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Summary:

Up to 77% of young people with severe mental illnesses smoke [1-4], a rate that is up to <u>five times higher</u> than the rate of daily smoking in other young adults [5, 6]. Contrary to popular belief, smoking tobacco *does not* provide any benefit for mental illness symptom control [7]. People with severe mental illnesses (SMI: schizophrenia and severe mood disorders) are dying, on average, <u>25 years earlier</u> than those without SMI [8, 9]. Much of this early mortality is due to higher rates of heart and lung diseases, cancers, strokes, and diabetes [8-14].

Cessation of smoking in these transition-age young adults can prevent cancer and increase life expectancy to that of non-smokers [15]. Combination treatments are effective in this group [16-21] and therefore key to improving outcomes, but few SMI smokers use them [22-25] despite their interest in quitting [26]. Motivational interventions for cessation increase interest in quitting [24, 27, 28], but <u>public mental health clinicians do not deliver them</u> [23, 29, 30], in part due to economic reasons [31, 32]. Thus cost effective methods to deliver motivational interventions to engage young smokers with SMI into treatment are needed.

To address this gap, we have developed an <u>electronic decision support system</u> (EDSS) for smoking cessation that is specifically tailored for smokers with SMI, who tend to have cognitive deficits and limited computer experience [34]. Similar to

EDSSs developed for other health problems [39], this EDSS provides information and motivational exercises within an easy-to-use, web-based computer program that can be used with minimal or no staff assistance. Initial piloting of the EDSS in middle-aged SMI smokers showed excellent usability and promising efficacy [33]. <a href="Pilot-testing among young patients suggested that the EDSS increased motivation to quit smoking and provided direction to adapt the format and content of the EDSS for young SMI smokers.

The purpose of this proposal is to further develop the motivational decision support system and to test its ability to motivate <u>young smokers with SMI to quit smoking with cessation treatment</u>.

The study aims are:

- **Aim 1.** To identify beliefs related to: cessation treatment, social norms for cessation treatment, and perceptions of behavioral control regarding cessation treatment, among young smokers with SMI.
- **Aim 2.** To adapt and complete the development of an EDSS for young smokers with SMI by adding features designed to change salient beliefs identified in Aim 1.
- **Aim 3.** To conduct usability testing of the new EDSS in young smokers with SMI.
- **Aim 4.** To pilot test, using a small randomized, controlled trial, the ability of the new EDSS to change treatment beliefs and to engage young smokers with SMI into cessation treatment. We will also recruit a minimal assessment control group.

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