



# **“Welcome To The Journey”**

**OHDSI Community Call  
Feb. 9, 2021 • 11 am ET**



# What Questions Do You Have Today?

**Ask your question (or upvote others) about joining the journey with the OHDSI community**  
You have not responded

Enter a response

Submit

New Top

All caught up!

- 1 How to implement clinical data based on OMOP data model from scratch?
- 2 Where's best place to start to learn about OHDSI tools?
- 3 How do I start a new study?
- 3 Where can I learn about databases that have adopted OMOP CDM?
- 2 How do I join a workgroup?

[Pollev.com/PatrickRyan800](https://pollev.com/PatrickRyan800)

- Ask a question
- Vote for a preferred question

**Think of questions later?**

- Use the chat
- Raise your hand during the session
- Use the forum



# February/March OHDSI Community Calls

Date	Topic
Feb. 9	Welcome To The Journey (Newcomer-Focused ... Let's Build Our Community)
Feb. 16	Focus Topic: EHDEN
Feb. 23	Community Presentations (Theme: COVID)
March 2	Network Breakouts (ATLAS, HADES, ETL)
March 9	Working Groups Updates (Oncology, Psychology, NLP, Medical Devices)
March 16	Community Presentations (Theme: Advances in Patient-Level Prediction)
March 23	Focus Topic: OHDSI Work with FDA Best program
March 30	OHDSI Challenge



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# Three Stages of The Journey

**Where Have We Been?**

**Where Are We Now?**

**Where Are We Going?**





# OHDSI Shoutouts!



Congratulations to the team of  
**Edward Burn, Cristian Tebé, Sergio Fernandez-Bertolin, Maria Aragon, Martina Recalde, Elena Roel, Albert Prats-Uribe, Daniel Prieto-Alhambra & Talita Duarte-Salles** for this study: *The natural history of symptomatic COVID-19 during the first wave in Catalonia*, published in Nature Communications.


nature communications

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nature > nature communications > articles > article

Article | [Open Access](#) | Published: 03 February 2021

## The natural history of symptomatic COVID-19 during the first wave in Catalonia

Edward Burn, Cristian Tebé, Sergio Fernandez-Bertolin, Maria Aragon, Martina Recalde, Elena Roel, Albert Prats-Uribe, Daniel Prieto-Alhambra  & Talita Duarte-Salles

*Nature Communications* 12, Article number: 777 (2021) | [Cite this article](#)

1110 Accesses | 43 Altmetric | [Metrics](#)

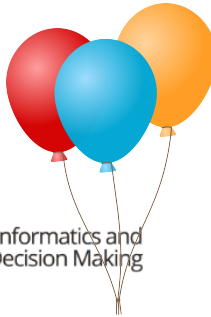
### Abstract

The natural history of coronavirus disease 2019 (COVID-19) has yet to be fully described. Here, we use patient-level data from the Information System for Research in Primary Care (SIDIAP) to summarise COVID-19 outcomes in Catalonia, Spain. We included 5,586,521 individuals from the general population. Of these, 102,002 had an outpatient diagnosis of COVID-19, 16,901 were hospitalised with COVID-19, and 5273 died after either being diagnosed or hospitalised with COVID-19 between 1st March and 6th May 2020. Older age, being male, and having comorbidities were all generally associated with worse outcomes.





# OHDSI Shoutouts!



Congratulations to the team of **Jenna Reps, Peter Rijnbeek, Alana Cuthbert, Patrick Ryan, Nicole Pratt and Martijn Schuemie** for this study: *An empirical analysis of dealing with patients who are lost to follow-up when developing prognostic models using a cohort design*, published in BMC Medical Informatics and Decision Making.

Reps et al. *BMC Med Inform Decis Mak* (2021) 21:43  
<https://doi.org/10.1186/s12911-021-01408-x>

BMC Medical Informatics and  
Decision Making

## RESEARCH ARTICLE

## Open Access



An empirical analysis of dealing with patients who are lost to follow-up when developing prognostic models using a cohort design

Jenna M. Reps<sup>1\*</sup>, Peter Rijnbeek<sup>2</sup>, Alana Cuthbert<sup>3</sup>, Patrick B. Ryan<sup>1</sup>, Nicole Pratt<sup>4</sup> and Martijn Schuemie<sup>1</sup>

### Abstract

**Background:** Researchers developing prediction models are faced with numerous design choices that may impact model performance. One key decision is how to include patients who are lost to follow-up. In this paper we perform a large-scale empirical evaluation investigating the impact of this decision. In addition, we aim to provide guidelines for how to deal with loss to follow-up.

