HHP/HPH COVID-19 Updates Webinar Series

Monday, May 18, 2020

5:00pm – 6:30pm

HAWAIʻI PACIFIC HEALTH | HAWAIʻI HEALTH PARTNERS

CREATING A HEALTHIER HAWAIʻI

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 Details

- You have been automatically muted.
  Do not unmute yourself.
- You will be able to submit questions via the Live Event Q&A section.
  - Due to time constraints, any unanswered questions will be addressed this week and emailed to everyone via Info@hawaiihealthpartners.org
- A recording of the meeting will be available tomorrow on the HHP website.

How to Claim CME Credit

1. Step 1: Confirm your attendance
   - You should have completed a survey 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.

CME Accreditation Statement

- In support of improving patient care, Hawai‘i Pacific Health is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.
- Hawai‘i Pacific Health designates this webinar activity for a maximum of 1.5 AMA PRA Category 1 Credit (s) ™ for physicians. This activity is assigned 1.5 contact hour for attendance at the entire CE session.

JOINTLY ACCREDITED PROVIDER™

INTERPROFESSIONAL CONTINUING EDUCATION

COVID-19 & HPH Clinical Updates

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Hawai‘i Data Collaborative Data as of 05/18/20

Hawaii COVID-19 Data: Cumulative Totals

(Values in parentheses refer to change from previous day)

State

640

(Δ 0)

- County Pending: **0**
- HI residents diagnosed elsewhere: **10**

Updated: 05/18/20

Last updated May 18

Hawaii
77
(Δ 0)

Honolulu
415
(Δ 0)

Kauai
21
(Δ 0)

Maui
117
(Δ 0)

Hospitalizations
82
(Δ 0)

Recovered
574
(Δ 1)

Deaths
17
(Δ 0)

HawaiiData COLLABORATIVE

https://www.hawaiidata.org/covid19

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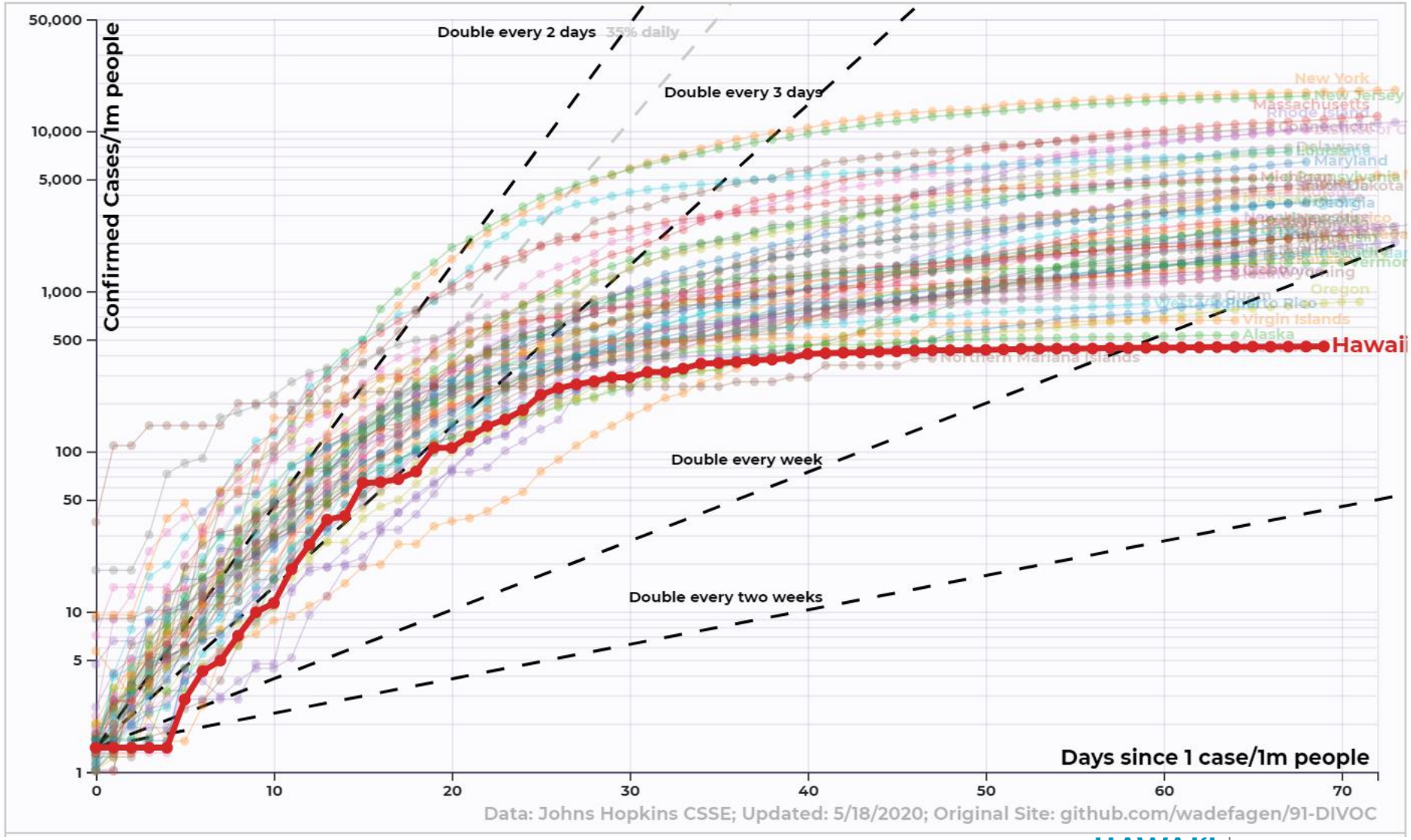
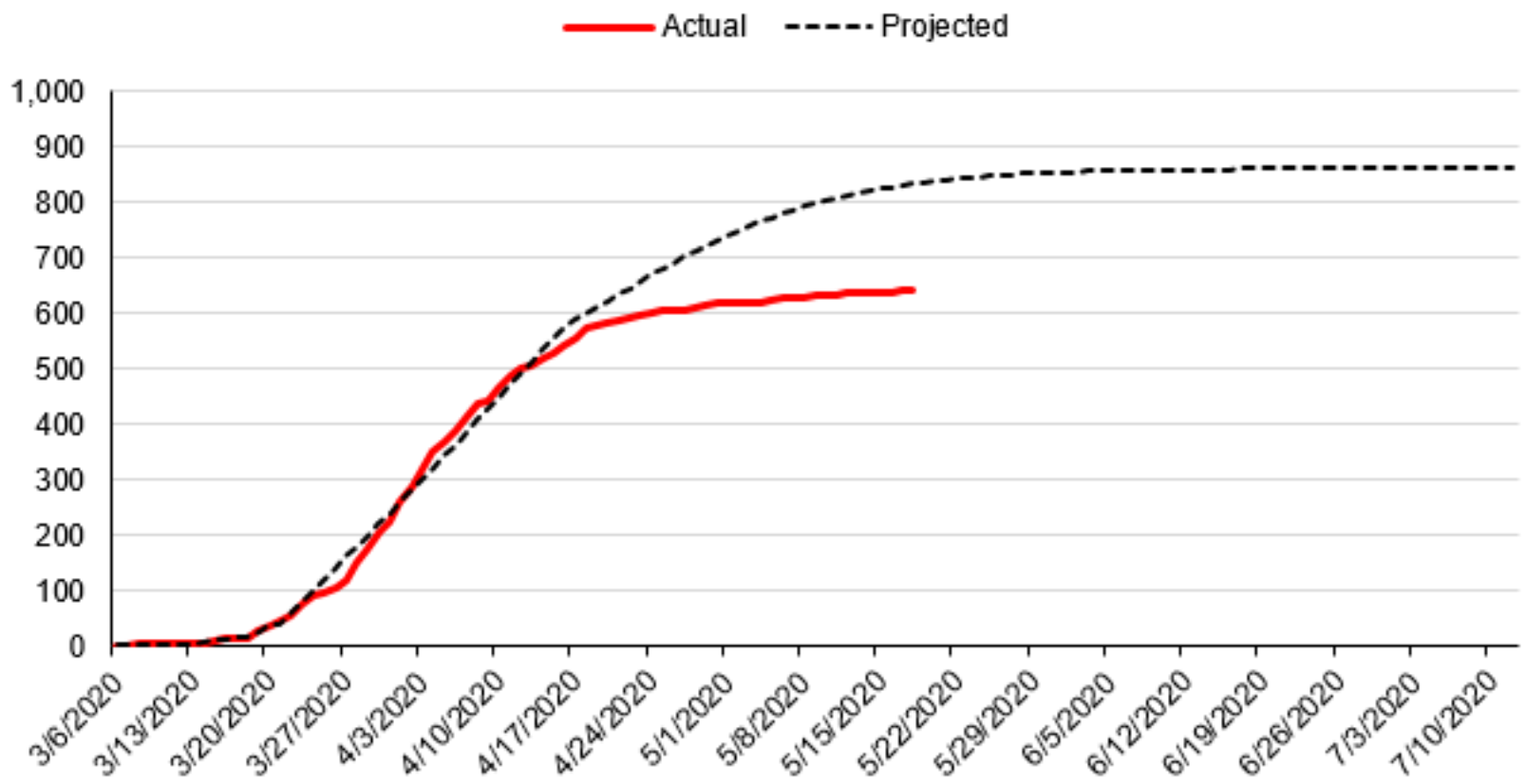
HAWAI‘I PACIFIC HEALTH | HAWAI‘I HEALTH PARTNERS

