



The Resilience Collaborative

Equipping health workers to recover,
adapt, and grow.

Building Health Worker Resilience:

A Toolkit to Protect Against Burnout on the Front Lines.

Johnson & Johnson

Center for Health Worker Innovation

Contents

Acknowledgements	4
Key Terminology	6
Introduction to the Center for Health Worker Innovation	10
Toolkit Scope	15
The Opportunity	21
Step 1: Explore the Problem	25
Step 2: Explore the Evidence	35
Step 3: Apply the Evidence	51
Step 4: Co-Create & Iterate	57
Step 5: Evaluate	61
The Future of This Toolkit	75
Appendix	79
References	87

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Key Terminology

Bereavement overload: A situation where an individual must deal with loss or death in a continuous and close way,¹ which may mean that a loss is not processed or dealt with before another occurs. Bereavement overload may lead to compassion fatigue and compromised patient and personal care.²

Burnout: A state of mental, emotional, or physical exhaustion resulting from workplace stressors.

ICD-11 definition: “Burnout is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by 3 dimensions:

1. Feelings of energy depletion or exhaustion.
2. Increased mental distance from one’s job, or feelings of negativism or cynicism related to one’s job; and
3. Reduced professional efficacy.³

Coherence: Grounded in an individual’s desire to make sense and meaning of the world and refers to the extent to which individuals see life issues as manageable, understandable, and meaningful, and therefore have expectations that things will mostly work out well.⁴

Compassion and self-compassion: A basic kindness with a deep awareness of the suffering of oneself and other living things, coupled with the wish and effort to relieve it. It is an innate ability, and a mental state capable of being enhanced through training.⁵

Compassion fatigue: Due to experiences as part of an individual’s occupation, it is the acute onset of physical and emotional responses that culminate in a decrease in compassionate feelings towards others. Over the last 2 decades, compassion fatigue has received considerable attention as an important stress response in health workers.⁶

Comprehensibility: A belief that things happen in an orderly and predictable fashion and a sense that one can understand events in one’s life and reasonably predict what will happen in the future.⁷

Determinants of health: According to the World Health Organization (WHO), determinants of health encompass the range of behavioral, biological, socio-economic, and environmental factors that influence the health status of individuals or populations.⁸ This Toolkit primarily focuses on the behavioral factors based on capability, opportunity, and motivation.⁹

Emotional labor: Emotional labor is the “process of regulating both feelings and expressions toward organizational goals.”¹⁰ Jobs rich in “people work” are shown to be emotionally taxing in the form of emotional labor.

Health and well-being: Broadly defined as a state of complete physical, mental, and social well-being and not merely the absence of disease.¹¹ General well-being and “wellness” is therefore considered to be an evolving process within which the presence of illness does not imply the absence of wellness (and vice versa).¹² Consequently, there are many individual physical, mental, social, and environmental factors that impact well-being, but many are difficult to modify.

Hope: The desire for and belief in a positive future, defined as “a multidimensional, dynamic, empowering state of being that is central to life, related to external help and caring, oriented toward the future and highly personalized to each individual.”¹³ Hope is theorized as motivating individuals to act toward reaching a future goal, and may be driven by interconnectedness, a future mindset, and readiness for change.¹⁴

Manageability: A belief that one has the skills or ability, the support, the help, or the resources necessary to take care of things, and that those things are within one’s control.¹⁵

Meaningfulness: A belief that things in life are interesting and a source of satisfaction, that things are really worthwhile, and that there is good reason or purpose to care about what happens.¹⁶

Mental health: A particular state of health operating at a level of psychological and emotional well-being impacting how we think, feel, and behave. Mental health has been described as an overall state of psychological and emotional well-being. However, the functional use of this term often refers to the presence or absence of mental disorders. Well-being, on the other hand, is often used to refer to more positive elements of functioning.

1. Concepts of mental health include subjective well-being, perceived self-efficacy, autonomy, competence, and recognition of the ability to realize one’s intellectual and emotional potential.¹⁷
2. It is defined as a state of well-being whereby individuals recognize their abilities, are able to cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their communities.¹⁸
3. Poor mental health can lead to mental illness, which refers collectively to all diagnosable mental disorders involving:¹⁹
 - a. Significant changes in thinking, emotions, and/or behavior.
 - b. Distress and/or problems functioning in social, work, or family activities.

Mentorship: Mentorship is a flexible teaching and learning process that is relationship oriented and designed to develop the professional capacity of both parties. It is based on mutual trust and respect and seeks to build confidence through fostering an empowering partnership between 2 people who have a shared set of learning objectives.²⁰ When the relationship is supervisor-to-employee, it can be used as a strategy to provide supportive supervision (described below).

Mental health and psychosocial support (MHPSS): The composite term “mental health and psychosocial support” (MHPSS) is used in the Inter-Agency Standing Committee (IASC) Guidelines for MHPSS in Emergency Settings to describe “any type of local or outside support that aims to protect or promote psychosocial well-being and/or prevent or treat a mental health condition.”²¹

Mindfulness: Defined as “paying attention in a particular way, on purpose, in the present moment, and non-judgmentally.” Mindfulness refers to awareness of a person’s emotions, cognitions, as well as to one’s environment and relationship together.²²

Moral distress: May occur when a health worker’s professional ethical values or commitments are incongruent with those of their patients and families, colleagues, supervisors, or the healthcare organization in which they work.²³

Resilience: The acquired ability to reframe stressful events and to **recover, adapt and grow** from stress:²⁴

- Other definitions may include the acquired ability to “bounce back” from adversity or trauma, to regularly recover and adapt from stress and remain focused and optimistic about the future.^{25,26}
- Can be demonstrated during psychological or physical stressors of short (acute) and long (chronic) duration.²⁷

Stress: Stress is a physical and emotional response to a stimulus (i.e., a stressor) perceived as challenging or threatening. For the purpose of this toolkit, stress is considered a dynamic process in which the amount of stress experienced by individuals is determined by the perceived demands upon them as well as by their perceived resources.²⁸ Individual responses to stressors can have a major influence upon mood, sense of well-being, behavior, and health.²⁹

Social support: Can be practical, informational, or emotional, and provided by friends, relatives, or colleagues.³⁰ Specifically, in the work context, it has been defined as the overall level of helpful social interaction available on the job from both co-workers and supervisors.³¹ This may be a mechanism to help foster a supportive workplace environment.

Supportive supervision: Refers to the provision of workplace guidance and feedback on matters of personal, professional, and educational development³²; which may emphasize mentoring, joint problem solving, and two-way communication³³ to promote quality at all levels of the health system.³⁴ Effective supportive supervision is found to be key for health worker motivation and retention and may contribute to the perception of a supportive workplace environment.

Dear Reader,

In 2019, Johnson & Johnson launched the Center for Health Worker Innovation (the Center) to catalyze efforts to respond to the human resource crisis in global health and build a thriving health workforce.

Shortly after the Center's founding, the entire world would come to recognize the role of frontline health workers as the COVID-19 pandemic tested global health systems and health workers in ways unseen in our lifetimes.

The Center's work is rooted in addressing the needs of health workers and the communities they care for each day. Burnout has become rampant among healthcare professionals around the world, and the burnout epidemic is even more pronounced in low-resource settings.

If we do not address this growing threat, this critical workforce will continue to shrink. Even before COVID-19, projections estimated we will face an 18-million-person shortage in the global health workforce by 2030.

This truth compelled the Center to stand up The Resilience Collaborative and produce this Toolkit to support organizations looking to equip the global health workforce with tools to manage their own well-being, ensuring they are capable of continuing to deliver high quality healthcare to vulnerable populations across the globe.

Resilience is the acquired ability to recover, adapt, and grow in response to stress, and can help mediate the effects of workplace stress and help to prevent burnout. Programs that provide health workers with techniques to improve their resilience and overall well-being can be an important resource as the global health community works to address other long-term systemic challenges.

The Resilience Collaborative is a global community of practice that aims to advance learning and drive adoption of evidence-based strategies for health worker resilience, particularly in low-resource settings. Improving the overall well-being of health workers can help benefit healthcare systems and patient care.

Together, we – as organizations, decision-makers, program managers, and implementers – can help improve retention among health workers across the globe by supporting these evidence-based strategies to prevent burnout. There has never been a more critical time to empower our frontline health workers, supporting them in developing a greater sense of well-being, and building a culture that values resilience throughout health systems around the world.

Sincerely,

Caitlin Bristol

Director, Global Community Impact;
Lead, The Resilience Collaborative

Ben Davies

Senior Director, Global Community Impact;
Lead, the Center for Health Worker Innovation



“Programs that provide health workers with techniques to improve their resilience and overall well-being can be an important resource as the global health community works to address other long-term systemic challenges.”

Our Call to Action

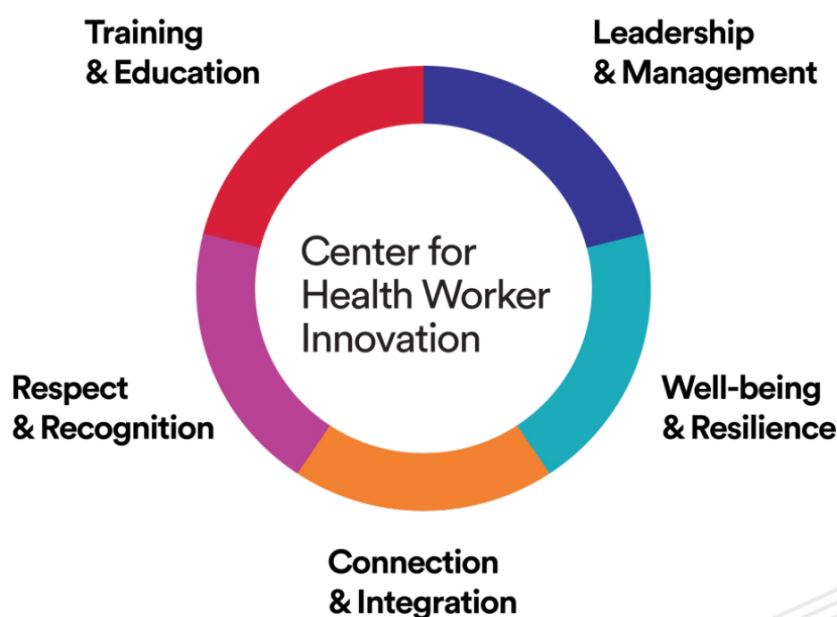
The Johnson & Johnson Center for Health Worker Innovation (the Center) was founded to catalyze efforts to respond to the human resource crisis in global health and build a thriving health workforce. The Center is tasked with guiding a **\$250 million, 10-year commitment** to support 1 million nurses, midwives, and community health workers reaching 100 million people by 2030, and an additional **\$50 million commitment** to support frontline health workers in response to COVID-19.

Both commitments have been made by the Johnson & Johnson Family of Companies and the Johnson & Johnson Foundation. Working with longstanding partners, the Center is developing a global portfolio of programs in regions with the highest community health burdens and frontline health worker gaps, while also ensuring that the current health workforce is thriving and resilient.

The Center has adopted a human-centered approach — impacting the system by first focusing on the needs of individual health workers and what they need to thrive on the job. They believe that by solving the challenges of frontline health workers, they can improve healthcare for everyone.

The Center takes its lead from health workers and the communities they care for and prioritizes 5 key challenge areas (see Figure 1).

Figure 1. The Center's five key challenge areas.



By addressing these priority challenge areas, the health worker shortage can be mitigated in 3 key ways (**see Table 1**).

Table 1. Strategies to reduce the health worker shortage.

- 1** **Get more:** Bring more health workers into the frontline health workforce through new recruitment, accreditation of existing informal workers, and increased funding of health worker posts.
- 2** **Lose less:** Improve retention of existing health workers.
- 3** **Do more:** Extend the reach and productivity of the frontline health workers we already have, so that health worker teams can cover a larger proportion of the population while still providing quality care.



Toolkit Scope



Priority Area: Well-being & Resilience.



Strategy: Improving retention of existing health workers.



Topic area: Preventing burnout and building resilience to improve well-being in health workers.



Who is this Toolkit for: Primarily for organizations, decision-makers, program managers, and implementors supporting health workers.



Purpose: To help organizations navigate the existing evidence* to inform health worker resilience program design, implementation, and evaluation.



This Toolkit is **not designed to place the responsibility of building resilience on health workers**. Rather, this is a call to action for organizations to provide evidence-based initiatives that promote resilience-building behaviors and opportunities for recovery.



