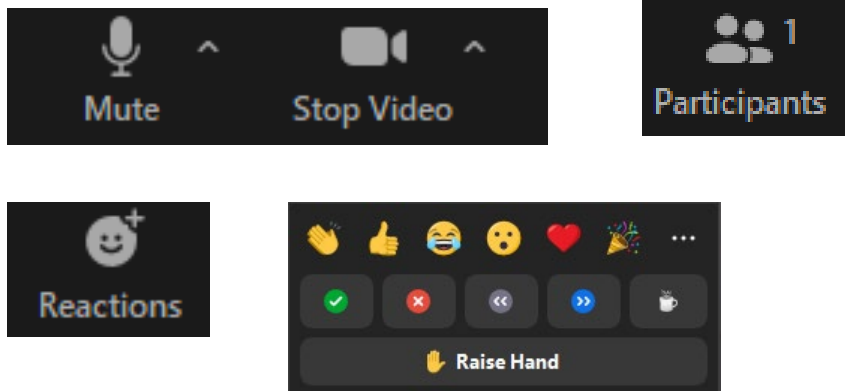




Psychedelic Medicine Task Force

Welcome Psychedelic Medicine Task Force members!

Please use this time to test your Zoom meeting controls located at the bottom of the screen:



Access **Mural** via the link sent to you in your meeting invitation. Only members have access to this shared workspace. Once on the site, minimize the screen for later use during the meeting.

MDH staff

- **Kari Gloppen**, Epidemiologist
Supervisor, Injury and Violence
Prevention Section
- **Dr. Caroline Johnson**, Psychedelic
Medicine Scientific Researcher

Task Force leadership

- Dr. Jessica Nielson, Chair
- Bennett Hartz, Vice-Chair
- Paula DeSanto, Work Group Chair

MAD staff

- Jessica Burke, Senior Management
Consultant
- Nick Kor, Senior Management Consultant
- Stacy Sjogren, Senior Management
Consultant

Welcome meeting observers

Thank you for your interest in the work of the
Psychedelic Medicine Task Force!

This meeting will not be recorded. **Minutes will be posted on the task force's website** along with other materials for this meeting:

<https://www.health.state.mn.us/people/psychmed/index.html>

health.psychedelictmmedicine@state.mn.us

The Psychedelic Medicine Task Force was established to advise the legislature on the legal, medical, and policy issues associated with the legalization of psychedelic medicine in the state. For purposes of this work, “psychedelic medicine” means MDMA, psilocybin, and LSD.

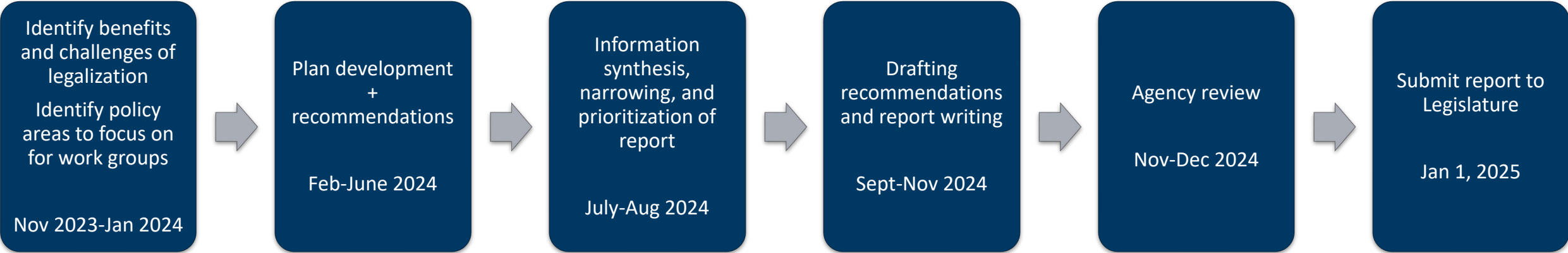
Scientific Research

1. Survey existing studies in the scientific literature on the therapeutic **efficacy** of psychedelic medicine in the treatment of mental health conditions, including depression, anxiety, post-traumatic stress disorder, bipolar disorder, and **any other mental health conditions and medical conditions** for which a psychedelic medicine may provide an **effective** treatment option.
2. Compare the efficacy of psychedelic medicine in treating the conditions described [above] with the efficacy of treatments currently used for these conditions.

