Electronic Supplementary Material 1

Table E1: Examples of multi-level interventions (implementation strategies and research approaches)

| | OSPI | SPIRIT | Qungasvik | Commonalities |
|-----------------------------|--|--|--|---|
| Location Target group(s) | Ireland, Portugal, Hungary, Germany All age groups, different sub- populations | All age groups, different subpopulations | Alaska, United States of America All age groups with a specific focus on the youth | Community-based Intersectoral collaborations Engagement of multiple |
| Number of levels/components | 4 | 3 | 36 intervention modules aimed at community, family, and individual levels | key actors and stakeholders • Adaptation of |
| Interventions/levels | Training and support in general practice General public awareness campaign Training of gatekeepers in the community Improvement in care for high-risk groups Restriction of access to lethal means | The Youth Aware of Mental Health – school-based program for adolescents A community storage facility for pesticides Training of community health workers in early identification | Community level: For example - Using 'Qasgiq' (Men's house) a sacred communal setting to hold discussions around the way of life or 'how to live' Family level: For example — Yup'ik kinship terms — constructing the family genogram to identify resource people and role models. Individual level: For example — 'Surviving your feelings' — creating settings where youth can openly discuss their feelings about taboo topics such as suicide. | interventions to local context/community settings • Synergies within interventions |
| Examples of key | Evaluative and iterative | Evaluative and iterative | Evaluative and iterative | |
| implementation | strategies: | strategies: | strategies: | |
| strategies | Capture and share local knowledge | Capture and share local knowledge | Capture and share local knowledge | |

| (Powell et al., 2015; Kirchner et al., 2017) | Develop stakeholder interrelationships: Use advisory boards and workgroups Build a coalition Train and educate stakeholders: Conduct ongoing training Use train-the-trainer strategies | Conduct local needs assessment Develop a formal implementation blueprint Adapt and tailor to context: Promote adaptability Develop stakeholder interrelationships: Mandate change Build a coalition | Conduct local consensus discussions Develop stakeholder interrelationships: Create a learning collaborative Use advisory boards and workgroups | |
|--|---|--|--|--|
| Research Design / Approach | Prospective controlled intervention effectiveness study (including a process evaluation) Hybrid Design Type 1 | Cluster randomised intervention trial (including a process evaluation) Hybrid Design Type 1 | Participatory research (to inform program development and implementation) | |

Kirchner, J. E., Waltz, T. J., Powell, B. J., Smith, J. L., & Proctor, E. K. (2017). Implementation strategies. In R. C. Brownson, G. A. Colditz, & E. K. Proctor (Eds.), *Dissemination and implementation research in health: Translating science to practice* (2nd ed., pp. 245–266). Oxford University Press. https://doi.org/10.1093/oso/9780190683214.003.0015