OHDSI community efforts on COVID-19 disease natural history

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Oxford University

Ross Williams
Erasmus MC

on behalf of OHDSI community

Agenda

- Welcome - FDA/RUF team - 5 min
- OHDSI community overview - Patrick
- Characterization of patients hospitalized with COVID-19- Dani
- Prediction of COVID outcomes in symptomatic patients- Ross
- Project CHARYBDIS: Large-scale disease natural history of COVID progression- Talita
- Q&A - All - 15 min

OHDSI: a global open science community

OHDSI Collaborators:

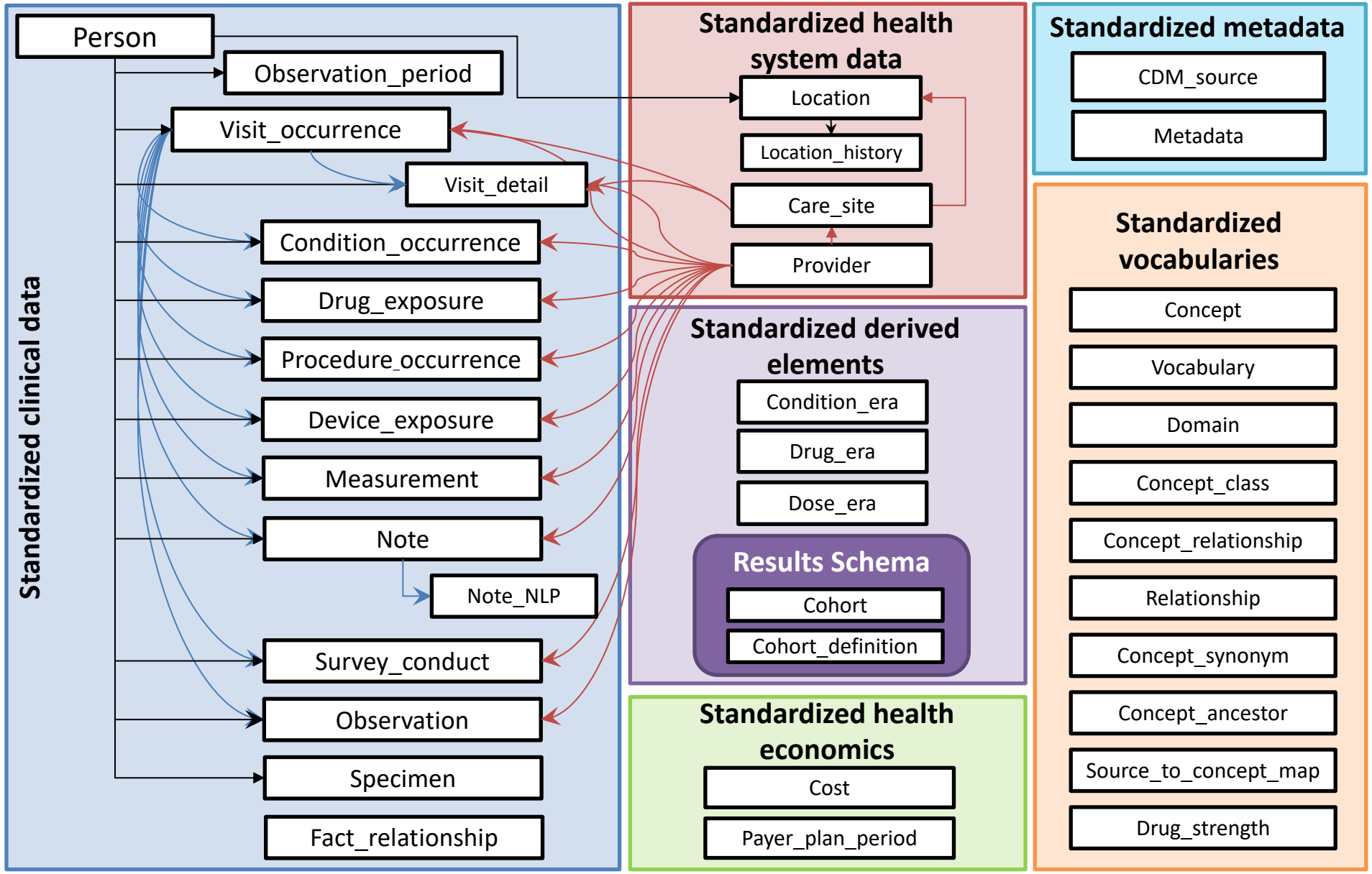
- 2,770 users
- 25 workgroups
- 18,700 posts on 3,250 topics

OHDSI Network:

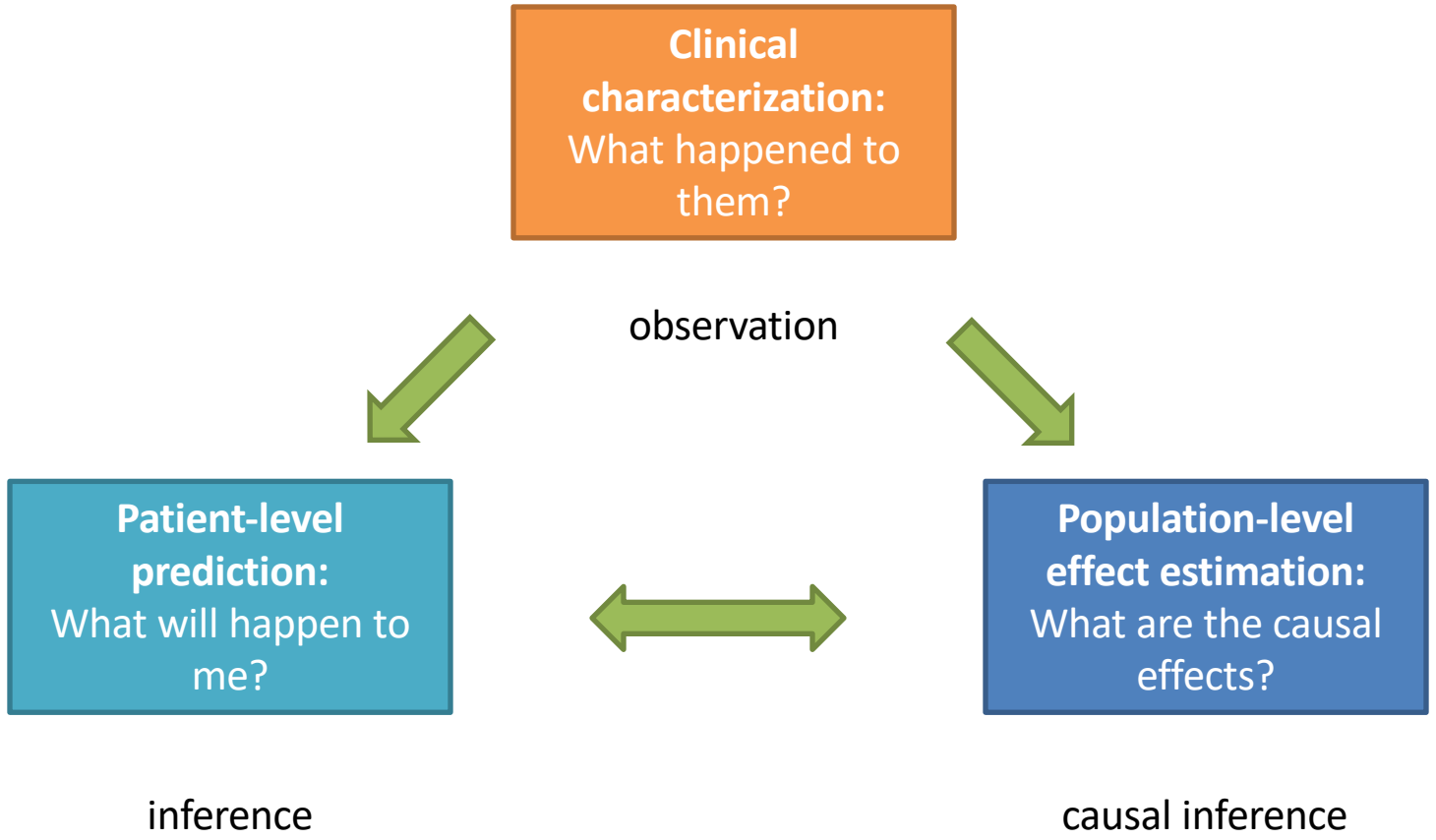
- 152 databases
- 18 countries
- approx. 600M patient records

OHDSI's Mission: To improve health by empowering a community to collaboratively generate the evidence that promotes better health decisions and better care

Open community data standard: OMOP CDM



Complementary evidence to inform the patient journey



What have we done?

