

**Innovation and Value Initiative Foundation (IVI)
MDD Advisory Group Meeting
Minutes
November 11, 2020
1:00-2:00 pm EST**

ATTENDEES

Jyoti Aggarwal (Pharmerit)
Laura Bozzi (University of Maryland)
Jennifer Bright (IVI)
Rahul Dhanda (Neurocrine)
Susan dos Rios (PAVE, University of Maryland)
Phyllis Foxworth (DBSA)
Paul Fronstin (Employee Benefit Research Institute)
Patrick Gillard (AbbVie)
Mike Grabner (HealthCore)
Jennifer Kennedy (Mental Health America)
Mohannad Kusti (NAHPC)
Debra Lerner (Tufts Medical Center)
Kendra Martello (Neurocrine)
Cheryl Neslusan (J&J)
Iman Nourhussein (Pharmerit)
Jordana Schmier (Pharmerit)
Julia Slejko (PAVE, University of Maryland)
Sonya Snedecor (Pharmerit)
Gretchen Wartman (NMQF)
Becky Yowell (APA)
Andrew Sperling (NAMI)

CALL TO ORDER

A meeting of the IVI MDD Advisory Group (AG) was held via teleconference on Wednesday, November 11, 2020. Jennifer Bright called the meeting to order at 1:01 PM EDT.

WELCOME AND ORGANIZATIONAL UPDATES

The AG members were reminded that they will receive information regarding the honorarium by November 20, 2020 (except for those who elected to decline the honorarium).



RESEARCH UPDATES

Jennifer announced a partnership with Pharmerit – an OPEN Source Company (Pharmerit) to help develop the MDD model. Work on the model and with PAVE are all on track. Pharmerit was in attendance and they discussed the goals and specifications for the MDD model, keeping in mind my several key questions:

- How will this model benefit the US population?
- What are the key objectives?
- Who is the target audience?
- How will potential users interact with the model?

The Pharmerit Team presented initial findings from the literature review and posed a series of questions to the Advisory Group. The discussion did not address all of the questions, and a post-meeting survey will be sent to secure additional feedback. Findings from the Chat are in Appendix A and findings from the Pre-Meeting Survey are in Appendix B.

DISCUSSION

Target Population

Jordana Schmier shared in the presentation that the model, per the Advisory Group’s recommendations, will focus primarily on adults who are 18 years and older who are diagnosed with major depressive disorder. Additional subgroups will be considered in the model.

Model Perspective

Ms. Schmier presented to the Advisory Group that the MDD model will feature the “societal perspective” as the base case.

- *A **societal perspective** will take into account the direct and indirect costs from caring for MDD patients regardless of who pays for the costs. It is a holistic approach that incorporates different perspectives (e.g., patients, employers, private insurer, public insurer, and healthcare system).*

Richard Xie emphasized that IVI is trying to think more broadly. Within the societal perspective, IVI will not be using a reduced version as typically done in existing economic models. As an example, he noted that IVI is evaluating guidance from the ISPOR Value Assessment Task Force and the “value flower” they developed, which truly considers nuances, the patient perspective and employer perspectives on things such as cost items or impact items. As we are developing the model, IVI is assessing to what extent we can build these nuances and perspectives into version 1.0, and then in 2.0 in the future. Similar to Mr. Xie’s comments, Jennifer Bright added that IVI wants to make sure that societal perspective is broader, more inclusive. We want to understand all angles and different components, particularly from the patient and employer perspectives, to inform the societal perspective.

Subgroups

Ms. Schmier and the Pharmerit Team also requested feedback on which subgroups or special populations should be included in the model. Key discussion points included:

- **Patients treated by Different Care Setting.** There is a high volume of existing depression treatment in the US that is not being provided by the mental health system or by psychiatrists, but rather in the primary care settings.
- **Patients with other comorbidities.** A key consideration related to the care settings are also the subpopulations of patients with comorbidities (e.g., diabetes, cardiovascular diseases). These patients could be diagnosed with MDD and prescribed treatments when seeking treatments for other conditions. It is important to consider the impacts of MDD treatments on the comorbidities (e.g., effectiveness, associated costs).
- **Treatment Resistant Depression.** Multiple participants, in the chat, the survey, and in the discussion, raised this as an important subgroup. However, there are concerns that in literature, treatment-resistant depression has multiple definitions. How will IVI define it?
- **Newly-Diagnosed individuals.** A key question raised: if we include the subgroup of newly-diagnosed patients, how do you identify those patients? Susan dosReis noted that some individuals experienced symptoms of depression well before they received a formal diagnosis. So, IVI needs to be cognizant of any nuances when identifying special populations. Other areas of concern in regard to subgroups and special populations is how to define when a person starts treatment (in relation to when they were diagnosed).