Evidence-based well-being and resilience initiatives are **not a substitute for the medical management** required for severe emotional distress, rather they may be considered as additive, supporting mechanisms.



This is **not a resource designed specifically for or in response to COVID-19**. While the implications of crisis-care are discussed within this Toolkit, it is designed with an eye toward long-term preventive initiatives.

** A majority of the evidence discussed in this resource is derived from the nursing population (including management and leadership perspectives), and evidence in low-resource settings is limited.*

Well-being & Resilience

This Toolkit is designed to support the Center’s well-being and resilience challenge area and is for organizations, decision-makers, program managers, and implementers interested in improving health worker well-being through resilience-building. This supports the second strategy identified in **Table 1** – improving retention among health workers – by supporting evidence-based strategies to prevent burnout.³⁵

Building resilience is recommended as a key preventative strategy against burnout among health professionals.³⁶

In general, 3 levels of change are recommended to improve resilience and reduce the risk of burnout:

1. Modifying the organizational structure and work processes;
2. Improving the fit between the organization and the individual health worker through professional development programs and interpersonal programs; and
3. Individual-level actions to increase resilience and promote effective coping and healthy behaviors.

While globally there has been an increased focus on improving health systems’ efficiencies and addressing broader factors that contribute to burnout, few systemic initiatives exist to prevent burnout at the individual level. More so, even though there is evidence indicating that such initiatives may be effective, those that have been implemented use a wide diversity of delivery modalities and assessment methods, so the field lacks a systematic approach for delivering and testing such interventions in a way that meaningfully builds the health worker resilience and well-being knowledge estate.

We hope to support local approaches that explore the knowledge gaps and generate new evidence for “what works” in low-resource settings.

Impact of Burnout

It is globally recognized that nurses, midwives, and health workers are often the first and only point of care in their communities and therefore play a vital role in providing health services. However, the world faces a severe deficit of these critical caregivers, with a projected shortage of 18 million health workers by 2030.³⁷

The World Health Assembly designated 2020 the International Year of the Nurse and the Midwife, recognizing that the projected deficit has significant global health implications.

Below-target staffing is associated with a 2%-15% increase in mortality, while an increase in 1 nurse per 1000 inpatient days is associated with a 4.3% decrease in mortality.^{38,39}

Strategies to close the workforce gap are therefore in high demand. While lower recruitment numbers are a contributing factor, the retention of existing nurses is a global concern, from high turnover rates reported in the USA (16.5%), to 20% of nurses in Kenya reporting they would leave the profession in 2 years, to a 7.5% reduction in job satisfaction reported in Germany.^{40,41,42}

Around the world, nursing is considered to be one of the most stressful professions, given the demanding nature of patient care and the complex health system landscape in which nurses operate.⁴³

This is reflected across the globe, with nurses reporting high levels of emotional exhaustion⁴⁴ and fatigue⁴⁵ and a subsequent impact on nurse health and well-being.^{46,47,48} Left unaddressed, these heightened levels of stress can lead to post-traumatic stress disorder, anxiety, depression, burnout,^{49,50} psychosomatic disorders, alcoholism, drug abuse, workplace injury, and musculoskeletal disorders.^{51,52,53,54}

These effects have implications for productivity and performance.^{55,56} When nurses' well-being is impacted, patients suffer as well. If not addressed appropriately, high levels of stress can lead to tardiness, turnover, and nurses distancing themselves emotionally and cognitively from their work, which can result in sub-optimal patient care.^{57,58,59,60,61,62,63}

Burnout includes three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment.⁶⁴

Burnout has reached rampant levels among health workers around the world⁶⁵ and many studies have demonstrated that provider burnout is detrimental to both patient care and workforce turnover.^{66,67,68} Health workers suffering from burnout feel less equipped to care for themselves and the patients they serve,⁶⁹ and are more likely to leave the healthcare system earlier, which leads to staff shortages and further burnout among the workers who remain.



The Opportunity

The nature of nursing and role of a health worker are both inherently stressful, and it is not feasible to completely remove all work-related stressors. In addition to efforts to reduce external stressors, there is an opportunity to improve health workers' ability to cope with and manage stress by **building their resilience, which may act as a “buffer” during high periods of stress.**

A clear link has been made between “recovery” and “bouncing back” – being able to recover from a trauma or difficult period and return to baseline health or well-being.^{70,71} Studies have shown that increases in resilience are correlated with increases in well-being and life satisfaction in the general population.⁷² Resilience has also been linked to enhanced patient satisfaction,⁷³ perceived better quality of care, and better attitudes toward patients.⁷⁴ High levels of resilience in nurses have also been associated with increased overall well-being, psychological health,⁷⁵ improved work relationships,⁷⁶ improved professional quality of life, and increased job-satisfaction.^{77,78,79,80,81}

Promoting psychological resilience among nurses is recognized as a key effort that can contribute to a healthy work environment,⁸² enhance nurse retention, and improve quality of care.⁸³ Research on resilience in nurses has highlighted its protective role against nursing turnover,⁸⁴ post-traumatic stress disorder,⁸⁵ emotional exhaustion,⁸⁶ and burnout.⁸⁷

Personal resilience has the potential to enable nurses to successfully negotiate the current challenges of the healthcare system and maintain job satisfaction, good health, and well-being.^{88,89} Building personal resilience alongside others in the same workplace could potentially facilitate more effective collaboration and support between colleagues and ultimately improve general morale and the workplace environment.⁹⁰

There is a need to identify key resilience-building behaviors, the determinants of those behaviors, and strategies that may support engaging in those behaviors. In addition, given the multifactorial nature of burnout, there is also a need to explore whether initiatives that consider effects at the organizational, community, and policy levels already exist to support engaging in these behaviors.

This Toolkit is not designed to place responsibility on health workers. Rather, this is a call to action and resource for organizations to provide evidence-based initiatives that facilitate resilience-building behaviors among health workers, and opportunities for their recovery.

5-Step Process

The following step-by-step process and accompanying templates are designed to help organizations apply evidence-based practices to develop, implement, and evaluate resilience-building strategies.

For interactive materials to assist in developing an approach to resilience-building, please refer to the **Appendix**.

1

Explore the problem

- a. Understand the terms
- b. Understand health worker needs (template in **Appendix 1.1**)

2

Explore the evidence*

- a. Review key behaviors
- b. Review key determinants
- c. Review what works
- d. Review gaps in the evidence

3

Apply the evidence

- a. Review the Center's Resilience Framework
- b. Create a strategy map (template in **Appendix 1.2**)

4

Co-create & iterate

- a. Involve multiple stakeholders and end users to co-create
- b. Conduct user testing

5

Evaluate*

- a. Complete a measurement plan (template in **Appendix 1.2**)
- b. Conduct real-world testing



*** Remember the [Evidence Library](#) and [Measures Library](#) can be accessed for more detailed information.**



Step 1

Explore the Problem

Executive Summary

In this section we distinguish between factors that are easier to modify by the individual and those that are more difficult to modify by the individual (see Figure 2). These factors may be considered as “within one’s scope of influence.”

This Toolkit leverages the 5 modifiable pillars of general well-being (listed below) developed by the Johnson & Johnson Health & Wellness Solutions team (JJHWS) alongside evidence exploring the key behaviors and determinants of health worker resilience. **However, it is important to note that the difficult to modify factors should still be considered as opportunities for stress reduction.** Such factors may not be in the individual’s scope of influence but may be within the scope or sphere of influence of implementing organizations.

To help organizations consider their sphere of influence, we describe the multifactorial nature of burnout and how it can be fueled by internal and external factors. We then further explore the role that resilience can play in preventing burnout as a complementary strategy to those targeting external stressors.

The JJHWS 5 modifiable pillars of general well-being:

1. **Vitality** (i.e., I have energy throughout the day)
2. **Emotional balance** (i.e., I feel peaceful)
3. **Connectedness** (i.e., My relationships matter)
4. **Growth** (i.e., I am learning & growing)
5. **Purpose** (i.e., My life has meaning)

Figure 2. Differentiating between factors of well-being that are modifiable by the individual and those that are difficult to modify by the individual.



Modifiable By Individual

- Having the energy to do the things one wants to do
- Having a sense of purpose and meaning in life
- Having strong personal relationships
- Being accepted by and belonging to groups
- Being able to manage emotional state (positive/negative)
- Having the ability to bounce back after adversity
- Experiencing mastery
- Expressing creativity
- Having new experiences



Difficult to Modify By Individual

- Socio economic status (SES); Income level, social status relative to wealth/power
- Safety/security (including financial, physical)
- Political climate/cultural norms
- Individual factors (i.e. age, gender, personality)

It is important to note that while interventions to build resilience and enhance well-being may offer value across the spectrum from feeling well to feeling ill, they may complement, but should not replace medical management needed under severe emotional distress or systemic efforts to reduce external stressors.

Multifactorial Nature of Burnout

Several theories and models have explored the multifactorial nature of burnout and the complex interplay between internal and external factors, including the Job Demands-Control model,⁹¹ the Effort-Reward Imbalance model,⁹² the Organizational Injustice Model,⁹³ and the Job Demands Resource model.⁹⁴ Organizations are encouraged to first consider the scope of their initiative using the Socio-Ecological Model (SEM) to identify and prioritize factors (see Figure 3).⁹⁵

Burnout is multifactorial in nature, driven by both internal and external factors.⁹⁶

The SEM posits there are 5 levels of influence on health behaviors and health outcomes (e.g., burnout) and that individuals both influence and are influenced by each of the following levels:

1. **Individual** - attitudes, beliefs, knowledge, self-efficacy, skills, behaviors.
2. **Interpersonal** - (primary groups) – close social networks and support systems, such as friends and family.
3. **Organizational** - organizations and institutions.
4. **Community** - where an individual lives, works, and broader social connections.
5. **Public Policy** - local, state, and national laws and policies.

Figure 3. The SEM.



External factors such as social norms and culture, safety/security, environmental factors, socio-economic policies, and interpersonal relationships can directly contribute to burnout as “stressors” but also influence whether or not individuals can engage in resilience-building behaviors.

This is particularly important when considering the provision of care under crisis circumstances such as COVID-19, which both alters and intensifies these factors as stressors.

A list of factors organized by the SEM that may contribute to burnout is provided in **Table 2**. Crisis-specific factors for COVID-19 have also been identified by the Inter-Agency Standing Committee.⁹⁷ Such insights may be relevant under other crisis care circumstances, such as natural and man-made disasters.

Where possible, efforts to reduce external stressors should be made. Organizations should acknowledge the impact they may have on engagement in, and effectiveness of, resilience programs.

Table 2. List of factors across the SEM that may contribute to burnout and impact engagement in, and positioning of, resilience programs.





POLICY FACTORS

GENERAL⁹⁸

Local, state, and national laws and policies: Can advance important health policy goals which may include universal health coverage, and establish the basis for organizing, governing, and financing a country's health system. Laws and policies can also indirectly impact health workers (e.g., tax-relief for childcare). These policy factors can contribute to or alleviate stress and influence the resources available to health workers.

CRISIS SPECIFIC^{99,100}

Local, state, and national laws and policies for crisis-care: These may include social distancing laws and vaccination rollouts. These can contribute to or alleviate stress and influence the resources available to health workers.



COMMUNITY FACTORS

GENERAL^{101,102,103,104,105, 106,107,108,109}

Structure of the healthcare system: Differences in private and public healthcare systems and funding availability can impact the resources, time, and support available to health workers. Resource scarcity, in particular, may contribute as a stressor but also limit access to programs.

Social cohesion: Whether a community has shared goals, responsibilities, and cooperation between members can either contribute to or alleviate stressors. This may also influence motivation and opportunity (access) to participate in programs.

Technological infrastructure: A community may vary in terms of the technological infrastructure which may contribute to administration burden and workflow interruptions. Access to technology may also be limited in rural areas which may influence how feasible a digital resilience program is to deploy.

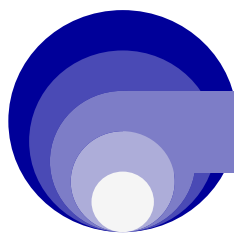
Safety, security, & stigma: Stigma associated with mental health and exposure to violence in certain healthcare settings contribute as stressors and may influence motivation and opportunity to engage in a program.

CRISIS SPECIFIC^{110,111}

Stigmatization: Stigmatization toward those working with COVID-19 patients may contribute as a stressor, reinforce feelings of isolation, and inhibit the ability to reach out for social support.

