

# A sneak peek into the OHDSI2021 Symposium



### OHDSI2021 Schedule of activities

- Sunday, Sept 12: Tutorial: 'Building conceptsets'
- Monday, Sept 13: Workshop: 'OHDSI reproducibility challenge'
- Tuesday, Sept 14:
  - State of the Community
  - Plenary: 'OHDSI impact on COVID-19 pandemic'
  - Collaborator Showcase
  - Time for networking
- Wednesday, Sept 15:
  - Collaborator Showcase
  - Plenary: 'Generating reliable evidence'
  - More time for networking







## Glucagon-Like Peptide 1 Receptor Agonists and Chronic Lower Respiratory Disease Exacerbations Among Patients With Type 2 Diabetes

Diabetes Care 2021;44:1-9 | https://doi.org/10.2337/DC20-1794



#### OBJECTIVE

Emerging data from animal and human pilot studies suggest potential benefits of glucagon-like peptide 1 receptor agonists (GLP-1RA) on lung function. We aimed to assess the association of GLP-1RA and chronic lower respiratory disease (CLRD) exacerbation in a population with comorbid type 2 diabetes (T2D) and CLRD.

#### RESEARCH DESIGN AND METHODS

A new-user active-comparator analysis was conducted with use of a national claims database of beneficiaries with employer-sponsored health insurance spanning 2005–2017. We included adults with T2D and CLRD who initiated GLP-1RA or dipeptidyl peptidase 4 inhibitors (DPP-4I) as an add-on therapy to their antidiabetes regimen. The primary outcome was time to first hospital admission for CLRD. The secondary outcome was a count of any CLRD exacerbation associated with an inpatient or outpatient visit. We estimated incidence rates using inverse probability of treatment weighting for each study group and compared via risk ratios.

#### RESULTS

The study sample consisted of 4,150 GLP-1RA and 12,540 DPP-4I new users with comorbid T2D and CLRD. The adjusted incidence rate of first CLRD admission during follow-up was 10.7 and 20.3 per 1,000 person-years for GLP-1RA and DPP-4I users, respectively, resulting in an adjusted hazard ratio of 0.52 (95% CI 0.32–0.85). For the secondary outcome, the adjusted incidence rate ratio was 0.70 (95% CI 0.57–0.87).

#### CONCLUSIONS

GLP-1RA users had fewer CLRD exacerbations in comparison with DPP-4I users. Considering both plausible mechanistic pathways and this real-world evidence, potential beneficial effects of GLP-1RA may be considered in selection of an antidiabetes treatment regimen. Randomized clinical trials are warranted to confirm our findings.



# Sunday, Sept 12: Tutorial: 'Building conceptsets'

In this tutorial, we will examine a foundational element to conducting a high-quality observational study such as Albogami et al: building conceptsets – expressions to identify the list of concepts (representing either source codes like ICD-9 and ICD-10 or standards from vocabularies like SNOMED and RxNorm). We will review the publication to determine what conceptsets are necessary to produce the study populations and analysis results. We will then walk through a series of interactive demonstrations and breakout exercises to develop conceptsets from different starting points that researchers find themselves. Finally, we will discuss strategies to evaluate conceptsets and highlight OHDSI tools that can help improve the quality of your research.

#### Students will learn:

- What is a conceptset
- How to build a conceptset from a list of source codes
- How to build a conceptset from a list of drug names
- How to build a conceptset from a description of a clinical idea
- How to evaluate conceptsets

#### Who should take this tutorial:

- Researchers involved in the design or implementation of new observational studies
- Researchers who wish to evaluate reproducibility and generalizability of existing studies

Register now! Space is limited!

