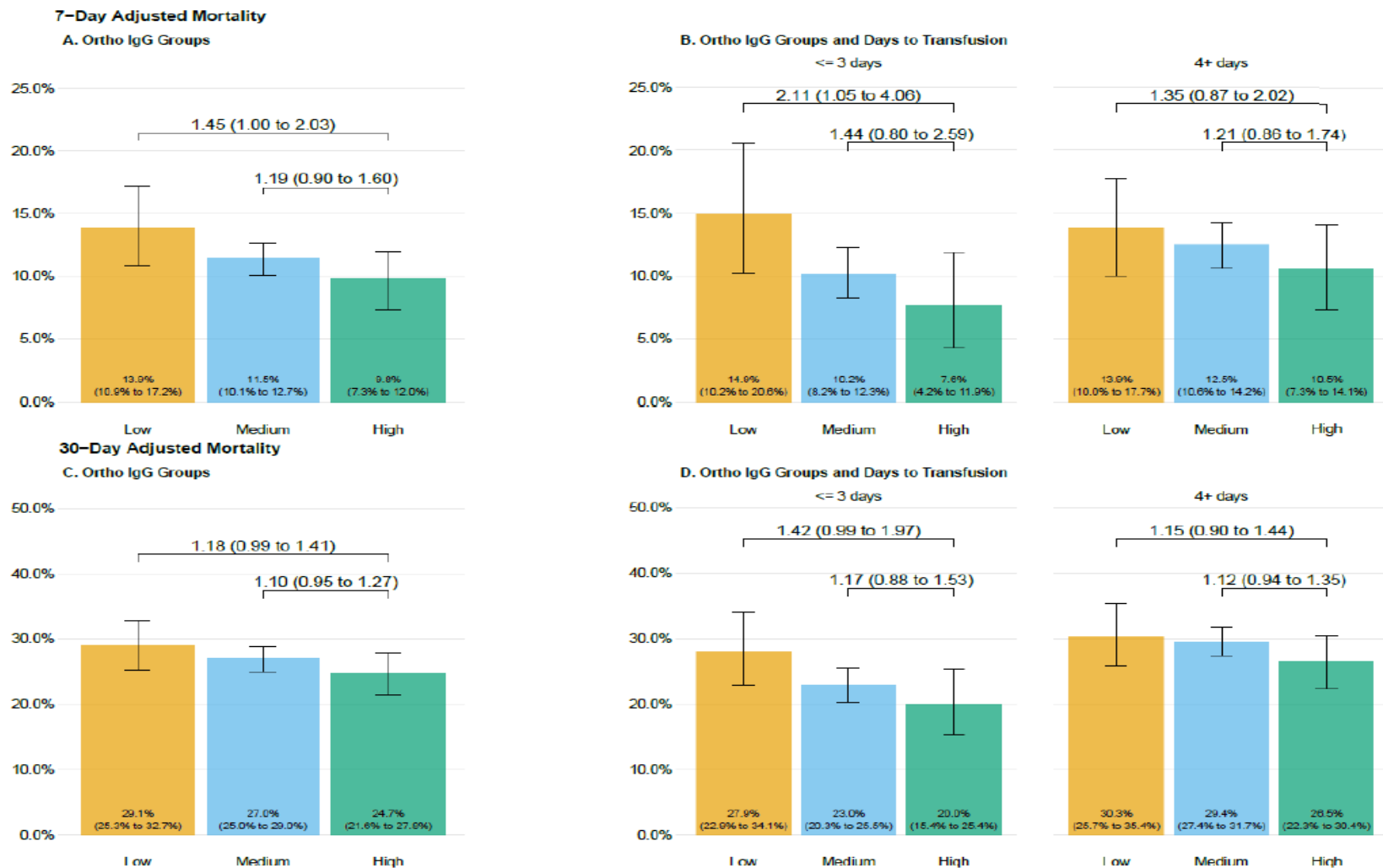
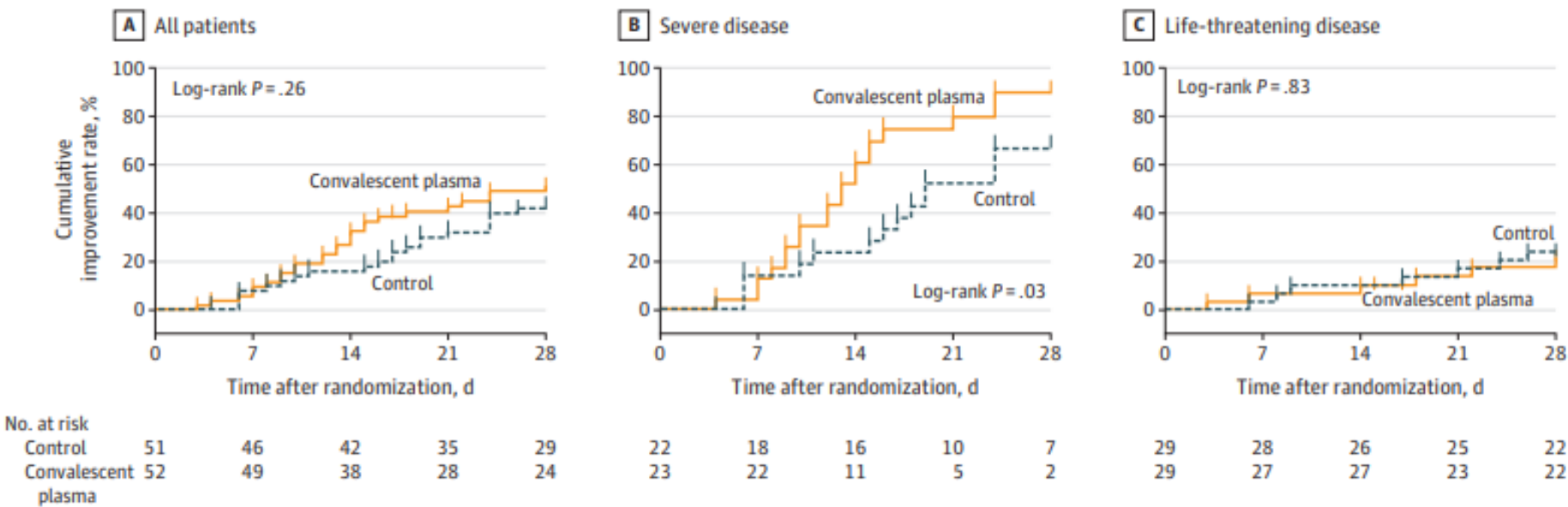