In only **88** hours, we have:

- Convened **351** participants brought together from **30** countries
- Held **12** Global Huddles, **>100** collaborator calls, **>13,000** chat messages
- Engaged **15** concurrent channels
- Reviewed **>10,000** publications
- Drafted **9** protocols
- Released **13** study packages
- Designed **355** cohort definitions
- Assembled a distributed data network with **37** partners signed on to execute studies

https://www.ohdsi.org/covid-19-updates/

3 things that we did in 4 days together that nobody has ever done before

- First large-scale characterization of COVID patients in US and Asia
- First prediction model externally validated on COVID patients to support triage to ‘flatten the curve’
- Largest study ever conducted on the safety of hydroxychloroquine

Open collaboration requires FULL transparency in every step of the research process

- Study registered in ENCEPP with full protocol posted: http://www.encepp.eu/encepp/viewResource.htm?id=34498
- Phenotype definitions and analysis specifications are both human-readable and computer-executable using ATLAS against any OMOP CDM: https://atlas.ohdsi.org/#/estimation/cca/6
- Analysis source code freely available and directly downloadable: https://github.com/ohdsi-studies/Covid19EstimationHydroxychloroquine
- Manuscript posted on Medrxiv while awaiting peer-review: https://www.medrxiv.org/content/10.1101/2020.04.08.20054551v1
- All analysis results available for public exploration through interactive R shiny application: http://evidence.ohdsi.org/Covid19EstimationHydroxychloroquine

An international characterisation of patients hospitalised with COVID-19 and a comparison with those previously hospitalised with influenza

Prof Dani Prieto-Alhambra

University of Oxford

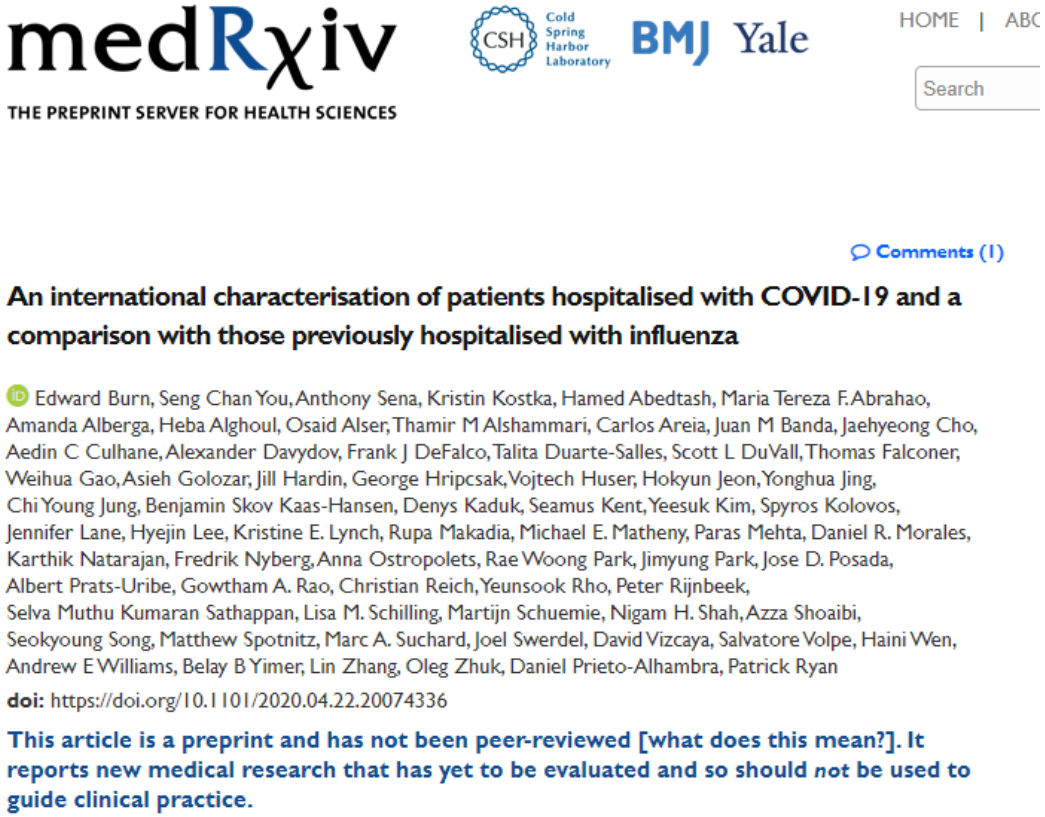
Open collaboration requires FULL transparency in every step of the research process

- Protocol and analysis source code freely available and directly downloadable: https://github.com/ohdsi-studies/Covid19HospitalizationCharacterization
- Phenotype definitions are both human-readable and computer-executable using ATLAS against any OMOP CDM: https://atlas.ohdsi.org/
- Manuscript posted on Medrxiv while awaiting peer-review: https://www.medrxiv.org/content/10.1101/2020.04.22.20074336v1
- All analysis results available for public exploration through interactive R shiny application: http://evidence.ohdsi.org/Covid19CharacterizationHospitalization/
- The study is a living evidence repository: any data partners can execute analysis and share aggregate results at any point, including updates as data accumulate

KEY FINDINGS

- 26,074 (US: 2,477, South Korea: 5,172, Spain: 18,425) included

- 49,331 summary characteristics extracted, summarised in an interactive web app (next slides)



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Comments (1)

An international characterisation of patients hospitalised with COVID-19 and a comparison with those previously hospitalised with influenza

Edward Burn, Seng Chan You, Anthony Sena, Kristin Kostka, Hamed Abedtash, Maria Tereza F. Abrahao, Amanda Alberga, Heba Alghoul, Osaid Alser, Thamir M Alshammari, Carlos Areia, Juan M Banda, Jaehyeong Cho, Aedin C Culhane, Alexander Davydov, Frank J DeFalco, Talita Duarte-Salles, Scott L DuVall, Thomas Falconer, Weihua Gao, Asieh Golozar, Jill Hardin, George Hripcsak, Vojtech Huser, Hokyun Jeon, Yonghua Jing, Chi Young Jung, Benjamin Skov Kaas-Hansen, Denys Kaduk, Seamus Kent, Yeesuk Kim, Spyros Kolovos, Jennifer Lane, Hyejin Lee, Kristine E. Lynch, Rupa Makadia, Michael E. Matheny, Paras Mehta, Daniel R. Morales, Karthik Natarajan, Fredrik Nyberg, Anna Ostropolets, Rae Woong Park, Jimyung Park, Jose D. Posada, Albert Prats-Uribe, Gowtham A. Rao, Christian Reich, Yeunsook Rho, Peter Rijnbeek, Selva Muthu Kumaran Sathappan, Lisa M. Schilling, Martijn Schuemie, Nigam H. Shah, Azza Shoaibi, Seokyoung Song, Matthew Spotnitz, Marc A. Suchard, Joel Swerdel, David Vizcaya, Salvatore Volpe, Haini Wen, Andrew E Williams, Belay B Yimer, Lin Zhang, Oleg Zhuk, Daniel Prieto-Alhambra, Patrick Ryan

doi: https://doi.org/10.1101/2020.04.22.20074336

This article is a preprint and has not been peer-reviewed [what does this mean?]. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.

