

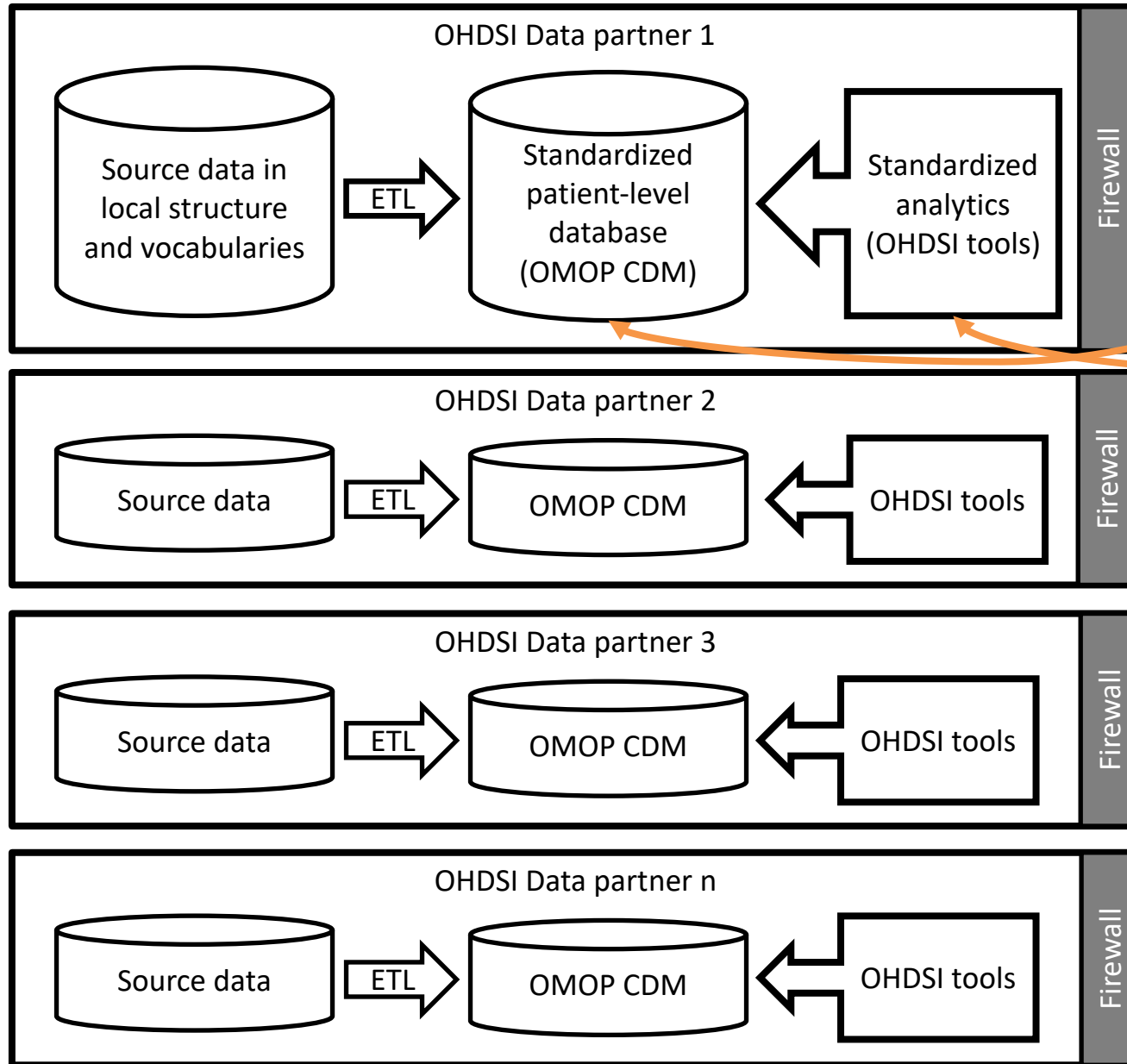
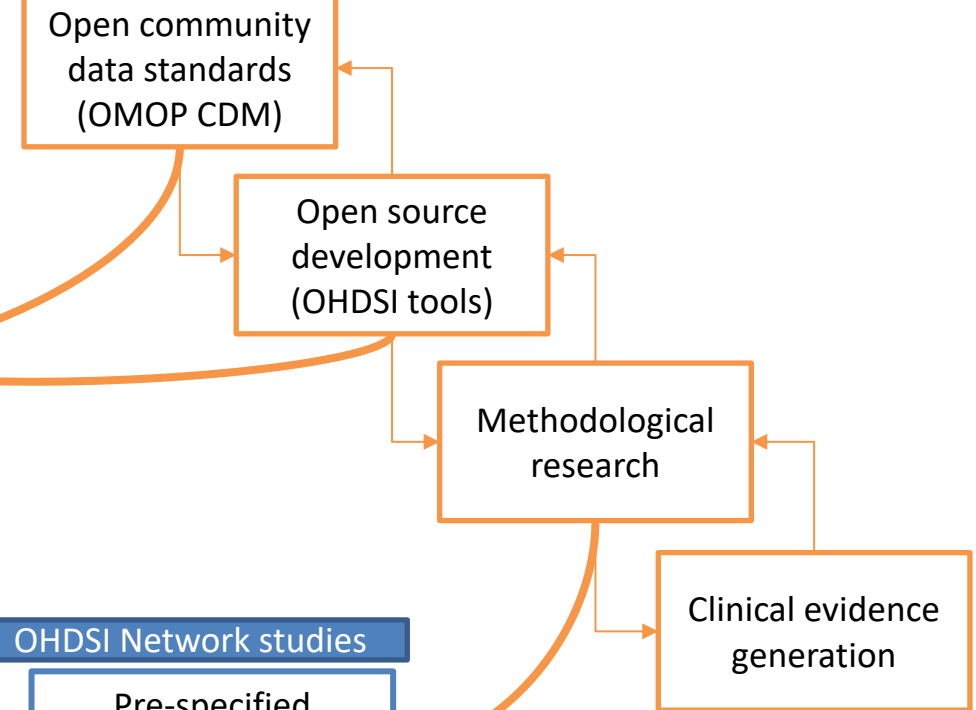
