

### Evidence Synthesis: Systematic Literature Reviews and Indirect Treatment Comparisons

Prepare your organization to execute successful product launches, regulatory submissions, key product developments, and other strategic activities

#### The foundation for evidence synthesis

At its most fundamental level, evidence synthesis entails reviewing available research and summarizing the overall body of scientific evidence in a digestible format to answer specific research questions. It encompasses different types of literature reviews, such as landscape or systematic literature reviews (SLRs), and qualitative and quantitative synthesis.

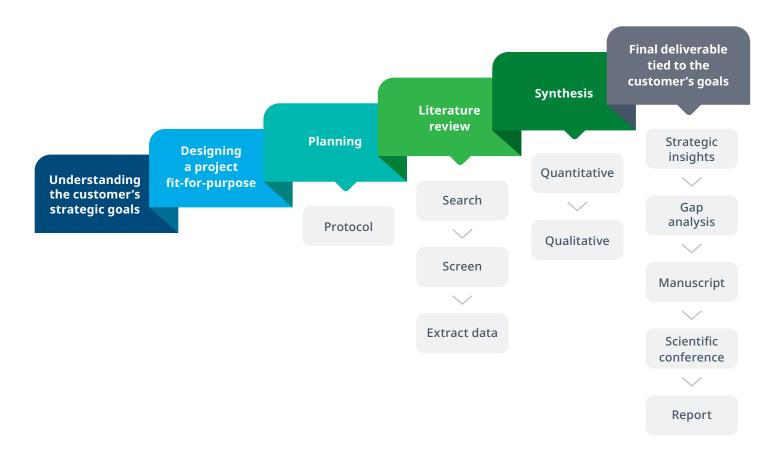


# Why conduct a systematic literature review (SLR) and quantitative analysis?

Many factors are at play when preparing your organization for a product launch, regulatory submission, and other key product development and related activities. Some of the reasons to conduct a literature review or network metanalysis (NMA) include

- Demonstrating product value based on published data to help propel you ahead of the competition
- Identifying opportunities in published literature to inform your HEOR evidence generation planning
- Contextualizing background adverse event rates for regulatory requirements
- Establishing disease burden and cost of illness to communicate unmet needs
- · Meeting regulatory requests from the FDA or EMA
- Understanding the state of literature and identifying new biomarkers to inform trial design
- Preparing for ICER Reviews to help inform strategic and timely responses
- · Informing internal decision-making

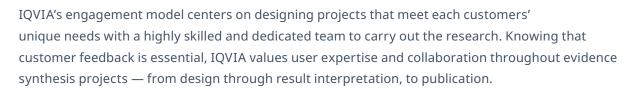
### Taking a customer-centered engagement approach



### How IQVIA can help with your evidence synthesis needs

IQVIA has supported hundreds of successful evidence synthesis projects for customers by combining expertise in evidence synthesis methods, statistics, and multiple therapeutic areas across U.S. and global markets, and by leveraging advanced technologies such as NLP and AI.

When working with IQVIA, customers can have confidence that the highest quality standards will be applied to their projects based on various international guidelines such as Cochrane, National Institute for Clinical Excellence (NICE), International Society for Pharmacoeconomics and Outcomes Research (ISPOR), Food and Drug Administration (FDA), European Medicines Agency (EMA), and Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).



### IQVIA has supported customers in various disease areas including



Infectious disease



Oncology



Cardiovascular diseases



Rare diseases



**Psychiatry** 



Metabolic diseases

# How we can work together: A snapshot of evidence synthesis services

# Comparative efficacy in the absence of head-to-head trials:

NMA allows for simultaneous comparison of multiple drugs connected in network for a given population/indication.

Matching-adjusted indirect comparisons (MAICs) are an option when NMAs are not.

#### SLRs and meta-analysis to support key messages and create door openers:

Published SLRs and meta-analysis on disease and economic burden can establish need and create the pathway for discussions with policy makers.

### Safety and background risk of adverse events:

SLR and meta-analysis of adverse events can help put into perspective safety events reported in real world studies and trials.

