Health Data 4 Action:

COVID Research Opportunity

Responding to WH CTO "Call to Action"

- 1 Trusted, Open Data
- 2 Automated Public Health Reporting
- 3 Open COVID Registry Network

Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) — United States, February 12–March 16, 2020

Early Release / March 18, 2020 / 69

Please note: This report has been corrected

CDC COVID-19 Response Team (View author affiliations)

View suggested citation

"No data on serious underlying health conditions were available. Data...are preliminary and are missing for some key characteristics of interest, including hospitalization status (1,514), ICU admission (2,253), death (2,001), and age (386)." –as of March 16, a total of 4,226 COVID-19 cases in the United States had been reported to CDC



HEALTHCARE Issued on: March 2

Call to Action to the Tech Community on New Machine Readable COVID-19 Dataset



CTO role facilitates public/private partnerships; opportunity to improve data access, use for smarter public health response



Open Web Standards for Testing, Updates

schema blog

Official blog for schema.org

MONDAY, MARCH 16, 2020

Schema for Coronavirus special announcements, Covid-19 Testing Facilities and more

The COVID-19 pandemic is causing a large number of "Special Announcements" pertaining to changes in schedules and other aspects of everyday life. This includes not just closure of facilities and rescheduling of events but also new availability of medical facilities such as testing centers.

We have today published Schema.org 7.0, which includes fast-tracked new vocabulary to assist the global response to the Coronavirus outbreak.

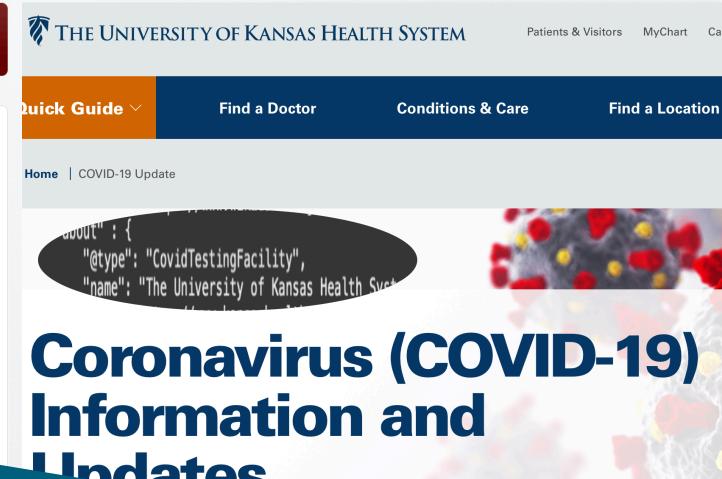
It includes a "SpecialAnnouncement" type that provides for simple date-stamped textual updates, as well as markup to associate the announcement with a situation (such as the Coronavirus pandemic), and to indicate URLs for various kinds of update such a school closures, public transport closures, quarantine guidelines, travel bans, and information about getting tested.

Many new testing facilities are being rapidly established worldwide, to test for COVID-19. Schema.org now has a CovidTestingFacility type to represent these, regardless of whether they are part of long-established medical facilities or temporary adaptations to the emergency.

We are also making improvements to other areas of Schema.org to help with the worldwide migration to working online and working from home, for example by helping event organizers indicate when an event has moved from having a physical location to being conducted online, and whether the event's "eventAttendanceMode" is online, offlline or mixed.

We will continue to improve this vocabulary in the light of feedback (github; doc), and welcome suggestions for improvements and additions particularly from organizations who are publishing such updates.

Dan Brickley, R.V.Guha, Google. Tom Marsh, Microsoft.



Search engines responded swiftly, posting instructions to tag trusted COVID information; U. of Kansas applies markup to make it easier for the public to learn about testing, among other topics



"Tuning" Biosense 2.0 Network ADT Feeds

? LOINCs for commercial in vitro diagnostics (IVD) test kits

The Regenstrief LOINC team has been working closely with a variety of IVD manufacturers to create and assign appropriate LOINC codes for their SARS-CoV-2 test kits. Some of these manufacturers have given us permission to list their test kits and corresponding LOINC codes on this page in order to make it as easy as possible for LOINC users to find the appropriate codes for their tests.

If you are a manufacturer, do not see your test kit listed, and would like us to include your test kit and corresponding LOINC information in this table, please contact us.