Insufficient protective equipment: When basic needs are not met, additional stress is placed on health workers and participating in supplementary programs may not be a priority.

Strict biosecurity measures: These require more time, which may impact both the motivation and opportunity (time) to participate in programs.



ORGANIZATIONAL FACTORS

GENERAL^{112,113,114,115,116,117}

Governance structure: A governance structure that does not advocate for and provide breaks for staff, or ensure roles are covered to allow time-off as needed, may inhibit the ability to recover from stress and may make health workers feel as though they cannot take breaks or prioritize self-care.

Organizational culture: An organization's culture is manifested in its actions (e.g., decisions, resource allocation) which can contribute to or alleviate stressors. This may influence whether supportive supervision is available to health workers and may also impact the opportunity and health worker motivation to participate in programs.

Staff shortages and/or long hours: Long hours and workload contribute as stressors and these challenges also reduce the time and energy health workers have available to engage in a program.

Workplace bullying and harassment policies: The tolerance of an organization regarding bullying and harassment in the workplace can either contribute to or alleviate emotional distress. This may also influence the opportunities made available and may impact levels of health worker motivation and vulnerability felt in group or 1-to-1 programs.

Workplace discrimination policies: The tolerance of an organization regarding discrimination in the workplace (e.g., age, disability, gender identity, marriage and civil partnership, pregnancy and maternity, race, religion or beliefs, sex) can either contribute to or alleviate emotional distress. This may also influence the opportunities made available and may impact levels of health worker motivation and vulnerability felt in group or 1-to-1 programs.

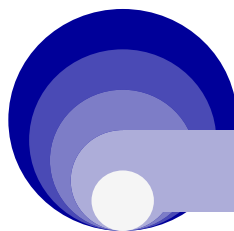
Clinical standards & processes: The practice environment, ethical climate, and resulting quality of care can contribute to or alleviate levels of moral distress which are associated with health worker burnout. This may also impact health worker levels of motivation and energy to participate in programs.

Employee assistance and development programs: Provision of employee resources may be a reflection of the organizational culture, the scarcity or prevalence of which may contribute to daily stress and directly impact access to programs.

CRISIS SPECIFIC^{118,119}

New strict procedures: May contribute as a stressor and prevent spontaneity and autonomy to participate in programs.

Longer working hours: Longer hours, coupled with increased patient loads due to crisis, contribute as stressors and reduce the time and energy health workers have available to engage in a program.



INTERPERSONAL FACTORS

GENERAL^{120,121,122,123}

Workplace bullying and harassment: Can occur in hospitals and healthcare settings as a source of distress and can also influence motivation to participate in programs, particularly those in group settings.

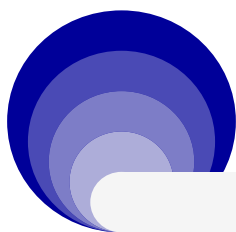
Workplace interpersonal discrimination: May occur during interactions with colleagues, supervisors, or patients, contributing as a stressor and influencing both motivation and opportunity to participate in programs.

Professional relationships: Interpersonal relationships between colleagues can be a source of support that buffers against detrimental stress or, alternatively, can be a source of tension and conflict and contribute to work-related stress. These relationships may influence motivation to participate in programs alongside colleagues.

Patient relationships: Interactions with patients who ignore medical advice, insist on unnecessary tests or treatments, or exhibit disrespectful behavior can cause emotional exhaustion. This may also influence energy available to participate in programs.

CRISIS SPECIFIC^{124,125,126}

Reduced interaction: Intense work schedules coupled with efforts to minimize contact with others can reduce health workers' capacity to access social support and participate in programs.



INDIVIDUAL FACTORS

GENERAL^{127,128,129,130,131}

Health concerns: Health concerns and problems of loved ones may be additional stressors and participating in programs may not be a priority.

Relationship problems: May further contribute to levels of stress and limit ability to access social support.

Financial problems: May be additional stressors that further impact interest and engagement in programs, particularly those that may incur costs to participants.

Limited time at home: May further limit health workers' time available to participate in programs due to existing conflicts with personal life.

CRISIS SPECIFIC¹³²

Fear of personal exposure to virus: An additional stressor which may also impact health workers' ability and motivation to participate in in-person programs.

Fear of passing COVID-19 onto family & friends: An additional stressor which may also impact health workers' ability and motivation to participate in in-person programs.

Physical strain: An additional physical stressor that can be caused by protective equipment which may also impact health workers' ability, motivation, and energy to participate in programs.

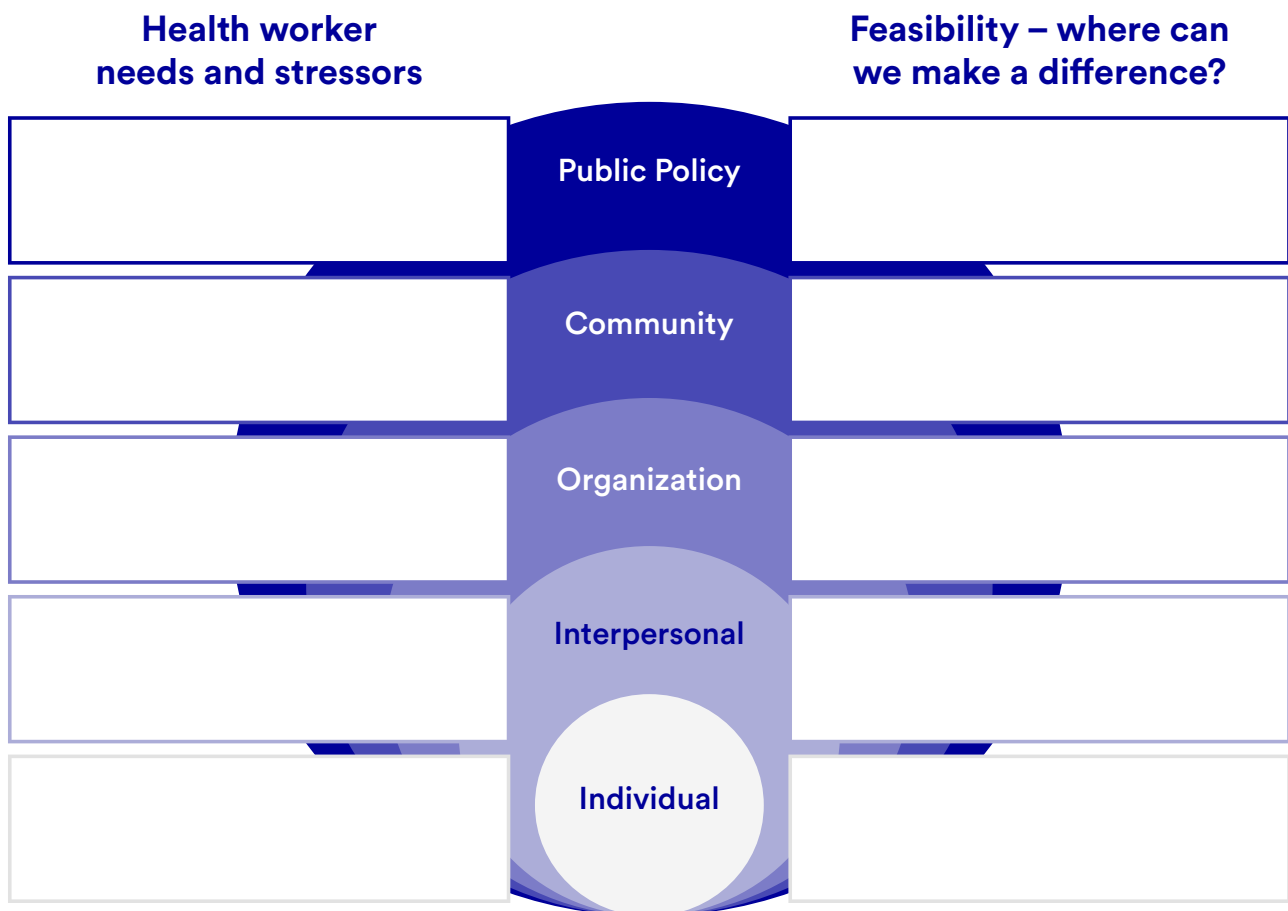
Keeping up to date with best practices as crisis develops: An additional stressor and further reduces time and energy available to participate in programs.

Physical isolation: An additional stressor which can inhibit ability to comfort those who are sick or distressed, or limit opportunity to receive comfort needed when experiencing sickness or distress. This also serves as a barrier to accessing social support and in-person programs.

Constant awareness: The extra vigilance required can be both mentally and physically exhausting which may contribute to emotional distress and impact motivation to engage in programs.

Understand Health Worker Needs

As mentioned on page 27, burnout is multifactorial in nature. It is important to understand how and when resilience-building initiatives can support your efforts. Using the information provided in **Table 2**, consider conducting a needs assessment with health workers to understand and prioritize stressors and external factors of influence. Using the SEM Template (**Appendix 1.1**), consider mapping those needs across the different levels to reflect the full landscape of opportunity.



Use template 1 found in the Appendix 1.1 to track health worker needs and stressors and then consider where you can make a difference.

Next, consider feasibility. Where can your organization most likely make a difference? How might resilience-building behaviors contribute as a core or supporting strategy in your efforts?

For example, a health worker needs assessment may indicate that in addition to long working hours, workplace bullying is a significant stressor. In this case, implementing partners may not be able to impact the work hours but may be able to implement organizational changes that include raising awareness and anonymous reporting mechanisms for workplace bullying. In this case, a resilience-building initiative may be introduced as a complementary strategy to build health worker coping and recovery skills in parallel to these efforts.



Step 2

Explore the Evidence

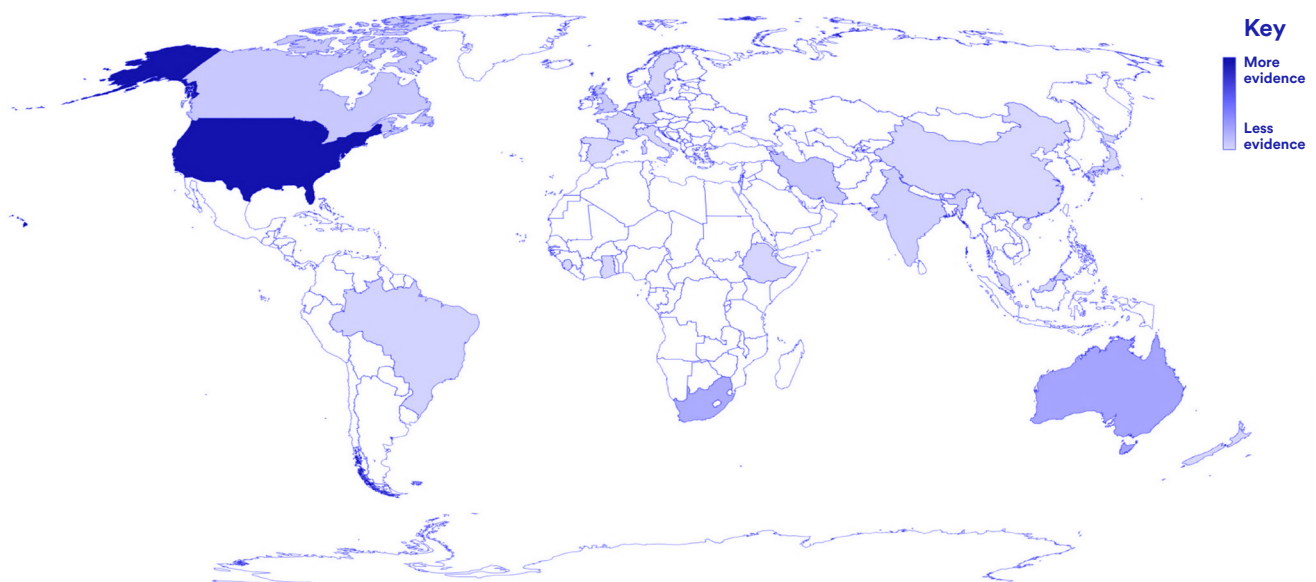
Executive Summary

As stated in Step 1 of this Toolkit, burnout is a multifactorial problem driven by internal and external factors. Some of these factors are within an individual's sphere of influence (i.e., easier to modify by the individual) and some are external factors that may contribute to stressors. It is important to conduct a health worker needs assessment to better understand existing stressors, where you can feasibly intervene, and how a resilience-building strategy may complement or support other interventions. Whether using building resilience as a core or supporting strategy, this section will help identify resilience-building behaviors and factors that are easier to modify, as one mechanism to improve well-being (Steps 2a-b). A list of strategies that have been tested and recommended to promote these resilience-building behaviors is also provided (Step 2c).