https://www.medrxiv.org/content/10.1101/2020.04.22.20074336v1

*under peer review

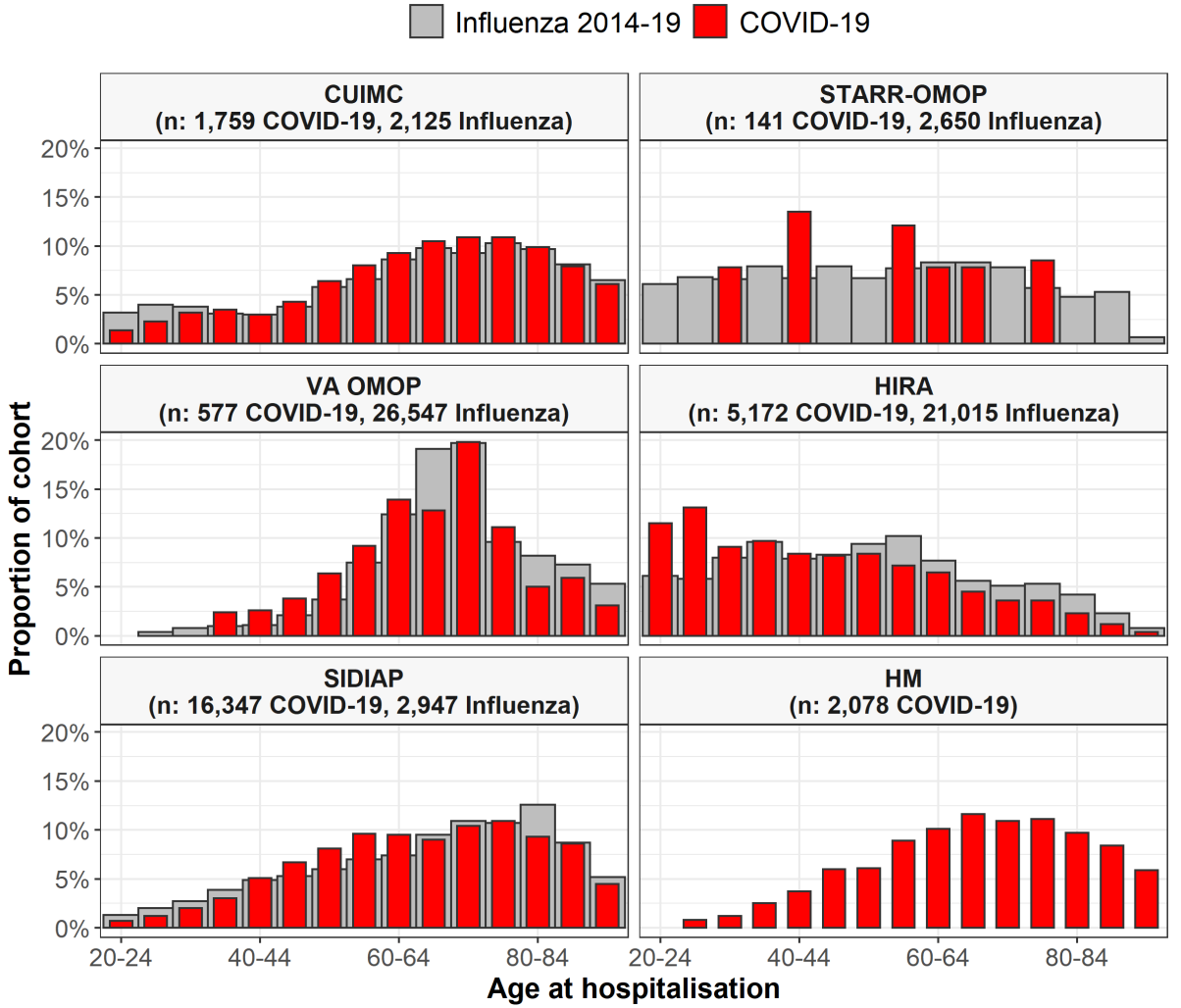
KEY FINDINGS (2)

- 26,074 COVID19 admitted patients from 3 continents
  - US: 2,477
  - South Korea: 5,172
  - Spain: 18,425

- 49,331 summary characteristics extracted, summarised in an interactive web app (next slides)

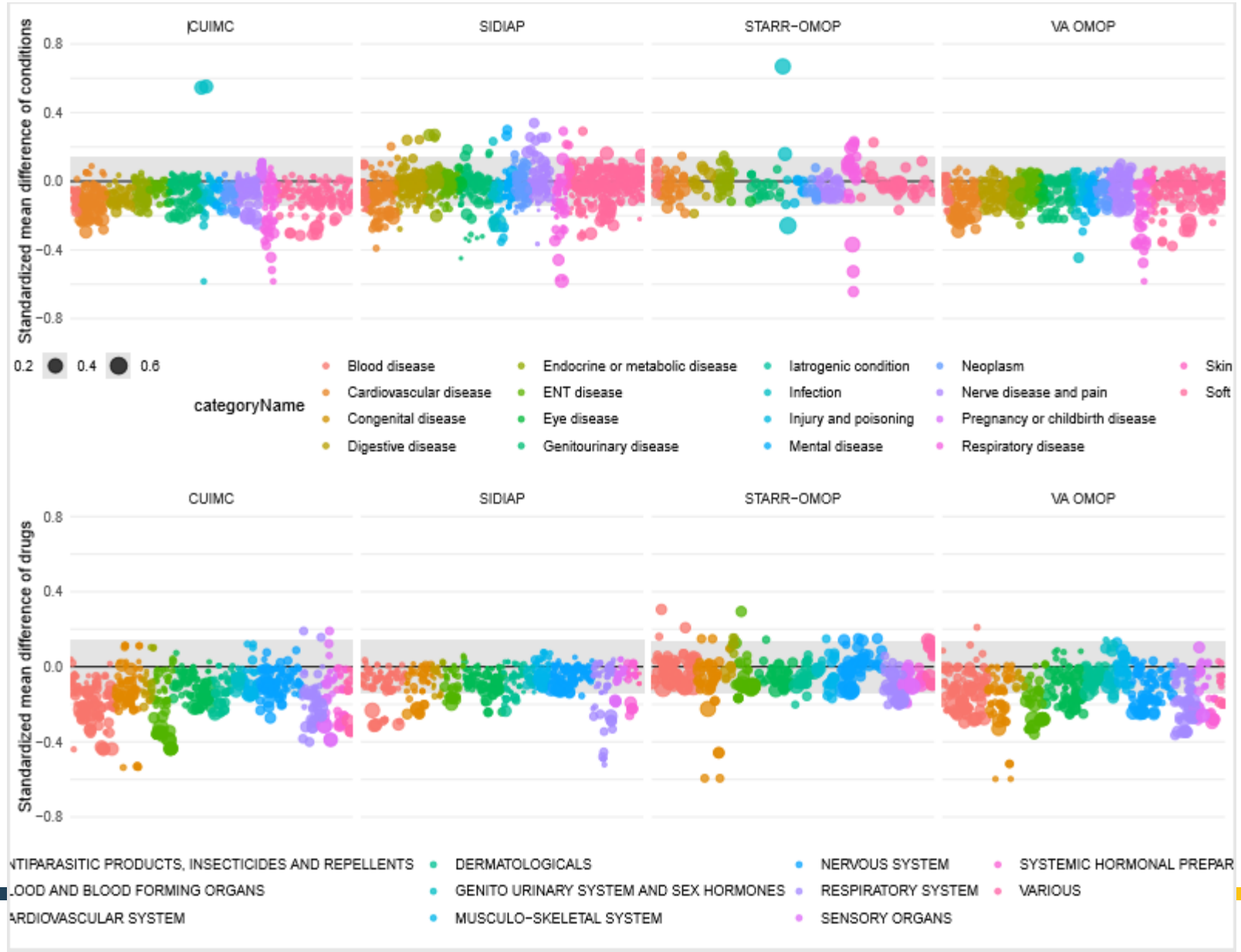
KEY FINDINGS (3)

- Patients were majority male in the US (VA OMOP: 94%, STARR-OMOP: 57%, CUIMC: 52%) and Spain (SIDIAP: 54%, HM: 60%)
- … but majority female in South Korea (HIRA: 56%).
- Age profiles varied across data sources.



KEY FINDINGS (4)

- COVID is no flu
- Healthier
- Less drug usage
- Exceptions obesity, diabetes, OA



OHDSI COVID and Influenza Hospitalization

About
Databases
Cohort Counts
Cohort Characterization
Compare Cohort Char.