Develop a comprehensive plan that covers:

1. statutory changes necessary for the legalization of psychedelic medicine.
2. state and local regulation of psychedelic medicine
3. federal law, policy, and regulation of psychedelic medicine, with a focus on retaining state autonomy to act without conflicting with federal law, including methods to resolve conflicts.
 - Such as seeking an administrative exemption to the federal Controlled Substances Act under United States Code, title 21, section 822(d), and Code of Federal Regulations, title 21, part 1307.03; seeking a judicially created exemption to the federal Controlled Substances Act; petitioning the United States Attorney General to establish a research program under United States Code, title 21, section 872(e); using the Food and Drug Administration's expanded access program; and using authority under the federal Right to Try Act
4. Education of the public on recommendations made to the legislature and others about necessary and appropriate actions related to the legalization of psychedelic medicine in the state.

Work cadence



Today's agenda

- Approve May meeting minutes
- Member-collected feedback
- Decision flow chart and timeline check-in/discussion
- **Break**
- Research update: MDMA
- Presentation: Lykos Therapeutics
- **Break**
- Work group updates and discussion

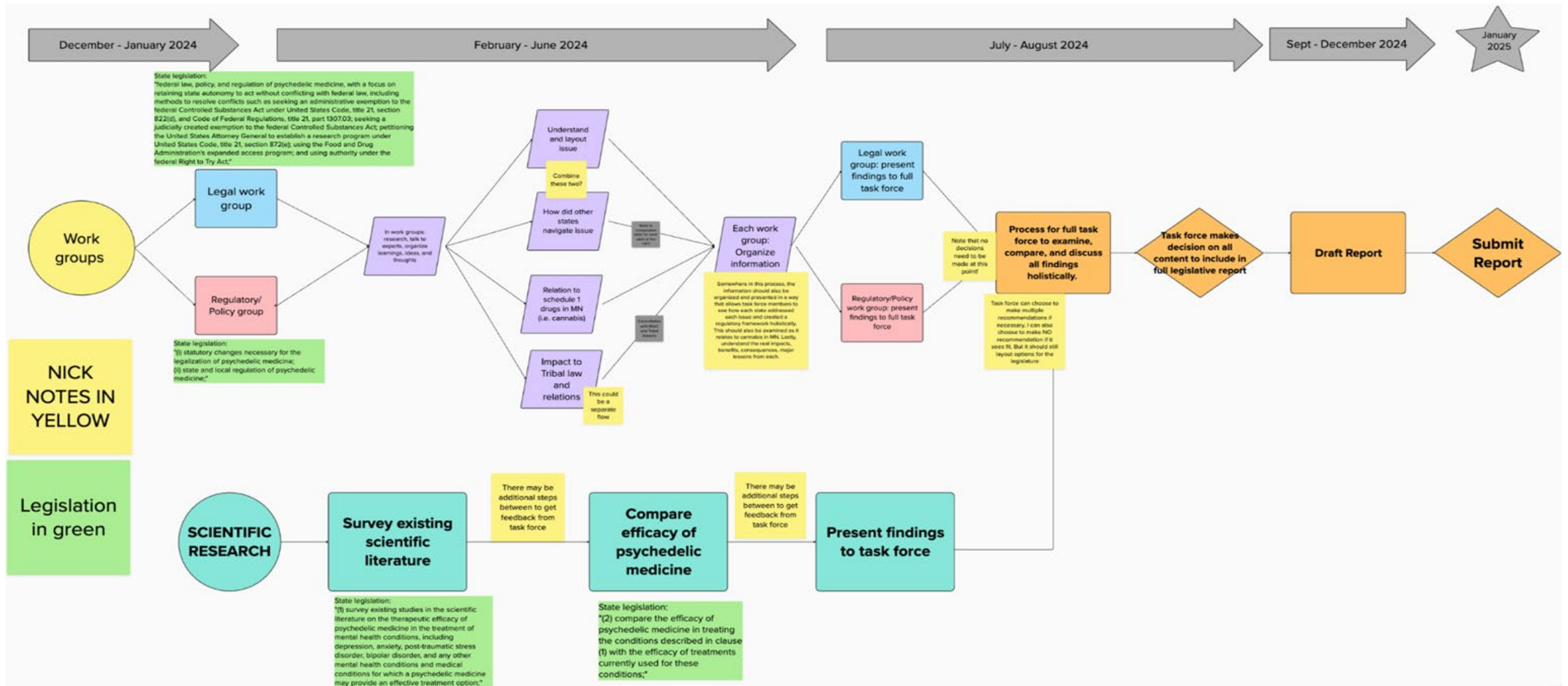
Desired meeting outcomes

- Check in on timeline and discuss decision flow chart
- Research update – MDMA results and discussion
- Guest speakers: Gretchen Shaub and Ben Everett, Lykos Therapeutics
- Work group update and discussion: Members stay abreast of small group work sequencing and have an opportunity to weigh in to keep process moving.

