

## Meeting Minutes

### HB 21-1317 Fifth Meeting of the Scientific Review Council

June 8, 2022; 12pm-2pm MT

#### General Remarks and Welcome

- Dr. Chris Urbina, Chair of the Scientific Review Council (SRC), called to order the fifth meeting of the SRC on June 8, 2022, at 12 pm MT.

#### Scientific Review Council Introductions and Update on Conflicts of Interest

- The Chair conducted a roll call for both the Council and the Colorado School of Public Health project team members.
- The following Council members were present and introduced:
  - Chris Urbina
  - Greg Kinney
  - Archana Shrestha, arrived 25 minutes late with apologies
  - Joseph Schacht
  - David Brumbaugh
  - Lesley Brooks, left early with apologies
- The following Council members were absent:
  - Paula Riggs, with advanced notice and apologies
  - Susan Calcaterra, with advanced notice and apologies
  - Kent Hutchinson, with advanced notice and apologies
  - Kennon Heard
  - Erica Wymore
- The following SPH team members were present and introduced:
  - Jonathan Samet arrived 30 minutes late with advanced notice and apologies
  - Greg Tung
  - Lisa Bero, left early with apologies
  - Tianjing Li
  - Ashley Brooks-Russell
  - Rosa Lawrence
  - Neeloo Soleimanpour
  - Louis Leslie
  - Jean-Pierre Oberste
  - Thaistsara Rittiphairoj
- The following SPH team members were absent:
  - Meghan Buran, with advanced notice and apologies
  - Sam Wang, with advanced notice and apologies
  - Ali Maffey, with advanced notice and apologies
  - Christi Piper, with advanced notice and apologies
- Changes to COI forms for any Council members
  - None
- Review of agenda with Council

- Agenda shown on screen for the panelists (Council and Colorado SPH) as well as public attendees.
- No questions for Chair Chris Urbina.

### **Review of Agenda, Meeting Minutes, and Response to SRC Recommendations**

- Chair Chris Urbina reminded everyone in attendance that meeting minutes and the response to SRC recommendations are available on the website under the resources tab.
- No questions for Chair Chris Urbina.

### **Review of HB 1317 Expectations**

- Chair Chris Urbina provided a review of the role of the Scientific Review Council and the HB 1317 legislative language on the responsibilities of the Colorado School of Public Health and the Scientific Review Council.
- Chair Chris Urbina provided a review of the charge to the Colorado School of Public Health and the research questions for the review.
- No questions for Chair Chris Urbina.

### **Progress Update from the Cannabis Research & Policy Project**

- Dr. Tianjing Li presented on the progress to date of the scoping review.
- Dr. Tianjing Li presented on the progress of data extraction process and expects the pace of extraction to increase exponentially. Currently extracted data available from 60 articles.
- No questions for Dr. Tianjing Li.
- Rosa Lawrence presented on the interactive dashboard and provided a tutorial for SRC members.

### **Questions and Answers**

- Chris Urbina asked if individuals without CU access can access the dashboard.
  - Rosa answered that a request form was sent out to SRC members who do not have a CU login access and to be on the lookout for a follow up response from our IT department.
- Lisa Bero asked if we can show an example of the dashboard capabilities and requested an SRC Member to ask specific characteristics to filter the search.
  - Chair Chris Urbina asked specific study characteristics to reflect a refined search in the table of studies.
  - Chair Chris Urbina asked if it would filter the restrictions on outcome.
    - Rosa Lawrence answered it is focused on eligibility criteria of the study populations.
    - Chair Chris Urbina followed up with questioning if there is a summary table focusing on outcome results.
      - Rosa answered by illustrating a walkthrough of the heat map.
    - Dr. Tianjing Li asked if there are any comments on the cleaning of the data.
      - Rosa Lawrence answered that this page is built on a table format, and it is extracted from exposure and outcomes. The table does not accurately represent all 60 studies used in the data extraction dashboard based on

the new data form. Rosa hopes to have an updated version reflecting the newly extracted studies by next week.

- Dr. Greg Kinney asked if it filters out studies that we did not select in the filter and does it create a way to see those studies because that highlights holes in our study.
  - I.E., Dr. Greg Kinney selected government funding and cannabis industry characteristics and notes that by refining the search, we may have lost the locations of those studies and potential holes
  - Rosa Lawrence answered that the categories were those relevant in the study articles. We plan to add case reports and systematic reviews as additional categories. If something is not captured well in the defined categories, then it falls into “other” categories.
- Dr. Tianjing Li suggested we determine the other characteristics we want to add to the filter.
  - Rosa answered the only component missing from the initial draft is location, but if helpful we can add outcome and/or exposures to the heatmap if desired.
- Dr. Joseph Schacht asked that the study filtered as opioid/alcohol use and RCT did not accurately reflect the report results. Seems to reflect healthy reports instead.
  - Rosa Lawrence answered by asking her to be emailed for those potential errors so they can be corrected on the backend.
  - Dr. Lisa Bero noted that in the data extraction you have to go to the full study and to reach out with any further miscoding
- Chair Chris Urbina noted that this is for internal use and the scientific team are looking at it carefully to make the report and eventually the public will be able to access the dashboard.
  - Dr. Tianjing Li confirmed that the comment was correct and the public will eventually have access if they please.
- No further questions.