Database

- [x] CUIMC
- [x] DCMC
- [x] HIRA
- [x] STARR-OMOP
- [ ] Tufts CLARET
- [x] VA OMOP

Cohort (Target)

COVID-19 with prior obser

○ Pretty ◉ Raw ◉ Binary ○ Continuous

Show 25 entries Search:

Covariate Name	CUIMC		DCMC		HIRA		STARR-OMOP		VA OMOP	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
age group: 00-04	<1.0%									
age group: 05-09									<1.7%	
age group: 15-19	<1.0%				2.1%	0.15	<7.1%			
age group: 20-24	1.2%	0.11			11.5%	0.34	<7.1%		<1.7%	
age group: 25-29	3.5%	0.19	16.7%	0.41	13.1%	0.36	<7.1%		<1.7%	
age group: 30-34	5.4%	0.23			9.1%	0.30	7.8%	0.28	<1.7%	
age group: 35-39	5.5%	0.23	3.3%	0.19	9.7%	0.31	7.1%	0.27	2.4%	0.16
age group: 40-44	5.0%	0.22	6.7%	0.26	8.4%	0.29	13.5%	0.37	2.6%	0.16
age group: 45-49	4.0%	0.20	3.3%	0.19	8.2%	0.29	<7.1%		3.8%	0.20
age group: 50-54	8.4%	0.29	3.3%	0.19	8.4%	0.29	<7.1%		6.4%	0.25
age group: 55-59	9.6%	0.31	10.0%	0.32	7.2%	0.27	12.1%	0.35	9.2%	0.30
age group: 60-64	9.3%	0.30	23.3%	0.49	6.5%	0.26	7.8%	0.28	13.9%	0.37
age group: 65-69	10.2%	0.32	3.3%	0.19	4.5%	0.21	7.8%	0.28	12.7%	0.36
age group: 70-74	9.9%	0.32	3.3%	0.19	3.6%	0.19	7.1%	0.27	19.9%	0.45
age group: 75-79	9.1%	0.30	10.0%	0.32	3.6%	0.19	8.5%	0.29	11.1%	0.33
age group: 80-84	6.8%	0.26	13.3%	0.37	2.3%	0.15	<7.1%		5.0%	0.22
age group: 85-89	5.2%	0.23	3.3%	0.19	1.2%	0.11	<7.1%		5.9%	0.24
age group: 90-94	5.0%	0.22			0.4%	0.07			3.1%	0.18
age group: 95-99	<1.0%				<0.1%				<1.7%	
condition_era group during day -30 through 0 days relative to index: Abdominal abscess	<1.0%						<7.1%		<1.7%	
condition_era group during day -30 through 0 days relative to index: Abdominal aortic aneurysm									<1.7%	
condition_era group during day -30 through 0 days relative to index: Abdominal aortic aneurysm without rupture									<1.7%	
condition_era group during day -30 through 0 days relative to index: Abdominal aortic ectasia									<1.7%	
condition_era group during day -30 through 0 days relative to index: Abdominal distension, gaseous	<1.0%						<7.1%		<1.7%	

http://evidence.ohdsi.org/Covid19CharacterizationHospitalization/

Seek COVER: Development and validation of a personalized risk calculator for COVID-19 outcomes in an international network

Ross D. Williams

Department of Medical Informatics, Erasmus University Medical Center, Rotterdam, The Netherlands

Open collaboration requires FULL transparency in every step of the research process

- Protocol and analysis source code freely available and directly downloadable: https://github.com/ohdsi-studies/Covid19PredictionStudies
- Phenotype definitions are both human-readable and computer-executable using ATLAS against any OMOP CDM: https://atlas.ohdsi.org/
- Manuscript posted on Medrxiv while awaiting peer-review: https://www.medrxiv.org/content/10.1101/2020.05.26.20112649v1
- All analysis results available for public exploration through interactive R shiny application: http://evidence.ohdsi.org/Covid19CoverPrediction
- The study is a living evidence repository: any data partners can execute analysis and share aggregate results at any point, including updates as data accumulate

Journal of the American Medical Informatics Association, 25(8), 2018, 969–975
doi: 10.1093/jamia/ocy032
Advance Access Publication Date: 27 April 2018
Research and Applications

Research and Applications

Design and implementation of a standardized framework to generate and evaluate patient-level prediction models using observational healthcare data

Jenna M Reps,[1] Martijn J Schuemie,[1] Marc A Suchard,[2] Patrick B Ryan,[1] and Peter R Rijnbeek[3]

[1]Janssen Research and Development, Raritan, NJ, USA, [2]Department of Biomathematics, UCLA School of Medicine, CA, USA, and [3]Department of Medical Informatics, Erasmus University Medical Center, Rotterdam,The Netherlands

Corresponding Author: Dr Jenna M Reps, Janssen Research and Development, Raritan, New Jersey, USA; jreps@its.jnj.com

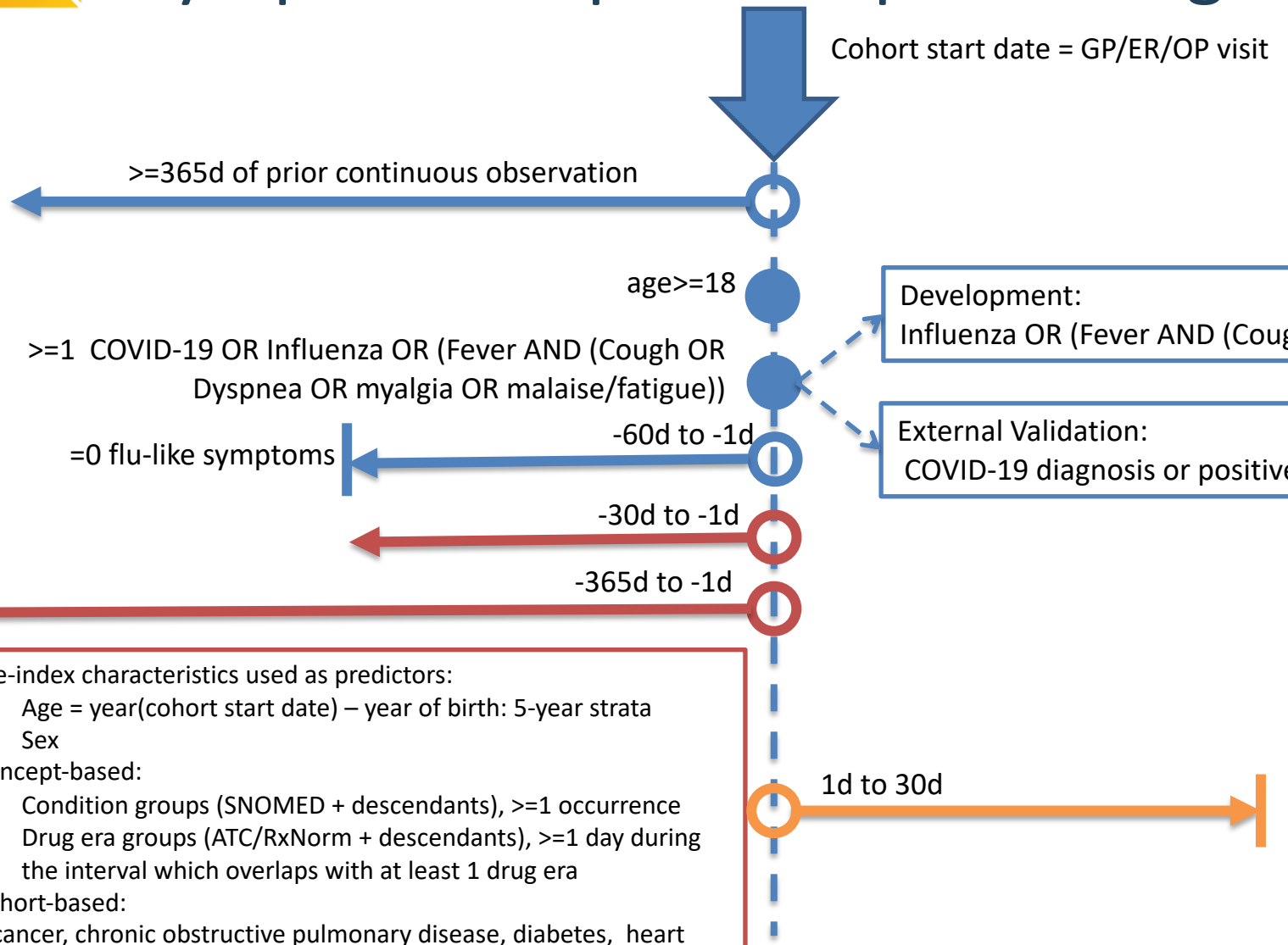
Received 30 May 2017; Revised 8 December 2017; Editorial Decision 23 February 2018; Accepted 15 March 2018