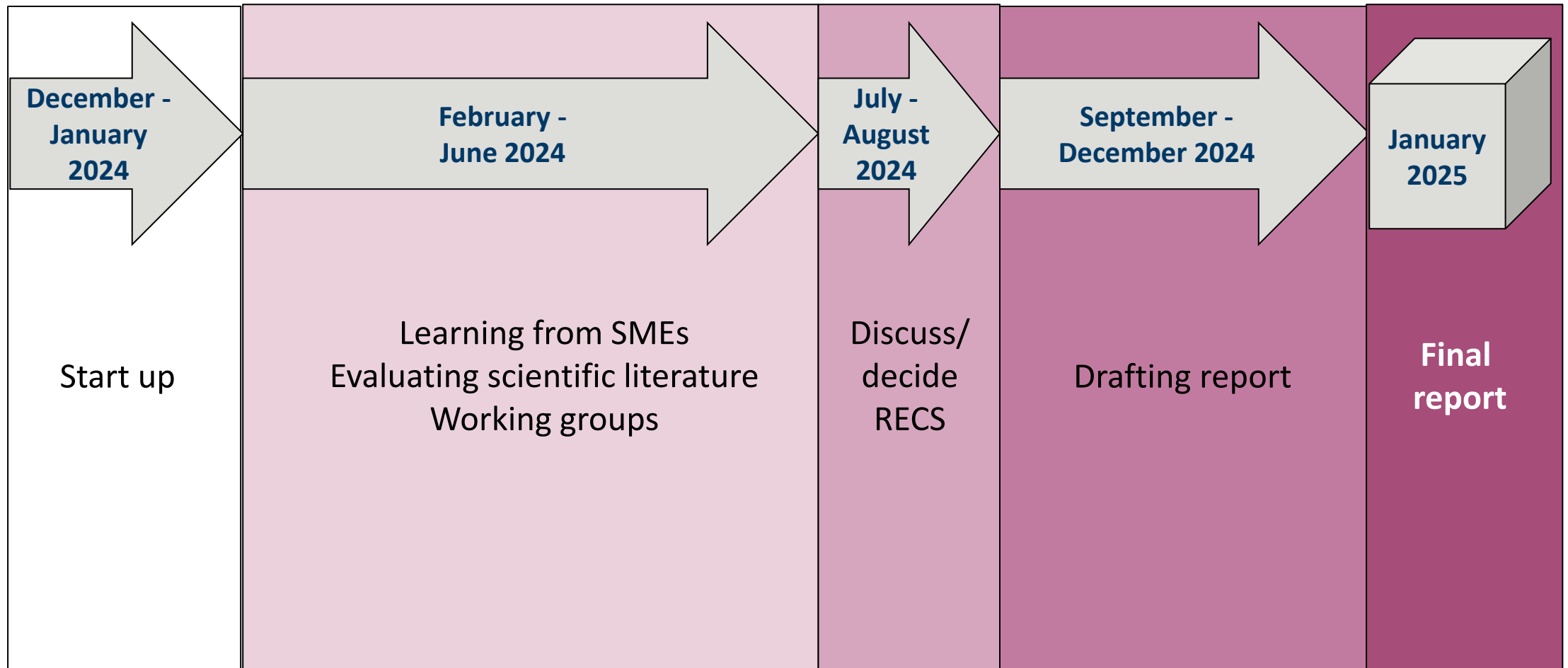
Task Force Status Update - June 2024

Dr. Jessica Nielson | Task Force Chair

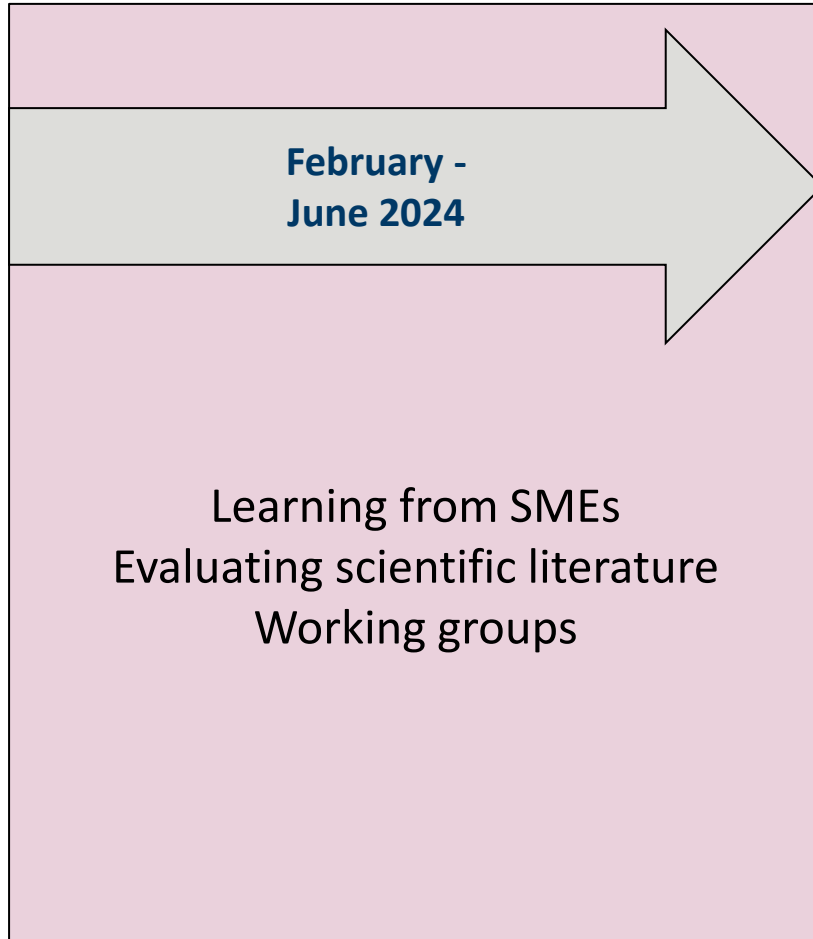
Timeline: decision flow chart



Timeline: simplified



What the task force has learned: medical

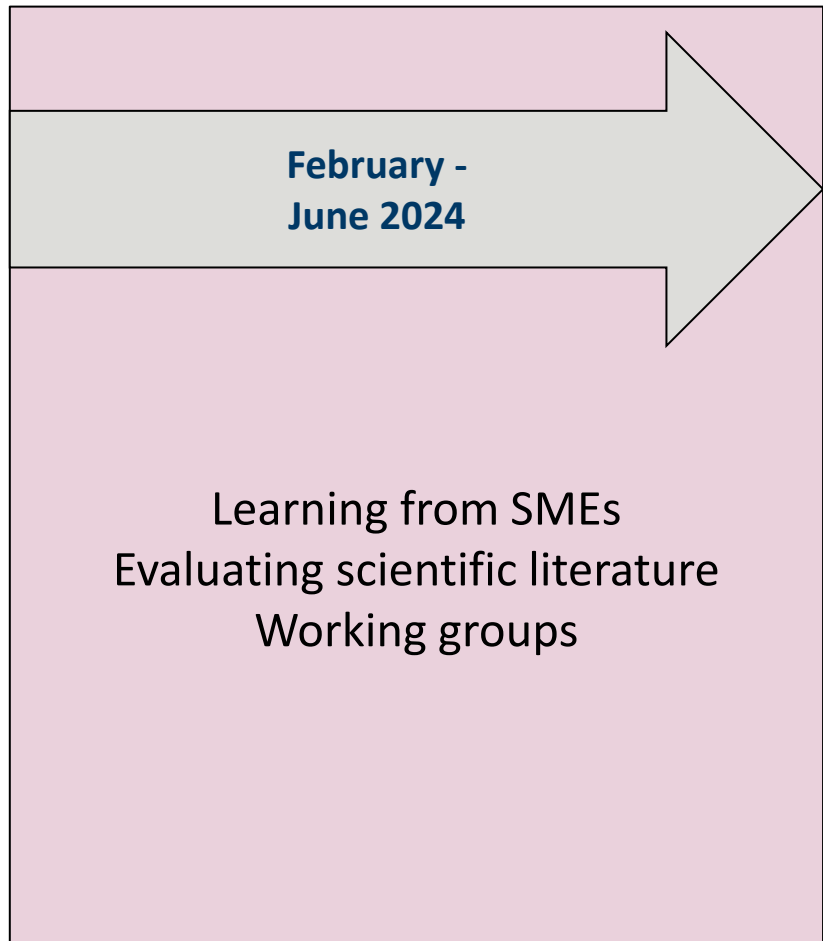


Addressing duties #1 and #2 in the legislation (survey clinical trials and compare to existing treatments)

Dr. Johnson's scientific research summaries

- a. LSD may be useful for anxiety and problematic alcohol use
- b. Psilocybin may be useful for mood disorders and problematic alcohol use
- c. MDMA may soon be approved for PTSD