However, it is important to acknowledge the limited generalizability of existing evidence which is biased toward certain countries, contexts, and populations (**see Figure 4**). Therefore, Step 2d identifies the gaps and opportunities for evidence generation across the Socio-Ecological Model (SEM) that may facilitate engagement in the identified resilience-building behaviors.

Evidence in low-resource settings is limited. Further research is needed.

Figure 4. Distribution of peer-reviewed articles: Interventional and cross-sectional evidence, including systematic reviews, integrative reviews, and global guidance.



As a best practice, this Toolkit starts with the existing evidence and acknowledges that not all evidence is created equal. The J&J Health & Wellness Solutions (JJHWS) Levels of Evidence was utilized to guide the classification of evidence. In short, the framework is a hierarchy of evidence available to date with the highest level being “Level 4” evidence (e.g., meta-analyses, several randomized controlled trials, etc.).

Figure 5. JJHWS Levels of Evidence.



The analysis starts with, but is not limited to, peer-reviewed scientific literature, with the acknowledgment that the health-behavior science evidence base can be sparse at times in terms of various factors including quantity, quality, and diversity of perspectives. Therefore, in addition to peer-reviewed scientific literature (91 articles), the guidance provided is informed by interviews with 29 health workers in low-resource settings, ongoing insights from existing implementing partners via The Resilience Collaborative, and subject matter expertise.

As a result of this review, 5 core and 2 supporting evidence-based, resilience-building behaviors are presented, alongside 3 domains listing the determinants (i.e., influencers of change) to support engagement in these behaviors.

Step 2a: Review Resilience-Building Behaviors

Using the evidence available, five core and two supporting individual-level, resilience-building behaviors have been identified.

Figure 6. Five core and two supporting resilience-building behaviors.



See Appendix 1.2 for a template, which can be used to assist in the development of a resilience-building strategy.



Engaging in cognitive behavioral stress management focused on reducing negative thoughts and increasing joyful occasions can considerably improve nurses' resilience. This typically involves using a set of techniques and methods to increase an individual's ability to deal with daily stressors.¹³³ Participants may be taught by an allied health professional to recognize the relationship between thinking, feeling, and behaving.¹³⁴ Cognitive restructuring may also be used when individuals are taught to examine and replace maladaptive thoughts (e.g., weighing evidence and developing alternative coping thoughts).^{135,136,137,138,139}



Practicing mindfulness and relaxation practices to reframe negative thoughts can also aid mood management and perceptions of stressful situations. Behavioral techniques may include breathing exercises, mindfulness, meditation, aromatherapy, guided imagery, progressive relaxation, stretch relaxation, autogenic training, and biofeedback.^{140,141,142,143}



Engaging in self-care (e.g., eat, sleep, activity) to ensure basic human needs are met is associated with both resilience and well-being. This may include physical exercise^{21,144} and micro-bursts of activity to improve energy level, mood, and fatigue level,^{145,146} in addition to sleep hygiene^{147,148} and prioritization of healthy eating for recovery and stress management.¹⁴⁹



Connecting with others and engaging in a social support network is a well-established recovery behavior for health workers. Activating social support from family, friends, and colleagues and reconnecting to people with whom individuals have close relationships allows them to maintain a sense of connectedness.^{150,151,152,153} This can take place in either informal settings (e.g., family or friends) or formal settings (e.g., discussion groups among nurses, etc.), and may be paired with programs to enhance communication skills.¹⁵⁴



Connecting to purpose and defining a personal meaning in life promotes a sense of well-being¹⁵⁵ and is well evidenced as a modifiable psychosocial factor for building resilience.¹⁵⁶ This may include, but is not limited to, practicing spirituality and faith (meditation/prayer) to improve resilience.¹⁵⁷



Seeking growth and continuing to learn can also facilitate resilience and well-being.^{158,159,160,161} Specifically, in the workplace environment, mentoring and supportive supervision is increasingly being used to facilitate career support and is considered a strategic means to help mitigate staffing shortages, promote socialization and retention, as well as support career development.¹⁶²



Seeking additional support, if needed. Instructional and emotional social support (e.g., mental health support) is emphasized as an important behavior during periods of high emotional distress (e.g., in pandemic response and during crisis care).^{163,164} However, seeking additional support can also include seeking informational support and guidance from peers and supervisors, particularly in early career professionals.^{165,166,167} The ability to do so may be influenced by the presence, or absence, of supportive supervision.

Step 2b: Review the Key Determinants

Having identified core behaviors, the next step is to understand the key determinants that may directly influence engagement in these behaviors, and/or that are shown to directly impact levels of resilience.

To support organizations, easier to modify determinants^{168,169,170,171,172} have been identified and clustered by adapting the psychological domains of resilience^{173,174,175,176,177} to form the Center's determinant domains:

- 1 Domain 1: Coping & control**
- 2 Domain 2: Sense of purpose**
- 3 Domain 3: Human connection**

These domains serve to help organizations further specify a resilience strategy that will also support more robust evaluation (in Step 5).

- 1 Domain 1: Coping & control**

This list represents the determinants associated with one's ability to cope and feel in control:

- 1. Skills & self-efficacy (cognitive flexibility, problem solving, stress management, work-life balance, belief in ability)**
- 2. Knowledge & awareness (of stressors, triggers, & recovery strategies)**
- 3. Readiness for change (construct of hope)**
- 4. Self-compassion & self-prioritization**

Control is identified as a psychological domain of resilience that is particularly important during periods of high emotional distress (e.g., pandemic and/or crisis care). Many years of research have established that people need to believe they have control in their lives, and those who have higher levels of personal control belief have higher life satisfaction and morale, and lower levels of depression and emotional distress.¹⁷⁸

Control is reflected in the belief that personal resources can be accessed to achieve valued goals and can be facilitated by individual coping mechanisms that help to achieve both short- and long-term goals.¹⁷⁹

For these reasons, it is proposed that coping is a high-level domain category rather than a subcategory of control. This approach acknowledges that coping can work alongside control, and that multiple determinants of coping and control can be a part of a robust interventional strategy. Resilience is described as an ability. There is strong evidence to indicate that certain skills are associated with higher resilience among healthcare workers. These skills may include cognitive flexibility, problem solving skills, stress management, and work-life balance skills. However, understanding one's triggers and stressors and knowing when to use these skills, while also having belief in one's ability (i.e., self-efficacy) to use these skills, is just as important. Knowledge, awareness, skills, and self-efficacy can impact an individual's motivation and ability to engage in resilience-building behaviors.^{180,181,182,183,184,185}

Hope is a multidimensional, dynamic, empowering state of being that is central to life¹⁸⁶ and may be driven by 3 constructs: interconnectedness, a future mindset, and readiness for change.¹⁸⁷ It is proposed that the individual constructs of hope span the 3 resilience domains, with readiness for change having the ability to influence an individual's coping and control.¹⁸⁸ Further, the ability of health workers to exercise self-compassion and self-prioritization^{189,190,191} may be particularly critical during periods of high emotional distress (e.g., in pandemic response and during crisis care).^{192,193}

2 Domain 2: Sense of purpose

This list represents determinants associated with one's sense of purpose:

- 1. Meaningfulness**
- 2. Feeling valued**
- 3. Future mindset (construct of hope)**
- 4. Optimism**

Research suggests that health worker motivation and level of resilience may also be influenced by their sense of purpose and coherence.^{194,195,196,197,198,199} Coherence is grounded in an individual's desire to make sense and meaning of the world and refers to the extent to which individuals see life issues as manageable, understandable, and meaningful, and therefore have expectations that things will mostly work out well.²⁰⁰

Fostering a sense of purpose and defining a personal meaning in life promotes a sense of well-being²⁰¹ and is well-evidenced as a modifiable psychosocial factor for building resilience.²⁰²

Meaningfulness can contribute to an individual's sense of purpose as a belief that things in life are interesting and a source of satisfaction, that things are really worthwhile and that there is good reason or purpose to care about what happens.²⁰³ More specifically in the workplace environment, research suggests that feeling valued is also an important motivational factor.

Furthermore, there is strong evidence to suggest that nurses' mindsets (e.g., future mindset - a construct of hope) and optimism may influence levels of resilience.^{204,205,206,207}

While these may be intrinsic factors, there is evidence to suggest they may be enhanced in a supportive work environment.²⁰⁸



Domain 3: Human connection

This list represents determinants associated with feeling supported by and connected to others:

1. **Social support**
2. **Supportive supervision**
3. **Interconnectedness (construct of hope)**
4. **Communication & teamwork skills**

There is substantial evidence to suggest having meaningful relationships both within and outside the work environment is associated with higher levels of resilience.^{209,210,211,212,213,214,215} Feeling connected and supported can be influenced by both personal (e.g., family and friends) and professional social support (e.g., peers and colleagues) which may foster a sense of interconnectedness - and is also a construct of hope. This can be reinforced by supportive supervision (i.e., provision of workplace guidance and feedback on matters of personal, professional, and educational development from supervisory and managerial staff)²¹⁶ which may impact overall health worker well-being.^{217,218,219}

In the workplace environment at the interpersonal level, strong working relationships and a collaborative environment may further influence health worker resilience by reducing conflict and miscommunication stressors while enhancing coping skills, while workplace policies, trainings, and resources at the organizational level may facilitate the development of communication and teamwork skills.

The complex role that socio-cultural factors play within the workplace environment cannot be overlooked. Specifically, lack of supervisor support, and workplace social norms that overlook the importance of recovery may serve as a barrier to learning and using coping skills, feeling in control, and/or feeling a sense of purpose within the workplace.

Creating a supportive work environment is a critical factor in promoting resilience-building behaviors.

Step 2c: Review What Works

The next step is to explore strategies that have been shown to reduce perceived stress, improve well-being, and/or prevent burnout via resilience-building behaviors. Doing so brings to life the mechanisms of action that may help to refine scope, steer design, and build the foundation for more robust evaluation.

To support organizations in doing this, a library of evidence-based strategies focused on building resilience to improve well-being has been consolidated (see [Appendix 1.3](#)). Using the JJHWS Levels of Evidence, this evidence has been categorized on a scale from 1 to 4 (see [Table 3](#)).

Table 3. Levels of evidence.

Type	N	Range
Randomized controlled trials	10	4.0
International guidelines	3	4.0.
Pre/post with control groups	9	3.75
Systematic reviews, meta-analyses, integrative reviews	9	3-4.0
Pre/post, no control	24	2.5-3.5
Qualitative	12	2.5-3.5
Cross-sectional analyses	12	2.5-3.0
Theoretical models	6	2.5
Review article	4	2.0
Expert opinion pieces	2	1-2.0

It is important to note that it takes time to establish peer-reviewed evidence. Organizations are encouraged to [join The Resilience Collaborative](#) to share their experience, learn from others, and contribute to growing the body of evidence to support the implementation of resilience-building practices.

Overall, 9 high-level categories were identified in the literature (see **Figure 7**). Examples per category are provided in **Table 4**. These categories are not mutually exclusive as the most frequently tested programs were found to be multi-modal in nature (e.g., a combination of Stress Management Training and psycho-education). The categories are presented within the context of the SEM to indicate the intervention levels primarily targeted by each category.

The average evidence level was calculated per high-level category. These values reflect the types of evidence in which a higher value represents formally tested strategies that were found to be effective. These predominantly included holistic programs, stress management, and communications training. **Lower values represent categories that may be less tested but may be considered emerging evidence and are increasingly recommended for testing to support resilience-building behaviors.**

Although the most frequently tested interventions were multi-modal, they tended to intervene at the individual-level of the SEM, rather than targeting factors at the interpersonal or organizational level.

There is a distinct lack of evidence for programs targeting multiple levels of the Socio-Ecological Model to promote resilience-building behaviors, particularly at the organizational, community, and policy level.

Therefore, organizations should endeavor to explore the evidence gaps and evidence generation opportunities that exist, which is described further in Step 2d.

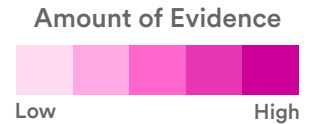
Figure 7. High-level categories generated from existing evidence to support resilience-building behaviors and subsequent opportunities for evidence generation.