Figure 2. Seven day (A, B) and 30-day (C, D) adjusted mortality stratified by antibody groupings in patients transfused with COVID-19 convalescent plasma. Adjusted mortality

Joyner, Senefeld, Klassen, et. al, 2020, Aug. Effect of Convalescent Plasma on Mortality among Hospitalized Patients with COVID-19: Initial Three-Month Experience. medRxiv preprint doi: <https://doi.org/10.1101/2020.08.12.20169359>

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Figure 2. Time to Clinical Improvement in Patients With COVID-19



The cumulative improvement rate is the percentage of patients who experienced a 2-point improvement or were discharged alive from the hospital. Ticks on the curves indicate censored events. All patients who did not reach clinical improvement were observed for the full 28-day period or until death. COVID-19 indicates coronavirus disease 2019.

The median (IQR) follow-up times for the convalescent plasma group and control group, respectively, were 15 (10-28) days and 24 (13-28) days overall; 13 (10-16) and 18.5 (11-26) days among those with severe COVID-19; and 28 (12-28) and 26 (15-28) days among those with life-threatening COVID-19.

Li L, Zhang W, Hu Y, et al. Effect of Convalescent Plasma Therapy on Time to Clinical Improvement in Patients With Severe and Life-threatening COVID-19: A Randomized Clinical Trial. *JAMA*. 2020. 2020;324(5):460-470. doi:10.1001/jama.2020.10044



FDA NEWS RELEASE

COVID-19 Update: FDA Broadens Emergency Use Authorization for Veklury (remdesivir) to Include All Hospitalized Patients for Treatment of COVID-19



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For Immediate Release:

August 28, 2020





Coding & Payment Updates

Keoki Clemente

Director, Revenue Integrity

Hawai'i Pacific Health

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COVID-19 Testing

- New CPT code for SARS-CoV-2 (COVID-19) antigen testing
- Can be used at Point of Care (POC)
- **CPT code 87426**
- Facility (hospital/physician's office) must possess current CLIA certificate of waiver
- Medicare and HMSA payment
- Pre-operative testing is covered
- ICD-10 codes: Z01.812 (pre-procedural lab) or Z01.818 (pre-procedural other exam)