#### **Question for SRC Consideration**

- Chair Chris Urbina presented questions to the SRC, asking for feedback on specific prompts to develop recommendations and see where we are as a group.
- Chair Chris Urbina presented prompt #1.
  - Dr. Greg Kinney asked since the Washington, Massachusetts and our report discusses potency incorrectly can we use the term concentration over potency.
    - Chair Chris Urbina, agreed and noted no issue for this conversation.
  - Dr. Jonathan Samet mentioned that we need to discuss the difference between populations and that it is currently missing from the introduction of the report.
  - Chair Chris Urbina agreed that it would be beneficial to include as he concurred that it is missing from the report.
  - Dr. Lisa Bero noted that only a number of subgroups are addressed in these studies, some more than others.

- Dr. Jonathan Samet asked what is the research that is needed? To say what we have is not much and is not beneficial but rather what do we need to evaluate for these populations? What would be recommended to fill a potential massive gap?
  - Chair Chris Urbina disclosed that we should focus on what recommendations we should mention, and should we call out populations specifically? The research should touch on all the populations we have material on.
  - Dr. David Brumbaugh notes that out of 90 studies where recommendations and population details are mentioned, almost 17 focus on studies in this age group that we are focusing on and need to utilize the interactive dashboard more to see if we have enough information for recommendations on kids.
    - Chair Chris Urbina agreed that we should look at these characteristics. Is it reasonable with the research team to have this collected?
      - Dr. Lisa Bero answered that we will collect responses for exposure and outcome, we are working through them for the age groups. No comment on the quality of the findings yet.
    - Dr. Greg Kinney asked if we could develop a summary similar to the Cochrane Review in coordination with Dr. Lisa Bero.
    - Dr Lisa Bero: Our report will have a link between exposures and outcome and thinks it would be interesting to develop a checklist of reporting standards.
    - Dr. Tiangjing Li suggests we move forward with other questions as it might answer Greg's question. But Dr. Kinney may be disappointed with the available findings.
- Chair Chris Urbina presented prompt #2.
  - Dr. Joseph Schacht agreed with Dr. Greg Kinney's comment that we do not have enough to make a recommendation based on the studies we have seen.
  - Dr. Lisa Bero notes the heterogeneity in the studies we are evaluating. The more specific we focus on then the smaller number of studies available to answer our questions.
  - Chair Chris Urbina asked if the dashboard available will answer recommendations we want to make.
  - Dr. Jonathan Samet commented that we have not examined clinical guidelines for recommend dose of THC i.e., for patients with epilepsy, pain, and GI issues, and are there sources to review their benefit. Are there existing guidelines for benefiting health effects in relation to these health conditions?
    - Dr. Archana Shrestha notes that for Epilepsy there is a CBD product recommended for clinical use, but not any THC products. There is pretty good data available for epilepsy syndrome.
    - Chair Chris Urbina asked if this is found in the systematic review.
      - Dr. Lisa Bero notes that we searched for systematic review but not focusing on therapeutic usage rather we focused on harm vs. benefit and excluded synthetic products.
  - Dr. Greg Kinney asked if this dashboard is unique or can we dive into a more mature field i.e., into cardiovascular field.

- Dr. Lisa Bero answered that the evidence maps she has reviewed focus mainly on environmental effects and can send out links to review relevant info.
  - Dr. Tianjing Li shared the following link: <https://covid-nma.com/>
    - Dr. Tianjing Li suggested that it would probably have minimal high potency use in clinical settings, if the studies exist then they are used in this data extraction.
  - Dr. Greg Kinney asked if it would go down to milligram use?
    - Dr. Tianjing Li said if it was in the study then it was included in the extraction.
- Chair Chris Urbina shared Prompt #3:
  - Dr. Greg Kinney notes this to be a standardization issue. It should be written as how should dose be defined or how is potency defined.
  - Chair Chris Urbina commented that it does not get to that level of detail to answer the question and inform the consumer. When we get to this level of detail is it desired?
  - Dr. Greg Kinney notes that when we get to this dose and how it is distributed across time which is articulated clearly. If we outline the exposure explicitly then the consumer will know what they will feel. Show the pharmacokinetic breakdown. We have an opportunity to explain the “how” in the packaging and marketing strategies.
    - Dr. David Brumbaugh, noted that we have to touch on naïve status when forming this criterion, and it has to be an objective criterion outlining tolerance.
    - Dr. Lisa Bero said this would be a great reporting comment on the lists as most studies do not touch on user status (naïve or experienced)
    - Dr. Tianjing Li said that we struggle articulating the process between exposure to dose, risk, and outcome and how it is measured short-term and long-term effect which requires a different kind of study.
    - Chair Chris Urbina notes that if the gaps in research exist then how do we express it and track it? What kind of educational campaigns do we create?
      - No response was provided from the group.
  - Chair Chris Urbina posed do we want to make suggestions from this direction we are headed or not?
    - Dr. David Brumbaugh posed those long-term effects, greater than 6 months- 1 years, do they show developmental stage impacts? Important question that we can agree on, but it is expensive and hard to follow up on. Can we identify it as a priority but we should also sit and identify our priorities.
      - Chair Chris Urbina expressed we should make recommendations on youth and pregnant women, and it is an area we should focus on.
      - Dr. Greg Kinney suggested creating a real-life example will be very powerful for retention.
      - Dr. Joseph Schacht notes that in his research, many findings come from lab rat studies and advocates for greater studies involving neuro imaging, cannot provide control group in RCT study in children but maybe a group of healthy effects later on in life and proceed with a PET scan would be a possible option.
- Chair Chris Urbina skipped prompt #4 due to time and proceeded with prompt #5 as it was mentioned during the last SRC meeting from May 25, 2022.