https://www.ohdsi.org/sept-12-building-conceptsets-tutorial/

Time: Sunday, 12Sept2021, 8:00amET-5:00pmET



# Monday, Sept 13: Workshop: 'OHDSI reproducibility challenge'

In this workshop, the 'OHDSI reproducibility challenge' will aim to reproduce the populations (exposures and outcomes) used in the analysis by Albogami et al. We will also aim to quantify the heterogeneity of interpretations that qualified researchers may produce when attempting to reproduce the same study. The Albogami study was purposefully selected as an example of current best practice, led by a leading research team in the field and published in a top clinical journal. The OHDSI reproducibility challenge is being conducted in collaboration with the lead author of the original study, though for the purposes of the workshop, only the information in the publication and supplemental materials will be used. Teams will independently work on two study design tasks, to be implemented in OHDSI ATLAS: 1) define the target exposure cohort, and 2) create cohorts for the primary and secondary outcomes. All teams will be provided access to an ATLAS instance with an empty cohort definition template, prepopulated with the necessary conceptsets to produce the cohorts, such that the focus of the reproducibility is limited to the logic of the cohort definitions and not selection of codes. Teams will separately implement the cohorts based on their interpretation of the publication. Final cohorts will then be shared and executed against the IBM MarketScan Commercial claims database (the same data as used in the original publication). Variation in cohort definition logic between teams will be reviewed, as well as empirical consequences of those differences will be quantified in terms of both cohort counts and the prevalence of baseline characteristics (demographics, prior conditions/drugs/procedures/measurements).

Results for the OHDSI reproducibility challenge will be summarized for presentation and publication.

#### Two ways to participate:

- Workshop collaborators participate in design of cohorts, interpretation of results, publication of findings
- Workshop observers learn by watching others

Time: Monday, 13Sept2021, 8:00amET-5:00pmET

Register now! Space is limited!

https://www.ohdsi.org/sept-13-ohdsi-reproducibility-challenge-workshop/



## Tuesday, Sept 14: Symposium

8:00amET-9:00amET State of the Community

9:00amET-12:00pmET Plenary: 'OHDSI impact on COVID-19 pandemic'

1:00pmET-5:00pmET Collaborator Showcase

5:00pmET onward Time for networking

Register now!

https://www.ohdsi.org/2021-ohdsi-global-symposium-info/



# This is NOT spam.....sign up to receive a surprise!

#### An OHDSI Symposium Surprise for you!



**OHDSI Events Manager** 

To

(i) You forwarded this message on 7/27/2021 10:20 AM.

#### Hello OHDSI Community!

If you are receiving this email it is because we show that you have registered for the 2021 Global OHDSI Symposium which will take place virtually in MSTeams from Sept. 12-15. While we are planning for yet another rewarding symposium, we would like to send you a small surprise prior to the symposium start date.

If you are interested in receiving this surprise in the mail, kindly fill out this form by August 15<sup>th</sup>!

#### Address Form for Surprise

Thanks for joining the journey!

Thank you!

2021 OHDSI Symposium Events Team symposium@ohdsi.org www.ohdsi.org Reply

≪ Reply Al



## Wednesday, Sept 15: Symposium

3:00amET-7:00amET Collaborator Showcase

8:00amET-12:00pmET Plenary: 'Generating reliable evidence'

1:00pmET onward Time for networking

Register now!

https://www.ohdsi.org/2021-ohdsi-global-symposium-info/



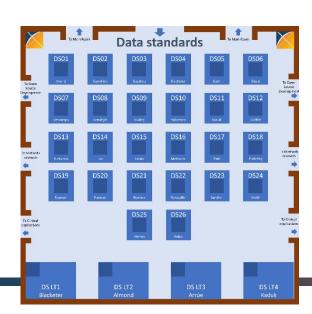
## OHDSI2021 Symposium is on gather.town!

# Join our virtual community!

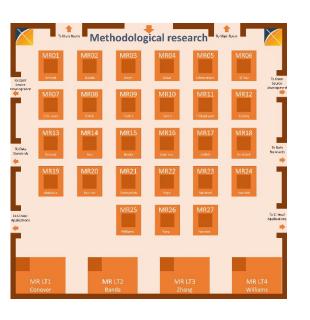


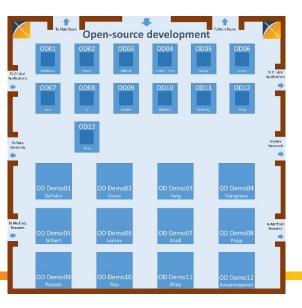
Choose your own **journey**!