COVID-19 Specimen Collection

- HCPCS code C9803 – hospital
- CPT code 99211 – clinic
- HMSA no cost sharing: 04/01/2020—12/31/2020
- Average payment: \$25-26

Telehealth

- Continued 'no cost sharing' for most payers
- Be sure to document:
 - ❖ Consent
 - ❖ Type of visit
 - ❖ Location of the patient
 - ❖ Platform change (video changes to telephone/audio, vice versa)
 - ❖ Time spent (Telephone and E-visits)

2021 CMS Physician Fee Schedule – Proposed Rule

- Expand Telehealth – temporary changes become permanent include: Prolonged E/M, Custodial Care and Patient Home E/M
- Direct Supervision: Can be met by interactive audio/video real-time communication technology (through CY 2021)
- Discontinuing payment for telephone codes 99441-99443 (effective January 01, 2021)
- Determine whether Medicare should develop coding and payment for such services

2021 CMS Physician Fee Schedule

- Proposed CMS fee schedule conversion factor: \$32.26 (down from \$36.09)
- Positive payment adjustments for E/M visit codes 99202—99215
- CMS to follow CPT/AMA coding guidelines for New and Established patient E/M codes
- Codes will be determined by either level of Medical Decision Making OR Time
- Time = Total time spent by the provider (face-to-face and non face-to-face)
- History and examination performed and documented as appropriate

E/M Work RVU Proposed Changes

HCPCS Code	Current wRVU	2021 Proposed wRVU
99201	.48	N/A
99202	.93	.93
99203	1.42	1.6
99204	2.43	2.6
99205	3.17	3.5
99211	.18	.18
99212	.48	.7
99213	.97	1.3
99214	1.5	1.92
99215	2.11	2.8

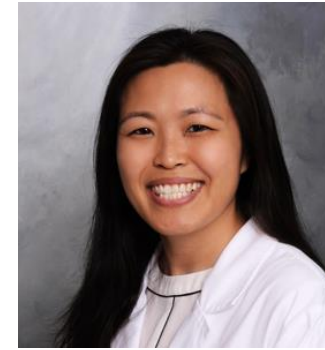
Virtual Clinic, COVID-19 Outpatient Care Center (REC) & Pediatric REC



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Virtual Clinic

(Virtual Urgent Care/Virtual COVID-19 Clinic)

- Docs On Call – Sheraton Waikiki
- **Open 7 days/week, 8a-8p**
- All ages
- Refer any of the following patients:
 - No PCP
 - COVID-19-related (positive, suspected, possible)
 - Any non-COVID-19 complaints not requiring an in-person evaluation
- Services offered:
 - COVID-19 education
 - Reassurance
 - Orders for Drive Up COVID-19 testing
 - Appropriate treatment (symptomatic or condition specific)
 - Refer to COVID-19 Outpatient Care Center (REC) or ED as needed
- **Call 462-5430, option 4**

COVID-19 Outpatient Care Center (REC)

- Chart Rehab location, next to Straub Parking Garage on King St
- Open **Monday – Friday, 830a-430p; holidays, 9a-2p**
- Adults (18 years-old and up)
- For patients needing in-person evaluation
- As of 8/24/2020, expanded scope to include **urgent care services for COVID+ patients**
 - Injuries – falls, sprains, minor fractures, animal bites, burns; I&D; simple laceration repairs; minor eye problems (eye irrigations); dehydration (IV fluids)
 - EKG, Labs, X-ray
- Walk-In/Drive-In care for possible/suspected COVID-19 patients
- **SDA scheduled for COVID+ patients by calling 462-5100**

Pediatric REC/Walk-In Clinic

- Kapiolani Pediatric After-Hours Walk-In Clinic; located in the Pediatric Outpatient Clinic on the 1st floor near the Radiology Department
 - Open **Monday-Friday, 5p-8p; weekends and holidays, noon-7p**
 - For patients 18 years-old and younger
- Walk-In and Virtual Care services
- COVID-19-related and other acute non-emergent in-person evaluations
- Labs, EKG, X-Ray services available if needed.
- Call **763-2888 for more information/virtual care visit**
- Please call first if sending a COVID+ patient or PUI

Scenario #1

- 45 y/o male exposed to coworker 5 days ago. No fever or respiratory symptoms. He was tested yesterday and just found out he's negative. Went hiking, fell and hit his head, had some confusion and amnesia about the event. He feels okay now except for a persistent headache.
 - Who does he call?
 - What would his “path” be?
 - Would he go to the COVID-19 Outpatient Care Center?
 - How would his exposure risk be minimized?