All of these points are important and will require further discussion, but at this point in the project, Ms. Bright reiterated the purpose right now is to determine what is of interest and how do we build a scope and assess feasibility to get a point where we have a clear pathway to be able to find data and incorporate that perspective, and see what may be missing or what we may not have considered.

FORTHCOMING BUSINESS

A reminder was also provided in regard to the upcoming meetings, all of which require significant feedback from the AG as indicated below.

- December: Review findings from PAVE interviews to inform survey
- January: Review initial model scoping with Pharmerit and draft PAVE survey
- February/March: Final PAVE survey and draft model protocol

ACTION ITEMS

The Advisory Group will be sent a follow-up survey following today's meeting

ADJOURNMENT

Ms. Bright adjourned the meeting at 2:01 PM EDT.



Appendix A

Chat Conversation:

From Erica Malik : As in previous discussions, please share additional comments, suggestions and questions in the chat.

From Rahul Dhanda : severity of disease ? are relapsed subjects included ?

From Rahul Dhanda got the severity issue resolved.

From Jennifer Bright : My recollection of prior discussion has been that relapsing and treatment resistant is included in this population target with perhaps the opportunity to evaluate differences based on those subgroups.

From Cheryl Neslusan : Patients are a key payer in the US...

From Bruce Sherman : A bit off-topic - but wondering if we're capturing/acknowledging socioeconomic status/race/ethnicity in the model, since that's becoming a progressively greater concern.

From Erica Malik : Bruce - yes. That is a key priority for us. We plan to include both demographic information and socioeconomic information, and are thinking about how to make sure these inputs fit into the model.

From Paul Fronstin : 42% of workers with insurance are not in self-insured plans.

From Jennifer Bright : Paul, that is a great point. It would be great to hear from you and others about the perspectives of mid-size employers

From Paul Fronstin : if we are getting into a discussion about productivity and whether workers are out on disability, you may need to consider not just health insurance claims but short term and long-term disability insurance premiums too

From Jennifer Bright : Paul, agree completely. It will be so helpful to understand data sources and the ability/feasibility to get to estimate that could be used in the model , for example. welcome input, insights and connections to consider options as we proceed.

From asperling@nami.org : I would recommend a focus on treatment resistant depression and even a subgroup on history of suicidal ideation.

From Bruce Sherman : Think there's a population with multiple morbidities - depression and diabetes, heart disease, obesity for example. Would be great to incorporate some perspective in



relation to the impact of effective MDD treatment on total healthcare costs and broader health/well-being outcomes, including disease control and work productivity.

From Susan dosReis To Jennifer Bright(privately) : When we discussed the target population for our focus - there was a strong feeling that we not focus only TRD - this would only be a treated group...we are finding several people in our sample of 20 have used ECT, TMS,

From Jennifer Bright To Susan dosReis(privately) : agree. Please feel empowered to bring this forward. To ensure continuity of thought

From Benjamin Miller : Totally agree with Bruce.

From Jennifer Bright : To Jessica's point, is costs related to suicide relevant here?

From Debra Lerner : The discussion of which patients to include or not will be highly related to which types of evidence you feel is relevant. So, if you depend on RCTs you will get a narrowly defined population generally speaking. If you accept studies that are not RCTs you will get data on a more heterogenous population with various subgroups.

From Debra Lerner : What does good data mean? RCTs, something else?

From Susan dosReis To Jennifer Bright(privately) : We have 1 more interview to complete (if the one tonight is eligible, we will be done tonight) — I will know more when we summarize the findings. but long term effects on the family has been mentioned — how many I will see....I hope we can bring some novel items to the cost consideration

From Benjamin Miller : From a patient perspective - I think of simple things - copays, distance that needs to be driven by patient (and gas costs), etc. perhaps not relevant but always on my mind. For providers, if they are a clinic that's integrating care (bringing on mental health), there's a cost associated with additional team members who can help with the medical care team

From Jennifer Bright : Thanks, Debra. We agree. This first step is exploring those data stream "possibilities" and how to prioritize

From Benjamin Miller : THANK YOU, Jennifer!