Questions to consider:

- Existing empirical evidence is a good starting point for evidence-based practice, but what about the gaps in evidence?
- Are there practice-based learnings that can contribute to the field?
- How can evaluation be optimized to better understand what works?
- A majority of the existing evidence targets the individual-level determinants predominantly in Domain 1 (coping & control). How can more evidence be generated for sense of purpose (Domain 2) and human connection (Domain 3) using interpersonal and organizational interventions?
- Considering the abundance of stressors existing across the SEM, how can such strategies be integrated into other stress-reducing efforts?
- Given the importance of organizational culture and supportive supervision, yet lack of interventions reported in the existing evidence, what organizational interventions can be developed and tested?

Table 4. Categories and example strategies based on existing evidence to support resilience-building behaviors.



1. Holistic Programs Ave. Evidence Level 3.46	2. Stress Management Training Ave. Evidence Level 3.43	3. Comms & Teamwork Training Ave. Evidence Level 3.17
Examples <ul style="list-style-type: none"> • Mindfulness meditation^{220,221} • Mindfulness-Based Stress Reduction (MBSR)²²² • Abbreviated MBSR²²³ • Mindful Self-care and Resiliency (MSCR)²²⁴ • Compassion cultivation^{225,226,227} • “Snack & Relax” Program²²⁸ • Yoga²²⁹ 	Examples <ul style="list-style-type: none"> • Stress Management and Resilience Training (SMaRT)²³⁰ • Counseling²³¹ • Cognitive behavioral stress management training^{232,233} • Accelerated Recovery Program (ARP)²³⁴ • Psychological flexibility program²³⁵ • Acceptance and Commitment Therapy (ACT)²³⁶ 	Examples <ul style="list-style-type: none"> • Emotional Intelligence Training²³⁷ • Adler/Sheiner Programme (ASP)²³⁸ • Teamwork training²³⁹ • Debriefing²⁴⁰ • Work shift evaluations²⁴¹
4. Social Interactions Ave. Evidence Level 2.95	5. Rewards & Recognition Ave. Evidence Level 2.93	6. Psycho-Education Ave. Evidence Level 2.89
Examples <ul style="list-style-type: none"> • Peer discussion groups²⁴² • Personal and professional relationship building^{243,244,245} • Time off²⁴⁶ 	Examples <ul style="list-style-type: none"> • Systematic community engagement²⁴⁷ • Feedback mechanisms^{248,249} • Professional development^{250, 251, 252} 	Examples <ul style="list-style-type: none"> • Workshops & seminars^{253,254,255} • Credited courses^{256,257,258} • Cognitive Behavioral Therapy Education (CBT)^{259,260}
7. Mentorship & Leadership Ave. Evidence Level 2.85	8. Spiritual-, Faith-, Religious-based Practice Ave. Evidence Level 2.64	9. Workplace Policies Ave. Evidence Level 2.50
Examples <ul style="list-style-type: none"> • Formal mentoring^{261,262,263} • Informal mentoring^{264,265,266,267} • Leading by example^{268,269} 	Examples <ul style="list-style-type: none"> • Spiritual practice^{270, 271} • Pastoral care²⁷² • Faith (meditation/prayer)²⁷³ 	Examples <ul style="list-style-type: none"> • Standard operating procedures²⁷⁴ Employee assistance programs^{275,276,277,278} • Nurse safety & protection programs²⁷⁹

Step 2d:

Consider the Evidence Gaps

Although studies indicate that resilience programs are feasible, acceptable,²⁸⁰ and can be used to equip health workers with skills to recover from stress and improve well-being,^{281,282,283,284} the evidence has limited generalizability. It is important to explore the evidence gaps and consider opportunities for further evidence generation, summarized below:

- 1. Feasibility & acceptability:** The most well-evidenced programs shown to be effective include holistic programs and stress management training. However, there is a need to explore the feasibility and acceptability of existing evidence-based programs in low-resource settings, and whether such strategies would be effective in different groups and clinical settings.
- 2. Contextualization:** In addition to feasibility and acceptability testing, prior to piloting, there is a need to conduct formative research. It is not clear how resilience programs can be integrated as supporting strategies into interventions tackling more systemic issues within the workplace that contribute to workplace stressors and impact health worker well-being (e.g., crisis-care situations, workplace bullying, and discrimination). There is a need for an assessment of health worker priorities and needs to identify how resilience programs may provide support. Similarly, there is a need to explore how well resilience-building behaviors resonate and translate within different contexts, and how local workplace policies, cultures, and structures may influence the implementation and scale of such programs.
- 3. Organizational-, community- and policy-level influences:** As discussed in Step 1, needs and stressors exist at multiple contextual levels and there is consistent evidence to indicate that creating a supportive work environment is a critical factor in promoting resilience-building behaviors. The current review did not yield intervention evidence for the community and policy level, and evidence for interpersonal and organizational interventions was limited. However, specific searches per level were not conducted and practice-based examples may exist, rather than peer-reviewed articles. There is a need to explore whether practice-based examples of policy, community, organizational, and interpersonal strategies may support the 5 core and 2 supporting resilience-building behaviors. Supportive supervision is also not limited to mentoring alone, and other ways to support supervisor-employee joint problem solving and two-way communication should be investigated. Finally, given the influence of the organizational culture and workplace policies (e.g., workplace discrimination and bullying policies) on interpersonal relationships within the workplace, there is a need to explore how resilience-building strategies focused on human connection can be leveraged to complement systemic efforts targeting organizational stressors.

- 4. Self-care:** Strategies for self-care were predominantly limited to psycho-education and activity within holistic programs. However, within the broader scope of well-being, there is a wealth of evidence describing the impact of poor sleep hygiene, unhealthy eating, and lack of physical activity, on physical and mental health. It is well evidenced that sleep, eating, and physical activity play a vital role in brain functions and many body systems. The current review did not individually search for healthy eating, sleep, or physical activity strategies within the broader scope of well-being. There is a need to dive deeper into each self-care area to explore additional determinants for sleep, healthy eating, and physical activity, including contextual influences such as shift-work patterns which are likely to disrupt sleeping, eating, and physical activity behaviors.
- 5. Scale & sustainability:** The programs tested have been implemented within the context of research. The costs of implementation and guidance on how to scale such programs is not known. Similarly, the short duration within which these interventions are implemented limits any insights regarding sustainability. There is a need to explore how such strategies can be disseminated on a larger scale over longer periods of time.
- 6. Alternative delivery modes:** There is a distinct lack of evidence exploring the use of digital modalities, which could potentially reduce implementation costs. There is a need to explore how digital modalities could be used as a mechanism for scale. Resilience interventions can be offered in various formats – in-person, through various technologies, or in blended (both in-person and tech-enabled) formats. Mobile-based interventions have the benefit of consistent availability, accessibility, and convenience.^{285,286}
- 7. Evaluation:** The programs tested vary in delivery and/or assessment methods. The field lacks a systematic approach for delivering and testing programs in a way that would meaningfully build the health worker resilience knowledge estate. It is also not known whether some components of multi-modal programs have larger effects than others. There is a need for systematic testing of the effects of each component within multi-modal programs.



Step 3

Apply the Evidence

Executive Summary

Knowing where to start with evidence (i.e., how to apply and generate it) can be overwhelming, particularly if an organization is in the early phases of design and the scope is broad. To support organizations, the Center's Resilience Framework (**Figure 8**) has been developed alongside a table of relevant behaviors and determinants (see **Appendix 1.3**) to summarize the high-level relationships between the existing evidence-based determinants, behaviors, and strategies. This section introduces the framework and provides 3 use-case examples of how an organization might leverage this framework depending on where it is in its design life cycle.

The Center's Resilience Framework

Many of the strategies listed in **Appendix 1.3** are multi-modal in nature and may target several behaviors and determinants, making it difficult to know where to start. Applying the framework can help an organization identify how to generate new evidence.

The framework is presented in Figure 8. Core behaviors are denoted by full circles. Semi-circles denote where behaviors may be partially supported depending on the delivery, format, and content.

The framework can be used proactively to inform the design of programs and/or research needed to fulfill evidence gaps, and retrospectively to inform measurement and evaluation strategy of a deployed program. Three use-case examples of how this framework may be applied are provided in **Figure 9**.

Example A: An Organization Would Like to Focus on a Particular Determinant (e.g., communication skills)

After reviewing the framework, an organization may use the **Evidence Library** to filter through the existing evidence and review these strategies and sub-strategies in more detail. For example, one may prioritize reviewing the evidence on mentorship & leadership, communication and teamwork training, workplace policies, and employee assistance programs. It may also be worth exploring other strategies such as stress management training, psycho-education, holistic programs, pastoral care, and social interactions that may partially support this particular determinant. In addition, one can refer to Step 2d, to consider where there may be opportunities to generate new evidence.

Example B: An Organization Knows What Type of Strategy It Would Like to Deploy (e.g., a psycho-educational course)

First, using either **Appendix 1.3** or the full **Evidence Library**, an organization may filter through the existing evidence to review psycho-educational interventions previously deployed, including the content, format, and delivery methods, in more detail. After reviewing the framework and existing evidence (or lack thereof — see Step 2d) one may consider focusing on self-care topics only or decide to facilitate connectedness via a group-based format.

These decisions will help to shape measurement and evaluation strategy. For example, an organization may benefit from measuring the frequency of participation in self-care activities before and after the course. In addition, one may choose to measure changes in relevant determinants such as coping skills, self-compassion, self-prioritization, etc.

Example C: An Organization Has Deployed a Program (e.g., a reward and recognition initiative)

After reviewing the framework, an organization may review the relevant determinants and behaviors in **Appendix 1.3** to enhance its existing measurement and evaluation strategy. For example, the organization may wish to measure the frequency by which health workers connect to their purpose and seek growth before and after the program. Further, one may consider measuring how valued health workers feel and their overall sense of purpose before and after the program. Finally, organizations may consider reviewing the **Evidence Library** for existing evidence on similar interventions to compare, contrast, and optimize their own.

Further details on the behaviors and determinants per existing strategy are provided in Appendix 1.3.

Figure 8. The Center's Resilience Framework: Strategies are not behaviorally exclusive. Core behaviors are denoted by full circles. Semi-circles denote where behaviors may be partially supported depending on the delivery, format, and content.