Scenario #2

- 75 y/o with fever, chills, fatigue and bodyaches for 1 day calls her PCP. Occasional non-productive cough; no shortness of breath. No known COVID-19 contacts or exposures.
 - What is the PCP's best disposition option?
 - What would happen next?

Scenario #3

- Mom phones the call center about her 8 y/o with mild sore throat, fatigue, no fever or cough. She is concerned because they live in household with a family member who tested positive in the surge testing.
 - What is the routing of the call from the call center?
 - How would the caller be handled by the virtual clinic?
 - If 8 y/o was asymptomatic, how would the care be handled?

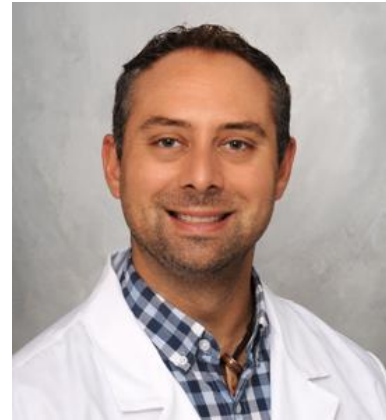
Scenario #4

- 25 y/o male calls the virtual clinic with acute shoulder and elbow pain after trying a new exercise routine at home. Exposed at a bar 4 days ago to someone who was positive, several people there that evening have come down with COVID-19, but he has not been tested and is asymptomatic.
 - What is the best next move for this patient?
 - Do they go to COVID-19 Outpatient Care Center if they have exposure risk but are asymptomatic?

Inpatient Care of COVID-19



Brian Pien, MD, MPH
Infections Disease,
Straub Clinic & Hospital
Hawai'i Pacific Health
Medical Group



Richard Kline, DO
Hospitalist – Family Medicine
Pali Momi Medical Center

Most common symptoms

- 96% of patients had a **fever, cough, or shortness of breath. Around 45% had all three of those symptoms.**
- The most common symptom was cough (84%) followed by fever (80%).
- **Coronavirus patients also showed other symptoms,** including chills, loss of taste and smell, muscle pain, headaches, fatigue, and digestive problems such as nausea, abdominal pain, vomiting, or diarrhea.
- **Approximately half of patients reported one or more GI symptoms;** among these, diarrhea was reported most frequently (38%) and vomiting least frequently (13%)"

Burke RM, Killerby ME, Newton S, et al. Symptom Profiles of a Convenience Sample of Patients with COVID-19 — United States, January–April 2020. MMWR Morb Mortal Wkly Rep 2020;69:904–908. DOI: <http://dx.doi.org/10.15585/mmwr.mm6928a2external icon>.

Risk factors for severe illness

- Increasing age – even with no other underlying co-morbidities
- Obesity
- Co-morbid conditions: serious heart conditions, diabetes, cancer, kidney disease, COPD
- Lower risk: Asthma, pregnancy, hypertension, smoking, immunosuppression medications
- Upon admission indicators for disease severity
 - Elevated D-dimer, Ferritin, LDH and fasting Blood Glucose

COVID-19 ASSOCIATED HOSPITALIZATION RELATED TO UNDERLYING MEDICAL CONDITIONS

FACTORS THAT INCREASE COMMUNITY SPREAD AND INDIVIDUAL RISK



CROWDED
SITUATIONS



CLOSE / PHYSICAL
CONTACT



ENCLOSED SPACE



DURATION
OF EXPOSURE

RISK FOR HOSPITALIZATION IF YOU HAVE ANY OF THESE CONDITIONS AND
GET COVID-19 COMPARED TO PEOPLE WITHOUT THE CONDITION(S).

Asthma
1.5x

Hypertension
3x

Obesity
(BMI ≥ 30)
3x

Diabetes
3x

Chronic Kidney
Disease
4x

Severe Obesity
(BMI ≥ 40)
4.5x

2 Conditions*
4.5x

3 or More
Conditions*
5x

Data has shown that racial and ethnic minority groups with the referenced conditions are at even higher risk for severe COVID-19 illness. Race and ethnicity are risk markers for other underlying conditions that impact health — including socioeconomic status, access to health care, and increased exposure to the virus due to occupation (e.g., frontline, essential, and critical infrastructure workers).