RESEARCH ARTICLE Open Access

Feasibility and evaluation of a large-scale external validation approach for patient-level prediction in an international data network: validation of models predicting stroke in female patients newly diagnosed with atrial fibrillation

Jenna M. Reps[1*], Ross D. Williams[2], Seng Chan You[3], Thomas Falconer[4], Evan Minty[5], Alison Callahan[6], Patrick B. Ryan[1], Rae Woong Park[3,7], Hong-Seok Lim[8] and Peter Rijnbeek[2]

COVER design for predicting COVID-19 outcomes in symptomatic patients presenting in outpatient setting



Development:
Influenza OR (Fever AND (Cough OR Dyspnea OR myalgia OR malaise/fatigue))

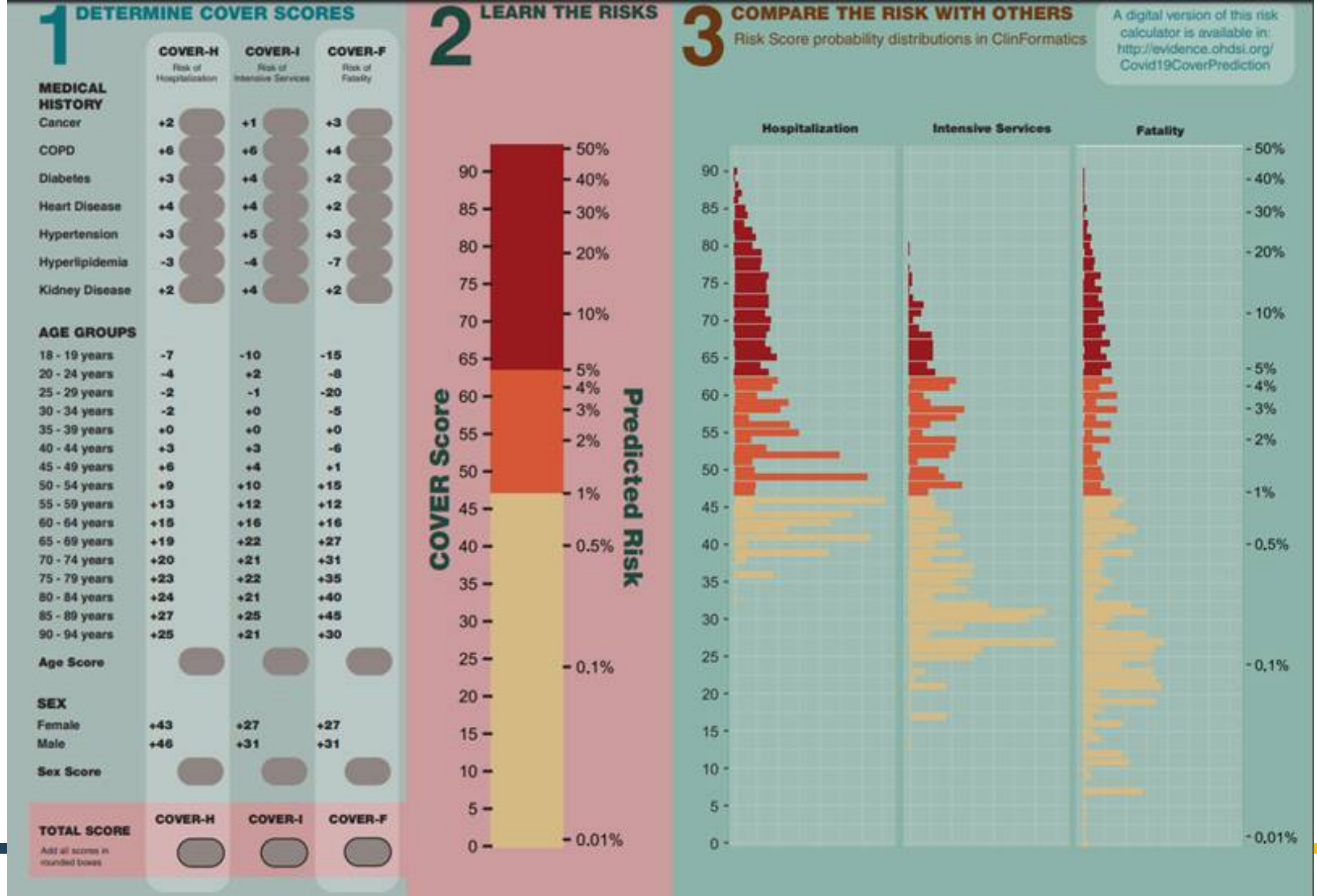
External Validation:
COVID-19 diagnosis or positive test

Pre-index characteristics used as predictors:
- Age = year(cohort start date) – year of birth: 5-year strata
- Sex

Concept-based:
- Condition groups (SNOMED + descendants), >=1 occurrence
- Drug era groups (ATC/RxNorm + descendants), >=1 day during the interval which overlaps with at least 1 drug era

Cohort-based:
- cancer, chronic obstructive pulmonary disease, diabetes, heart disease, hypertension, hyperlipidemia, kidney disease

Outcomes:
- Hospitalization with pneumonia
- Hospitalization requiring intensive services (mechanical ventilation, tracheostomy, or ECMO)
- Death


1 DETERMINE COVER SCORES
COVER-H
Risk of Hospitalization
COVER-I
Risk of Intensive Services
COVER-F
Risk of Fatality
MEDICAL HISTORY
Cancer +2 +1 +3
COPD +6 +6 +4
Diabetes +3 +4 +2
Heart Disease +4 +4 +2
Hypertension +3 +5 +3
Hyperlipidemia -3 -4 -7
Kidney Disease +2 +4 +2
AGE GROUPS
18 - 19 years -7 -10 -15
20 - 24 years -4 +2 -8
25 - 29 years -2 -1 -20
30 - 34 years -2 +0 -5
35 - 39 years +0 +0 +0
40 - 44 years +3 +3 -6
45 - 49 years +6 +4 +1
50 - 54 years +9 +10 +15
55 - 59 years +13 +12 +12
60 - 64 years +15 +16 +16
65 - 69 years +19 +22 +27
70 - 74 years +20 +21 +31
75 - 79 years +23 +22 +35
80 - 84 years +24 +21 +40
85 - 89 years +27 +25 +45
90 - 94 years +25 +21 +30
Age Score
SEX
Female +43 +27 +27
Male +46 +31 +31
Sex Score
TOTAL SCORE
Add all scores in rounded boxes
COVER-H
COVER-I
COVER-F
2 LEARN THE RISKS
COVER Score
Predicted Risk
90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0
50% 40% 30% 20% 10% 5% 4% 3% 2% 1% 0.5% 0.1% 0.01%
3 COMPARE THE RISK WITH OTHERS
Risk Score probability distributions in ClinFormatics
A digital version of this risk calculator is available in: http://evidence.ohdsi.org/Covid19CoverPrediction
Hospitalization
Intensive Services
Fatality

Personalizing risk is only useful if the prediction model is reliable

Internal validation in Influenza

Outcome	Predictors	No. Variables	AUC
Hospitalization with pneumonia	Conditions/drugs + age/sex	521	0.852
	Age/sex	2	0.818
	COVER-H	9	0.840
Hospitalization with pneumonia requiring intensive services or death	Conditions/drugs + age/sex	349	0.860
	Age/sex	2	0.821
	COVER-I	9	0.839
Death	Conditions/drugs + age/sex	205	0.926
	Age/sex	2	0.909
	COVER-F	9	0.896

External validation in COVID

Outcome	Database	AUC (95% ci)
Hospitalization with pneumonia	HIRA	0.806 (0.762-0.851)
	SIDIAP	0.748*
	TRDW	0.731 (0.611-0.851)
Hospitalization with pneumonia requiring intensive services or death	CUIMC	0.734 (0.699-0.769)
	HIRA	0.910 (0.889-0.931)
Death	CUIMC	0.820 (0.796-0.840)
	HIRA	0.898 (0.857-0.940)
	SIDIAP	0.895 (0.881-0.910)