Confirmed Cases per One Million People – Hawai‘i



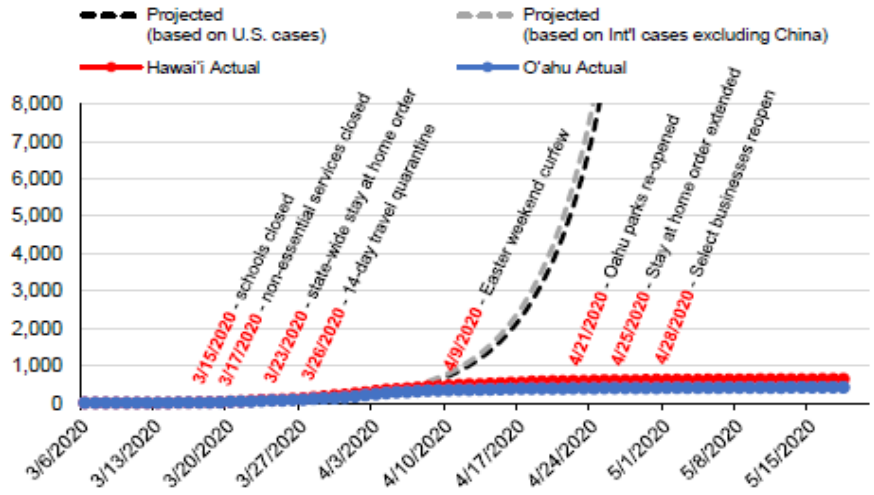
https://www.hawaiidata.org/covid19

Hawaii Actual v. Projected Cumulative COVID-19 Cases

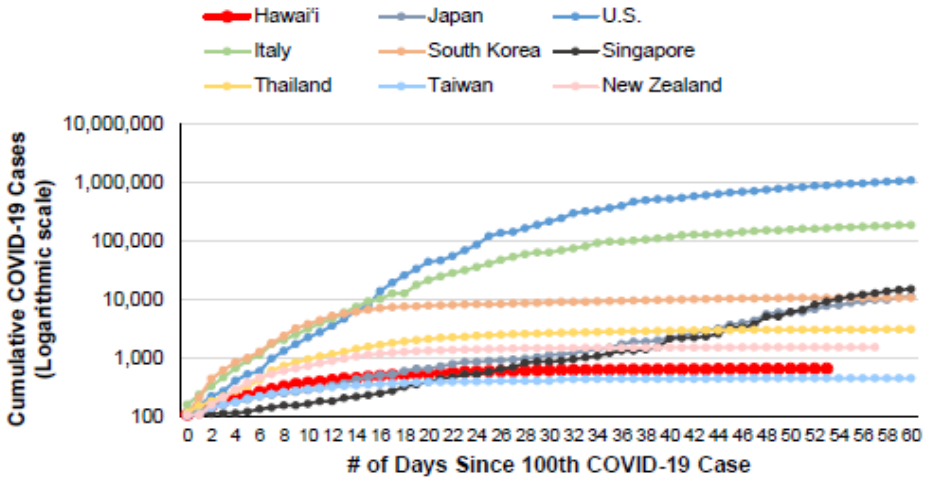


HPH Business Analytics 05/11/20

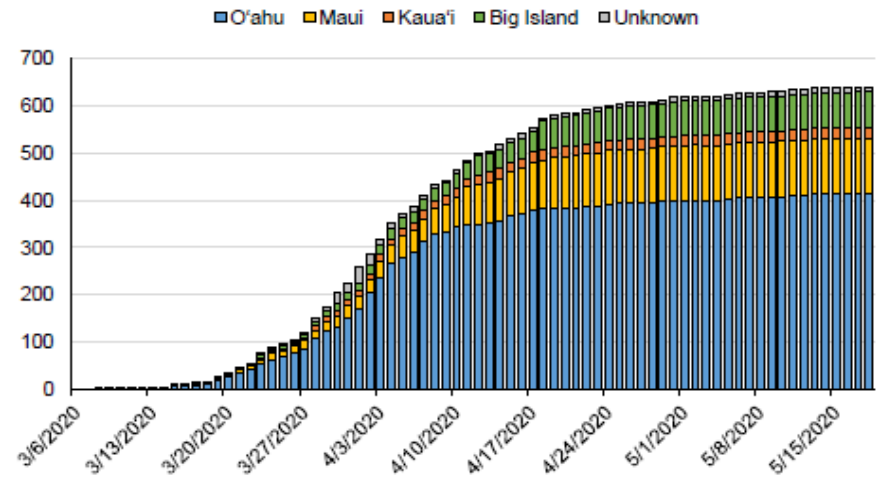
Projected and Actual COVID-19 Cases in Hawaii (As of 5/18/2020)



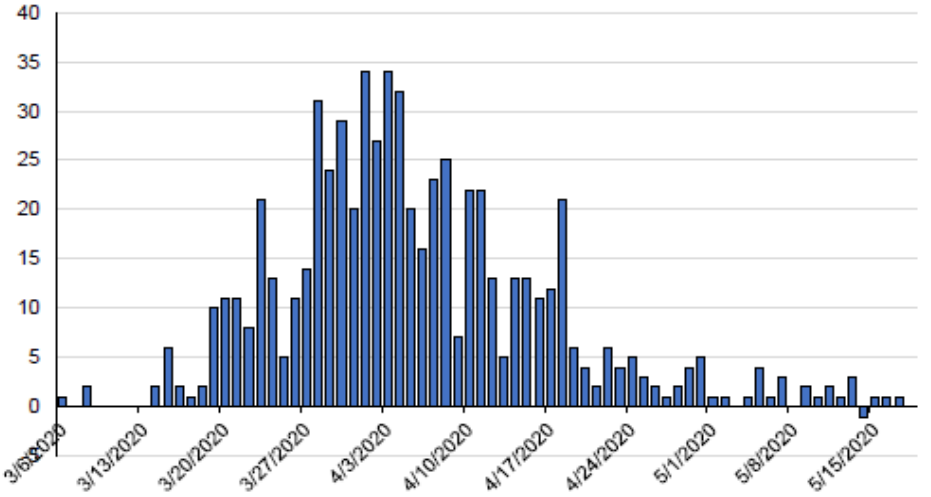
COVID-19 Cases by Number of Days Since 100th Case (As of 5/18/2020)



Hawaii COVID-19 Cases by Island (As of 5/18/2020)



Hawaii COVID-19 New Cases by Day (As of 5/18/2020)

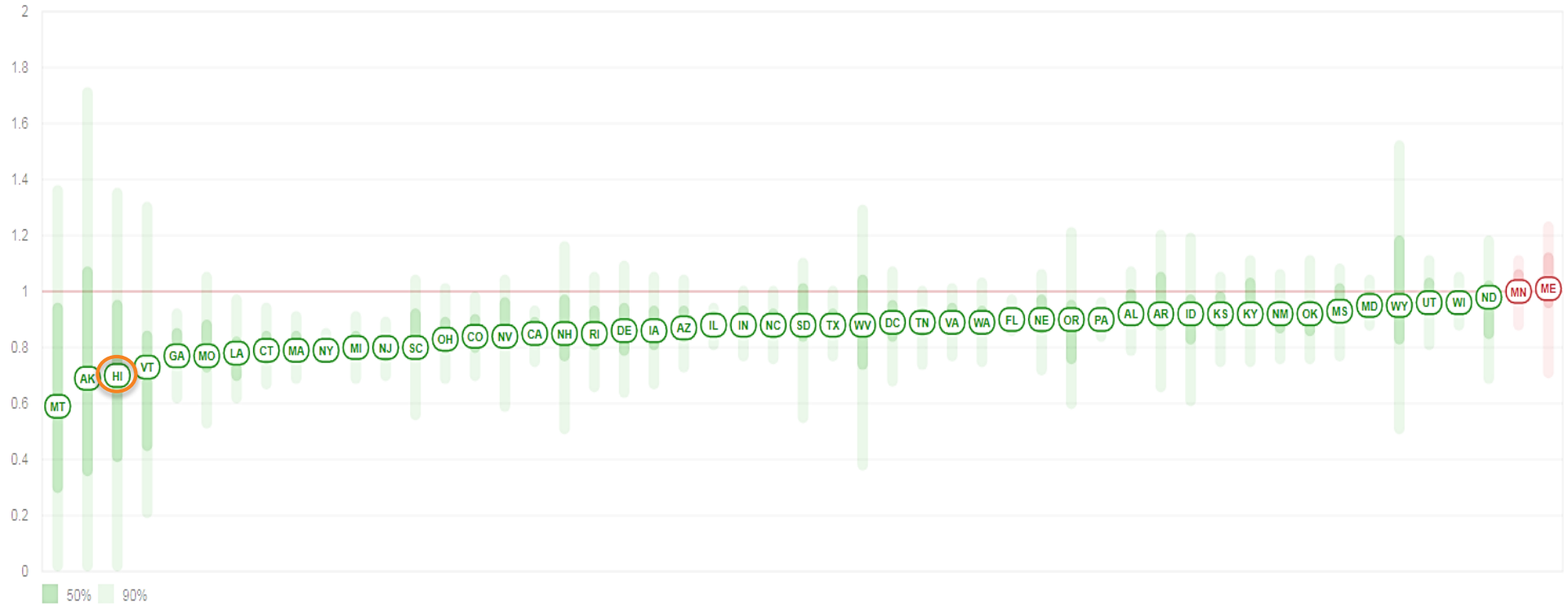


R_t Covid-19

These are up-to-date values for R_t, a key measure of how fast the virus is growing. It's the average number of people who become infected by an infectious person. If R_t is above 1.0, the virus will spread quickly. When R_t is below 1.0, the virus will stop spreading. Learn More.

Data Last Updated: 5/18 at 5:18AM

Latest | Last Week | 2 Weeks Ago | 4 Weeks Ago | 6 Weeks Ago



Local Rt matters more than National Rt
- *How patchy is it?*
- *What policies work?*
- *Search for modifiable risk factors?*

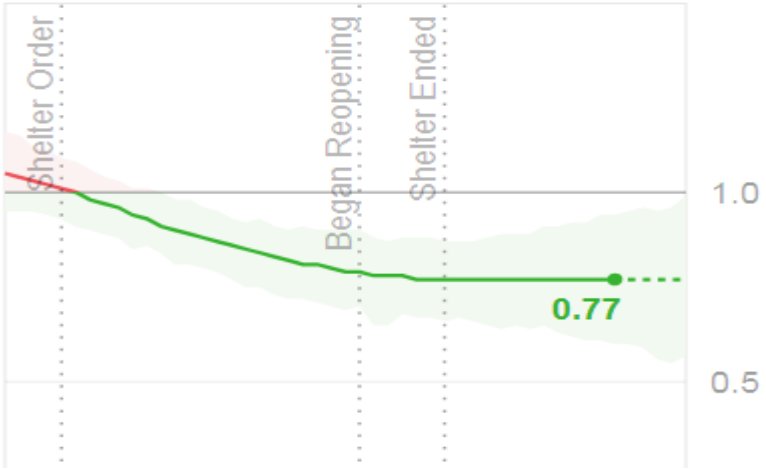
Use confidence intervals
- *(i.e., if upper end of the 90% CI is below 1, good to go with reopening)*
- *But don't disregard tails (improbable events)*