Manufacturer & test kit	Result LOINC(s)	Manufacturer's notice and if provided, URL for more information		
	OAF24 E (SADS CoV 2 DdDn cono	Emergency Use Authorization		
Abbott ID NOW™ COVID-19	94534-5 (SARS-CoV-2 RdRp gene result)	The final decision regarding the appropriate code(s) is		
		the responsibility of the testing laboratory.		
Abbott RealTime SARS-CoV-		Emergency Use Authorization		
2 assay for m2000	94500-6 (SARS-CoV-2 result)	The final decision regarding the appropriate code(s) is		
instrument		the responsibility of the testing laboratory. $ \\$		
	PCR1 - Order LOINC 94531-1	SARS-COV-2 R-GENE® product is under the		
	94533-7 (SARS-CoV-2 N gene result)	Research Use Only status. LOINC codes are provided		
bioMerieux ARGENE®	94534-5 (SARS-CoV-2 RdRp gene result) 94500-6 (overall SARS-CoV-2 result)	as an help to laboratories, they are not intended to imply or suggest any unapproved indication for use.		
		It is the responsibility of laboratories to review		
SARS-COV-2 R-GENE®		proposed SARS-CoV-2 associated LOINC codes and		
		ther they want to use them as provided or		
Oppo	rtunity to update M	U2 "Syndromic OINC data		

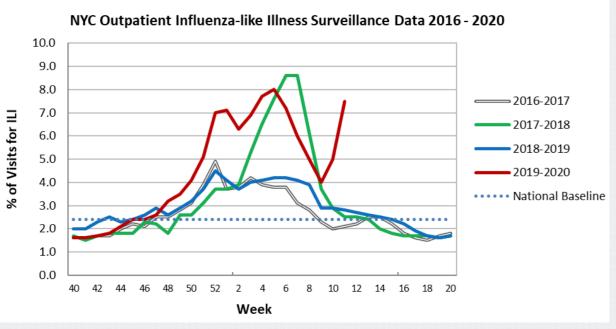
Surveillance" or "ELR" ADT feed to public

health with COVID-specific codes

Nichole Davis @NicholeDWBZ · 17h

Dr. Deborah Birx calls on states that have flu surveillance systems to keep an eye on peaks of flu-like activity.

Says four areas constitute the majority of new #COVID19 cases: NYC, Suffolk/Nassau/Westchester counties in NY. Says she believes test backlog's almost caught up.



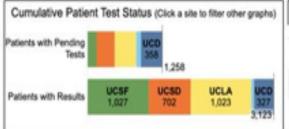


Source: loinc.org

Open COVID Surveillance Registry Network

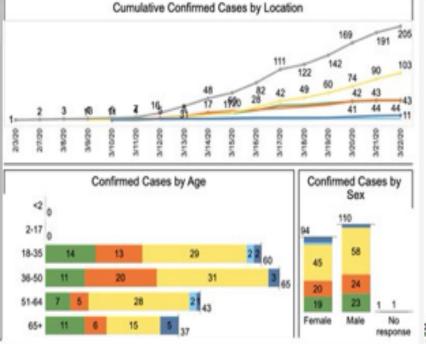


UC Health COVID-19 Positive Patients (Data through 3/22/2020 11:59 PM) Interim report, data subject to correction



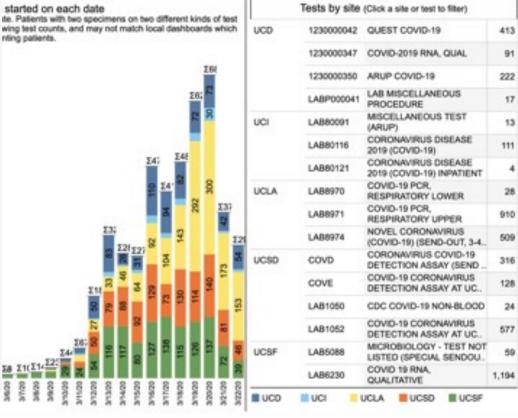
Cumulative Testing						
	UCLA	UCD	UCSD	UCSF	UCI	UC Health
Patients with Pending Tests Is.	367	358	304	155	74	1,258
Patients with Results	1,023	327	702	1,027	44	3,123
Total Positives	103	11	44	43	4	205





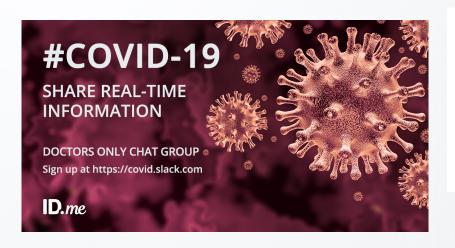
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Interim report, data subject to correction







Standardizing "Virtual Rounds" Reporting



	Admitted	GMF	ICU	Intubated	Prone	Death
RUMC	37	17	20	15	13	0
ROPH	5	3	2	0	0	0
RCMC	3	2	1	1	1	0
	Admitted	DC	Stable	Upgrade to ICU	Downgrade to GMF	
Total	45	13	23	3	0	