**Methods:** We generate a partially synthetic dataset with complete follow-up and simulate loss to follow-up based either on random selection or on selection based on comorbidity. In addition to our synthetic data study we investigate 21 real-world data prediction problems. We compare four simple strategies for developing models when using a cohort design that encounters loss to follow-up. Three strategies employ a binary classifier with data that: (1) include all patients (including those lost to follow-up), (2) exclude all patients lost to follow-up or (3) only exclude patients lost to follow-up who do not have the outcome before being lost to follow-up. The fourth strategy uses a survival model with data that include all patients. We empirically evaluate the discrimination and calibration performance.

**Results:** The partially synthetic data study results show that excluding patients who are lost to follow-up can introduce bias when loss to follow-up is common and does not occur at random. However, when loss to follow-up was completely at random, the choice of addressing it had negligible impact on model discrimination performance. Our empirical real-world data results showed that the four design choices investigated to deal with loss to follow-up resulted in comparable performance when the time-at-risk was 1-year but demonstrated differential bias when we looked into 3-year time-at-risk. Removing patients who are lost to follow-up before experiencing the outcome but keeping patients who are lost to follow-up after the outcome can bias a model and should be avoided.

**Conclusion:** Based on this study we therefore recommend (1) developing models using data that includes patients that are lost to follow-up and (2) evaluate the discrimination and calibration of models twice: on a test set including patients lost to follow-up and a test set excluding patients lost to follow-up.





# OHDSI Shoutouts!



Congratulations to the team of **Vaclav Papez, Maxim Moinat, Stefan Payralbe, Folkert Asselbergs, R Thomas Lumbers, Harry Hemingway, Richard Dobson, Spiros Denaxas** for this study:

*Transforming and evaluating electronic health record disease phenotyping algorithms using the OMOP common data model: a case study in heart failure, published in JAMIA Open.*



## Article Contents

- Abstract
- Lay Summary
- BACKGROUND AND SIGNIFICANCE
- METHODS
- RESULTS
- DISCUSSION
- CONCLUSIONS
- SUPPLEMENTARY MATERIAL
- Contributors
- ACKNOWLEDGMENTS
- REFERENCES
- Supplementary data

## Transforming and evaluating electronic health record disease phenotyping algorithms using the OMOP common data model: a case study in heart failure

Vaclav Papez, Maxim Moinat, Stefan Payralbe, Folkert W Asselbergs, R Thomas Lumbers, Harry Hemingway, Richard Dobson, Spiros Denaxas

JAMIA Open, ooab001, <https://doi.org/10.1093/jamiaopen/ooab001>

Published: 04 February 2021 Article history

PDF Split View Cite Permissions Share

### Abstract

#### Objective

The aim of the study was to transform a resource of linked electronic health records (EHR) to the OMOP common data model (CDM) and evaluate the process in terms of syntactic and semantic consistency and quality when implementing disease and risk factor phenotyping algorithms.



### Email alerts

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ROMOP: a light-weight R package for interfacing with OMOP-formatted electronic health record data





# Workgroup Updates



## OHDSI Phenotype Library workgroup - 2021 OKR feedback request

■ Researchers



Gowtham\_Rao

2h

Thank you for the community brainstorming on OHDSI community breakout session on [January 19th 2020](#). Based on the discussion, we would like to propose the following OKRs for 2021. Please provide your input.

The workgroup page is [here](#). The workgroups mission, areas of focus are [here](#).

### The 2021 objective of the workgroup is

2021 Objective: To enhance the content and the adoption of the phenotype library across the community and establish a standardized process for cohort definition development and evaluation. The primary area of focus for 2021 is content development, with additional focus on COVID-19.

We are seeking feedback for the 2021 OKRs. Please see OKRs in MS teams [here](#) <sup>1</sup> .