https://rt.live/ accessed 05.18.2020

Georgia

show new cases

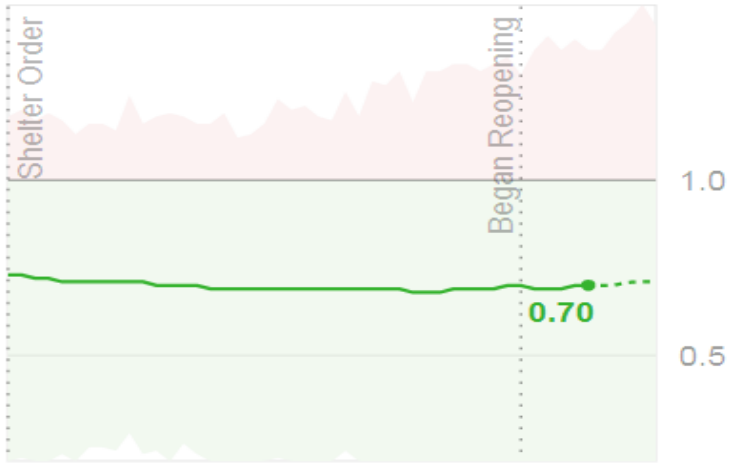
Share



Hawaii

show new cases

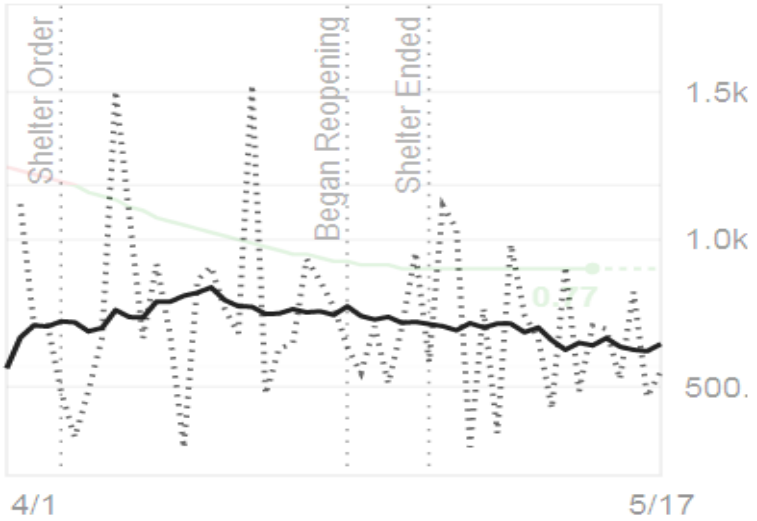
Share



Georgia

hide new cases

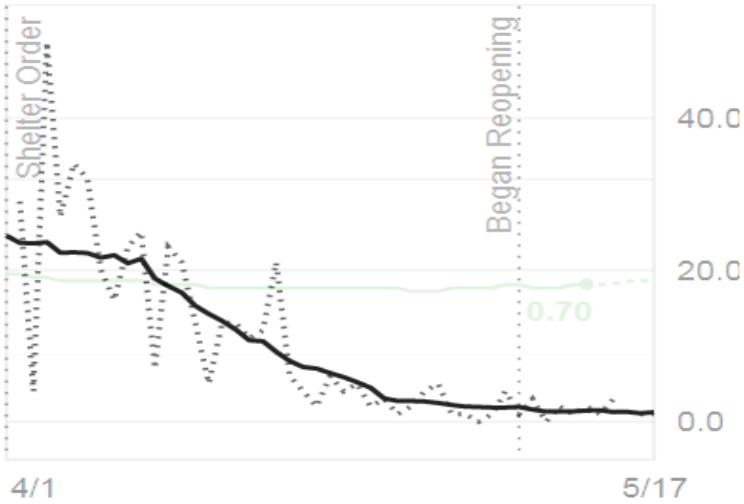
Share



Hawaii

hide new cases

Share



https://rt.live/ accessed 05.18.2020

As of 05/18/20	Total Census	ICU beds occupied	# Ventilators in use	# New Admissions w/ COVID-19 screen	# 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
KMCWC	152	AICU: 0 NICU: 76 PICU: 3	AICU: 0 NICU: 26 PICU: 2 Wilcox: 0	0	1	0	0
PMMC	72	7	5	0	0	0	0
SMC	96	12	4	0	0	0	0
WMC	39	3	0	0	0	0	0

HPH Site Specimen Collection Thru 05/18/20

Location		**Totals** (New from last week – 05/11/20) Ordered	Pending	Positive
Kapiolani Medical Center	Inpatient	**236** (19)	1	**1** (0)
Kapiolani Medical Center PSC	Outpatient	**1,252** (198)	9	**14** (0)
Pali Momi Medical Center	Inpatient	**572** (77)	1	**6** (0)
Pali Momi PSCs	Outpatient	**2,338** (300)	42	**51** (2)
Straub Clinic and Hospital	Inpatient	**492** (52)	1	**2** (0)
Straub Clinics	Outpatient	**1,731** (237)	17	**28** (1)
Wilcox Memorial Hospital	Inpatient	**224** (17)	6	**3** (0)
Wilcox Clinics	Outpatient	**1,289** (129)	46	**13** (0)
HPH Total		**8,134** (1,029)	**123**	**118** (2)

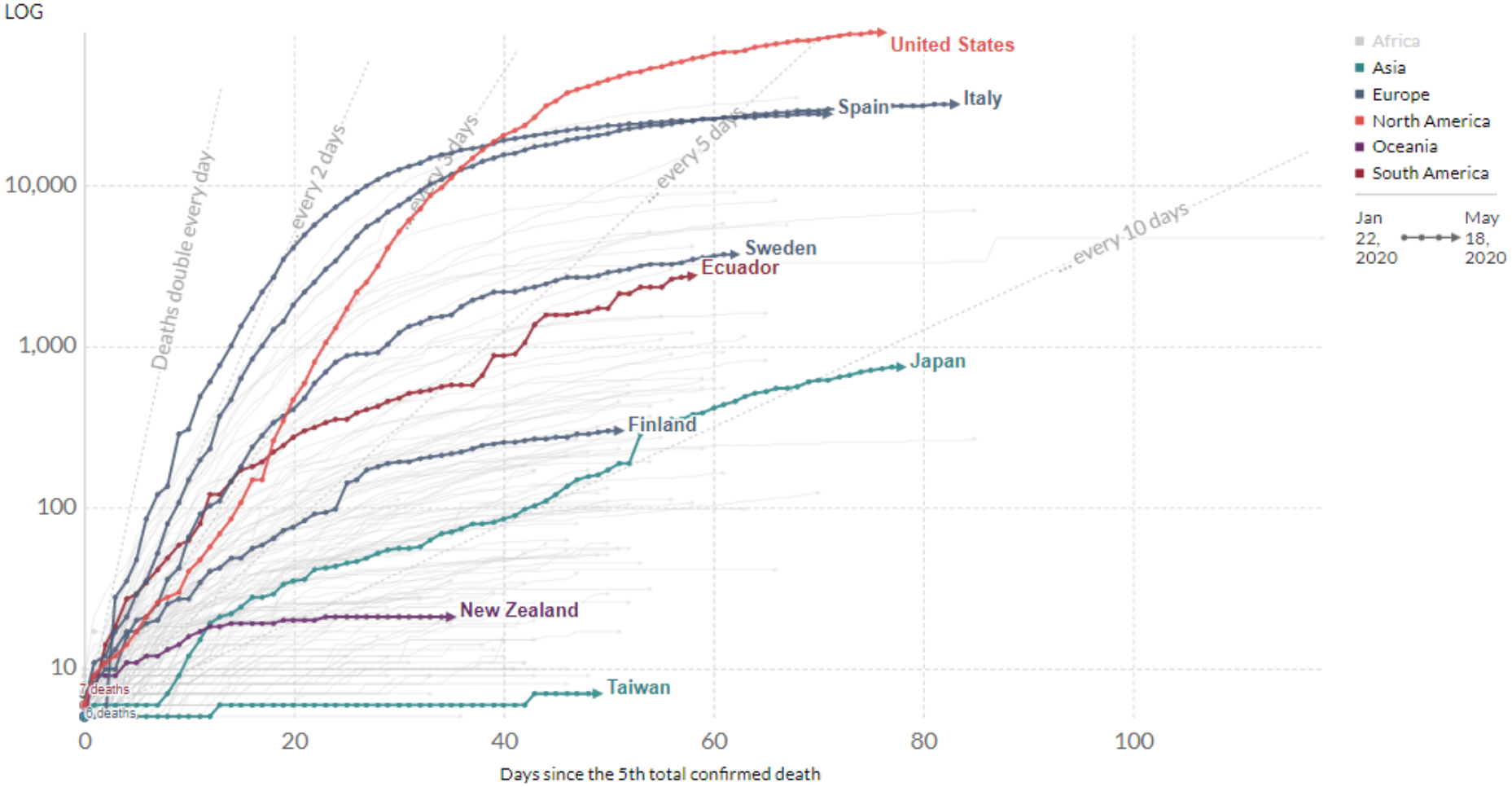
Inpatient = ED and hospitalized (currently all "inpatient" positives are from ED, none are hospitalized)
Outpatient = clinics and specimen collection sites

Laboratory Update

- SARS-CoV-2 molecular nucleic acid amplification testing (NAAT)
- Clinical Labs of Hawaii has been validating a new high-throughput assay to detect SARS-CoV-2, called the Aptima® SARS-CoV-2 Assay from Hologic
- FDA Emergency Use Authorized
- Throughput: 1000 tests per day
- Estimated test result time: within 24 hours
- Technology: Transcription mediated amplification
- Test characteristics (calculated in relation to separate RT-PCR-based as the reference):
  - Positive Percent Agreement (analogous to "sensitivity"): 100%
  - Negative Percent Agreement (analogous to "specificity"): 98.2%
- Planned start date: this week
- More details to come

Total confirmed COVID-19 deaths: how rapidly are they increasing?

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



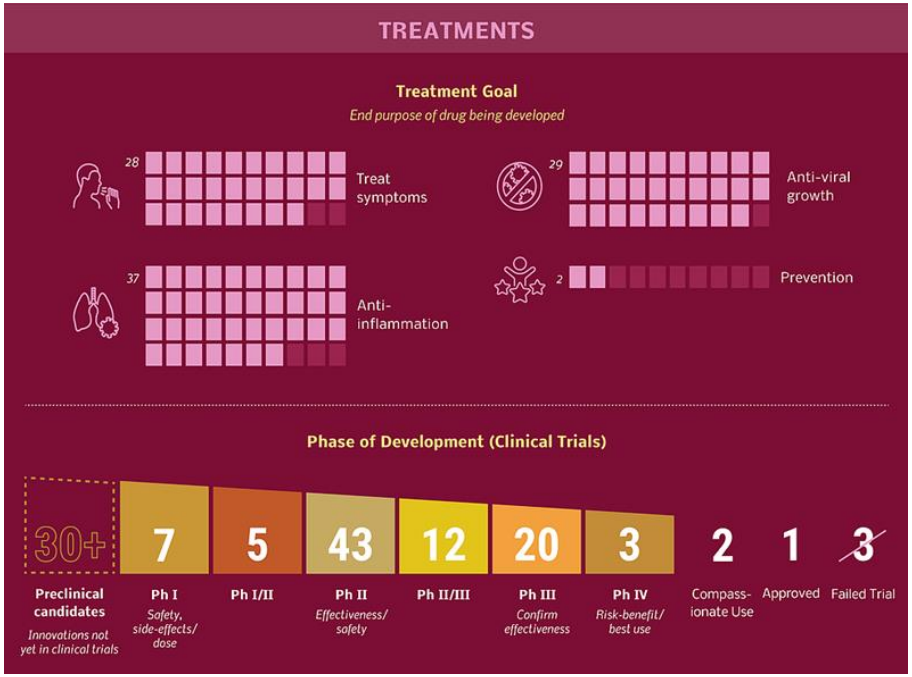
Source: European CDC – Situation Update Worldwide – Last updated 18th May, 11:00 (London time)

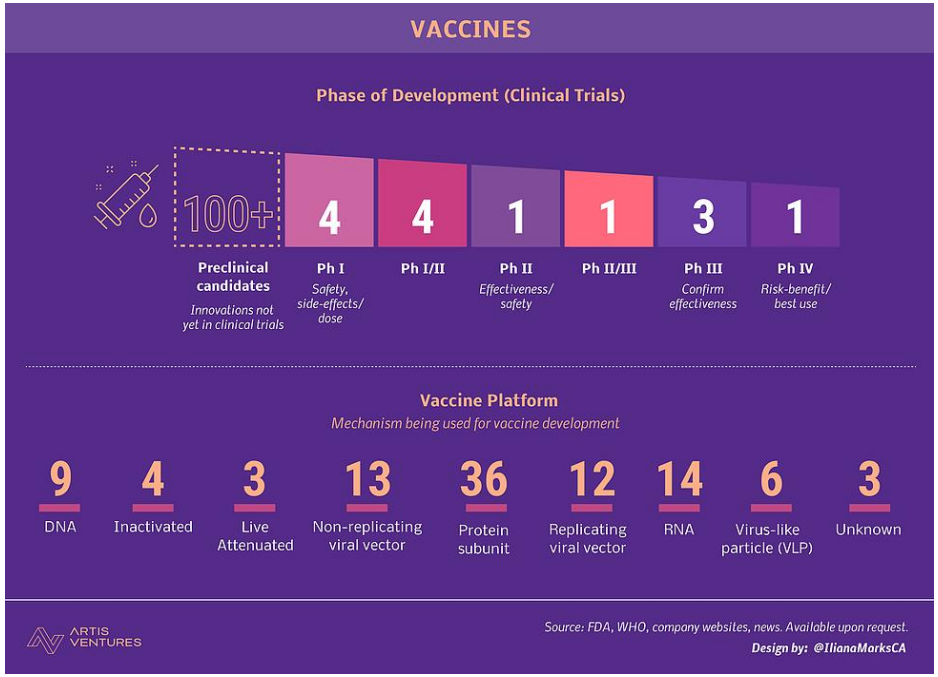
OurWorldInData.org/coronavirus • CC BY

https://ourworldindata.org/grapher/covid-confirmed-deaths-since-5th-death?country=USA+ITA+ESP+SWE+ECU+FIN+JPN+NZL+TWN