*Conditions include asthma, obesity, diabetes, chronic kidney disease, severe obesity, coronary artery disease, history of stroke and COPD.

ACTIONS TO REDUCE RISK OF COVID-19



WEARING A MASK



SOCIAL DISTANCING
(6 FT GOAL)



HAND HYGIENE



CLEANING AND
DISINFECTION



ALTHOUGH RISK GENERALLY INCREASES WITH AGE, ALL INDIVIDUALS
SHOULD ROUTINELY TAKE ACTIONS TO REDUCE RISK OF INFECTION
AND AVOID ACTIVITIES THAT INCREASE COMMUNITY SPREAD.

cdc.gov/coronavirus

Source: Ko JY, Danielson ML, Town M et al. 2020.

CS319360-A 08/08/2020

What have we learned over the past several months?

- It's not hopeless – look at the statistics of deaths now compared to the height of the illness in NY
 - There are drugs to help improve outcomes, no cure.
 - PPE works – I'm proof
- Outpatient:
 - Masks work
 - Physical distance
 - Hand washing
 - Surface contamination
- Prevention, quarantine, isolation, and awareness is key
- Education of our patients and families by qualified healthcare providers

When to send patient to the hospital – ER evaluation

- There is **NO** defined specific criteria for admission, it is clinical judgement including an evaluation of comorbidities including age, dyspnea, hypoxia, and how far along they are in the illness
- Fever alone IS NOT an indication for admission
- Among patients who developed severe disease, the median time to dyspnea from the onset of illness or symptoms ranged from 5 to 8 days, the median time to acute respiratory distress syndrome (ARDS) from the onset of illness or symptoms (not when they test positive but from symptom onset) ranged from 8 to 12 days, and the median time to ICU admission from the onset of illness or symptoms ranged from 10 to 12 days.^{1,2,3,4}
- Patients who are hypoxic and “early in their disease” in my medical opinion should be hospitalized and treatment started immediately.

Admission Criteria and Treatment Considerations

- Almost all patients with a positive COVID-19 test will qualify for home O2 without the co-morbid chronic condition usually required. Get Case Management involved early even in ER
 - DC from the ER with supplemental Oxygen? Yes! Maybe! Like all other diseases a detailed history is key.
- If a Patient is on symptom day 10-12, with no significant underlying comorbidities, help and support of family at home and hypoxic defined as an ambulatory SaO2 of 88% or lower, consider home O2 and close outpatient follow-up with PCP via telehealth/Hawaii Health Partners
- If patient is Hypoxic, SaO2 88% with ambulation day #5, with or without comorbidities admit immediately and start treatment with Steroids, Remdesivir and Plasma with proning techniques.
 - Remdesivir can be administered with positive COVID-19 test and SaO2 <94%

Case #1

- Erin develops a cough and diarrhea on September 4th, she calls her PCP and finally completes drive through testing on the 7th with results on the 8th. By this time she feels “sick and increasingly short of breath walking to the lanai door to let the dog out.” Erin asks her PCP what should she do, when contacted with the results of her test on the 8th.
 - What do you recommend?

Case #1: Answer

- Stay home on quarantine until September 14th and no longer having fevers
 - Consider/strongly recommend pulse oximeter (order via Amazon ~ \$40.00 if they can afford.) Have a friend/non-household family member drop one off on doorstep
 - Have patient go to Respiratory Clinic for evaluation
 - Use complex care order in EPIC and type in COVID 19, because HHP and Laura Pladson are amazing and checking on patients (likely overwhelmed at this point)
 - Come to ER if Pulse Ox has SaO2 of < 90% for at least evaluation
 - Continue to stay hydrated, continue to take prescribed meds, antipyretics, antidiarrheals, benzonate all OK and recommended.