## Collaborator Showcase reminders

- All showcase participants should have received notifications about their posters, software demos, lightning talks
  - Final posters and video recordings due 1Sept2021
- All need to respond to Elisse Katzman by Friday, 13Aug2021 to get scheduled for a OHDSI Gather.town tutorial



### **Titan Award Nominations**

#### **Titan Awards**

To recognize OHDSI collaborators (or collaborating institutions) for their contributions towards OHDSI's mission, the OHDSI Titan Awards were introduced at the 2018 Symposium and were handed out once again during both the 2019 and 2020 Symposiums.

Annually, community members are invited to nominate individuals or institutions they feel have made significant contributions towards advancing <a href="OHDSI">OHDSI</a>'s mission, vision and values. Once nominations are submitted, the OHDSI Titan Award Committee will select the award winners. Award winners will be announced before the networking reception at the annual symposium.

Nominations are now OPEN for our 2021 Titan Awards! You can submit your nomination(s) here; the deadline is Aug. 30 at 5 pm ET.

The award categories, as well as all previous recipients, can be found below.



Titan Award for Data Standards – to recognize extraordinary contributions by an individual, organization, or team in development or evaluation in community data standards, including OMOP common data model and standardized vocabularies

- 2020 Clair Blacketer/Janssen Research and Development
- 2019 Oncology Workgroup (Michael Gurley/Northwestern Univ., Rimma Belenkaya/Memorial Sloan Kettering Cancer Center, Robert Miller/Tufts CTSI)
- 2018 Vocabulary team (Christian Reich/IQVIA, Anna Ostropolets/Columbia Univ., Dmitry Dymshyts/Odysseus Data Services)



Titan Award for Methodological Research – to recognize extraordinary contributions by an individual, organization, or team in development or evaluation in analytical methods for clinical characterization, population-level effect estimation, or patient-level prediction

- 2020 Nicolas Thurin/Université de Bordeaux
- · 2019 Jenna Reps/Janssen Research and Development
- . 2018 Martijn Schuemie/Janssen Research and Development, Marc Suchard/University of California, Los Angeles

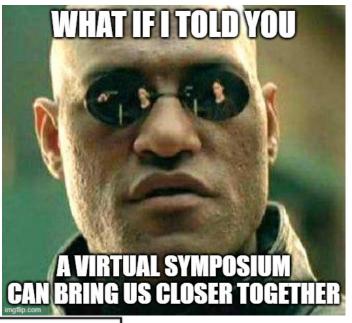
- Titan Award nominations due 30Aug2021 at 5pmET
  - Data standards
  - Methodological research
  - Open-source development
  - Clinical applications
  - Community collaboration
  - Community support
  - Community leadership

https://www.ohdsi.org/titan-awards/



### OHDSI2021 Meme-a-thon





After you register, you'll be added to the 'OHDSI2021 Symposium' Team. Go the 'OHDSI2021 Meme-a-thon' channel, add your own memes or upvote and comment on others!





OHDSIZOZI INGATHERTOWN





## Name That Collaborator! game

**How it started** 



How it's going



Submit one childhood face photo and one current, head-shot photo. We'll have a little fun during the symposium seeing how well we know our community. Forum to submit is on OHDSI Forums.



## OHDSI2021 Symposium is almost here!

- Register to take advantage of all of the collaboration opportunities
  - Sept12 Tutorial: building concepts
  - Sept13 Workshop: OHDSI Reproducibility Challenge
  - Sept14-15 Symposium
- Don't forget:
  - Sign up to receive a surprise!
  - Nominate a collaborator for Titan Awards!
  - Collaborator showcase presenters:
    - sign up for gather tutorial
    - submit final materials Sept1
- Start your OHDSI2021 Symposium journey now!