Buying time to get to a cure or immunity

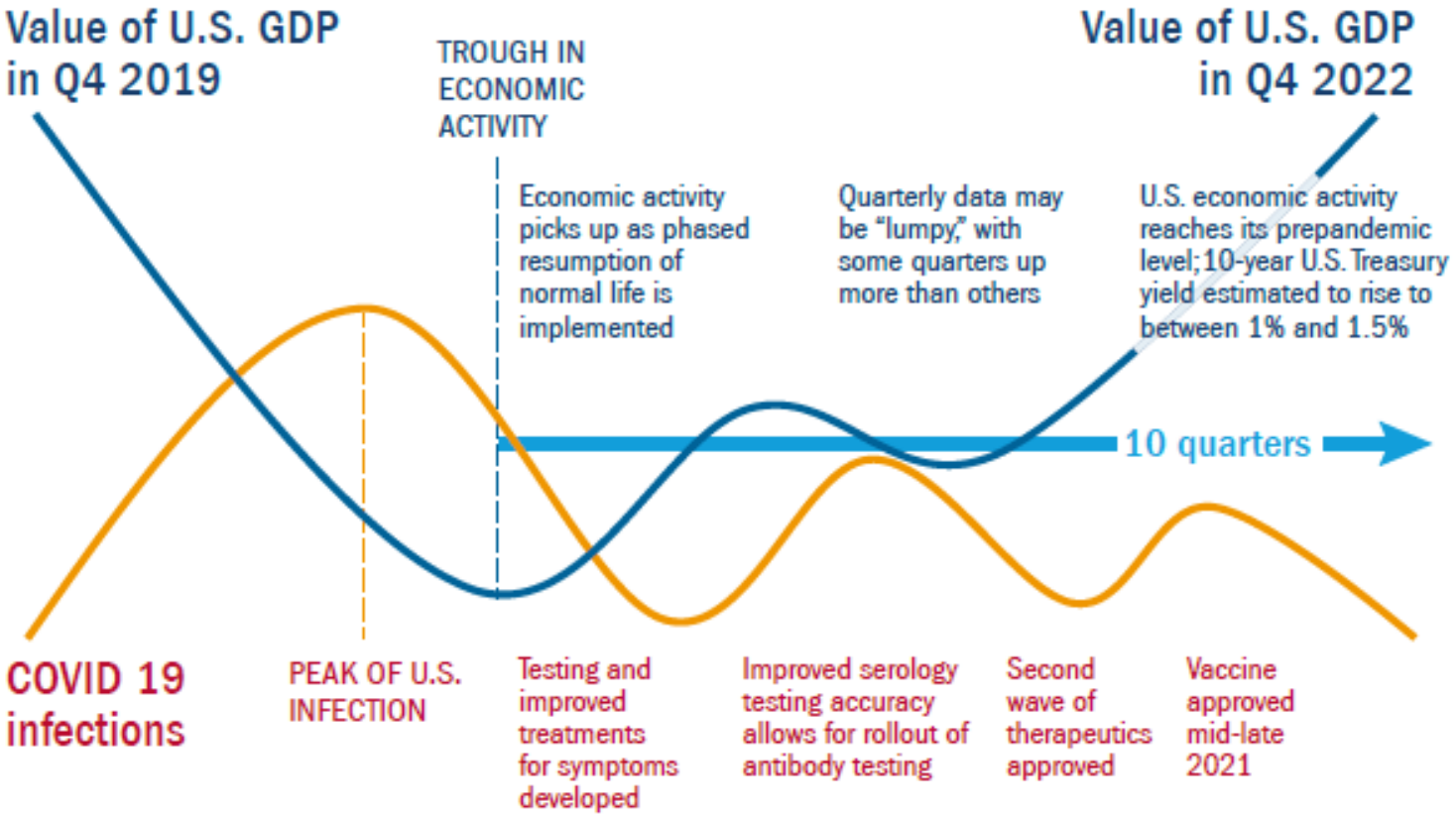
Herd Immunity achieved at ~67% of population having experienced COVID-19





Bailey, V. & Guttendorf, Z. (2020).Fighting the Pandemic. https://www.av.co/covid accessed 5/18/20

Forecasting Economic Recovery with Pandemic Wave Scenarios



Source: Columbia Management Investment Advisers, LLC. For illustrative purposes only.

The interplay of infection and economic activity. *Columbia Threadneedle Investments, 2020.* https://www.columbiathreadneedleus.com/binaries/content/assets/cti-blog/04.28.20-cotg-u-shaped-recovery.pdf

Path to Normal Functioning Economy

- Universal Testing (500K/d)
- Supported Quarantine (income support)
- Contact Tracing (100K)
- Common Sense Precautions
  - Masks, distance and clean surfaces

- Immunity Passports?
  - Chile

1. Allen, D., Block, S., Cohen, J. et al. (2020, April 20). ROADMAP TO PANDEMIC RESILIENCE. Massive Scale Testing,Tracing, and Supported Isolation (TTSI) as the Path to Pandemic Resilience for a Free Society. *Edmond J. Safra - Center for Ethics at Harvard University*.
2. Watson C, et al. (2020, April 10). A National Plan to Enable Comprehensive COVID-19Case Finding and Contact Tracing in the US. Johns Hopkins University Bloomberg School of Public Health, Center for Health Security.

Utility of Serology is still Unknown

- Cross reactivity with other Corona viruses
- Standardization
  - Minimum test performance depending on prevalence
  - Antibodies against which component of the virus? (nucleocapsid, receptor binding domain or full length of spike protein)
- Persistence of antibodies/immunity
- Possibility of reinfection
  - S Korea, China
- Immunity versus seropositivity
  - Neutralizing Antibodies
  - Role of Innate Immunity and Cellular Immunity
- Testing availability and access
  - Sufficient number of validated tests
  - Vulnerable populations
- Regulation of certificates
  - Confidentiality & Privacy
  - Affordability
  - Counterfeits
  - Term & Expiration
  - Safeguards against discrimination

Gronvall G., Connell, N., Kobokovich, A. et al. Developing a National Strategy for Serology (Anitbody Testing) in the United States. *John Hopkins University, 2020.*

Challenges with Serologic Testing

Abbott Architect SARS CoV-2 IgG High Throughput ELISA	Sensitivity	Specificity
	100%	99.6%
	88/88	*1066/1070*

Population	Infection Rate	Infected	Uninfected
1,500,000	5%	75,000	1,425,000
	Seropositive	75,000	**5,700**
	Seronegative	-	1,419,300
		PPV	**92.9%**
		NPV	100%

Population	Infection Rate	Infected	Uninfected
1,500,000	30%	450,000	1,050,000
	Seropositive	450,000	**4,200**
	Seronegative	-	1,045,800
		PPV	**99.1%**
		NPV	100.0%

Challenges with Testing

Cellex qSARS CoV-2 IgG/IgM Rapid Test	Sensitivity	Specificity
	93.8%	96.0%
	120/128	*240/250*

Population	Infection Rate	Infected	Uninfected
1,500,000	5%	75,000	1,425,000
	Seropositive	70,350	**57,000**
	Seronegative	**4,650**	1,368,000
		PPV	**55.2%**
		NPV	99.7%

Population	Infection Rate	Infected	Uninfected
1,500,000	30%	450,000	1,050,000
	Seropositive	422,100	**42,000**
	Seronegative	**27,900**	1,008,000
		PPV	**91.0%**
		NPV	**97.3%**

Challenges with Testing

Mount Sinai Hospital Clinical Laboratory SARS CoV-2 (2-Step ELISA)	Sensitivity	Specificity
	92.5%	100.0%
	37/40	*74/74*

Population	Infection Rate	Infected	Uninfected
1,500,000	5%	75,000	1,425,000
	Seropositive	69,375	-
	Seronegative	**5,625**	1,425,000
		PPV	100.0%
		NPV	**99.6%**

Population	Infection Rate	Infected	Uninfected
1,500,000	30%	450,000	1,050,000
	Seropositive	416,250	-
	Seronegative	**33,750**	1,050,000
		PPV	100.0%
		NPV	**96.9%**

Two Ships Passing in the Night

USS Theodore Roosevelt

- 4800 total sailors
- 1102 active cases
- 60% asymptomatic (661)
- 6 hospitalized, 2 to ICU, 1 death
- 2900 on board now

Diamond Princess

- 3711 total passengers and crew
- 712 active cases
- 46.5% with no symptoms (331)
- 13 deaths

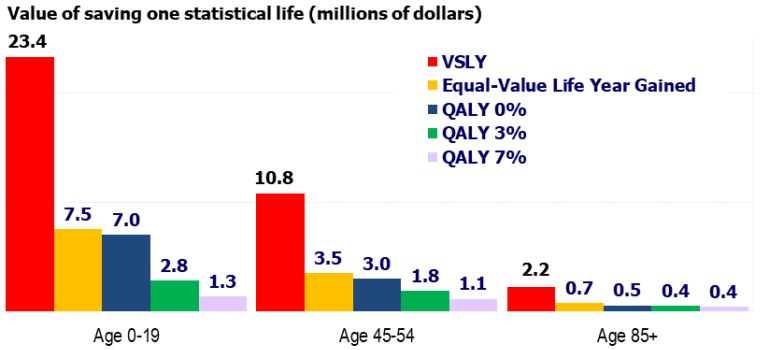
- **13 retested positive with Sx after recovering from initial infection with 14 days and 2 neg PCR tests.**

"These five Sailors developed influenza-like illness symptoms and did the right thing reporting to medical for evaluation," the Navy said, adding that they were immediately removed from the ship and put back in isolation. A small number of other sailors who were in contact with them were also taken off the ship.

Seligman, L. (2020, May 16). 13 USS Theodore Roosevelt sailors test positive after recovering from Covid-19. *Politico.* https://www.politico.com/news/2020/05/16/uss-theodore-roosevelt-sailors-test-positive-coronavirus-261873

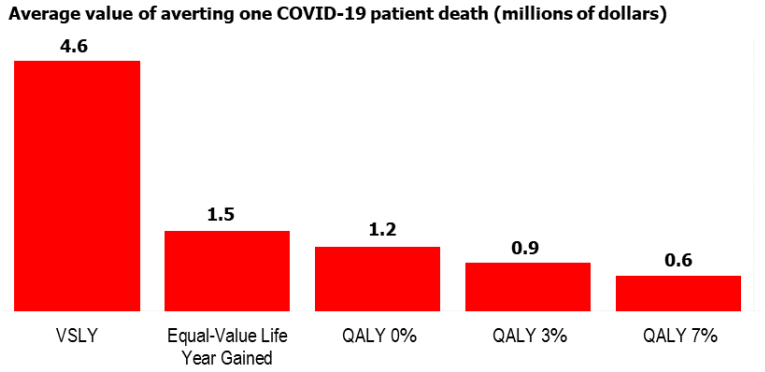
Shut Down: Comparing economic value of lives saved with the economic costs

The value of saving one statistical life varies widely by patient age and value of life method used



VSLY=Value of Statistical Life Year: $311,194 x undiscounted years of life expectancy
Equal-Value Life Year Gained: $100,000 x undiscounted years of remaining life expectancy
QALY 0%=$00,000 x undiscounted quality-adjusted years (QALYs) of remaining life expectancy
QALY 3%=$100,000 x QALYs of remaining life expectancy discounted at 3%
QALY 7%=$100,000 x QALYs of remaining life expectancy discounted at 3%

The value of averting a single COVID-19 death depends heavily on the value of life method used



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Chris C. (2020, March). The Apothercare Contributor Group. *Forbes Magazine*. How Economists Calculate The Costs And Benefits Of COVID-19 Lockdowns. Mar 27, 2020.

