

## Instructions for CC Honest Brokers – Algorithm Version 2

- 1) OUD Algorithm Version 2 Deliverables
  - a. For expert reviewer **one**: V2 patient level chart review templates (with MRNs)
  - b. For expert reviewer **two**: V2 patient level chart review templates (with MRNs)
  - c. For UNC PI: summary spreadsheet
  - d. For UNC PI: 10 patient results spreadsheet
  - e. For UNC PI: patient level chart review template, de-identified and filled in by expert reviewer **one**
  - f. For UNC PI: patient level chart review template, de-identified and filled in by expert reviewer **two**
- 2) Verify support tables created with V1 code are still available in database
  - a. cc\_1171\_meds
  - b. cc\_1171\_ingredients
  - c. cc\_1171\_treatment\_meds
- 3) Verify cohort table created with V1 code is still available in database
  - a. cc\_1171\_cohort
- 4) OUD Algorithm V2 SQL
  - a. On Github:  
[https://github.com/bostasie/Carolinas/blob/master/Projects/ShabbarRanapurwala\\_1171/V2/oud\\_algorithm\\_v2.sql](https://github.com/bostasie/Carolinas/blob/master/Projects/ShabbarRanapurwala_1171/V2/oud_algorithm_v2.sql)
  - b. Modify the SQL to work at your site, some notes at top of file
  - c. Run SQL step 1, look for comment “1) output summary”. This will create the summary report. Save the summary spreadsheet to send to UNC PI.
  - d. Run SQL step 2, look for comment “2) output 10 sample patients”. This will create the sample patient list. Save this list of 10 patients, some of these patients will be assigned to each expert reviewer. This list will also be sent to the UNC PI.
  - e. Run SQL step 3, look for comment “3) update patient cohort table, set sample patients to reviewed=1”. This will flag these patients as already reviewed so we don’t review them in future algorithms.
- 5) Provision chart review templates with MRNs to expert reviewers one and two
  - a. **NEW STEP! Once you create the spreadsheet, sort the patients by MRN to “randomize”**
  - b. From the list of 10 sample patients, provision 8 patients to each expert reviewer
  - c. Only share MRN and PATID with reviewers. The reviewers should not know if a patient is included based on the OUD algorithm or not included
  - d. Each reviewer should get 4 of the “included” patients and 4 of the “not included” patients
  - e. How to distribute among two reviewers:

provision to reviewer 1	provision to reviewer 2	PAT_TYPE	PATID
yes		included	XXXXXXXXXX
yes	yes	included	XXXXXXXXXX
yes	yes	included	XXXXXXXXXX
yes	yes	included	XXXXXXXXXX
	yes	included	XXXXXXXXXX
yes		not included	XXXXXXXXXX
yes	yes	not included	XXXXXXXXXX
yes	yes	not included	XXXXXXXXXX
yes	yes	not included	XXXXXXXXXX
	yes	not included	XXXXXXXXXX

- f. For each expert reviewer, create a chart review file using the template “Expert\_validation\_chart\_review\_template\_V2.xlsx”. Populate these files with the patids and MRNs selected for each reviewer. The template file is available in Github: [https://github.com/bostasie/Carolinas/blob/master/Projects/ShabbarRanapurwala\\_1171/V2/Expert\\_validation\\_chart\\_review\\_template\\_V2.xlsx](https://github.com/bostasie/Carolinas/blob/master/Projects/ShabbarRanapurwala_1171/V2/Expert_validation_chart_review_template_V2.xlsx)
- g. Again, remember to sort the patient list in each of these spreadsheets by MRN to randomize
- h. Deliver spreadsheets to each reviewer
- 6) Once the expert reviewers are complete, deliver files to UNC (SEE deliverables section above)
  - a. De-identify the chart review files and save as a copy, deliver these two files to UNC
  - b. Also deliver summary file and 10 patient results to UNC.
- 7) Instructions sent to expert reviewers:

Dear Expert Reviewers,

Thank you all for your work on this project! Your expert reviews were extremely helpful in determining how our **first iteration** of the algorithm did. We were not stellar, but we were good. The **sensitivity** of the algorithm in determining if someone had OUD was **83%**, however, the **specificity** was **only 62%**. In essence, our algorithm picked more OUDs (false positives) than you all adjudicated.

**One main observation: Our algorithm used data from 2014-2017, but most of you used more recent data on these patients to adjudicate these cases.** This may explain some of the lack of specificity, too. Keeping this in mind and with some other insights from the review process in iteration #1, here are some **additional instructions for review** for you all for iteration #2-#5.

1. **Please review electronic health records** on the patients listed below **from 2014-2017 only**.
2. **Do not review** or base your review on patient's electronic health **records after Dec 31, 2017**.
3. Please list the number of DSM 5 criteria met for all patients you review. There can be up to 11 criteria met. The DSM 5 criteria for OUD are explicated here: <https://www.cdc.gov/drugoverdose/training/oud/accessable/index.html>
4. Please write out the reasons for or against an OUD diagnosis for a patient. These can be the DSM5 criteria the person met, especially where you diagnosed a person with OUD.

5. If you have any questions, **feel free to reach out** to Dr. Shabbar Ranapurwala at [sirana@email.unc.edu](mailto:sirana@email.unc.edu), or by phone at **919-843-3529**.

6. **Please fill in your name, institution, and the start and end dates of reviews** at the bottom of this sheet.

Thank you so much for your support and help!

Sincerely,  
Shabbar