What the task force has learned: legal

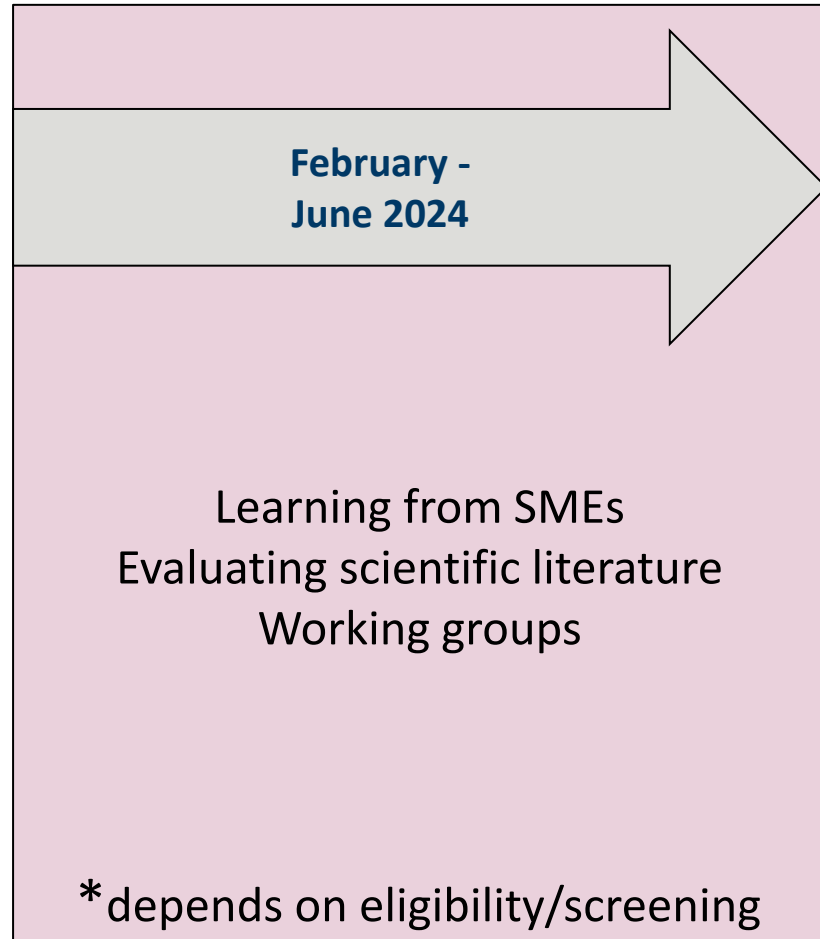


Addressing duty #3i-iii (comprehensive plan for state and local statutes and federal conflicts)

Legal advice from SMEs

- a. State regulated programs - most in conflict with federal law
- b. Clinical trials - least in conflict with federal law
- c. Waiting for FDA approval - least in conflict with federal law
- d. Decriminalization - not applicable (not enforcing federal law)