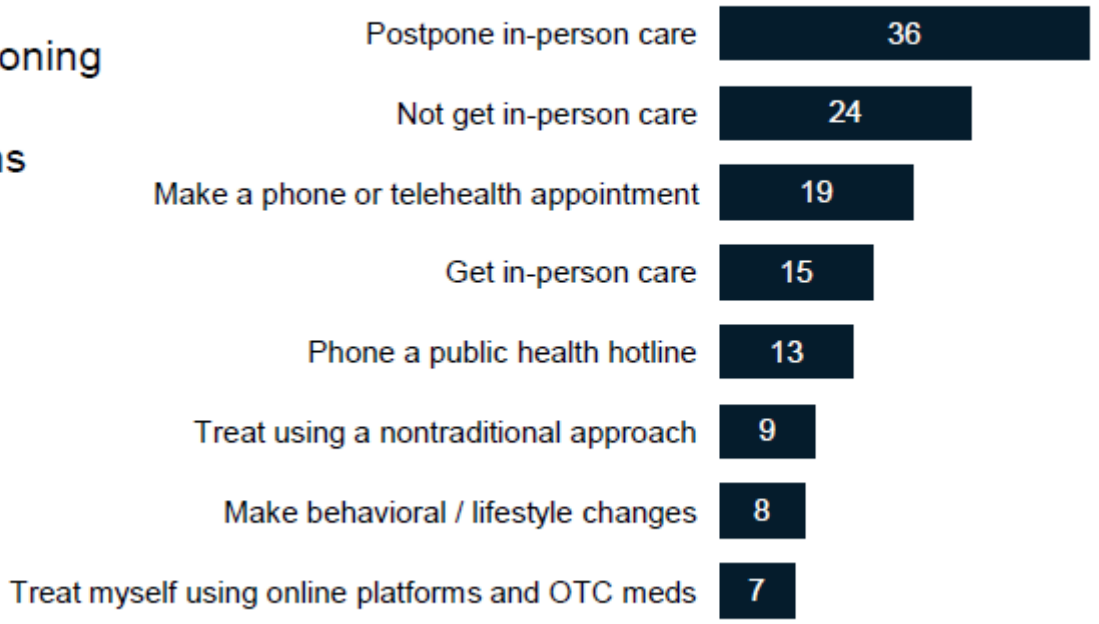
Delaying Care

Changes in healthcare utilization

Some respondents are postponing or foregoing care for new symptoms or health conditions developed during the crisis

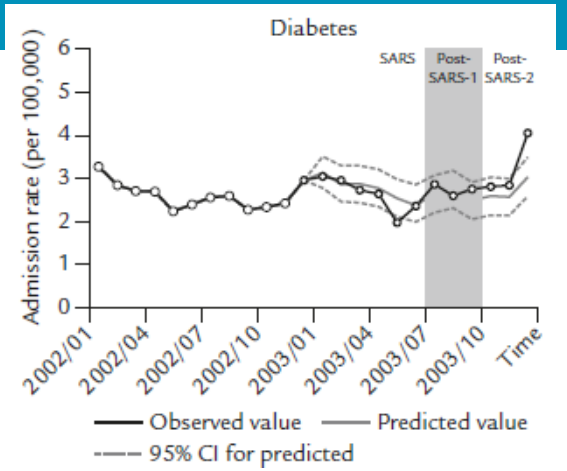
Actions taken by respondents to address new conditions and symptoms[12]

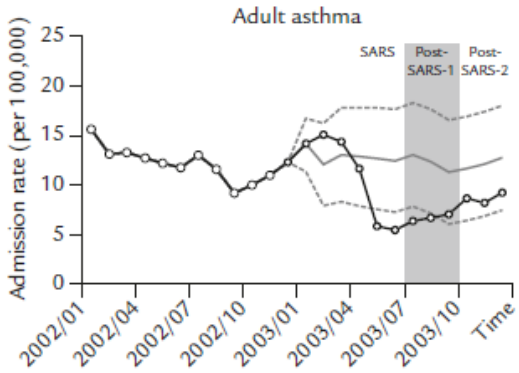
% of respondents who developed new medical conditions or symptoms since COVID-19 pandemic began, n = 107

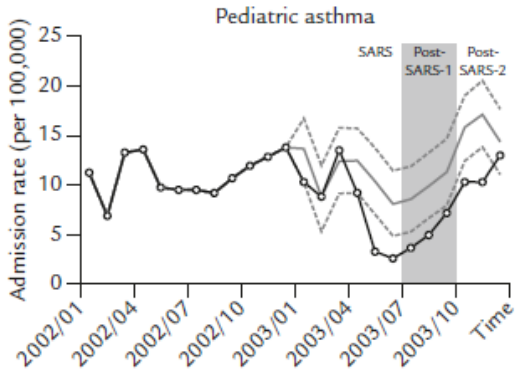


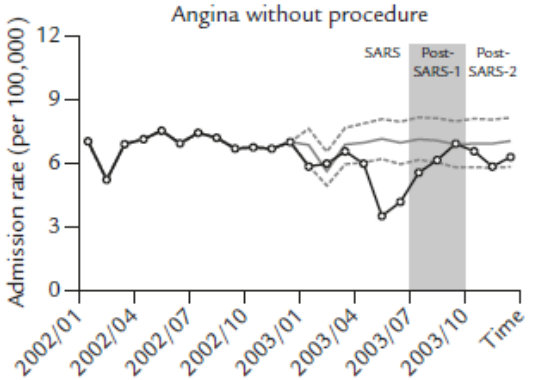
McKinsey & Co. Survey - fielded online on March 16–17, 2020, March 27-29, and April 11–13, 2020. Respondents to March 17 survey (n = 979), March 29 survey (n = 1,265), and April 13 survey (n = 1,265) include US residents between the ages of 18–84. The sample frames were balanced to be nationally representative for sex, age, income, race/ethnicity, region, and type ofhealth insurance. The surveys were conducted only in English. Thus, they do not reflect the behavior or attitudes of those who would have preferred a survey in another language.

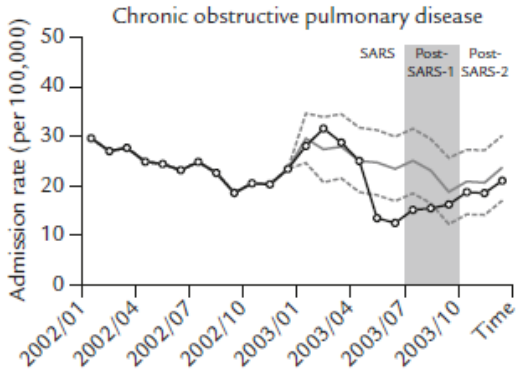
SARS Epidemic Delayed Care
(Taiwan, 2003)