From Rahul Dhanda : yes

From Jennifer Bright : If you have studies, sources of data or other inputs that will help IVI and our partners develop our thinking, please share them after this call.

Appendix B Pre-Meeting Survey Summary:

There were 14 respondents to the survey, with representatives from every stakeholder group, including:

- Payers (1)
- Employers (3)
- Patient (2)
- Innovators (2)
- Clinician (2)
- Researcher (2)
- Multiple (3)

IVI intends to develop the MDD model with the societal perspective as the base case in order to comprehensively capture the benefits and costs of different treatment options for various stakeholders. Please rank other additional perspectives that you think the model should specifically address below.

Respondents gave equal weight (42.8%) to including private payer, public payer, and employer perspectives. 30% also ranked the health system perspectives as important.

In our previous discussion, you have highlighted several subgroups within the MDD population that will require special considerations. From your perspectives, which subgroups are most important to evaluate, and what makes these patients different from the "general" patients (e.g., different responses to treatments, access to different treatment options)?

- Self-insured employers
- Public and private payers
- Focus on differences in outcomes
- Treatment failure on two+ interventions
- Severity/Level of disability
- Socio-economic status
- Co-morbidities, especially those that are contraindicated for antidepressants
- Demographics
- Conduct data mining to identify differences

What are the key clinical outcomes that you or your organization consider in evaluating the effects of treatment options in the real world (e.g., PHQ-9, MADRS, HAM-D)?

- Quality of Life measures (return to work, disability time)
- PHQ9 (4)
- MADRS
- Treatment outcomes, not just symptoms (4)

- Hospitalizations, mortality, absenteeism, costs of care, etc.
- I'm answering as an economist - important to supplement with real clinician and patient advice of course ;-) PHQ9 is important in the US - from what I've heard from clinicians it's used as a screening tool for non-behavioral health specialists to guide diagnosis, severity, and need for referral. The utility may depend on whether the interventions are prescribed by PCP or psychiatrist. It's easy to administer and interpret. Importantly it's the measure that HEDIS (<https://www.healthec.com/hedis.php#:~:text=The%20Healthcare%20Effectiveness%20Data%20and,dimensions%20of%20care%20and%20service.&text=HEDIS%20consists%20of%2081%20measures%20across%20five%20domains%20of%20care.>) has chosen to measure remission/response. See details here - inc specificity on change scores : <https://www.ncqa.org/hedis/the-future-of-hedis/hedis-depression-measures-for-electronicclinical-data/>. BTW HEDIS is less specific with which screening measure to use - PHQ9 is fine but so are others. The issue of what are the best measures/effect sizes for meaningful change has an active research community in the US - see for example <https://ps.psychiatryonline.org/doi/abs/10.1176/appi.ps.201900295?af=R> - would reach out to the MHRN researchers as still an evolving issue (eg HEDIS has changed of late and is something that will continue to evolve - i.e. current metrics/thresholds do not have full clinical endorsement... the art of medicine and patient heterogeneity gets lost with cut-points. Of note as well, there has been some resistance to measurement in this area, so needs to be considered in looking at data (eg <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6380611/>

For the clinical outcomes you listed above, what definitions are used to evaluate response or remission (e.g., a reduction in score of 50% or more, meeting a specified threshold)?

- Favor using whatever threshold standard is most commonly used. Will create more challenges if attempting to add yet another metric to what patients/clinicians need to track (4).
- 50% improvement (2)
- MADRS reduction

The MDD model seeks to evaluate the cost-effectiveness of both pharmacologic and non-pharmacologic treatments. The inclusion and definitions of treatment options will be informed by clinical guidelines, market shares, and availability of evidence. At what level of granularity should the interventions (comparators) be captured in the MDD model? (Please select all that apply)

- Broad Categories (3)
- By Therapy Classes (4)
- Specific Medications (0)
- Mix (8)
- Other (5)
 - Sample comments include:

- Suggest breaking up psychotherapy into general type of psychotherapy. You can reference the American Psychological Association's clinical practice guideline on depression for model of categorizing psychotherapies <https://www.apa.org/depression-guideline/guideline.pdf>
- broad categories produce useless results and fail to mirror decisions made in patient care.
- An option to select between the 3 types of aggregation would be immensely useful for payers
- It really depends on the nature of the treatment. Some measure of comparative efficacy/cost benefit analysis will be important, in comparison to usual care.