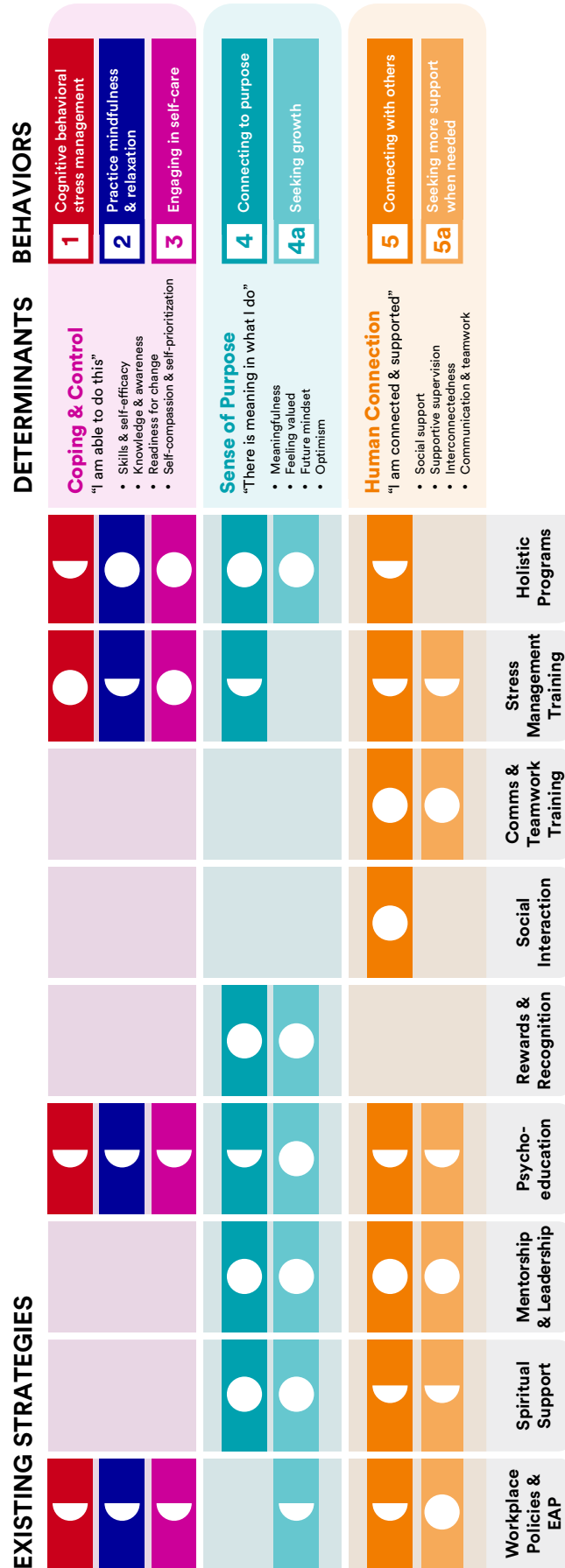
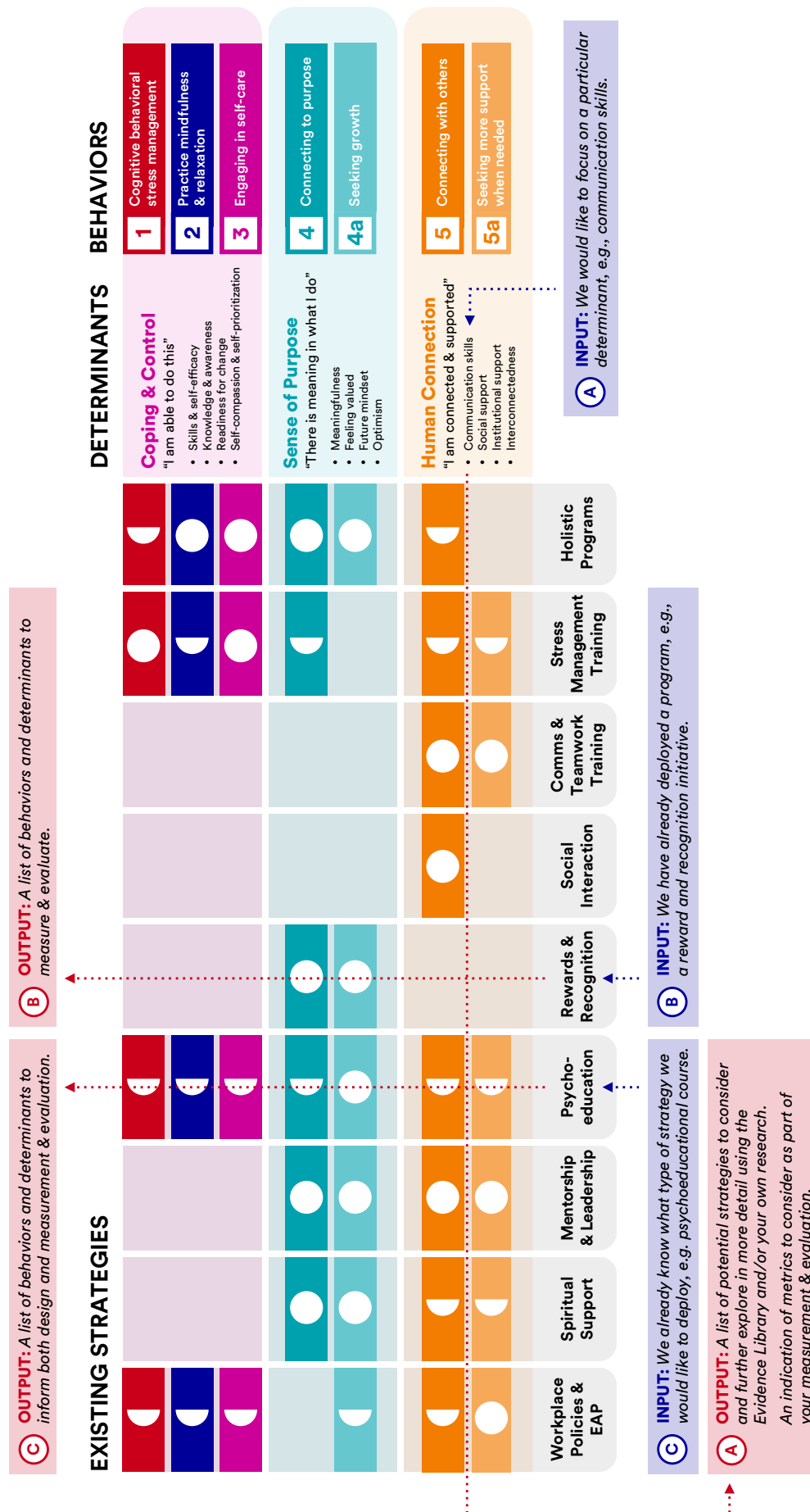


Figure 9. Three use cases for the Center's Resilience Framework.





Step 4

Co-create & Iterate

Executive Summary

It can be difficult to translate evidence-based approaches to local, real-world settings. This section reinforces the need for and value of co-creative practices to support contextualization and the importance of user testing and iteration. This section refers to an example case study that outlines the implementation of co-creative and iterative strategies.

Lack of user involvement early in the design process has been identified as one of the major contemporary difficulties encountered during intervention implementation.²⁸⁷

This is of particular importance when considering adapting evidence-based approaches that may not have been tested in a particular setting or environment. For example, knowing that data costs and access to Wi-Fi may be significant barriers to mHealth adoption can be identified early in the design process via formative research.²⁸⁸ The selection of a particular delivery mode may be related to an individual's preferences, availability, or their ability to access the intervention. It is suggested that fundamental design problems may be avoided by applying user-centered design (UCD) principles in which the end-users influence how a design evolves early on in the intervention design process.^{289,290} It is recommended to collect user feedback early and often, to overcome potentially costly design flaws.



Case Study:

Pilot Community of Practice

In an effort to improve the support available to organizations interested in developing resilience-building interventions, the Center surveyed 8 partner organizations to better understand the types of support and resources that would facilitate evidence-based resilience-building practices. Of high priority was the provision of and access to foundational evidence-based assets that could be adapted and localized to form an intervention. In an effort to meet this need, the Center implemented a 6-month community of practice with 5 organizations to co-create a global messaging framework using this 5-step process and the Center's Resilience Framework as the starting point.

During weekly meetings, members of the community of practice explored the problem, including the internal and external factors driving burnout in their local contexts. In addition to local interviews, the 5 core behaviors and 2 supporting behaviors provided in this guide were used as the foundation of the **messaging program** and explored for contextualization. Two rounds of user testing were conducted with health workers, which allowed critical issues to be identified early in the design process.

For free access to the insights, guidance, and 6-month messaging framework developed from this experience, please [join The Resilience Collaborative](#).



The lack of a standardized process for evidence generation inevitably results in time-consuming cycles where solutions are deployed, mediocre data are collected, and less-than-average insights are generated. This can be improved upon by informing the measurement plan of a solution and by devising cost-effective testing efforts that are fit



Step 5 Evaluate

Executive Summary

for purpose.

Having identified broadly what an organization can develop in Step 3, and refined this further in Step 4, the measures section in the template found in **Appendix 1.2** can be completed using the list of recommended measures in **Appendix 1.3**. A detailed version is provided in the **Measures Library**. An application of this approach is provided in the case study example on page 59, which walks through the measurement and evaluation optimization of a psycho-educational course.

To enable this, we introduce in this section:

1. The JJHWS Metrics Model.
2. A list of recommended measures alongside an application example.
3. The complexity of measuring engagement.
4. Some mHealth considerations.

Outcomes Evaluator

Organizations are encouraged to develop measurement and evaluation plans that explore the expected evidence-based relationships between determinants, behaviors, and health and organizational outcomes. The JJHWS Behavior Science Metrics Model (see **Figure 10**) displays data elements that should indicate whether these evidence-based expectations are being met, both in the short-term (leading metrics) and long-term (lagging metrics). It is important to consider how the metrics built using the Center's Resilience Framework (see Step 3) are reflected in the strategy map (i.e., template found in **Appendix 1.2**). Understanding this framework enables ongoing measurement of the solution or strategy rather than waiting until evaluation of the health and organizational outcomes.

Whether organizations are implementing one or many strategies, evaluation should be continuous, with ongoing implementation of insights. As evaluation continues, behavioral subgroups and advanced analytics can be used as a means to determine which interventions are most effective. This approach ensures consistent optimization, measurement, and a strong understanding of how to increase resource deployment efficiencies.

Figure 10. JJHWS outcomes evaluator, behavior science metrics model.

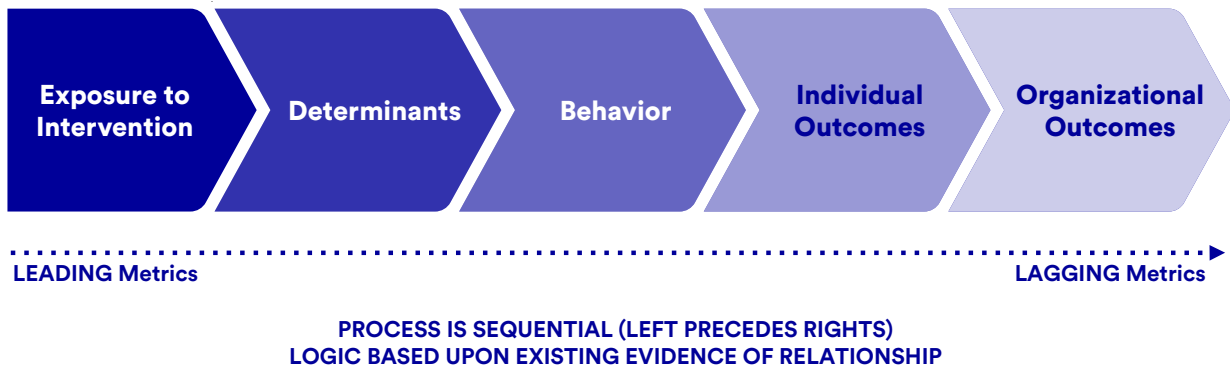


Table 5. List of metrics and measures to consider in the evaluation of resilience interventions.

Exposure to the Strategies	Metrics
General	Enrollment numbers Number of countries, counties, regions Participation rates over time
Digital	Number of downloads Time spent in app per day/week/month
Domain 1: Coping & Control	
Coping skills	Brief coping orientations to problems experienced (brief COPE) scale Ways of coping inventory
Control	Valuing questionnaire (VQ)
Cognitive flexibility	The cognitive flexibility scale
Coping & confidence	The coping self-efficacy scale (CSE)
Problem-solving skills	Consider CSE or simple Likert scale
Mindfulness	Five facet mindfulness questionnaire (FFMQ) Freiburg Mindfulness Inventory (FMI)
Confidence	Consider CSE or simple Likert scale
Self-compassion	Self-compassion scale
Self-prioritization	Likert scale
Work-life balance	Work-life balance measure (WLB)
Knowledge & awareness	Quizzes, Likert scales

Domain 2: Sense of Purpose

Sense of coherence	Sense of coherence questionnaire
Optimism	Life orientation test (LOT-R)
Hope	Herth hope index (HHI)
Feeling valued	Employee satisfaction surveys

Domain 3: Human Connection

Emotional intelligence	Emotional intelligence questionnaire
Teamwork	Mayo high performance teamwork scale (MHPTS)
Communication skills	Self-assessment of communication skills (SACS)
Perceived social support	Multi-dimensional scale of perceived social support (MSPSS)
Perceived institutional support	Survey of perceived organizational support (SOPS)

Behaviors

All behaviors	Frequency - Likert scale Organization dependent
----------------------	--

Individual Outcomes

Perceived stress	Perceived stress scale (PSS)
Resilience	Conor-Davidson scale (CD-RISC) (25-item and 10-item) Brief resilience scale (BRS) Resilience scale (RS-14) - validated in Nigeria
Well-being	World Health Organization-Five well-being index (WHO-5)
Psychological distress	General health questionnaire (GHQ-12)
Burnout	Maslach burnout inventory (MBI)
Work productivity	Work productivity and activity impairment questionnaire (WPAI)
Work engagement	Utrecht work engagement survey (UWES)

Organizational Outcomes

Reduced workforce gap	TBD by organization
Improved quality of care	TBD by organization
Strengthened health systems	TBD by organization



Please join The Resilience Collaborative.

Case Study: Evaluation Optimization for a Psycho-Educational Course

The Johnson & Johnson Foundation recently provided funding to the Foundation for Professional Development (FPD) to create a psycho-educational course targeting healthcare worker resilience and well-being. The topic overview, the associated study materials, and the original evaluation strategy are provided in **Figure 11**. Initial evaluation was focused on the determinant level only (capturing change in knowledge and competency alongside perceived usefulness). While this was a great starting point, there was an opportunity to explore whether the course facilitated any change in behavior and resultant improvement in resilience and well-being.