What the task force has learned: policy

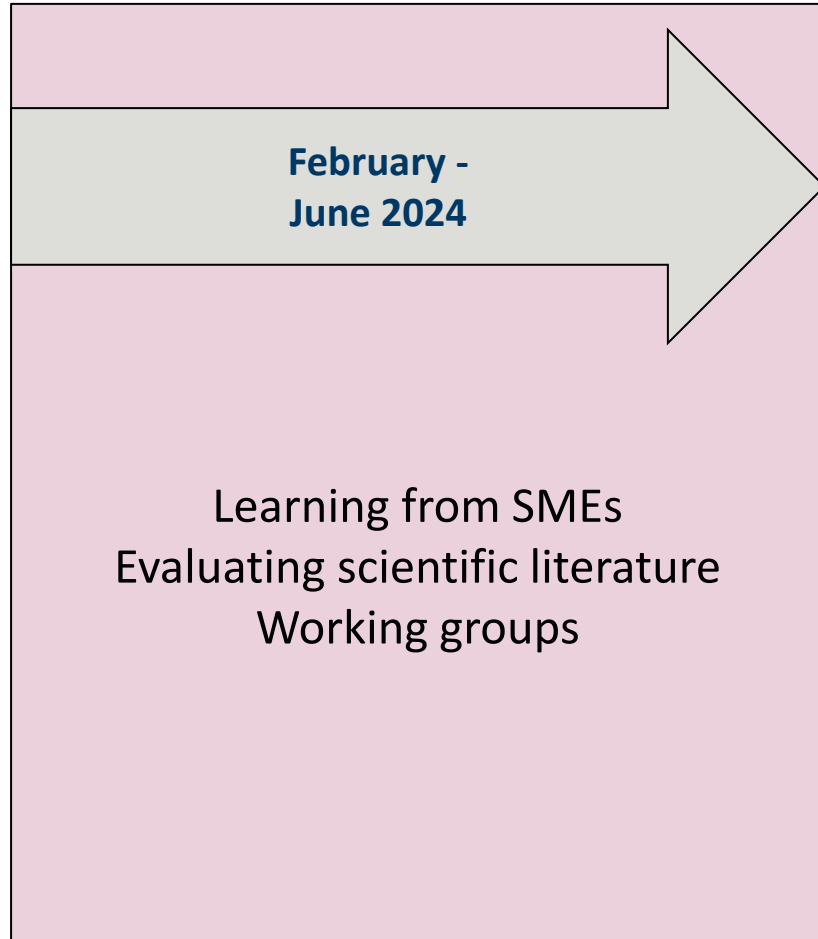


Policy decisions will occur in July and August, addressing duties 3i-iv

Policy advice from SMEs

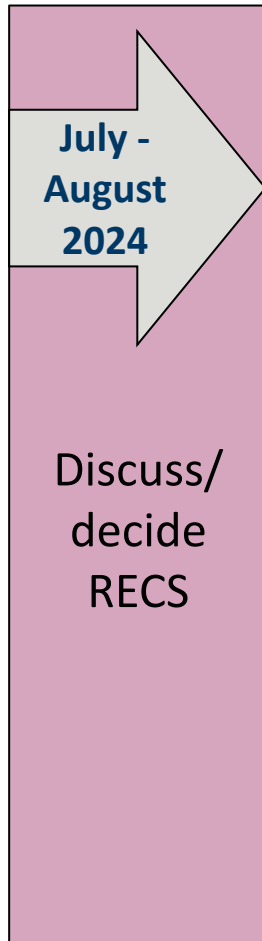
- a. State regulated programs - most expensive, least accessible
- b. Clinical trials - moderately expensive, somewhat accessible*
- c. Waiting for FDA approval - moderately expensive, somewhat accessible*
- d. Decriminalization - least expensive, most accessible

What is missing?



Information still needed to be sorted out

- a. Tribal law considerations
- b. Discussions with state licensing boards
- c. Estimating costs for different options
- d. Identifying existing state agencies with overlapping infrastructure/oversight



Guiding principles to help decide on recommendations

- Scientific and research rigor
- Collaboration and inclusivity
- Accountability and Integrity
- Awareness in evaluation
- Strive for practicality of recommendations
- Social equity
- Engage the public whenever possible

Decision-making tools

What is next?

MURAL ACTIVITY

MDMA Literature Review

Dr. Caroline Johnson

Overview of section

- Health Conditions
- Post-Traumatic Stress Disorder
 - Phase 3 Trials
 - Phase 2 Trials
- Risks
- Discussion

- Post-Traumatic Stress Disorder (PTSD)
- Anxiety in specific populations
 - Social anxiety in autism spectrum disorder
 - Anxiety in life-threatening illnesses