- Dr. Greg Kinney advised not recreating the wheel. Address a standard set of criteria and literature.
- Dr. David Brumbaugh commented that after reviewing this we make be able to comment on negative effects in addition to the benefit which will be adequate.
- No other questions.
- Will review further as we progress with our report.

### **SRC Discussion of General Plans and Overview of the Draft Report**

- Dr. Jonathan Samet provided a review of the Draft Report for the Legislator developed by the Cannabis Research and Policy Team. Reviewed the outline and discussed the relatively finished introduction section.
- Dr. Jonathan Samet requested feedback on the background on systematic review and scoping review section, considerations related to strength of evidence and decision-making section, and theoretical framework for how potency is related to health effects section to ensure they are accurately depicted.

### **Questions and Answers**

- Chair Chris Urbina asked what format would be best to receive feedback.
  - Dr. Jonathan Samet asked for comments during this meeting and asked the group if we want a written version then how do we desire to track comments as we revise and refine report over the month. Chair Chris Urbina posed this question to the group primarily for the recommendation section.
    - Dr. Greg Kinney said we should track comments and asked should we collate the comments in a more formal manner?
      - Chair Chris Urbina suggested sending it to Neeloo and her and I will work together to make an accessible document.
      - Dr. Tianjing Li asked what would be the most efficient way to address this?
      - Dr. Jonathan Samet commented in favor of provision of major comments in writing and that those would be reviewed i.e., the discussion between concentration and potency to be formally responded to.
      - Chair Chris Urbina suggested sending comments to Neeloo and himself. Review at next SRC meeting. Agreed by group with no objections.
- Dr. Jonathan Samet asked for comments on the report and correct terminology to be used consistently throughout the write-up.
  - Chair Chris Urbina confirmed that the SRC will provide comments and ensure we are defining it appropriately for interpretation

**Question from the Public Audience (Ean Seeb):** “ Have you thought to engage or reach out to the Cannabis Regulators Association (Cann-ra.org)? Gillian Schauer who was doing contract work for CDC during EVALI is the current Executive Director. They have access to top state and federal resources who may be able to assist with some of the challenges identified.”

- Dr. Greg Tung advised we follow up with this later, but notes that we have reached out to CANNRA.

### **Links Shared to Group During Meeting**

- Dr. Lisa Bero provided the following links regarding evidence maps and data visualization:
  - Pelch KE, Bolden AL, Kwiatkowski CF. Environmental Chemicals and Autism: A Scoping Review of the Human and Animal Research. Environmental Health Perspectives. 127(4):046001. doi:10.1289/EHP4386  
<https://public.tableau.com/app/profile/the.endocrine.disruption.exchange#!/>
  - Goulart CM, Purewal A, Nakhuda H, et al. Tools for measuring gender equality and women's empowerment (GEWE) indicators in humanitarian settings. Confl Health. 2021;15(1):39. doi:10.1186/s13031-021-00373-6  
[https://public.tableau.com/app/profile/humairanakhuda/viz/SRHRGEWEScopingReviewStory\\_Final\\_Nov16/SRHRGEWEStory](https://public.tableau.com/app/profile/humairanakhuda/viz/SRHRGEWEScopingReviewStory_Final_Nov16/SRHRGEWEStory)
  - Keshava C, Davis JA, Stanek J, et al. Application of systematic evidence mapping to assess the impact of new research when updating health reference values: A case example using acrolein. Environment International. 2020;143:105956. doi:10.1016/j.envint.2020.105956  
<https://public.tableau.com/app/profile/literature.inventory/viz/AcroleinEvidenceMapVisualizations/ReadMe>
  - <https://www.sciencedirect.com/science/article/pii/S016041202031761X>

### **SRC Plans and Approach**

- Chair Chris Urbina advised reviewing the reports, interacting with the dashboard, and thinking through some recommendations. Please send comments to Neeloo ([neeloo@cuanschutz.edu](mailto:neeloo@cuanschutz.edu)).

### **Meeting Proposal**

- Chair Chris Urbina made an overall proposal to schedule another meeting on June 21 before the July 1 report deadline and react to specific questions as an entire group.

### **Decision**

- All present SRC members raised their hands, indicating approval of this proposal.

### **Next Meeting Timing and Closing Remarks**

- June 15<sup>th</sup> meeting is scheduled
- June 21<sup>st</sup> meeting will be scheduled
- No final questions or comments