HPH Protocol Treatment of COVID-19

Outpatient	<ul style="list-style-type: none">- Supportive care only- No current recommendation for specific therapy outside the context of a clinical trial
Inpatient, SpO2 >94% on room air	<ul style="list-style-type: none">- Supportive care only- Recommend against remdesivir, dexamethasone, and CCP
Inpatient, SpO2 ≤ 94% on room air, OR Requiring supplemental oxygen, OR Mechanical ventilation ≤72 hours	<ul style="list-style-type: none">- Supportive care- Recommend remdesivir, dexamethasone, and CCP (if supply available)
Inpatient, Mechanical ventilation >72 hours, OR ECMO	<ul style="list-style-type: none">- Supportive care- Recommend dexamethasone and CCP (if supply available)- Recommend against remdesivir

Hospitalized Treatment of COVID-19

Agent	Suspected Mechanism of Action	Dose	Main Toxicities	Notes
Dexamethasone	May prevent extended cytokine response; may promote resolution of inflammation in pneumonia	6mg IV/PO q24h x 10 days; discontinue upon discharge.	Inhibition of immune response, reduction in pathogen clearance, increased viral shedding.	The benefits and risks of corticosteroid therapy should be weighed carefully before use. Diabetic patients having significantly elevated BG

Hospitalized Treatment COVID-19

Dexamethasone

- In a randomized, open-label trial of >9000 patients hospitalized with COVID-19 in the United Kingdom, low-dose dexamethasone significantly reduced 28-day mortality among patients hospitalized with COVID-19 compared with usual care alone (21.6 versus 24.6 percent) ⁵

Hospitalized Treatment of COVID 19

Agent	Suspected Mechanism of Action	Dose	Main Toxicities	Notes
Remdesivir	Inhibition of RNA synthesis	<p>≥40kg: 200mg IV on Day 1, then 100mg IV q24h on Days 2-5.</p> <p>3.5-<40kg: 5mg/kg IV on Day 1, then 2.5mg/kg IV q24h on Days 2-5.</p> <p>OK to stop early???</p>	Infusion-related reactions, transaminase elevations	<p>Drug administration:</p> <ul style="list-style-type: none"> - Patient on Tele status - Infuse over 2 hours - Check BP/HR at baseline, q15min x 2, q30min x 2. Call physician for SBP<90 or HR<60. - <p>Categorized as a Table 2 hazardous drug</p>

Hospitalized treatment of COVID 19 - Remdesivir

- Available data suggest there is likely some clinical benefit to [remdesivir](#), although certainty in the overall evidence is low. Preliminary results from one large trial indicate that remdesivir reduced time to recovery from severe COVID-19; in a smaller second trial that was stopped early for poor enrollment, there was also a trend towards reduced time to recovery with remdesivir, but it was not statistically significant. Whether remdesivir reduces mortality remains uncertain
- In a multinational trial of >1000 patients with confirmed COVID-19 and pulmonary involvement, [remdesivir](#) resulted in faster time to recovery (median 11 versus 15 days with placebo); a trend towards lower 14-day mortality was not statistically significant (7 versus 12 percent) ⁶

Hospitalized Treatment of COVID 19

Agent	Suspected Mechanism of Action	Dose	Main Toxicities	Notes
COVID-19 Convalescent Plasma (CCP)	Neutralizing antibodies may provide short-term passive immunity	1-2 units FFP	Risks associated with the administration of plasma include allergic reactions and viral infections.	Previously required study clearance and authorization, now available per emergency use authorization can be ordered more liberally.

Hospitalized Treatment of COVID 19 – Convalescent Plasma

- Convalescent plasma that contains high neutralizing titers to SARS-CoV-2 may provide clinical benefit to patients with active COVID-19 when given early in the course of disease.
- In an open-label trial from China of 103 patients with severe COVID-19, addition of convalescent plasma to standard treatment improved the rate of viral RNA clearance, but there were no statistically significant differences in the overall rates of clinical improvement (52 versus 43 percent) or survival (84 versus 76 percent) ⁷

Hospitalized Treatment of COVID 19

Anticoagulants	<p>There is increasing evidence that patients with severe COVID-19 develop a hypercoagulable state, which has been associated with poor outcomes (e.g., progressive respiratory failure, acute respiratory distress syndrome [ARDS], death). Early anticoagulation in these patients may reduce the risk of thrombotic complications and improve clinical outcomes.</p> <p>The International Society for Thrombosis and Haemostasis, American College of Cardiology, and American Society of Hematology recommend that all hospitalized COVID-19 patients receive prophylactic-dose LMWH unless contra-indicated (e.g., active bleeding, severe thrombocytopenia, fibrinogen <0.5 g/L).</p>
Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)	<p>Currently no compelling evidence to support an association between ibuprofen and negative outcomes in patients with COVID-19. However, some experts have recommended preferentially using acetaminophen for treatment of fever.</p> <p>NIH COVID-19 Treatment Guidelines states that patients who are receiving NSAIDs for other conditions should continue receiving the drugs; states antipyretic strategy (e.g., use of acetaminophen or NSAIDs) should be no different between patients with or without COVID-19.</p>