- ~~Tinnitus~~

PTSD: Phase II Clinical Trials

- Lykos Therapeutics (Multidisciplinary Association for Psychedelic Studies)^{1,2}
- 194 participants:
 - 99 got MDMA + psychotherapy
 - 95 got placebo + psychotherapy
- Treatment:
 - 3 preparatory sessions
 - 3 all-day treatment sessions (with overnight stay)
 - 3 integrative psychotherapy sessions after each drug session
- Doses:
 - 1st session: 80 milligrams (mg), optional half dose ~2h later
 - 2nd & 3rd session: 120mg, optional half-dose ~2h later
- **MDMA-assisted psychotherapy resulted in statistically significant reductions of PTSD symptomology**
 - Large effect of treatment from baseline to end (in both groups)
- MDMA-assisted psychotherapy resulted in loss of PTSD diagnosis and remission from disorder

PTSD: Phase II Clinical Trials

- Pooled analyses, phase 2 trials
 - Primary study duration³
 - Long-term follow-up⁴
- Groups:
 - Over 100 participants total
 - Active dose group: 75mg, 100mg, 125mg
 - Control group: 0mg, 25mg, 30mg, 40mg
- **Statistically significant change in PTSD symptomology following active dose³**
 - Continued to improve in 12 months following treatment⁴
- Loss of PTSD diagnosis greater in active dose group than control group (54% vs 23%)³
- Nearly 100% of participants reported long-lasting benefits at the 12-month mark⁴

3) Mithoefer et al., 2019, Psychopharmacology; 2) Jerome et al., 2020, Psychopharmacology.