Demo: COVER risk calculator

Multiple PLP Viewer

- Description
- Calculate Risk
- Summary
- Performance
- Model
- Log
- Data Info
- Help

Use this tool to calculate the risk of COVID outcomes:

Age:

18 50 94

18 26 34 42 50 58 66 74 82 90 94

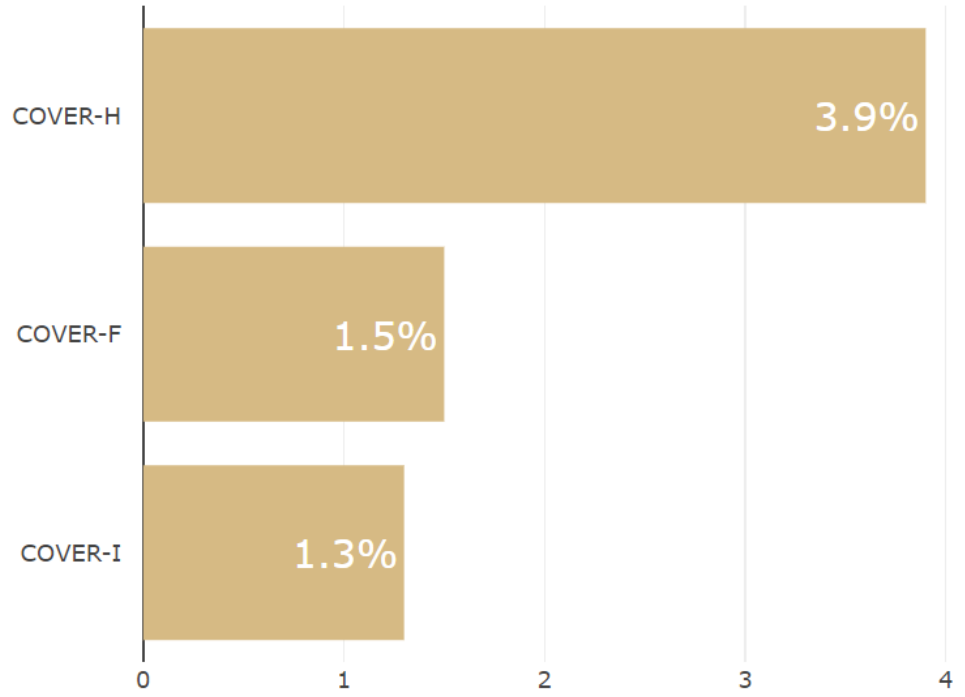
Sex

Male

- [ ] History of Cancer
- [ ] History of COPD
- [x] History of Diabetes
- [ ] History of Heart disease
- [ ] History of Hyperlipidemia
- [x] History of Hypertension
- [ ] History of Kidney Disease

Calculate Risk

Predicted Risk (%)



Description

Demo: COVID disease natural history explored through predictive modeling

Model Table

Download Model

Show 10 entries

Search:

	Covariate Name	Value	Count	Outcome Mean	Non-outcome Mean	Std Mean Diff
8	History of kidney disease	2	6578	0.172	0.0894	0.1744
4	History of hypertension	3	8722	0.2917	0.1174	0.3128
12	History of hyperlipidemia	-3	7172	0.2121	0.097	0.2279
6	History of heart disease	4	6400	0.2038	0.0863	0.2391
10	History of diabetes	3	4676	0.1576	0.0629	0.2161
14	History of COPD	6	1364	0.0523	0.0182	0.131
16	History of cancer	2	3608	0.1273	0.0484	0.1988
24	gender = MALE	3	32543	0.5856	0.4474	0.1975
23	age group: 90-94	25	558	0.022	0.0074	0.0854
22	age group: 85-89	27	1029	0.0318	0.0139	0.0849

Showing 1 to 10 of 24 entries

Previous 1 2 3 Next

Characterizing Health Associated Risks, and Your Baseline Disease In SARS-COV-2 (CHARYBDIS)

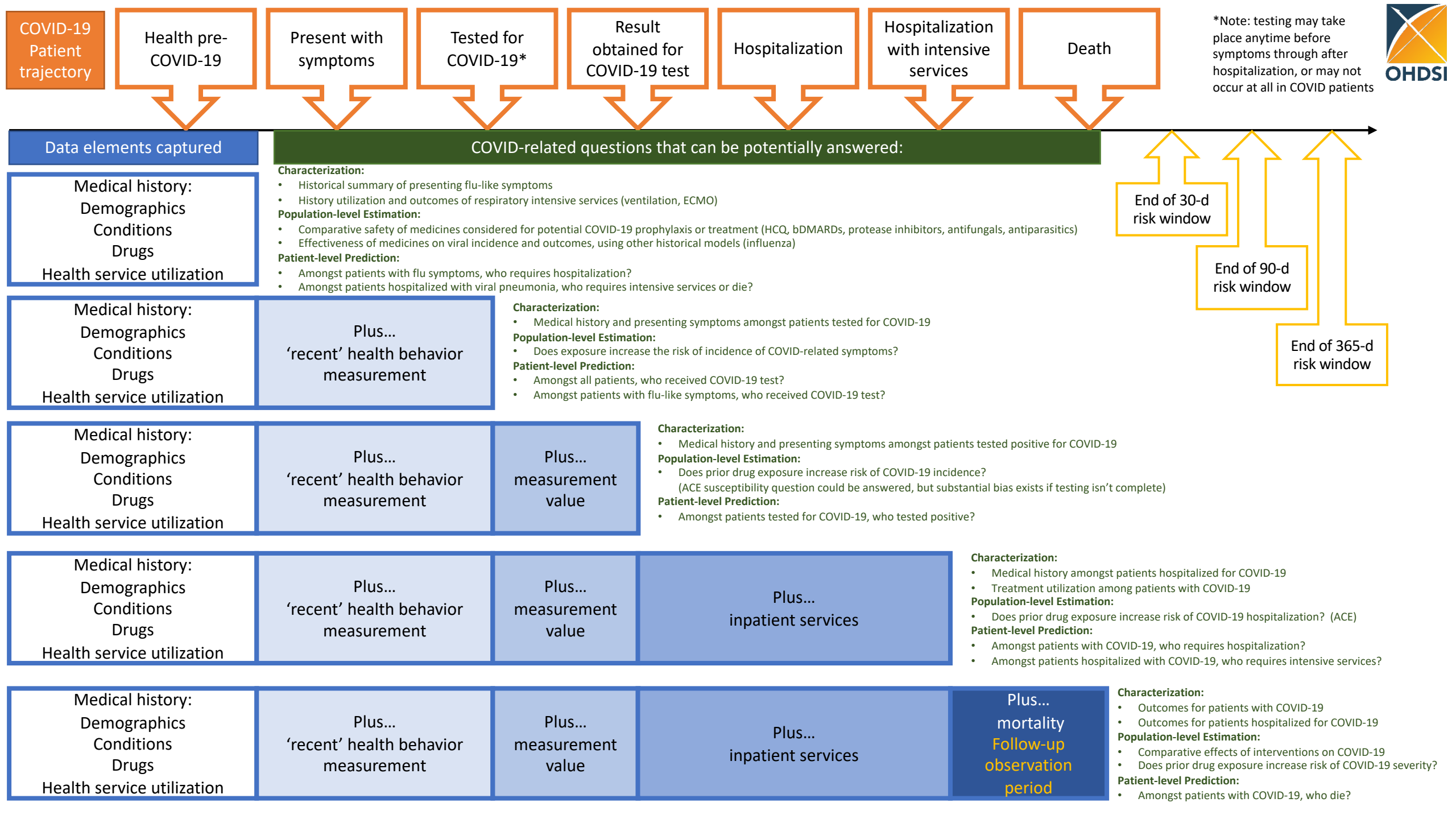
Talita Duarte-Salles

#OHDSICOVID19
Characterization Study Group

CHARYBDIS – Aims

1) Describe the baseline demographic, clinical characteristics, treatments and outcomes of interest among individuals with COVID-19 overall and stratified by sex, age and specific comorbidities

2) Describe characteristics and outcomes of influenza patients between September 2017 and April 2018 compared to the COVID-19 population