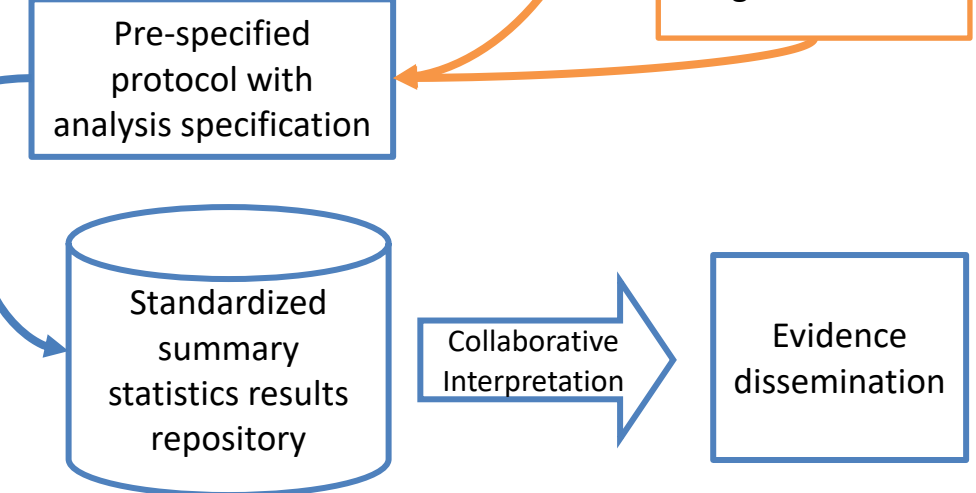