PTSD: Comparison of Efficacy

- Current standard treatments
 - Psychotherapies
 - Cognitive Behavioral Therapy (**CBT**), Prolonged Exposure (**PE**), Eye Movement Desensitization and Reprocessing (**EMDR**)
 - Pharmacotherapies
 - Selective Serotonin Reuptake Inhibitors (**SSRIs**), Serotonin Norepinephrine Reuptake Inhibitors (**SNRIs**)
- Psychotherapy is preferred over medication⁵
- Effect size for all standard treatments: 0.81⁶
 - **CBT**: 1.26
 - **PE**: 1.08
 - **EMDR**: 1.01
 - **SSRIs/SNRIs**: 0.41—0.74
- MDMA + psychotherapy vs control:
 - **Phase 2 trials**: 0.90, 1.17^{7,8}
 - **Phase 3 trials**: 0.70, 0.91^{1,2}
- Within groups:
 - **MDMA**: 1.95, 2.10^{1,2}
 - **Placebo**: 1.20, 1.25^{1,2}

- Mild-to-moderate adverse effects, dose-dependent
 - Headache, nausea, dizziness, fatigue, tight jaw, anxiety, sleep disturbances
 - Suicidal ideation
- Increases in blood pressure, heart rate, body temperature
- Sex differences in adverse effects
- Other things to think about:
 - Drug-drug interactions: antiretrovirals
 - Low abuse potential, low potential for toxicity
- ICER Report⁹
 - Functional unblinding
 - Expectancy effects
 - Boundary violations

9) Mustafa et al., 2024

MDMA Overview Discussion

- Recommend MDMA?
 - If so, in what capacity?

References

- 1) Mitchell et al. (2021). MDMA-assisted therapy for severe PTSD: a randomized, double-blind, placebo-controlled phase 3 study. *Nature Medicine*, 27(6), 1025. .
- 2) Mitchell et al. (2023). MDMA-assisted therapy for moderate to severe PTSD: a randomized, placebo-controlled phase 3 trial. *Nature Medicine*, 29(10), 2473-2480.
- 3) Mithoefer et al. (2019). MDMA-assisted psychotherapy for treatment of PTSD: study design and rationale for phase 3 trials based on pooled analysis of six phase 2 randomized controlled trials. *Psychopharmacology*, 236, 2735-2745.
- 4) Jerome et al. (2020). Long-term follow-up outcomes of MDMA-assisted psychotherapy for treatment of PTSD: a longitudinal pooled analysis of six phase 2 trials. *Psychopharmacology*, 237, 2485-2497.
- 5) Hoskins et al. (2015). Pharmacotherapy for post-traumatic stress disorder: systematic review and meta-analysis. *The British Journal of Psychiatry*, 206(2), 93-100.
- 6) Watts et al. (2013). Meta-analysis of the efficacy of treatments for posttraumatic stress disorder. *J Clin Psychiatry*, 74(6), e541-e550.
- 7) Amoroso & Workman. (2016). Treating posttraumatic stress disorder with MDMA-assisted psychotherapy: a preliminary meta-analysis and comparison to prolonged exposure therapy. *Journal of Psychopharmacology*, 30(7), 595-600.
- 8) Feduccia et al. (2019). Breakthrough for trauma treatment: safety and efficacy of MDMA-assisted psychotherapy compared to paroxetine and sertraline. *Frontiers in psychiatry*, 10, 650.
- 9) Mustafa et al. (2024). 3,4-Methylenedioxymethamphetamine Assisted Psychotherapy for Post-Traumatic Stress Disorder: Effectiveness and Value; Draft Evidence Report. Institute for Clinical and Economic Review.

Presentation from Lykos Therapeutics

Ben Everett, Senior Director, Medical Science & Health Outcomes and Senior Director for Government Affairs, and Gretchen Shaub, Associate Director, State Government Affairs and Public Policy

- **Upcoming meetings**

- Second and fourth Thursdays of each month, 4:00-5:00 pm

Next steps and adjournment

- **Opportunity for member feedback:** please leave your feedback in Mural.
- **Questions between meetings:** contact Jess Burke (jessica.burke@state.mn.us)
- **Next meeting:** Monday, July 1, 2024, 9:30 am – 12:30 pm