Hospitalized Treatment of COVID 19

- Supplemental O2
 - Prefer NC, unfortunately only useful until max 6L
 - Escalate to HFNC/Oxymizer – more aerosolizing? Increasing risk to providers?
 - Of note 6-7 total HFNC devices at Pali Momi, limiting step to treatment?
 - Once max (100% on 60L) on HFNC patient will likely need intubation –still attempting to avoid intubation as last resort, however outcomes are better than previously documented
- Discharge patient home on < 4 liters of supplemental O2 via NC? Who weans?

Case #2

- Len is hospitalized for COVID-19. He consented to treatment with Dexamethasone (currently Day 6), Remdesivir (5 days of treatment, mild bradycardia during treatment, since resolved), Plasma (1 unit FFP - no side effects). He originally required 2 liters of supplemental O2 via NC, and this was escalated to 6L by hospital day 2. Currently hospital day 6 he is on 4L of O2. When can he be discharged?

Case #2: Answer

- Good question!!!
- To consider
 - What day of symptoms is he? Is he off isolation? Will returning home extend family's quarantine time?
 - Does he need PT/OT? – likely will not qualify for SNF placement if too early in symptoms
 - Does he have reliable help at home?
 - Can someone help him wean O2? Outpatient Pulmonologist? PCP?

Discharge Considerations

- What I personally do:
 - If patient discharges does it extend family quarantine time? Consider DC to hotel for remainder of isolation
 - Prescribe aspirin 81mg PO daily for 30 days. There isn't date, yet, however there are known significant thrombotic events associated with COVID 19 infections
 - DC with supplemental O2? Depends, can patient wean? Does patient have follow-up with Pulmonologist? PCP? Reliable help at home to assist patient and help wean
 - Antibiotics sometimes, usually to help limit superimposed bacterial infections.

A patient calls and tells you that they have had contact with someone who tested positive for COVID-19?

- A close contact as defined by the DOH is a person who has been in contact with a COVID-19 positive patient for 15 minutes within 6 feet, regardless of masks
- Contact tracers are only looking at 2 days before the test was taken
- Original recommendation if contact with a positive patient was to quarantine (14 days), no need for testing. Since updated, now recommendation from local DOH is to test.*
 - Be aware not likely reliable test within 1-3 days. How long to test positive? Better to wait for symptoms? Is there a correct answer?



COVID-19 ISOLATION AND QUARANTINE

HAWAII DEPARTMENT OF HEALTH

HOME ISOLATION AND QUARANTINE GUIDANCE

PERSON WITH COVID-19

(Mild to Moderate Illness who is not Severely Immunocompromised)

Must stay home in ISOLATION until:

- At least 10 days have passed since symptoms first appeared; **AND**
- At least 24 hours have passed since last fever without use of fever-reducing medications; **AND**
- Symptoms have improved (e.g., cough, shortness of breath)

HOUSEHOLD CONTACT

If having ongoing contact, must stay home in **QUARANTINE** until 14 days after **PERSON WITH COVID-19** is released from ISOLATION

NON-HOUSEHOLD CONTACT

Must stay home in **QUARANTINE** for 14 days after last contact with **PERSON WITH COVID-19**

- Stay separate from others, especially people at higher risk for severe illness
- Self-monitor for symptoms (fever, cough, shortness of breath)

CONTACTS OF CONTACTS

(Co-workers of **HOUSEHOLD CONTACTS**)

(Spouse, children, household members, co-workers of **NON-HOUSEHOLD CONTACTS**)

If **HOUSEHOLD/NON-HOUSEHOLD CONTACTS** are not symptomatic, **CONTACTS OF CONTACTS** who are healthy are not required to be in **QUARANTINE** (e.g., may leave household following recommendations for social distancing, cloth face coverings).