COVID-19 Patient trajectory
Health pre-COVID-19
Present with symptoms
Tested for COVID-19*
Result obtained for COVID-19 test
Hospitalization
Hospitalization with intensive services
Death
*Note: testing may take place anytime before symptoms through after hospitalization, or may not occur at all in COVID patients
OHDSI
Data elements captured
COVID-related questions that can be potentially answered:
End of 30-d risk window
End of 90-d risk window
End of 365-d risk window
Medical history:
Demographics
Conditions
Drugs
Health service utilization
Characterization:
• Historical summary of presenting flu-like symptoms
• History utilization and outcomes of respiratory intensive services (ventilation, ECMO)
Population-level Estimation:
• Comparative safety of medicines considered for potential COVID-19 prophylaxis or treatment (HCQ, bDMARDs, protease inhibitors, antifungals, antiparasitics)
• Effectiveness of medicines on viral incidence and outcomes, using other historical models (influenza)
Patient-level Prediction:
• Amongst patients with flu symptoms, who requires hospitalization?
• Amongst patients hospitalized with viral pneumonia, who requires intensive services or die?
Plus…
'recent' health behavior measurement
Characterization:
• Medical history and presenting symptoms amongst patients tested for COVID-19
Population-level Estimation:
• Does exposure increase the risk of incidence of COVID-related symptoms?
Patient-level Prediction:
• Amongst all patients, who received COVID-19 test?
• Amongst patients with flu-like symptoms, who received COVID-19 test?
Plus…
measurement value
Characterization:
• Medical history and presenting symptoms amongst patients tested positive for COVID-19
Population-level Estimation:
• Does prior drug exposure increase risk of COVID-19 incidence?
(ACE susceptibility question could be answered, but substantial bias exists if testing isn't complete)
Patient-level Prediction:
• Amongst patients tested for COVID-19, who tested positive?
Plus…
inpatient services
Characterization:
• Medical history amongst patients hospitalized for COVID-19
• Treatment utilization among patients with COVID-19
Population-level Estimation:
• Does prior drug exposure increase risk of COVID-19 hospitalization? (ACE)
Patient-level Prediction:
• Amongst patients with COVID-19, who requires hospitalization?
• Amongst patients hospitalized with COVID-19, who requires intensive services?
Plus…
mortality
Follow-up observation period
Characterization:
• Outcomes for patients with COVID-19
• Outcomes for patients hospitalized for COVID-19
Population-level Estimation:
• Comparative effects of interventions on COVID-19
• Does prior drug exposure increase risk of COVID-19 severity?
Patient-level Prediction:
• Amongst patients with COVID-19, who die?

CHARYBDIS – Target cohorts

COVID-19:

Persons **tested** for SARS-CoV-2
Persons **tested positive** for SARS-CoV-2
Persons **tested** with a **COVID-19 diagnosis** record or a SARS-CoV-2 **positive test**
Persons with a **COVID-19 diagnosis** or a SARS-CoV-2 **positive test**
Persons **hospitalized** with a COVID-19 diagnosis record or a SARS-CoV-2 positive test
Persons hospitalized and requiring **intensive services** with a COVID-19 diagnosis record or a SARS-CoV-2 positive test

Influenza:

Persons with **Influenza** diagnosis or positive test 2017-2018
Persons **hospitalized with influenza** diagnosis or positive test 2017-2018
Persons hospitalized with influenza diagnosis or positive test and **requiring intensive services** 2017-2018

CHARYBDIS – Stratification factors

COVID-19 and…

- Asthma
- Cancer
- Cardiac Outcomes
- Chronic Kidney Disease
- COPD
- Elderly
- End-Stage Renal Disease
- Gender Differences
- Heart Disease
- Hepatitis C
- HIV infection
- Hypertension
- Immune Disorders
- Obesity
- Pediatrics
- Pregnant Women
- Tuberculosis
- Type 2 Diabetes
- Dementia

… And more!

OHDSI
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

CHARYBDIS – Features

Pre-index characteristics (the last 30 days and the year prior to index):

- **Demographics**: Age, Sex
- **Conditions** groups (SNOMED + descendants)
- **Drug** groups (ATC/RxNorm + descendants)

Post-index characteristics (at index date and in the 30 days from index date):

- **Conditions** groups (SNOMED + descendants)
- **Symptoms**
- **Outcomes**
- **Procedural treatments**
- **Pharmacological treatments**
- **Death**

CHARYBDIS – Features

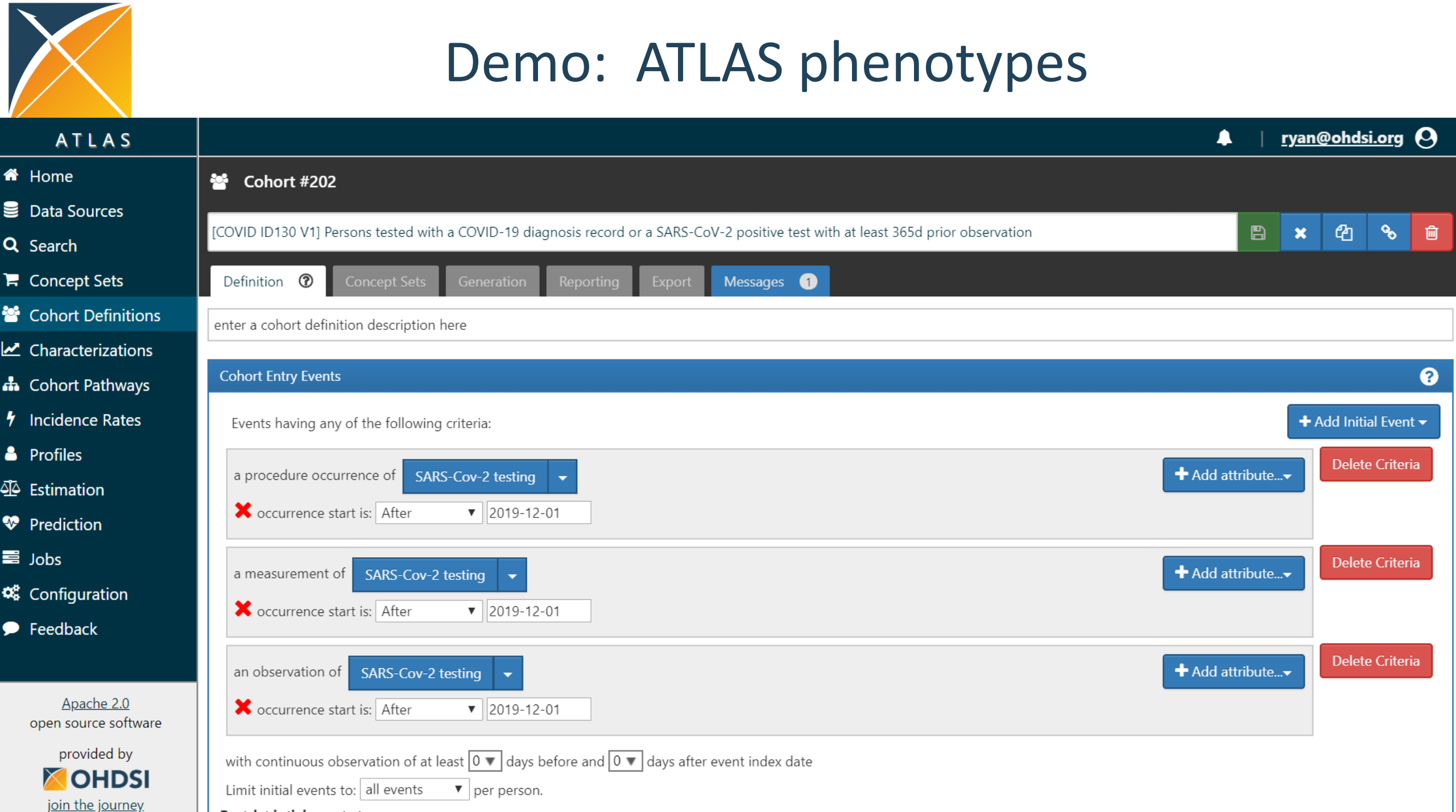
- Prevalent Asthma or Chronic obstructive pulmonary disease (COPD)
- Asthma/COPD Step 1
- Asthma/COPD Step 2
- Asthma/COPD Step 3
- Gestational diabetes
- Eclampsia and pre-eclampsia
- Fever
- Cough
- Myalgia
- Malaise or fatigue
- Dyspnea
- Anosmia OR Hyposmia OR Dysgeusia
- Persons with additional testing for SARS-Cov-2 (prior test >=1d before test)
- Persons with additional testing for SARS-Cov-2 (prior test >=5d before test)
- Hospitalization episodes
- Pneumonia during hospitalization
- Acute Respiratory Distress syndrome (ARDS) during hospitalization
- Acute kidney injury (AKI) diagnosis during hospitalization
- Acute kidney injury (AKI) using diagnosis codes and change in measurements during hospitlization
- Sepsis during hospitalization
- Venous thromboembolic (pulmonary embolism and deep vein thrombosis) events
- Pulmonary Embolism events
- Deep vein thrombosis events
- Heart failure during hospitalization
- Cardiac arrhythmia during hospitalization
- Bradycardia or heart block during hospitalization
- Supraventricular arrythymia during hospitalization
- ventricular arrhythmia or cardiac arrest during hospitalization
- death
- Stillbirth
- Livebirth Delivery
- Livebirth Preterm Delivery
- Livebirth Post term Delivery
- Livebirth excluding preterm and post term delivery
- Abortion
- Premature Rupture of Membranes
- Fetal growth restriction
- Cesarean section
- Hospitalization for Asthma
- Hospitalization for COPD
- Pneumonia episodes
- intensive services during hospitalization
- mechanical ventilation during hospitalization
- tracheostomy during hospitalization
- ECMO during hospitalization
- dialysis during hospitalization
- Discharge from hospitalization
- Persons with chest pain or angina
- Angina during hospitalization
- Persons with hepatic failure
- Acute pancreatitis events
- Total cardiovascular disease events
- Gastrointestinal bleeding events
- Cardiovascular-related mortality
- Transient ischemic attack events
- Stroke (ischemic or hemorrhagic) events
- Ischemic stroke events
- Hemorrhagic stroke (intracerebral bleeding) events
- Acute myocardial infarction events
- Bleeding during hospitalization
- Incident depression with no prior treatment and no mania/psychoses
- Hospitalization for psychosis
- Suicide and suicidal ideation
- Multi-system inflammatory syndrome (Kawasaki disease or