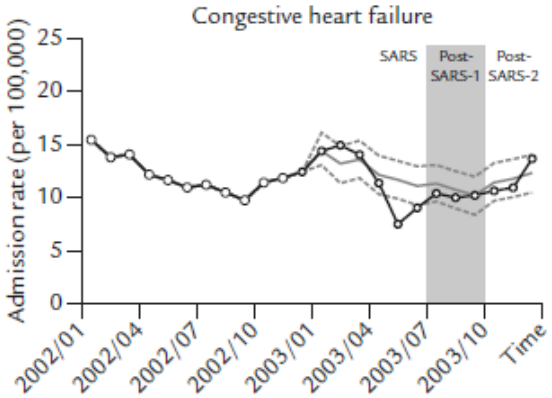


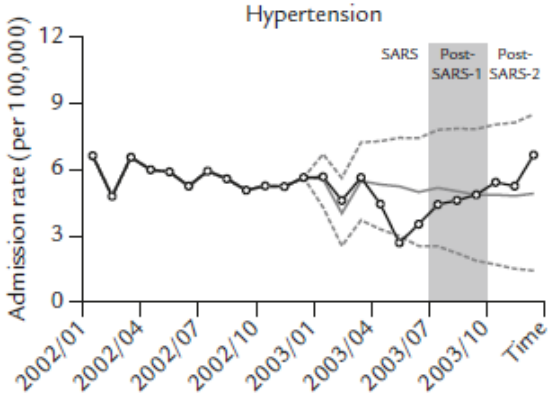






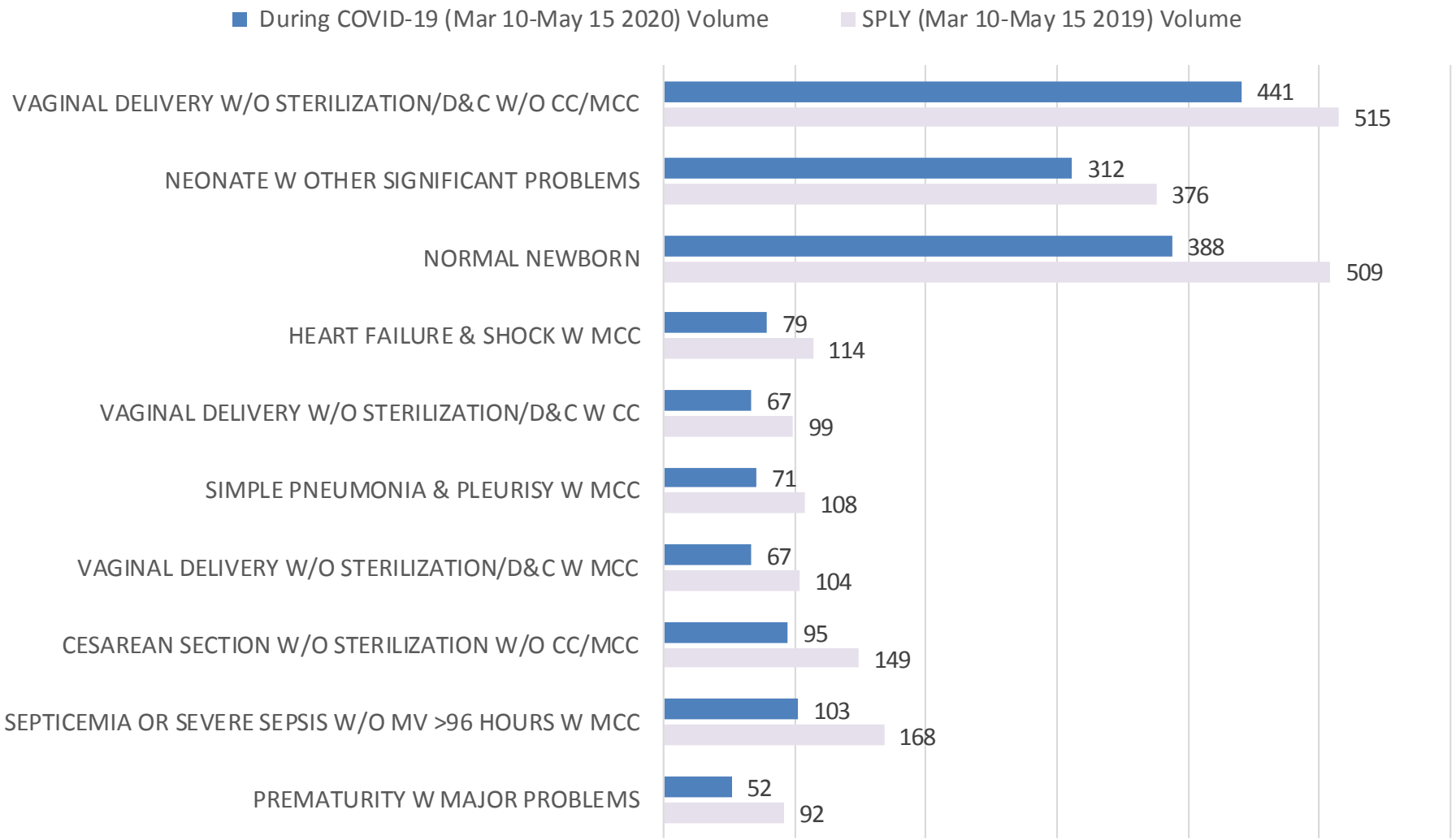




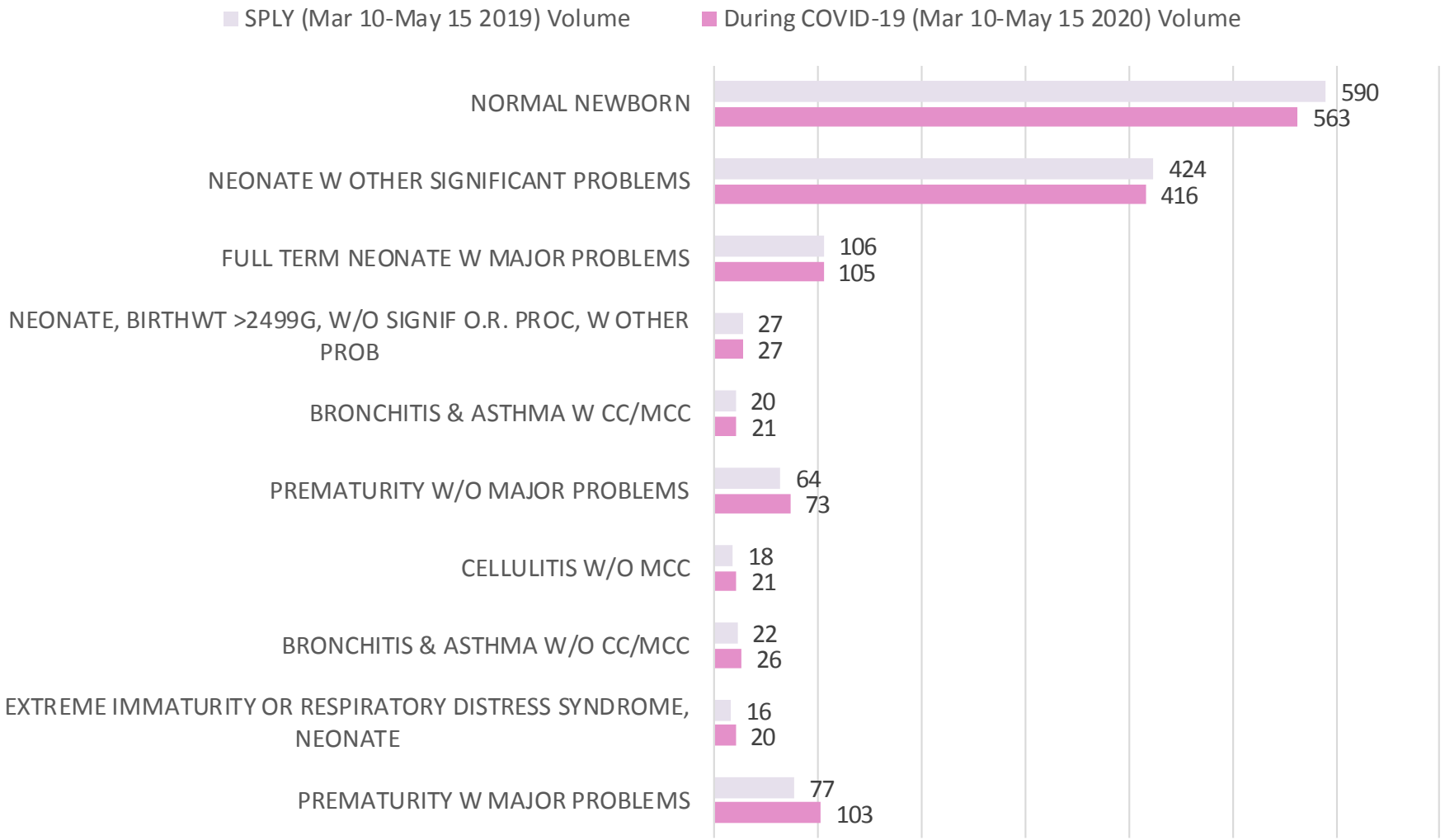


Yu-Tung Huang, Yue-Chune Lee, & Chun-Ju Hsiao (2009). Hospitalization for Ambulatory-care-sensitive Conditions in Taiwan Following the SARS Outbreak: A Population-based Interrupted Time Series Study. *Elsevier, J Formos Med Assoc. Vol 108, No 5.*

Adults


During COVID-19 (Mar 10-May 15 2020) Volume
SPLY (Mar 10-May 15 2019) Volume
VAGINAL DELIVERY W/O STERILIZATION/D&C W/O CC/MCC
441
515
NEONATE W OTHER SIGNIFICANT PROBLEMS
312
376
NORMAL NEWBORN
388
509
HEART FAILURE & SHOCK W MCC
79
114
VAGINAL DELIVERY W/O STERILIZATION/D&C W CC
67
99
SIMPLE PNEUMONIA & PLEURISY W MCC
71
108
VAGINAL DELIVERY W/O STERILIZATION/D&C W MCC
67
104
CESAREAN SECTION W/O STERILIZATION W/O CC/MCC
95
149
SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC
103
168
PREMATURITY W MAJOR PROBLEMS
52
92

Pediatrics


SPLY (Mar 10-May 15 2019) Volume
During COVID-19 (Mar 10-May 15 2020) Volume
NORMAL NEWBORN
590
563
NEONATE W OTHER SIGNIFICANT PROBLEMS
424
416
FULL TERM NEONATE W MAJOR PROBLEMS
106
105
NEONATE, BIRTHWT >2499G, W/O SIGNIF O.R. PROC, W OTHER PROB
27
27
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Elective versus Necessary Care: Where did all the MIs go?

Conversation with Hingson Chun, MD

Cardiac Electrophysiology, Cardiology

Hawai‘i Pacific Health

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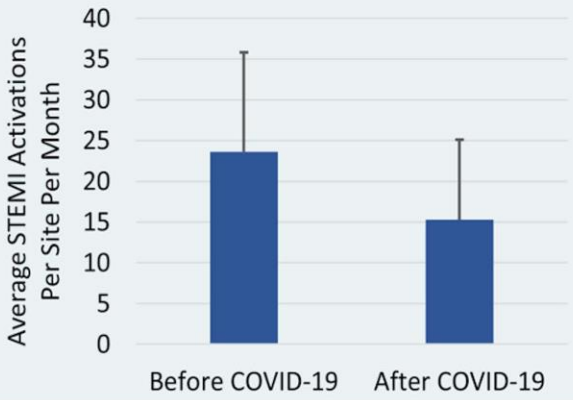
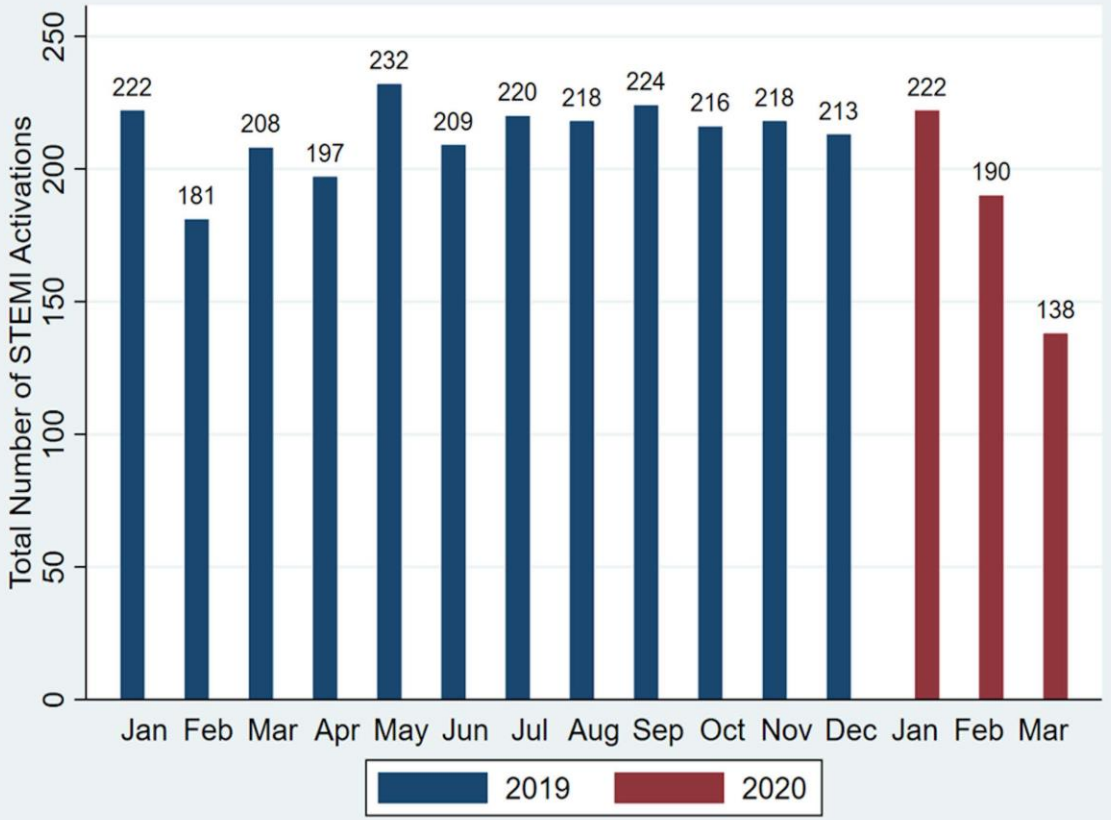
Reduction in ST-Segment Elevation Cardiac Catheterization Laboratory Activations in the United States during COVID-19 Pandemic