Save Our Sisyphus Challenge



Network studies are hard.

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**OHDSI data network****OHDSI collaborations****OHDSI Network studies**



## Save Our Sisyphus Challenge

The task of taking a research study from idea through design through execution through publication can seem a daunting challenge, much like rolling a boulder up a hill. That task is all the more challenging when researchers try to go it alone, as each step requires a distinct set of skills. Observational study design requires epidemiologic understanding and statistical methodological expertise. Implementing a study design requires statistical programming ability. Interpreting and reporting results requires domain knowledge of the clinical problem.

But when you are part of the OHDSI community, you never have to go it alone. And as a team effort, what seems an arduous task can become an efficient and effective process.

We are seeking important research questions that you want to contribute and participate in to take from idea to publication. The OHDSI community will provide support through every step of the process, working with you to design an appropriate protocol, implement a network analysis package, execute across OHDSI data partners, and prepare a manuscript for publication. Our goal is to collaboratively complete this network study over the course of 8 weeks across April and May, using the open-source tools and process that OHDSI has



Analytic use case	Type	Structure	Example
Clinical characterization	Disease Natural History	Amongst patients who are diagnosed with <insert your favorite disease>, what are the patient's characteristics from their medical history?	Amongst patients with <b>rheumatoid arthritis</b> , what are their demographics (age, gender), prior conditions, medications, and health service utilization behaviors?
	Treatment utilization	Amongst patients who have <insert your favorite disease>, which treatments were patients exposed to amongst <list of treatments for disease> and in which sequence?	Amongst patients with <b>depression</b> , which treatments were patients exposed to <b>SSRI, SNRI, TCA, bupropion, esketamine</b> and in which sequence?
	Outcome incidence	Amongst patients who are new users of <insert your favorite drug>, how many patients experienced <insert your favorite known adverse event from the drug profile> within <time horizon following exposure start>?	Amongst patients who are new users of <b>methylphenidate</b> , how many patients experienced <b>psychosis</b> within <b>1 year of initiating treatment</b> ?
Population-level effect estimation	Safety surveillance	Does exposure to <insert your favorite drug> increase the risk of experiencing <insert an adverse event> within <time horizon following exposure start>?	Does exposure to <b>ACE inhibitor</b> increase the risk of experiencing <b>Angioedema</b> within <b>1 month after exposure start</b> ?
	Comparative effectiveness	Does exposure to <insert your favorite drug> have a different risk of experiencing <insert any outcome (safety or benefit) > within <time horizon following exposure start>, relative to <insert your comparator treatment>?	Does exposure to <b>ACE inhibitor</b> have a different risk of experiencing <b>acute myocardial infarction</b> while <b>on treatment</b> , relative to <b>thiazide diuretic</b> ?
Patient level prediction	Disease onset and progression	For a given patient who is diagnosed with <insert your favorite disease>, what is the probability that they will go on to have <another disease or related complication> within <time horizon from diagnosis>?	For a given patient who is <b>newly diagnosed with atrial fibrillation</b> , what is the probability that they will go onto to have <b>ischemic stroke</b> in <b>next 3 years</b> ?
	Treatment response	For a given patient who is a new user of <insert your favorite chronically-used drug>, what is the probability that they will <insert desired effect> in <time window>?	For a given patient <b>with T2DM who start on metformin</b> , what is the probability that they will <b>maintain HbA1C&lt;6.5%</b> after <b>3 years</b> ?
	Treatment safety	For a given patient who is a new user of <insert your favorite drug>, what is the probability that they will experience <insert adverse event > within <time horizon following exposure>?	For a given patients who is a <b>new user of warfarin</b> , what is the probability that they will have <b>GI bleed</b> in <b>1 year</b> ?



January							
SU	MO	TU	WE	TH	FR	SA	
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	ICHPS, Scottsdale AZ		ISPOR due				
		2023 kickoff					
	15	16	17	18	19	20	21
		speed dating					
	22	23	24	25	26	27	28
		2023 priorities			WG OKR due		
	29	30	31				
		phenotype					

February							
SU	MO	TU	WE	TH	FR	SA	
				1	2	3	4
			Phenotype Phebruary				
			ISM due				
	5	6	7	8	9	10	11
	Phenotype Phebruary						
	12	13	14	15	16	17	18
	Phenotype Phebruary						
		ICPE due					
	19	20	21	22	23	24	25
	Phenotype Phebruary						
	26	27	28				
	Phenotype Phebruary						

March							
SU	MO	TU	WE	TH	FR	SA	
				1	2	3	4
	5	6	7	8	9	10	11
		SOS vote opens					
	12	13	14	15	16	17	18
	AMIA Summit, Seattle WA US		WG Leader summit				
	19	20	21	22	23	24	25
		SOS voting ends					
	26	27	28	29	30	31	
	SOS challenge kickoff						

April							
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	SOS challenge: data diagnostics						
	9	10	11	12	13	14	15
	SOS challenge: phenotype development						
			MLHC due				
	16	17	18	19	20	21	22
	SOS challenge: phenotype evaluation						
				DevCon tbd			
	23	24	25	26	27	28	29
	SOS challenge: analysis design						
	30						

May							
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	SOS challenge: network execution						
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	ISPOR, Boston MA US						
	SOS challenge: diagnostics						
	14	15	16	17	18	19	20
	SOS challenge: evidence synthesis						
	21	22	23	24	25	26	27
	SOS challenge: result		ACIC, Austin TX US				
		Rstudio, Dallas Tx					
	28	29	30	31			

June							
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	AIPM, Portland ME US						
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	SER, Portland OR US						
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	DIA, Boston MA US						

July							
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	MedInfo, Sydney Australia			OHDSI APAC			
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	Sydney						
	23	24	25	26	27	28	29
	30	31					

August							
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	JSM, Toronto, ON, CA			ML4HC, NY US			
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	20	21	22	23	24	25	26
			ISPE, Halifax, Nova Scotia, CA				
	27	28	29	30	31		

September							
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October							
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						OHDSI Global	
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	tbd						
	29	30	31				