Open collaboration requires FULL transparency in every step of the research process

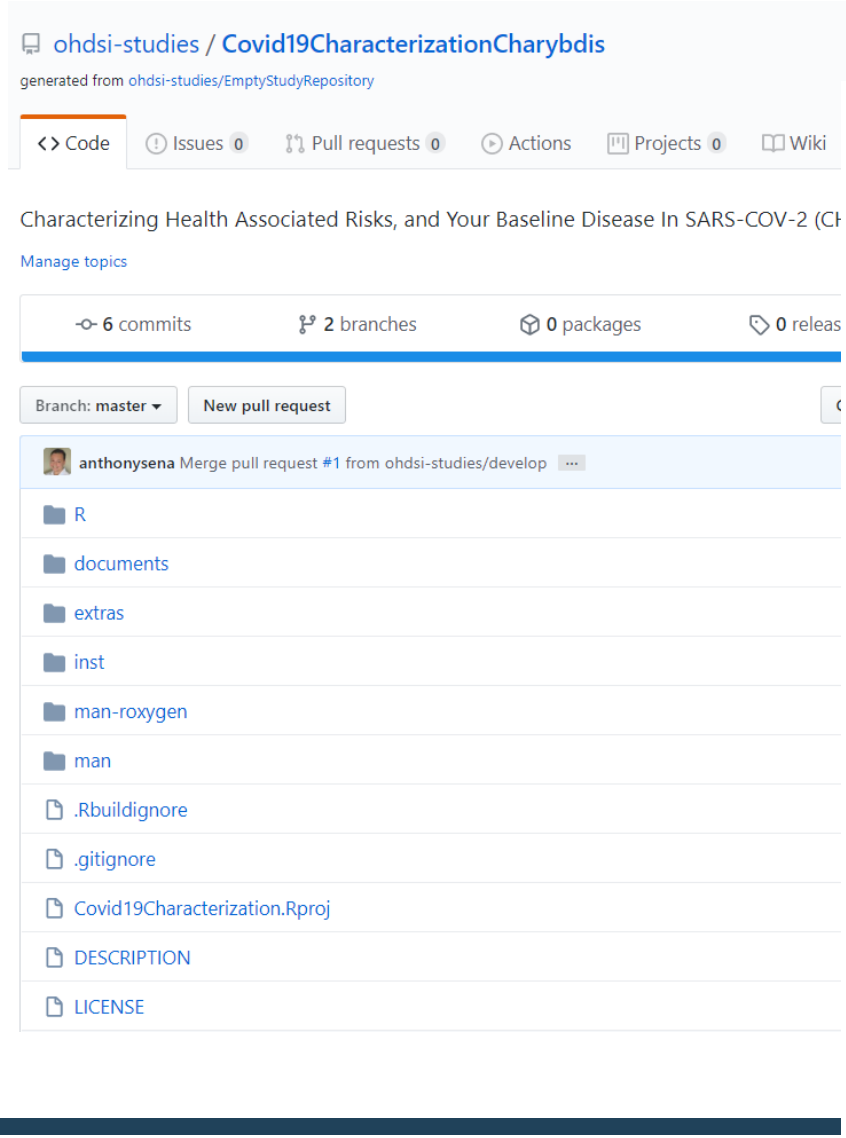
- Protocol and analysis source code freely available and directly downloadable: https://github.com/ohdsi-studies/Covid19CharacterizationCharybdis
- Phenotype definitions are both human-readable and computer-executable using ATLAS against any OMOP CDM: https://atlas.ohdsi.org/
- All analysis results will be available for public exploration through interactive R shiny application: http://data.ohdsi.org/Covid19CharacterizationCHARYBDIS/
- The study is a living evidence repository: any data partners can execute analysis and share aggregate results at any point, including updates as data accumulate

Join the Journey!

Demo: ATLAS phenotypes



Demo: CHARIBDYS Git repository



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Unwatch 7 | Star 0 | Fork 0

generated from ohdsi-studies/EmptyStudyRepository

Code | Issues 0 | Pull requests 0 | Actions | Projects 0 | Wiki

Characterizing Health Associated Risks, and Your Baseline Disease In SARS-COV-2 (CH

Manage topics

6 commits | 2 branches | 0 packages | 0 releas

Branch: master | New pull request

anthonysena Merge pull request #1 from ohdsi-studies/develop

- R
- documents
- extras
- inst
- man-roxygen
- man
- .Rbuildignore
- .gitignore
- Covid19Characterization.Rproj
- DESCRIPTION
- LICENSE

README.md

Characterizing Health Associated Risks, and Your Baseline Disease In SARS-COV-2 (CHARYBDIS)

Study Status Started

- Analytics use case(s): **Characterization**
- Study type: **Clinical Application**
- Tags: **OHDSI, Study-a-thon, COVID-19**
- Study lead: **Talita Duarte-Salles, Kristin Kostka, Albert Prats-Uribe**
- Study lead forums tag: **tduarte**, **krfeeney**, **Albert_Prats**
- Study start date: **April 21, 2020**
- Study end date: **Mid-June 2020**
- Protocol: **Word Doc**
- Publications: -
- Results explorer: -

Objectives: 1) Describe the baseline demographic, clinical characteristics, treatments and outcomes of interest among individuals tested for SARS-CoV-2 and/or diagnosed with COVID-19 overall and stratified by sex, age and specific comorbidities; 2) Describe characteristics and outcomes of hospitalized influenza patients between September 2017 and April 2018 compared to the COVID-19 population.

Installation

OHDSI

OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

COVID-19 Study-A-Thon

ohdsi.org/covid-19-updates

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Oleg Zhuk
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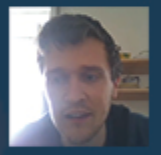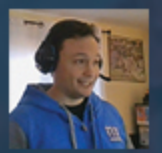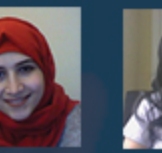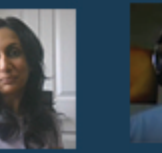
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