Please engage in discussion here in MS teams

[Gowtham Rao: OHDSI Phenotype Library workgroup - 2021 OKR feedback request](#) <sup>1</sup>

posted in OHDSI / General at Feb 7, 2021 11:12 AM

♡ 🔗 ... ↩ Reply





# OHDSI Shoutouts!



**Any shoutouts from the community? Please share and help promote and celebrate OHDSI work!**







# Three Stages of The Journey

**Where Have We Been?**

**Where Are We Now?**

**Where Are We Going?**





# Upcoming Working Group Calls



Date	Time (ET)	Meeting
Wednesday	2 pm	Natural Language Processing
Thursday	1 pm	OMOP CDM Oncology – CDM/Vocabulary Subgroup
Friday	10 am	China Regional Chapter
Tuesday	9 am	OMOP CDM Oncology – Genomic Subgroup

[www.ohdsi.org/upcoming-working-group-calls/](http://www.ohdsi.org/upcoming-working-group-calls/)





# Upcoming Working Group Calls



The screenshot shows the OHDSI website homepage. The navigation menu includes: Who We Are, OHDSI Updates & News, Standards, Software Tools, OHDSI Studies, Book of OHDSI, Resources, New To OHDSI?, EHDEN Academy, This Week In OHDSI, Events & Collaborations, Collaborate with OHDSI in MTeams, and Social Media/Newsletter. A callout box from 'This Week In OHDSI' highlights 'OHDSI Community Calls' and 'Upcoming Working Group Calls'. A large blue arrow points to the 'Upcoming Working Group Calls' link.

## Welcome to OHDSI!

The Observational Health Data Sciences and Informatics (or OHDSI, pronounced "Odyssey") program is a multi-stakeholder, interdisciplinary collaborative to bring out the value of health data through large-scale analytics. All our solutions are open-source.

OHDSI has established an international network of researchers and observational health databases with a central coordinating center housed at Columbia University.

Read more [about us](#), about [our goals](#), and how

## 2020 OHDSI Symposium

Our 2020 OHDSI Global Symposium brought together a global research community for 18 hours of open science, international collaboration and community fun. The day included research presentations from community members, panels that brought together leaders from major healthcare organizations, as well as network sessions, the annual collaborator showcase, and plenty more. Check it all out at the link below.

[2020 OHDSI Global Symposium](#)



# Next APAC Community Call



The second **APAC Community Call** will be held tomorrow, Feb. 10, at 10 pm ET. This will also focus on welcoming newcomers to the APAC Community.

This call will use the same WebEx link as the first call. Future calls are anticipated to take place in the Teams environment.

Community Call Dates	Topics
1/28/21	Kick-off and overview
2/11/21	New to OHDSI
2/25/21	Collaboration showcase x2
3/11/21	Network Research x2
3/25/21	OMOP projects x2
4/8/21	Regional Update x6
4/22/21	10-minute tutorials x6
5/6/21	Collaboration showcase x2
5/20/21	Network Research x2
6/3/21	New to OHDSI
6/17/21	OMOP projects x2
7/1/21	Regional Update x6
7/15/21	10-minute tutorials x6
7/29/21	Collaboration showcase x2
8/12/21	Network Research x2
8/26/21	OMOP projects x2
9/9/21	New to OHDSI
9/23/21	10-minute tutorials x6
10/7/21	Regional Update x6
10/21/21	Collaboration showcase x2
11/4/21	Network Research x2
11/18/21	OMOP projects x2
12/2/21	10-minute tutorials x6
12/16/21	





# Upcoming Deadlines

## MEETINGS

### 37ICPE

- Africa Conference
- Annual Conference
- Asian Conference
- EuroDURG Meeting
- Mid-Year Meeting
- Other Meetings/Courses
- Overview



Abstracts are now being accepted for ICPE 2021

[Submit your abstract here](#)

Deadline: February 12, 2021

View how to complete the abstract [here](#)

Scholarship Applications now being accepted for ICPE 2021

[Submit your application here](#)

Deadline: March 1, 2021

Deadline for abstracts  
for ICPE 2021 is **THIS  
FRIDAY, February 12.**

Scholarship applications  
are accepted until  
**March 1.**



# Where Are We Going?

**Any other announcements  
of upcoming work, events,  
deadlines, etc?**





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# Today's Call Focus!



## Welcome To The Journey

**OHDSI Overview, tours through main community hubs**

**Hear from OHDSI veterans**

**Q&A Session ... ask on chat, in poll, in person**

**Next steps**

**Sarah Seager**



**Greg Klebanov**



**Mui Van Zandt**



**Andrew Williams**