The adapted measurement and evaluation strategy is presented in **Figure 12**. Leveraging the existing self-assessment activities, the evaluation strategy was adapted to measure the frequency with which course attendees engaged in recovery behaviors (e.g., frequency of relaxation and mindfulness activities, etc.). Health outcomes were also measured using validated measures of resilience (CD-RISC) and well-being (WHO-5) before and after the course. Following these changes, FPD also sought ethical approval and plans to publish the findings, helping to build the evidence base for low-resource settings.

Figure 11. Psycho-educational pre-optimization.

BEFORE

Module 3

1. Self-monitoring/pacing
2. Checking in regularly with family/friends/colleagues
3. Taking self-care breaks for relaxation and stress reduction
4. Practicing healthy self-talk and calibrating realistic appraisals of threat
5. Balancing acceptance vs. control
6. Connecting to hope and patience
7. Avoiding unhelpful coping strategies like substance use or ignoring personal needs by overworking

Study Materials:

E-learning courses have been developed by leading experts in the field and are designed to provide a user-friendly and inter-active approach using:

1. Case studies;
2. Thinking points;
3. Activities; and
4. Self-assessment activities.

Evaluation

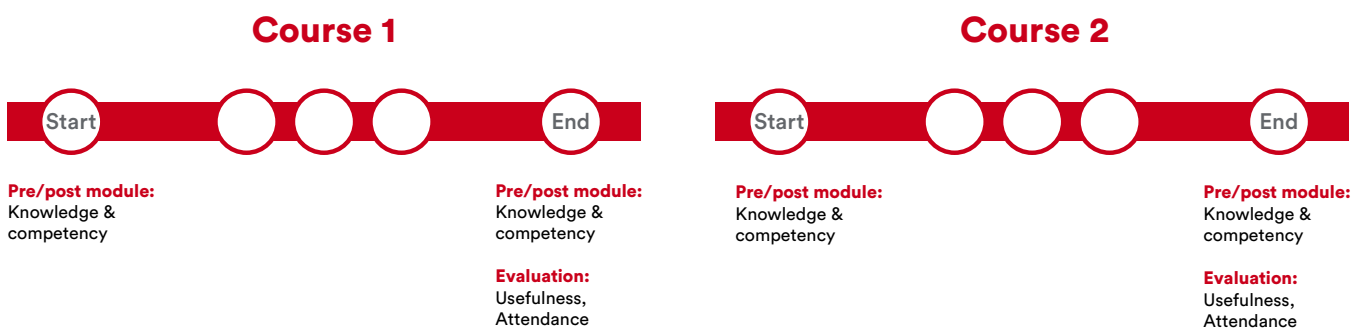
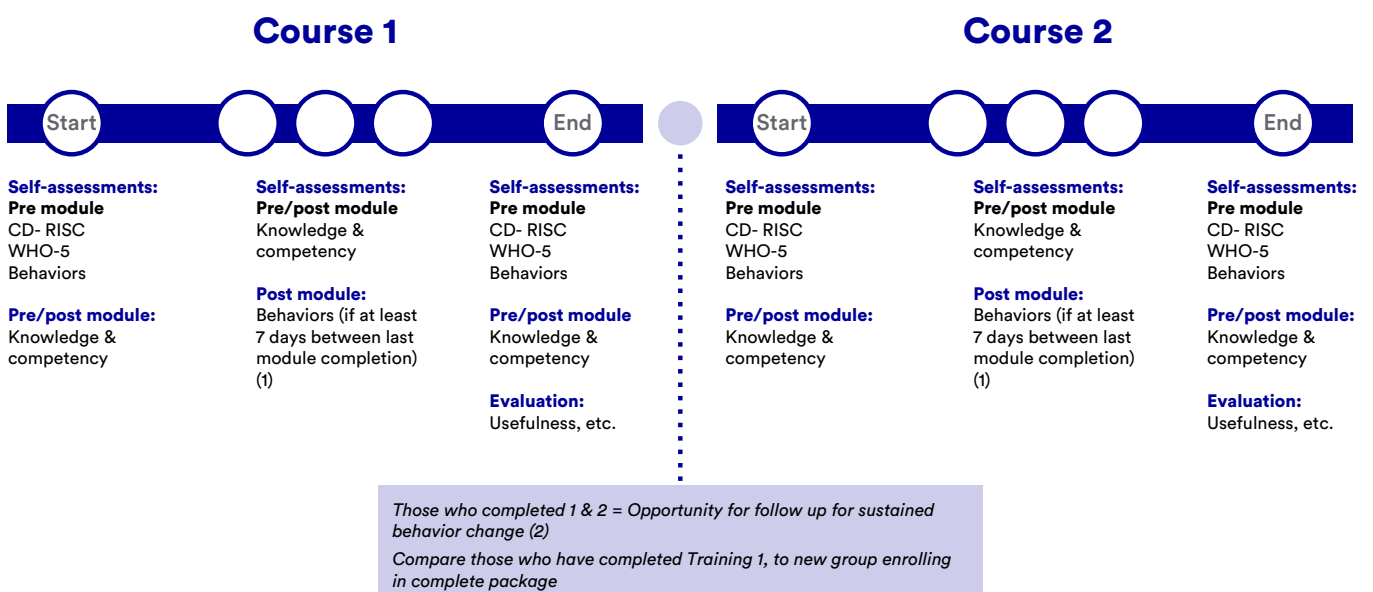


Figure 12. Adapted measurement and evaluation strategy.

AFTER



Other Considerations

The Complexity of Engagement

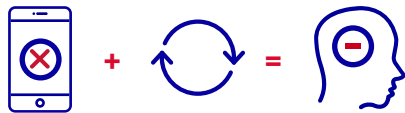
The extent to which interventions and innovations can deliver on the promise of demonstrable positive health outcomes depends on the successful utilization of interventions by users and the subsequent sustained performance of the intended health behaviors. This section distinguishes between 2 necessary components – “Little e” and “Big E” (see Figure 13). A detailed explanation of the terminology can be found on the [JMIR Publications website](#).²⁹¹

“Big E”: Engagement with the targeted health behavior. It is important that engagement with the health behavior is achievable and measurable to determine if an intervention is successful.²⁹²

Figure 13. Diagram illustrating relationship engagement measurements. UI: user interaction; BCT: behavior change technique.

Measuring Effectiveness – Big E and Little e

Little e UI Little e BCT Big E



Low Interaction & Decreased Intervention:

When a user has **low interaction** with the digital health solution, they receive **decreased exposure** to BCTs, therefore, there is a reduced likelihood that the behavior outcome will be achieved.



Appropriate Interaction & Ineffective Intervention:

When a user has **an appropriate level of interaction** with the digital solution but the BCTs **components are not relevant**, then there is a reduced likelihood that the behavior outcome will be achieved.



Appropriate Interaction & Effective Intervention:

When a user has **the appropriate level of interaction** with the digital solution and the BCT **components are relevant**, then there is a increased likelihood that the behavior outcome will be achieved.

“Little e”: Engagement with the digital or non-digital behavior-change intervention. This is sometimes referred to as user interaction with the solution and is comprised of 2 types of interactions:

1. User interactions with the features and the context in which those interactions happen (little e_{UI}).
2. Interactions with behavior change intervention components/active ingredients specifically designed to influence the behavioral determinants, which in turn influence the health behaviors (little e_{BCT}).

Measurement of both little e_{UI} and intervention Behavior Change Technique (BCT) components (little e_{BCT}) are necessary to understand the effectiveness on Big E (health behavior). Advances in technology mean that it is possible to collect data over time (e.g., via Google Analytics or wearables) to consider additional determinants’ data on dynamic contextual information (e.g., location, time of day, and biometric characteristics like heart rate). Other determinant information (including demographics) is also important and should be leveraged to build user profiles that are robust and describe behavior change processes from “Little e” to “Big E”.

Failing to collect BCT, determinant, and behavior data means that “why” an intervention was or was not effective cannot be explored.²⁹³

Considerations for mHealth interventions

The term “mHealth” refers to the use of mobile and wireless technologies for health and aims to capitalize on the rapid uptake of information and communication technologies (ICT) to improve health system efficiency and health outcomes.²⁹⁴ Over the past decade, the use of mobile health has steadily increased in low-income and middle-income countries²⁹⁵ and has the potential to bridge systemic gaps, which is needed to improve access to and use of health services, particularly among underserved populations.²⁹⁶ There is preliminary evidence of mHealth demonstrating the efficacy of this service delivery format in treating emotional well-being, depression, and anxiety symptoms.^{297,298,299} Studies have also shown the positive effects of mHealth interventions on healthcare workers in low- and middle-income countries, including improving workforce well-being and resilience.^{300,301,302,303,304,305}

However, organizations should consider what “good engagement” looks like, particularly when considering mHealth interventions for well-being.³⁰⁶

In a recent review of 93 apps targeting anxiety, depression, or emotional well-being, the median percentage of daily active users (open rate) was 4.0%, with higher rates for trackers and peer-support apps versus breathing exercise apps. Among active users, daily minutes of use were significantly higher for mindfulness/meditation and peer support than for apps incorporating other techniques (e.g., trackers, breathing exercises, or psycho-education).

There is a sharp decline of more than 80% in app open rates between day 1 and day 10. While the declines between days 15–30 are smaller, they represent a continued decline of approximately 20% in app open rates. The authors also observed that the pattern of daily use presented 2 descriptive peaks for mindfulness and meditation (morning and night) with other techniques presenting 1 peak toward the evening (e.g., tracker, psycho-education, and peer support).

These findings are of particular importance for organizations developing mHealth interventions when considering the level of engagement needed to elicit a health benefit, and/or the data and privacy requirements that need to be in place to generate insights. Despite the emergence of hundreds of mHealth studies and initiatives, there remains a lack of rigorous, high-quality evidence on the efficacy and effectiveness of such interventions.³⁰⁷ The evidence base is heterogenous in quality, completeness, and objectivity of the reporting of mHealth interventions, thus making comparisons across intervention strategies difficult.

To address this gap, the mHealth Evidence Reporting and Assessment (mERA) checklist is provided. It was created on behalf of the World Health Organization by global experts working at the intersection of mHealth research and program implementation. This checklist incorporates additional evaluation considerations ([see Table 6](#)). This may be of particular relevance to organizations that plan to publish their findings (e.g., peer-reviewed journals) helping to build the evidence base for low-resource settings.

Table 6. The WHO mHealth Technical Evidence Review Group guidelines for reporting of health interventions using mobile phones: the mHealth evidence reporting and assessment (mERA) checklist, supplemented with JJHWS considerations for mHealth.