- i. Number of tests (total, and Net new in 24 hours)
- ii. Number positive cases
- iii. Number of positive admitted
- iv. Among admissions, number with ICU stay
- v. COVID 19 current ICU census
- vi. Among ICU patients, percent on ventilator
- vii. Among ICU Patients, percent on ECMO
- viii. ICU Mean LOS
- ix. % of admissions that died
- x. % of admissions recovered and sent home

"Virtual Rounds"

- Opportunity to join voluntary network to review timely updates via free physician identity-validated free Slack channel
- Phase 1 we report measures; phase 2 we standardize; phase 3 distributed queries for research
- Detailed clinical case vignettes to review:
 - -Source of Exposure
 - -Clinical History
 - -Clinical Course
 - -Whether patient intubated; ICU upgraded/downgraded
 - -LOS



OCHIN Shares "COVID Registry Playbook"

	Examples of Data Elements	Notes	Focus Areas	Examples of Data Elements	Notes
COVID-19 surveillance	 Diagnosis Lab orders and results^a Patient demographics (e.g., age, federal poverty level, language) Symptoms and vitals Pre-existing co-morbidities (e.g., COPD, diabetes, heart conditions) Social determinants (e.g., housing, neighborhood, income, nutrition/food, homeless, corrections) Mortality and cause of death^b Maternal child links in clinic (clinics generally link mothers with their 	a OCHIN is in the process of determining how test results will be integrated into the EHR b We are not yet certain about the timeliness of these data. We suspect this information will come from multiple sources, including our member clinics as well as states' vital statistics.	Impact on community health centers for COVID-19 and usual care	 COVID-19 Impact on capacity ^c Share of visits for COVID-19 and visits for non-COVID-19 Reason for visits and diagnosis eVisits and telephone visits - compare volume to pre-COVID-19 and track trajectory of use over time independently and as a share of total visits Assess impact on care access over time E.g., Next available appointment (either virtual, telephone or F2F) If possible, identify # of patients turned away from usual care^d 	c Analyses could be conducted in real time or retrospectively by time period. d Additional exploration is needed to determine whether and how this element could be measured.
Groupings by risk	children) OCHIN just released registries to health centers: New - COVID-19 Risk Registry includes Patients who are high risk Patients with relevant symptoms and additional risk (e.g., age, underlying conditions) Patients with social needs (e.g, living in homeless shelters) *New - COVID-19 Positive Patient Registry - Includes patients with positive COVID-19 diagnosis or test result. Indicators include: Patients with positive screens	Registries are based on algorithms that assign patients to relevant COVID-19 groups. They support assignment and tracking of patient cohorts and reporting.	Conduct retrospectiv e analysis of the care cascade for patients after diagnosis	Could look at screenings, diagnosis and treatment for patients identified as having COVID-19 Examples: Impact on health care system (longitudinal and compared to point in time pre-COVID-19) o # of total visits o # of visits for COVID-19 o # of visits for other types of care Treatment trajectories and comparison to outcomes Recovery treatment trajectories and comparison to outcomes	eThis work could be pursued at some time in the future, after emergency responses are wellestablished and a meaningful body of data has been collected.

Source: OCHIN

Patients with positive screensCoronavirus Lab Order Report

Coordinating Researcher Interest

Funding Opportunities

Health Data for Action: Leveraging Health Data for Actionable Insights (Data Access Award)

2018 Call for Proposals

Release Date: October 30, 2018 | Application Deadline: Fri, 14 Dec 2018

Purpose

The Health Data for Action: Leveraging Health Data for Actionable Insights (Data Access Award) (HD4A) program will support innovative research that uses the available data to answer important research questions. Applicants under this Call for Proposals (CFP) will write a proposal for a research study using data from one of the following four data providers: the Health Care Cost Institute (HCCI), OptumLabs, CareJourney, or athenahealth. The proposed studies should enable relevant, innovative, and actionable research that uses the available data to answer important, policy-relevant questions. Successful applicants will receive access to these data, which are described in greater detail in the CFP.

Application is Now Closed

Application closed as of: December 14, 2018, 3:00 p.m. ET

Key Materials

Full Funding Opportunity (PDF) →

Sample Research Questions

- For persons with both positive or negative test results (Clinical condition; Suspected source of exposure)
- For positive cases (Age; Hospitalization status; ICU admission status; Death status/Recovery)
- Is the incidence of new positive cases increasing, decreasing, staying the same?
- How is presentation to ED for cough/fever/flu-like symptoms changing, by geography? (+ calls to health dept?) and what % is COVIDrelated?
- Can we predict COVID mortality by population segment?