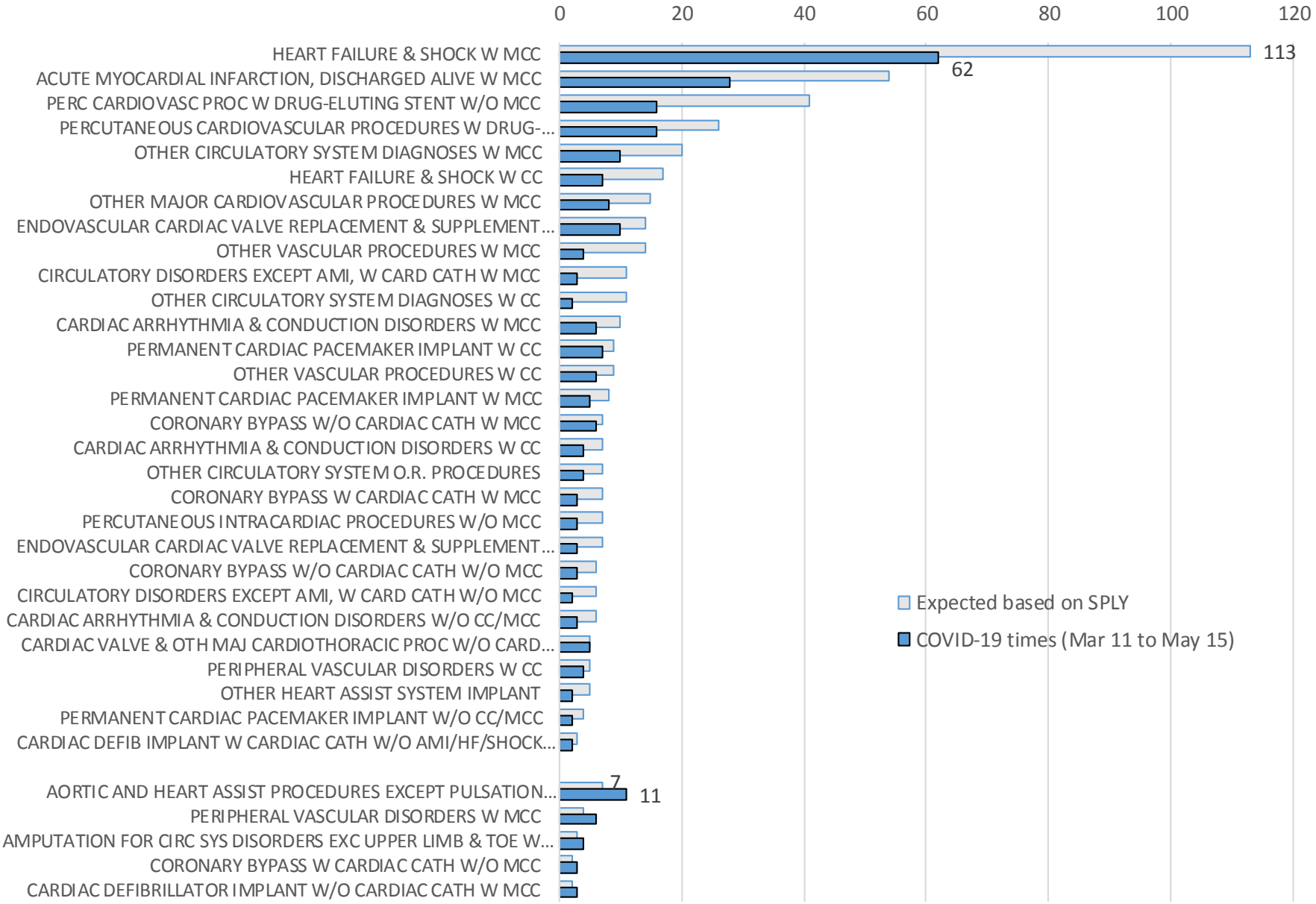




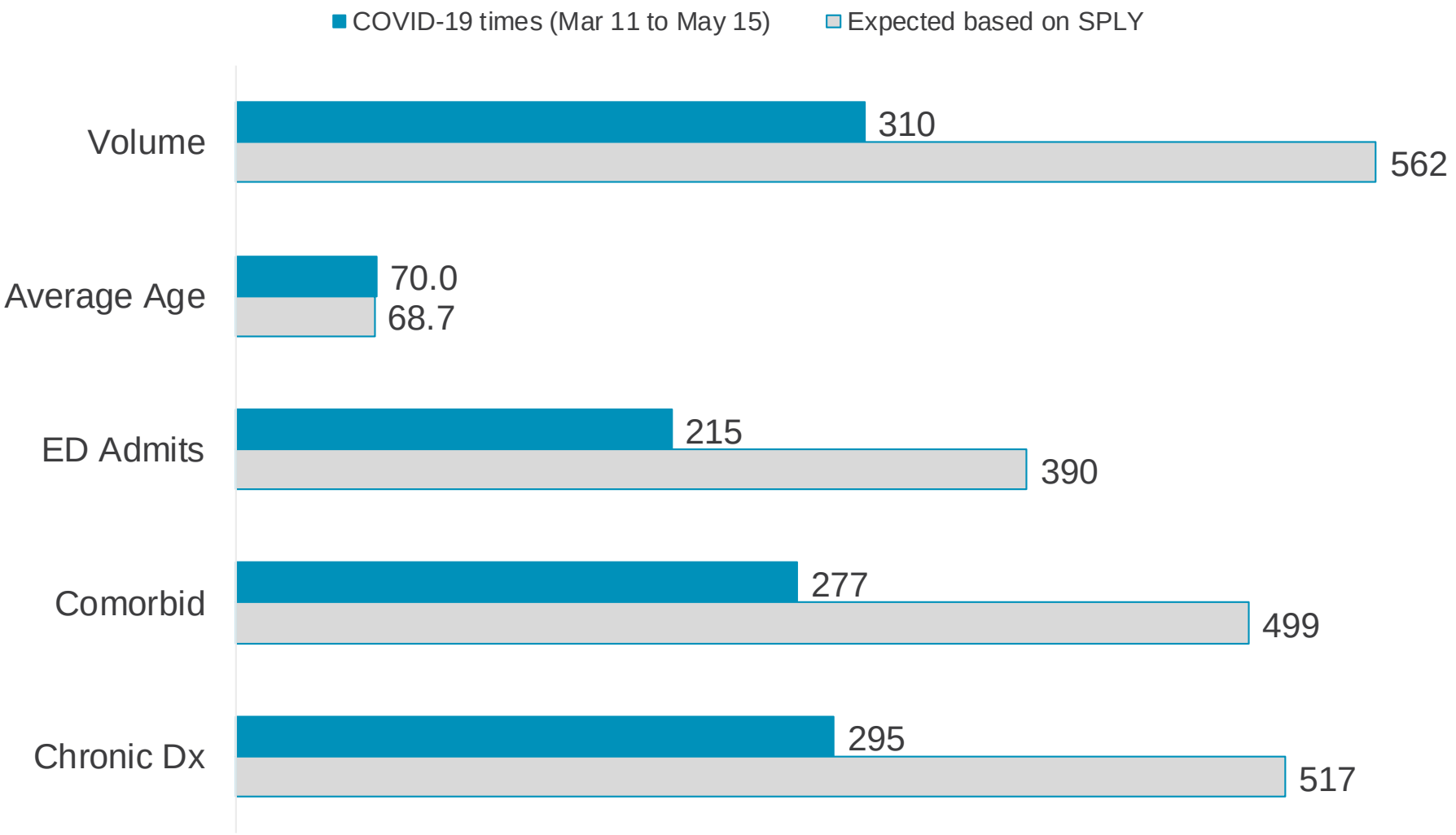
Garcia S, Albaghdadi MS, Meraj PM, Schmidt C, Garberich R, Jaffer FA, Dixon S, Rade JJ, Tannenbaum M, Chambers J, Huang PP, Henry TD, Reduction in ST-Segment Elevation Cardiac Catheterization Laboratory Activations in the United States during COVID-19 Pandemic, *Journal of the American College of Cardiology* (2020)

Cardiovascular Admits (DRG) during COVID-19 Pandemic

Expected versus Actual based on Same Period Last Year (March 10 - May 15)

