

## Appendix 1 Search Strategy

A protocol was prepared and available upon request from the authors, along with the data collection forms.

Occupation section:

Organisation\* OR organisation\* OR occupation\* OR employee\* OR employer\* OR workforce\* OR worker\* OR business OR team OR emergency response OR healthcare provider\* OR healthcare worker\* OR construction work\* OR fire-fighter\* OR fire officer\* OR paramedic\* OR doctor\* OR nurse\* OR police OR first aid responder\* OR personnel OR hospital administrator OR military

AND

Disaster Section:

Anthrax OR avalanche OR avian influenza OR bioterrorism OR bird flu OR blizzard OR bomb\* OR chemical spill OR Chernobyl OR cyclone OR drought OR disaster\* OR earthquake OR Ebola OR emergenc\* OR explosion OR fire OR flood OR Fukushima OR H1N1 OR H5N1 OR hurricane OR industrial accident OR landslide OR massacre OR mass killing OR MERs OR Middle East respiratory syndrome OR pandemic OR nuclear radiation OR radiological OR SARs OR severe acute respiratory syndrome OR 11 September OR shooting\* OR storm OR swine flu OR terroris\* OR Three Mile Island OR tidal wave OR tornado OR tsunami OR typhoon OR volcanic eruption OR volcano OR World Trade Centre

AND

Psychological Wellbeing Section:

Well-being OR anxiety OR panic OR “post-traumatic stress” OR PTSD OR stress OR “mental health” OR depress\* OR neurosis OR adjustment disorder\* OR distress OR psychological OR resilience OR coping OR ‘mental disorder\*’ OR “positive psychology” OR “satisfactory life” OR mindfulness OR flourish OR pleasure OR flow OR growth

## Appendix 2 Quality Assessment Tool

Section 1: Study design

1. Was the research question/objective clearly stated?
2. Were all subjects selected or recruited from the same or similar populations (including the same time period)?
3. Were the inclusion and exclusion criteria for being in the study pre-specified and applied uniformly to all participants?
4. Was the study population and size clearly specified and defined?

Section 2: Data collection and methodology

1. Were standardised measures used, or where measures are designed for the study, attempts to ensure reliability and validity were made?
2. Were the data collected in a way that addressed the research issue?
3. Was the participation rate stated and at least 50%?
4. Was the number of participants described at each stage of the study?
5. If the study followed participants up, were reasons for loss to follow-up explained?

Section 3: Analysis and interpretation of results

1. Were details of statistical tests sufficiently rigorous and described?
2. Were details of confidence intervals given?
3. Were potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?
4. Was the answer to the study question provided?
5. Are the findings related back to previous research?
6. Do conclusions follow from the data reported?
7. Are conclusions accompanied by the appropriate caveats? (6)

### Appendix 3 Transferability scoring considerations

| Notes        | Primary context = the study context   |  |  |
|--------------|---|--|--|
|              | Target Context = frontline healthcare workers in a hospital setting in Ireland  |  |  |
|              | Hypothesis is that the more both contexts resemble each other against those criteria that determine intervention success, the more likely is the transferability of the intervention. |  |  |
| Parameter    | Criteria  | Consider   |  |
| Population   | 1   | The population characteristics in the primary and target context are similar                             | ...the epidemiologic characteristics<br>...sociodemographic characteristics<br>...the cultural/social (including individual) characteristics<br>...cognitive characteristics<br>...socio-educational characteristics   |
|              | 2   | The population's perceptions of health and health services in the primary and target context are similar | the health needs (regarding the health problem)<br>...the cooperation between providers and recipients   |
|              | 3   | The population's attitude towards the intervention in the primary and target context are similar         | population demand for the intervention<br>...the acceptability of the intervention<br>...the motivation  |
| Intervention | 4   | The evidence base of the intervention is appropriate for the target context                              | usefulness and quality   |
|              | 5   | The intervention content is appropriate for the target context   | conception and adaptability  |
| Environment  | 6   | policy and legislation in the primary and target context are similar                                     |  |
|              | 7   | coordination players in the primary and target context are similar                                       | types of partners, networks, and their (formal or informal) involvement<br>...different personal and professional interests of stakeholders  |
|              | 8   | the health care system and service provision in the primary and target context are similar               | structure and conditions   |
|              | 9   | Characteristics of the local and organizational setting in the primary and target context are similar    | current existence of synergistic or antagonistic interventions<br>...the social/cultural local and/or organizational climate<br>...the general organizational structure and practice<br>...awareness of the intervention and readiness with regard to pre-existing and durable organizational (including political) will for intervention transfer<br>...decision-makers'/leaders' positive perception of the intervention and its importance/priority, their skills, status, and latitude for action<br>support of decision-makers/leaders and (institutional and/or centralized) management<br>...providers' (professionals') perception and support of the intervention |
| Transfer     | 10  | communication requirements in the target context in comparison to the primary context                    | communication requirements   |
|              | 11  | knowledge transfer in the target context in comparison to the primary context                            | supports and training required   |
|              | 12  | adoption and implementation in the target context in comparison to the primary context                   | implementation strategies, recruitment, adaptation   |
|              | 13  | evaluation in the target context in comparison to the primary context                                    | type and quality of evaluation   |
|              | 14  | sustainability in the target context in comparison to the primary context                                | changes in current practice, financing   |