November							
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	ISOP, Bali, Indonesia						
	12	13	14	15	16	17	18
	AMIA, New Orleans, US						
	19	20	21	22	23	24	25
	26	27	28	29	30		

December							
SU	MO	TU	WE	TH	FR	SA	
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	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
			2023 year in review				
	17	18	19	20	21	22	23
		holiday party					
	24	25	26	27	28	29	30



# SOS Challenge schedule of events

- 28Feb2023: SOS Study idea submissions due
- 7Mar2023: Finalist ideas presented on community call; voting opens
- 21Mar2023: SOS idea voting ends
- 28Mar2023: SOS Challenge kickoff: tutorial: how to initiate a network study : ohdsiStudies Git repo, protocol, publication
  - 28Mar2023: Collaborator sign up to participation (data partner and other contributors)
  - 1Apr2023: Background section of publication complete; concept protocol complete
- 4April2023: Tutorial: Data diagnostics
  - 6Apr2023: Data partners share data diagnostics results; 7Apr2023: Office hours for data diagnostics debugging
- 11Apr2023: Tutorial: Phenotype development
  - 15Apr2023: Candidate phenotypes completed
- 18Apr2023: Tutorial: Phenotype evaluation
  - 21Apr2023: Data partners share phenotype diagnostics results; 22Apr2023: Office hours for phenotype diagnostics debugging
- 25Apr2023: Tutorial: Creating analysis specifications
  - 30Apr2023: Methods section of publication complete
- 2May2023: Tutorial: Network execution and results sharing
  - 5May2023: Office hours for network execution
- 9May2023: Tutorial: Study diagnostics
  - 11May2023: Data partners share study diagnostic results; 12May2023: Office hours for study diagnostics debugging
- 16May2023: Tutorial: Evidence synthesis
  - 18May2023: Final results from data partners locked; 19May2023: Meta-analysis complete and Rshiny posted
- 23May2023: Tutorial: Interpreting results
  - 30May2023: Results and discussion section of publication complete





# What we need from you (and what you'll get in return)

- Good ideas of important clinical questions
  - You can be principal investigator and potential co-author of your own network study!
- Data partners willing to participate in distributed analysis
  - Learn how to run data diagnostics for this study and any other
  - Get support setting up your environment to execute OHDSI packages
  - Visibility for the data source to show it is fit-for-purpose
  - Recognition for your contributions as potential co-author
- Lead and support tutorials and office hours to assist community in working through each step along the journey
  - Recognition for your contributions as potential co-author
  - Meet new colleagues to foster future collaborations (with folks who now owe you a favor 😊)





# OHDSI Authorship Guidance

## OHDSI Authorship Guidance

This document aims to help determine who qualifies for authorship on an OHDSI scientific paper.

### Authorship requirements

OHDSI follows the ICMJE guidelines for authorship requirements:

- **Substantial** contributions to
  - the **conception** or **design** of the work, OR
  - the **acquisition** of, or **access** to the data, OR
  - **analysis** of the data, OR
  - **interpretation** of results

AND

- **Drafting** the work or **reviewing** it critically for important intellectual content,

AND

- Final **approval** of the version to be published,

AND

- Agreement to be **accountable** for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Those who contributed to the paper but do not meet these requirements may be included in the acknowledgement section of the paper.

### Examples

Scenarios where the contributor **meets** the criteria for authorship (assuming the contributor also reviews and approves the manuscript and agrees to be held accountable):

- Interpreting the data and writing the first full draft of the manuscript, including outline.
- Contributing to the design of the study, for example by reviewing negative controls.
- Creating cohort definitions used in the study.
- Developing the study package implementing the study.
- Performing a literature review informing the design of the study.
- Performing a literature review, and putting the study results in the context of the prior research.
- Helping interpret results by contributing to the discussion of the results.
- Performing a statistical analysis of the data.
- Designing novel visualizations of the results.
- Executing the study by using OHDSI's standardized analytical tools (e.g. ATLAS).
- Providing technical support for the execution of the study, for example debugging the study package execution at a site.
- Having developed software used in the study.
- Having converted data used in the study to the Common Data Model.

Scenarios where the contributor **does not meet** the criteria for authorship:

- Editing the manuscript for grammatical mistakes.
- Making minor edits to the choice of words in the manuscript.
- Attending meetings without making substantial contributions to the discussion.
- Executing the study package on data, but not reviewing the manuscript.
- Being the manager / superior of someone who made substantial contributions to the paper.
- (Re)formatting the paper for a specific journal.
- Having developed software used in the study, but not reviewing the manuscript.
- Having converted data to the Common Data Model, but not reviewing the manuscript.



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