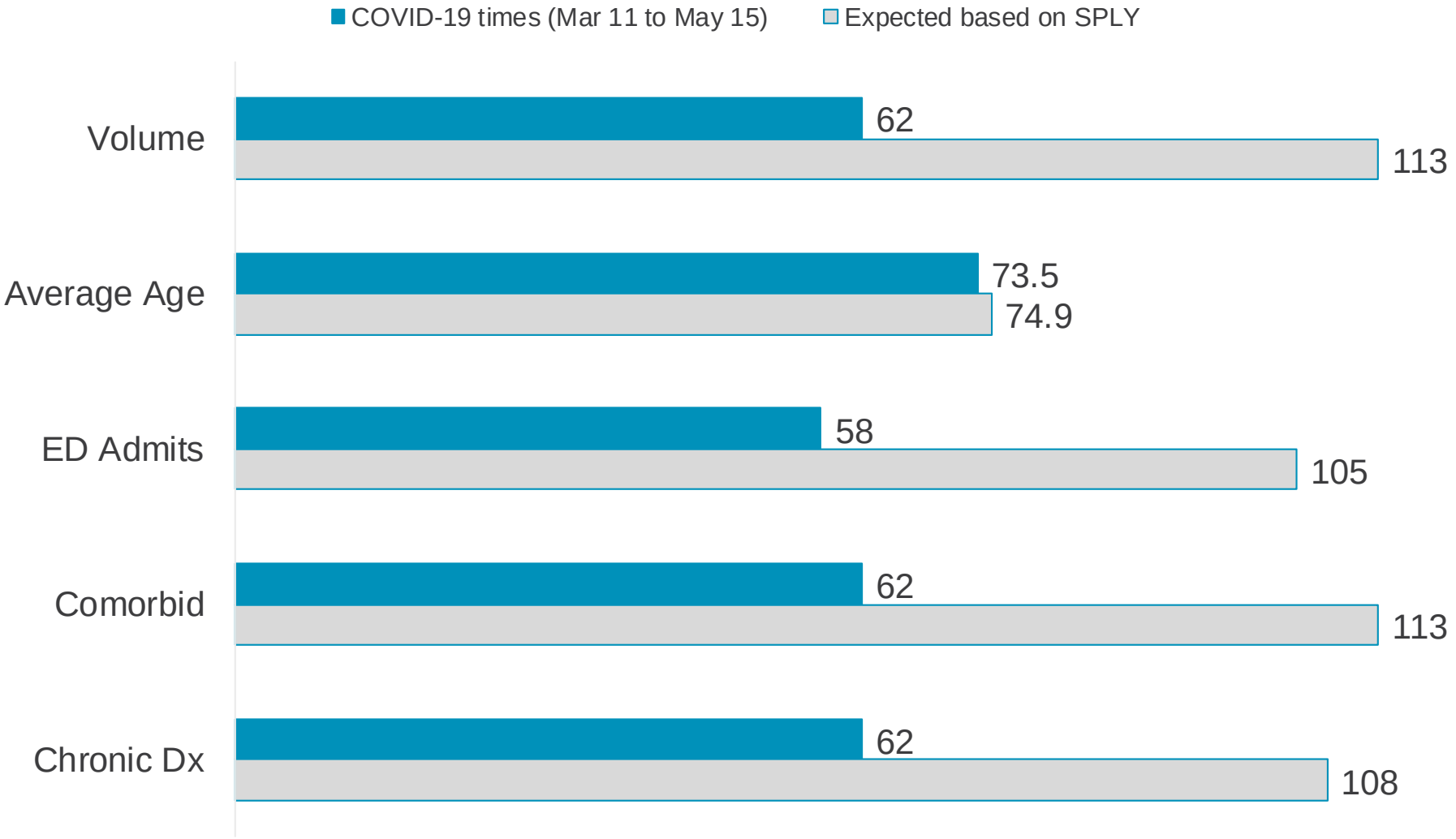


Cardiovascular Admissions During COVID-19 Pandemic

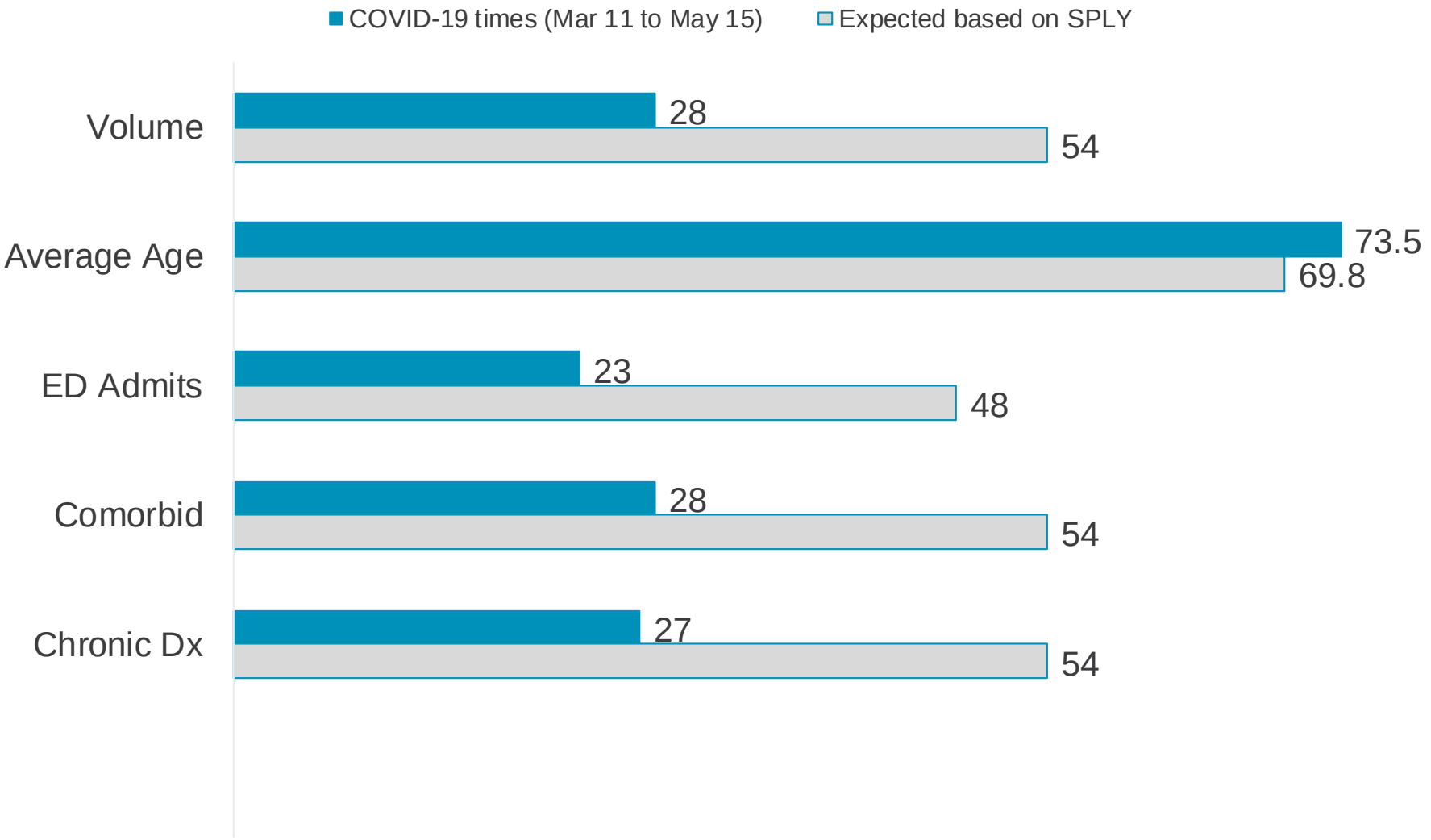


For admissions to all HPH facilities

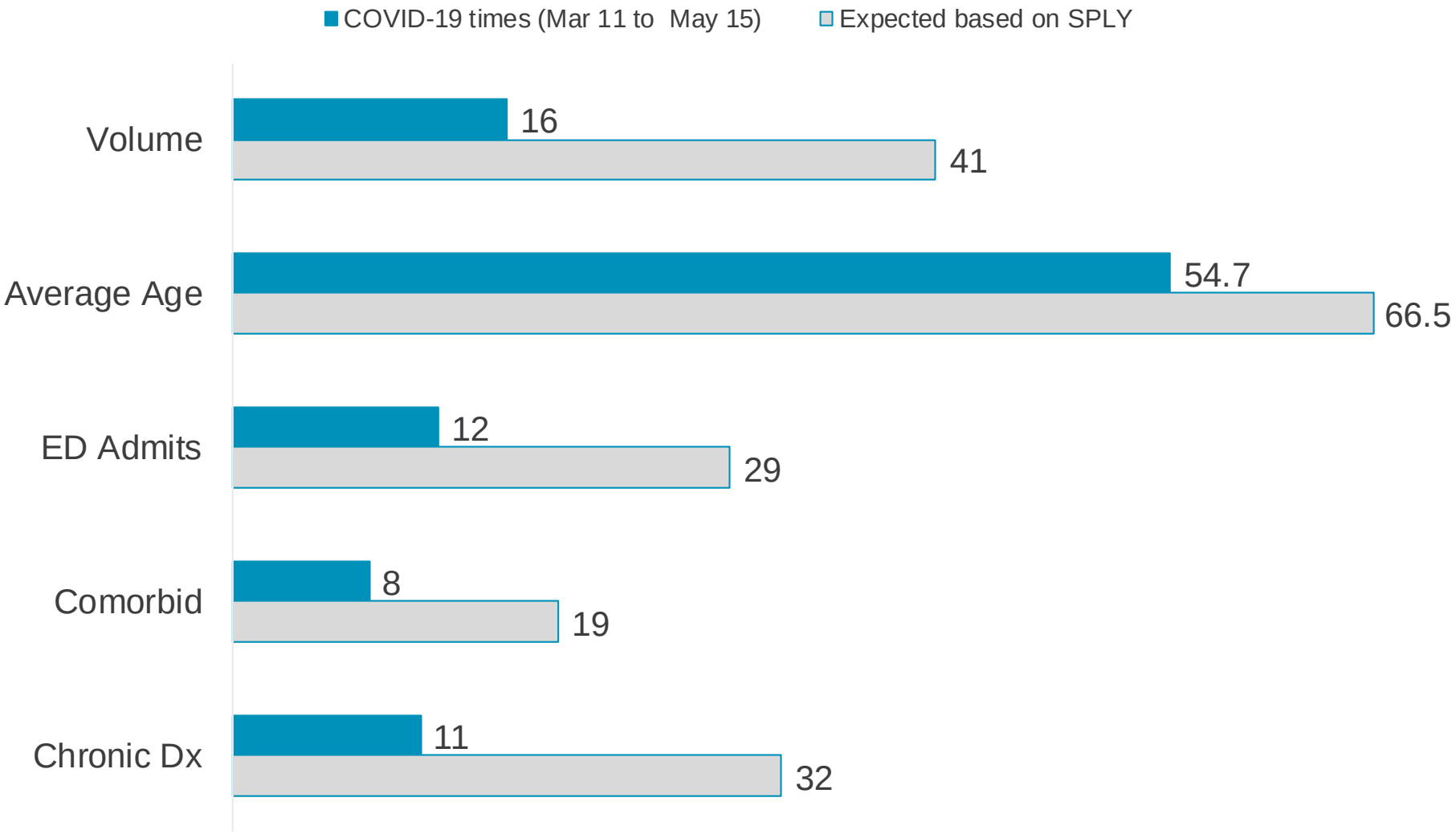
Heart Failure & Shock w/MCC (DRG)



AMI, discharged Alive w/ MCC (DRG)



Percut CV Proced w/ Drug-Eluting Stent w/o MCC (DRG)



COVID-19 and the Cardiovascular System

Hingson Chun, MD

Cardiac Electrophysiology, Cardiology

Hawai‘i Pacific Health

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Practice Transformation and Experience

Josephine Quensell, MD
Pediatrician

Nina Teruya, MD
Pediatrician

Lori Yamanaka, MD
Pediatrician

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Clinic Background

- Number of Physicians in Clinic: 3
- Practice size
- Exam rooms
- Pre-COVID-19 workflow

Changes in Practice with COVID-19

- Mid-March: Stopped answering our phones
- Split sick and well visits
- Prioritized the physicals
- Limited number of physicians in office
- Remote work for employees

Our “almost-virtual” Pediatric office

- In office sick visits: 0-1 per day
- Telemedicine
- 15 minute well child visits instead of every 30 minutes
- Empty waiting rooms
- Physicians Exchange calls

“Never waste a good crisis” – Winston Churchill

Practice Transformation and Experience

Shigeko Lau, MD

Pediatrician, *Hawai‘i Pediatrics*

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Clinic Background and response to pandemic: Shigeko Lau, M.D., LLC dba Hawaii Pediatrics

- Number of Physicians: 3

- **RAPID ADJUSTMENT TO PRACTICE:**
  - 12/31/2019: China reports cluster of pneumonia in Wuhan
  - 1/11/2020: 1st report of death related to the cluster
  - 1/21/2020: 1st confirmed US case reported (Novel coronavirus)
  - 1/26/2020: 1st report of suspected local transmission in US
  - 1/30/2020: WHO declares pandemic/global health emergency
  - 3/07/2020: 1st reported case in Hawai‘i
  - 3/13/2020: Trump declares national emergency
  - 3/23/2020: Gov. Ige’s shelter-in-place mandate begins

Dr. Lau – Changes in Practice

- Essential office visits only
  - All 2 y/o well checks and under, all others requiring immunizations, acute visits
  - Stricter triaging and screening
  - Telemedicine where appropriate
- Increased use of Telehealth
- Expanded blueprint
  - 3 doors and 1 wing for sick visits
- Half staff; the rest working remotely
  - No furloughs/lay-offs and continued full salary/benefits
  - PMPM helps
- Adopted recent HPH policy, attempted 20% face-to-face census
- Bottom line: achieve social distancing for patients and staff
  - Adjusting schedules, close monitoring

Dr. Lau – Experience

- "Transformed"; "I'm a believer". It's the new normal.
- Patients love Telehealth
- Great teamwork: PO/Community Leadership (Health, Business, Local government)
- Grateful for organization support
  - HHP is "big" but we get great support in achieving our quality metrics and improving work flow
  - Webinars: helpful updated information gleaned from various research initiatives
- **CHALLENGES:**
  - Access to supplies, especially disinfectants, PPE, etc
  - Requires "buy-in"/cooperation of entire staff – teamwork
  - Adopting the policy of a large reputable organization gives credibility

Telemedicine Coding and Billing Update

Keoki Clemente

Director, Revenue Integrity

Hawai‘i Pacific Health

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Telemedicine – Service types

- Telehealth (audio and video) = modifier -95
- Telephone = 99441-9943
- E-visit (patient portal) = 99421-99423

Telemedicine Reimbursement

- No cost-sharing for telemedicine services
- Payers reimburse 100% allowable
- No impact to HMSA PT physicians
- Telehealth (Video) – payment rate the same as in-person visit
- In-person visit = patient cost share applies

Telemedicine Reimbursement

- For Medicare Telehealth only, Medicare is allowing providers to select visit level using duration of visit or level of medical decision making

- Annual Wellness Visits – Telehealth ok, document attempt to obtain vitals

- Telephone visits same wRVUs and payment as established office visits
  - ✓ 99441 = 99212
  - ✓ 99442 = 99213
  - ✓ 99443 = 99214

COVID-19 Pre-surgical Asymptomatic Screening

- HMSA has decided to cover COVID-19 pre-surgical testing of asymptomatic patients with no cost share as of April 1, 2020.

- This exception covers COVID-19 RT-PCR testing (U0001, U0002, U0003, U0004, 87635) for asymptomatic patients before a surgery or procedure when rendered by a participating provider.

  - Z01.812 Encounter for preprocedural laboratory examination.
  - Z01.818 Encounter for other preprocedural examination.

- HMSA coverage will be through June 30, 2020. HMSA review this decision and determine if the period needs to be extended.

Q&A

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Thank you!

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

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