- ISOLATION:** Separates sick people from people who are not sick. People who are in isolation must stay home. In the home, anyone sick should separate themselves from others by staying in a specific “sick” bedroom or space and using a different bathroom. The sick person should wear a face covering if he/she needs to be in contact with others.
- QUARANTINE:** Separates someone who has been in contact with a person with COVID-19 from others, in case they were infected and become sick. Persons in self-quarantine must stay at home, separate themselves from household members, monitor their health, and wear a face covering if they need to be in contact with others. Quarantine helps limit further spread of COVID-19.

Note: CDC recommends 14 days of quarantine after exposure based on the time it takes to develop illness if infected. In some circumstances, it is possible that a person with *known* COVID-19 could leave isolation earlier than a person who is quarantined because of the *possibility* they are infected.

7/21/2020

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Case #3

Last slide is harder to interpret than you think...

- Joe lives with Koa. Koa's developed a fever on September 2nd. She tests positive on September 4th after calling PCP who ordered outpatient test. She develops hypoxia on September 5th and is admitted. She is treated with Dexamethasone, Remdesivir and Plasma on the 5th. She does well and returns home on the 10th.
 - What are your recommendations to Joe?
 - When is he off quarantine?
 - When is Koa off isolation?

Case #3: Answer

- Joe is off quarantine 14 days after contact with a positive patient (patients are considered positive and suspected to be infectious for 10 days plus 24 hours post last febrile episode without the use of antipyretic)
- Koa's was febrile on the 2nd –Joe 14 days post his last contact with her. EXCEPT! Koa was hospitalized and returned home on the 10th. She is NOT out of isolation (only 8 days since onset of her symptoms) She is off isolation on the 12th.
- Joe's last day of contact with a positive, potentially infectious person was the 12th (Koa returned home on the 10th). Therefore he is not out of quarantine until the 26th.
 - It doesn't matter if he has 8 negative tests. Negative tests do not remove you from quarantine.

References

- Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet* 2020;395:497-506.
- Wang D, Hu B, Hu C, et al. Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus-Infected Pneumonia in Wuhan, China. *JAMA* 2020.
- Zhou F, Yu T, Du R, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *Lancet* 2020.
- Yang X, Yu Y, Xu J, et al. Clinical course and outcomes of critically ill patients with SARS-CoV-2 pneumonia in Wuhan, China: a single-centered, retrospective, observational study. *Lancet Respir Med* 2020.
- RECOVERY Collaborative Group. Effect of Dexamethasone in Hospitalized Patients with COVID-19 – Preliminary Report. <https://www.medrxiv.org/content/10.1101/2020.06.22.20137273v1.full.pdf> (Accessed on June 23, 2020)
- Remdesivir for the Treatment of Covid-19 - Preliminary Report. AU Beigel JH, Tomashek KM, Dodd LE, Mehta AK, Zingman BS, Kalil AC, Hohmann E, Chu HY, Luetkemeyer A, Kline S, Lopez de Castilla D, Finberg RW, Dierberg K, Tapson V, Hsieh L, Patterson TF, Paredes R, Sweeney DA, Short WR, Touloumi G, Lye DC, Ohmagari N, Oh MD, Ruiz-Palacios GM, Benfield T, Fätkenheuer G, Kortepeter MG, Atmar RL, Creech CB, Lundgren J, Babiker AG, Pett S, Neaton JD, Burgess TH, Bonnett T, Green M, Makowski M, Osinusi A, Nayak S, Lane HC, ACTT-1 Study Group Members *SON Engl J Med*. 2020;
- Effect of Convalescent Plasma Therapy on Time to Clinical Improvement in Patients With Severe and Life-threatening COVID-19: A Randomized Clinical Trial. AU Li L, Zhang W, Hu Y, Tong X, Zheng S, Yang J, Kong Y, Ren L, Wei Q, Mei H, Hu C, Tao C, Yang R, Wang J, Yu Y, Guo Y, Wu X, Xu Z, Zeng L, Xiong N, Chen L, Wang J, Man N, Liu Y, Xu H, Deng E, Zhang X, Li C, Wang C, Su S, Zhang L, Wang J, Wu Y, Liu Z *SOJAMA*. 2020;

Q&A

CREATING A HEALTHIER HAWAI'I

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Thank you!

- A recording of the meeting will be available afterwards.
- Unanswered question?
 - Contact us at Covid19Bulletin@hawaiipacifichealth.org