Project Name: Mississippi Drug-Use Reduction Program

Statement of Need:

This proposal will leverage already established partnerships to implement and adapt evidence based programs and interventions in four economic regions in Mississippi (i.e. Northwest, Northeast, Delta, and Coast – see Table 1 for demographic details). These regions have been selected because they have high rates of overdose deaths and/or are geographically close to counties that have been designated high density drug trafficking areas.[1]

According to the Mississippi Opioid and Heroin Data Collaborative the number of opioid related deaths increased in the first quarter of 2022 by 6% compared to the first quarter of 2021 (See Table 2 for additional details). Moreover, the total number of overdose deaths increase by 13.6%, which due in part to an increase by 32.6% in the number overdose deaths suspected to be connected to methamphetamine.[2] There has also been a 15.8% increase in the number of administrations of naloxone by emergency responders during the same time period.[2] Importantly these values are likely underestimations of real values of overdose related deaths and the administration of Naloxone, as there were 21 of the 39 included counties that might be missing data.[2] Moreover, Naloxone administrations captured as part of this data were doses administered by emergency responders.[2] However, it is possible for members of the general public to obtain opioid overdose reversal agents from pharmacies in the state under a State Standing Order and administer these agents without the assistance of emergency responders.[3]

Further to these data, it has been well established that many people suffering with substance use disorder started using substances as young people and often in response underlying mental health concerns. According to a survey of binge drinking and a National Survey on Drug Use young people (ages 12-20) in the economic regions chosen for this project often use a use

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illicit drugs, marijuana, and alcohol at higher rates than other young people in the State.[4,5] Moreover, Mississippi is a very rural state (see Table 2), which current faces a maldistribution of healthcare resources, along with lower-than-average insurance rates, making access to mental health and treatment services challenging.[6] Given these current realities empowering students, parents, communities to prevent substance use and misuse in young people is integral.[7] When completed, this project will have created a suite of tailored programs and interventions to change the drug use ecosystem of the targeted regions and thereby improve the wellbeing of our youth and ultimately our communities.

Planned Activities:

1. Develop and implement education programing for students to help improve mental health literacy, build academic tenacity, and increase access to mental health services.

A recent review found little evidence of value for well-known "scared straight" programming, but found more evidence supporting life skills training programming.[7] This activity will add to that evidence base by combining several life skills tools, including but not limited to: emotional intelligence (EI) skill development,[8] principles from purpose driven flourishing[9], substance use avoidance, and leadership training.[10] Taken as separate interventions each of these curricula have demonstrated benefits to students, however, the impact has been small.

Activity #1 will be led by a team of experts from the schools of education at both the University of Mississippi and Baylor University, the National Center for School-University Partnerships, and the Clinic for Outreach and personal Enrichment (COPE), in collaboration with the

William Magee Institute for Student Wellbeing (WMI). These academic groups will partner with teachers, school counsellors, and school administrators to co-create this educational program,

using the Breakthrough Collaborative Model,[11] and provide access to additional mental health services to students in need. The initial co-creation process will take place in both the Northeast and Delta economic regions of the state to leverage previously established partnerships with local school boards, through a series of meetings. As the final version of the curriculum takes shape it will be paired with data and information that can be used to access COPE resources, then be shared with partners in the other economic regions to gather additional feedback and allow for tailoring to those unique settings. It is anticipated the initial co-creation will take approximately 6 months to complete. However, there after it will be rolled out immediately in the initial partner schools and then rolled out as it has been tailored to each of the subsequent regions' schools. See Gannt Chart for complete details.

2. Develop and provide training for families and community-youth leaders to identify students in crisis or at risk of crisis and connect those students to available local resources.

There is a well-established connection between mental health disorders and substance misuse and abuse. However, it is often difficult to identify someone who may be struggling with a mental health disorder and then know how to appropriately approach that person about seeking help. Youth Mental Health First Aid (yMHFA) is a program that teaches participants how to identify and respond appropriately to signs of mental illness and substance use disorders in young people.[12] Training increases yMHFA knowledge, recognition of mental disorders, beliefs

about effective treatment, and confidence to help, as well as intentions to apply learnings from the program.[13] It also resulted in a slight decrease in stigma.[13] In collaboration with schools and other organizations across the state this initiative will provide yMHFA training to parents and community-youth leaders across the state.

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Activity #2 will be led by experts from the School of Applied Sciences, which has experience rolling out this training program on the University of Mississippi campus, in collaboration with the WMI. Dr. Allison Ford-Wade and her team have already provided training to a group of instructors, who will in turn provide training in their local units. We intend to employ a similar model for this initiative. In collaboration with school board partners identified as part of Activity #1 interested schools will be asked to identify 1-2 representatives from the school who has the interested in capacity to receive training to become a yMHFA instructor. At least two local events will be held in each of the economic regions at times and in spaces convenient to local participants. These instructor training events will be held within the first four months. Subsequently members of Dr. Ford-Wade's team will work alongside new instructors from each of the economic districts to put together a plan for how these instructors will provide training in their local schools and communities to parents and community-youth leaders.

3. Develop and distribute an education program for future and current healthcare professionals focused on reducing addiction related stigma, increasing addiction related health literacy, and appropriately connecting people to available resources.

Addiction related stigma coming from healthcare professionals (HCPs) continues to be an important barrier to patients accessing and engaging with treatment for substance use disorder.[14] A recent systematic review identified 15 studies suggesting that educationally based stigma

reduction interventions, and especially those that give providers the opportunity to engage with individuals in recovery, are effective at reducing associated stigma.[14] However, with the exception of 1 article, the interventions listed in these studies were not developed or tested in the Southeastern US.[14] Furthermore, many of the studies contained low quality assessment ratings and contained significant methodological limitations.

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Activity #3 will be led by experts in the School of Pharmacy in partnership with a large non-profit organization (Shatterproof) and the WMI, focused specifically on reducing addiction related stigma.[15] This Activity will develop and disseminate a cost-effective and sustainable educational intervention for future and current HCPs being trained or practicing in the Southeastern US. Similarly, to Activity #1, Activity #3 will begin with engagement of currently practicing HCPs around the materials that are intended to make up the stigma reeducation educational programming. Stakeholder feedback and curriculum development will take place during the first 6 months of the program. This feedback will involve focus group meetings and surveys undertaken in each of the economic regions. Activity #3 team members will work with the professional organizations and the University of Mississippi Medical Center to recruit allied health professionals to participate in feedback sessions. As modules are developed, they will be made available to HCPs real time to allow for feedback and immediate benefit the population.

Expected Outcomes:

	Activity #1	Activity #2	Activity #3
Product	Tailored life skills educational program	Instructor recruitment materials Trainee recruitment materials	Tailored stigma reduction educational program for healthcare professionals

Outcome*	Process for co-creating life skills educational program; Student perceptions of life skills educational program; Student satisfaction with life skills educational program; Teacher, administrator, counselor satisfaction with co-creation process; Number of schools onboarded for program Number of students engaged with the program	Feedback on applicability of training program in rural and southern spaces; Trainee feedback on value of programing; Total number of instructors trained; Total number of trainings given; Total number of trainees	Process for co-creating HCP stigma reduction educational program; HCPs perceptions of stigma reduction educational program; HCP satisfaction with stigma reduction educational program; HCP satisfaction with co creation process; Number of clinics and programs onboarded for delivery of educational program; Number of HCPS engaged with the program

** All assessments will also collect demographic data for assessment of activity reach and value.*