## ICER review preparedness:

Combining NMA with economic modeling can help prepare for an ICER response.

# Thematic coding of published data for deep, qualitative insights:

For trending topics, understanding the major and most saturated areas of research to inform your strategy and messaging.

### AI-enhanced HEOR literature landscape:

Intelligent retrieval tools provide for rapid and continuous assessment of your competitor's publications and messaging and identify opportunities to enhance your product's value.

#### Achieve publication success through collaboration

While some evidence synthesis projects are performed for internal planning purposes, such as to inform evidence generation planning, many are performed with the expressed purpose of publication to lend a seal of credibility to the research.

Through close consultation with our customers, IQVIA has published the results of various projects in peer-reviewed journals, and frequently submits papers and presents at conferences such as The International Society for Pharmacoeconomics and Outcomes Research (ISPOR), International Conference on Pharmacoepidemiology (ICPE), and therapy-specific conferences, such as the American Society of Clinical Oncology (ASCO). Here are recent examples. Names in bold are IQVIA authors as of May 2021.



Kadakia, A., Dembek, C., **Heller, V., Singh, R., Uyei, J.**, Hagi, K., Nosaka, T., and Loebel, A. (2021). Efficacy and Tolerability of Atypical Antipsychotics for Acute Bipolar Depression: A Network Meta-Analysis. BMC Psychiatry.

Lautsch, D., Alsumali, A., McLeod, E., **Kuang, Y., He, J., Singh, R., Nevo, A.**, Arnet, U., **Uyei, J.**, Rajpathak, S. (2021). Comparative efficacy of dual and single initiation of add-on oral antihyperglycemic agents in type 2 diabetes uncontrolled on metformin alone: A systematic literature review and network meta-analysis. Diabetes Therapy.

Garmo, V., Stoilove, I., Solon, C., Ali, F., **Uyei, J., Bilir, P., Karabis, A., Singh, R., Jiang, Y.**, Do, D. (2020). <u>Comparative Efficacy of Different Anti–Vascular Endothelial Growth Factor Treatment Regimens in Patients With Neovascular Age-Related Macular Degeneration: A Network Meta-Analysis.</u> ARVO 2020; Investigative Ophthalmology and Visual Science.

**Uyei, J.**, Johnson, C., **Campbell, C., Singh, R.**, Rachev, B., **Kowal, S.** (2020). <u>Understanding Stakeholder</u> Perspectives on Affordability: Evaluating Use and Application in Value-Based Care. ISPOR 2020, Orlando.

Wasserman, M., Hall-Murray, C., **Nevo, A., Uyei, J.**, et al., (2020). <u>Conceptual economic model methodology for infant pneumococcal conjugate vaccine program and its impact on antimicrobial resistance.</u> ID Week, Virtual.

Ansari, W., Quintana, A., Mohamed, N., Patino, N., Irani, P., **Coyle, K., Chang, H., Uyei, J.** (2020). <u>PIN43 - Impact of CRE infections on hospital LOS and mortality in Asia.</u> Value in Health Regional Issues.

Dang, J., **Uyei, J.**, **Jiang, Y.**, **Singh, R.**, **Bilir, P.**, **Karabis, A.**, Munakata, J., Michalska, M., Best, J.H. (2020). <u>FRI0089</u> - <u>Comparative efficacy (ARC 20) of tocilizumab to other targeted immune modulators (TIM) for rheumatoid arthritis: A network meta-analysis (NMA).</u> Annals of the Rheumatic Diseases 79 (Suppl 1).

Raval, A., **Uyei, J., Karabis, A.**, Bash, L., Brull, S. (2020). <u>Incidence of residual neuromuscular blockade and use of neuromuscular blocking agents with or without antagonists: A systematic review and meta-analysis of randomized controlled trials. J Clin Anesth 64: 109818.</u>

Evidence synthesis is just one of the ways of leveraging the power of IQVIA Connected Intelligence™ to discover new insights, drive smarter decisions, and unleash new opportunities. To learn more, contact us today.