Criteria	Item No.	Notes
Infrastructure (population level)	1	Clearly presents the availability of infrastructure to support technology operations in the study location. This refers to physical infrastructure such as electricity, access to power, connectivity etc. in the local context. Reporting X% network coverage rate in the country is insufficient if the study is not being conducted at the country level.
	2	Describes and provides justification for the technology architecture. This includes a description of software and hardware and details of any modifications made to publicly available software.
Technology platform	2a	What is the backend architecture: Is there the capability to collect user data and usage data? (e.g., Google Analytics).
	3	Describes how mHealth intervention can integrate into existing health information systems. Refers to whether the potential of technical and structural integration into existing HIS or programs has been described irrespective of whether such integration has been achieved by the existing system.
Interoperability/Health information systems (HIS) context	4	The delivery of the mHealth intervention is clearly described. This should include frequency of mobile communication, mode of delivery of intervention (that is, SMS, face-to-face, interactive voice response), timing, and duration over which delivery occurred.
	4a	What is the justification for the choice of delivery mode, and what evidence supports the modality decision?
Intervention delivery	5	Details of the content of the intervention are described. Source and any modifications of the intervention content is described.
	6	Describes formative research and/or content and/or usability testing with target group(s) clearly identified, as appropriate.
Intervention content	7	Describes user feedback about the intervention or user satisfaction with the intervention. User feedback could include user opinions about content or user interface, their perceptions about usability, access, connectivity, etc.
	7a	Where is the program in its life cycle? Has sufficient user testing been conducted?
Usability/content testing	8	Mentions barriers or facilitators to the adoption of the intervention among study participants. Relates to individual-level structural, economic, and social barriers or facilitators to access, such as affordability and other factors that may limit a user's ability to adopt the intervention.
	8a	Are accessibility guidelines, including disability regulations, considered? ³⁰⁸
User feedback		

Cost assessment	9	Presents basic cost assessment of the mHealth intervention from varying perspectives. This criterion broadly refers to the reporting of some cost considerations for the mHealth intervention in lieu of a full economic analysis. If a formal economic evaluation has been undertaken, it should be mentioned with appropriate references. Separate reporting criterion are available to guide economic reporting.
Adoption inputs/ program entry	10	Describes how people are informed about the program including training, if relevant. Includes description of promotional activities and/or training required to implement the mHealth solution among the user population of interest.
	10a	How will awareness be built and measured?
Limitations for delivery at scale	11	Clearly presents mHealth solution limitations for delivery at scale.
	11a	Are mitigation plans provided?
Contextual adaptability	12	Describes the adaptation, or not, of the solution to a different language, different population, or context. Any tailoring or modification of the intervention that resulted from pilot testing/usability assessment is described.
Replicability	13	Detailed intervention to support replicability. Clearly presents the source code/ screenshots/flowcharts of the algorithms or examples of messages to support replicability of the mHealth solution in another setting.
Data security	14	Describes the data security procedures/confidentiality protocols.
	14a	What are the privacy agreements in place for collecting user and usage data within the solution?
Compliance with national guidelines or regulatory statutes	15	Confirms that mechanism used to assure that content or other guidance/ information provided by the intervention is in alignment with existing national/ regulatory guidelines and is described.
Fidelity of the intervention	16	Consider whether the intervention was delivered as planned. Describe the strategies employed to assess the fidelity of the intervention. This may include assessment of participant engagement, use of backend data to track message delivery and other technological challenges in the delivery of the intervention.
Measuring effectiveness of the intervention	17	Will engagement related to mHealth feature interaction (Little e) as well as performance of the desired health behavior (Big E) be measured?



The Future of This Toolkit

As noted throughout this Toolkit, the hypothesis is that a resilient global health workforce is the key to continued improvement in the care of the world's communities.

By creating this Toolkit, we hope to have demonstrated the value in preventing burnout and have laid a navigable framework for organizations who work with or employ health workers to implement evidence-based, resilience-building practices.

Our vision is that this Toolkit will not only support implementation of new practices and spur needed research, particularly in low-resource settings, but also contribute to the larger discourse around the health and well-being of these essential workers.

While continued scientific understanding is required to refine our understanding of resilience-building strategies, we believe all forms of evidence and real-world insights are valuable in contributing to a new global paradigm of care.

To that end, we welcome feedback, anecdotes, and engagement from organizations working with these materials.



Learn more about The Resilience Collaborative and [contact us here.](#)

Annual Procurement
Plan

Summary of income
and expenditures

20% Dev
Ut

Summary of income
and expenditures

20% Dev
Ut





Appendix

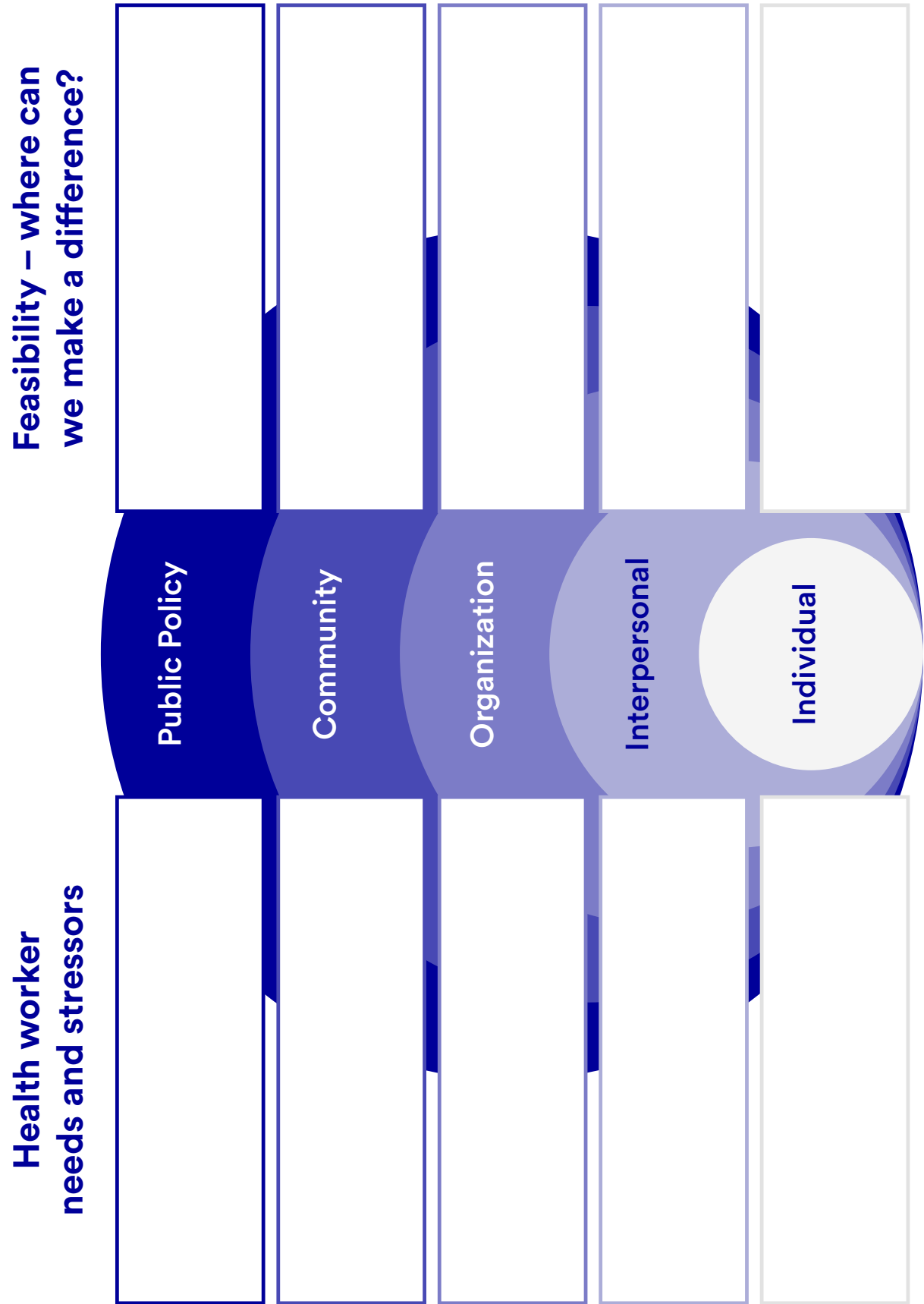


Using the Appendix

This appendix provides supplemental resources to support the development of strategies to address selected key health outcomes.

Appendices 1.1 and 1.2 have been developed as templates to guide strategy development. The tables can be printed out and filled in, providing an opportunity to begin mapping out an approach to addressing key health outcomes.

Appendix 1.1



Appendix 1.2

Example Template 2 - Blueprint		FOR THE BELOW CONSIDER REVIEWING TABLE 5 (LIST OF MEASURES)					
Public Policy	YOUR STRATEGIES	SELECT KEY DETERMINANTS COPING & CONTROL <ul style="list-style-type: none"> <input type="checkbox"/> Skills & self-efficacy <ul style="list-style-type: none"> <input type="radio"/> Cognitive flexibility <input type="radio"/> Problem solving <input type="radio"/> Stress management <input type="radio"/> Work-life balance <input type="radio"/> Belief in ability <input type="checkbox"/> Knowledge & awareness of stressors & triggers <input type="checkbox"/> Readiness for change (hope) <input type="checkbox"/> Self-compassion & prioritization SENSE OF PURPOSE <ul style="list-style-type: none"> <input type="checkbox"/> Meaningfulness <input type="checkbox"/> Feeling valued <input type="checkbox"/> Future mindset (hope) <input type="checkbox"/> Optimism HUMAN CONNECTION <ul style="list-style-type: none"> <input type="checkbox"/> Social support <input type="checkbox"/> Supportive supervision <input type="checkbox"/> Interconnectedness (hope) <input type="checkbox"/> Communication & teamwork 	SELECT KEY RESISTENCE-BUILDING BEHAVIORS <ul style="list-style-type: none"> <input type="checkbox"/> Cognitive behavioral stress management <input type="checkbox"/> Practicing mindfulness & relaxation <input type="checkbox"/> Engaging in self-care (e.g., eat, sleep, activity) <input type="checkbox"/> Connecting to purpose <input type="checkbox"/> Seeking growth <input type="checkbox"/> Connecting with others <input type="checkbox"/> Seeking more support when needed 	SELECT KEY HEALTH OUTCOMES <ul style="list-style-type: none"> <input type="checkbox"/> Resilience <input type="checkbox"/> Well-being <input type="checkbox"/> Burnout 	OTHER	OTHER	HOW WILL YOU MEASURE THESE OUTCOMES?
Community	YOUR STRATEGIES				OTHER		HOW WILL YOU MEASURE THESE BEHAVIORS?
Organization	YOUR STRATEGIES						HOW WILL YOU MEASURE THESE DETERMINANTS?
Interpersonal	YOUR STRATEGIES						
Individual	YOUR STRATEGIES						
		HOW WILL YOU MEASURE ENGAGEMENT AT EACH LEVEL?					

Appendix 1.3

See the summary of existing evidence-based strategies and the associated resilience-building determinants and behaviors below.

Strategy	Examples	Determinants	Behaviors
Holistic programs (i.e., targeting mind & body) Evidence Level 3.46	<ul style="list-style-type: none"> • Mindfulness meditation^{309, 310} • Mindfulness-Based Stress Reduction (MBSR)³¹¹ • Abbreviated MBSR³¹² • Mindful self-care and resiliency (MSCR)³¹³ • Compassion cultivation^{314, 315, 316} • “Snack & relax” program³¹⁷ • Yoga³¹⁸ 	<ul style="list-style-type: none"> • Sense of purpose • Future mindset • Optimism • Self-prioritization & self-compassion • Skills & self-efficacy-mindfulness <p>May include:</p> <ul style="list-style-type: none"> » Skills & self-efficacy (cognitive flexibility, problem-solving, stress management, work-life balance) » Knowledge & awareness of stressors, triggers, recovery strategies » Readiness for change » Social support 	<ul style="list-style-type: none"> • Practicing mindfulness & relaxation • Engaging in self-care • Connecting to purpose • Seeking growth <p>May include:</p> <ul style="list-style-type: none"> » Cognitive behavioral stress management » Connecting with others
Stress management training (including psychosocial support) Evidence Level 3.43	<ul style="list-style-type: none"> • Stress Management and Resilience Training (SMaRT)³¹⁹ • Counseling³²⁰ • Cognitive behavioral stress management training^{321, 322} • Accelerated Recovery Program (ARP)³²³ • Psychological flexibility program³²⁴ • Acceptance and Commitment Therapy (ACT)³²⁵ 	<ul style="list-style-type: none"> • Skills & self-efficacy – (cognitive flexibility, problem-solving, stress management, work-life balance) • Knowledge & awareness of stressors, triggers, recovery strategies • Self-prioritization & self-compassion • Readiness for change <p>May include:</p> <ul style="list-style-type: none"> » Sense of purpose » Future mindset » Optimism » Self-prioritization & self-compassion » Social support 	<ul style="list-style-type: none"> • Cognitive behavioral stress management • Engaging in self-care <p>May include:</p> <ul style="list-style-type: none"> » Practicing mindfulness & relaxation » Connecting to purpose » Connecting with others
Communication & teamwork training Evidence Level: 3.17	<ul style="list-style-type: none"> • Emotional intelligence training³²⁶ • Adler/Sheiner Programme (ASP)³²⁷ • Teamwork training³²⁸ • Debriefing³²⁹ • Work shift evaluations³³⁰ 	<ul style="list-style-type: none"> • Communication skills • Institutional support • Interconnectedness • Social support 	<ul style="list-style-type: none"> • Connecting to others • Seeking further support when needed
Social interaction Evidence Level: 2.95	<ul style="list-style-type: none"> • Peer discussion groups³³¹ • Personal and professional relationship building^{332, 333, 334} • Time off³³⁵ 	<ul style="list-style-type: none"> • Interconnectedness • Social support • Institutional support 	<ul style="list-style-type: none"> • Connecting to others

Recognition & reward Evidence Level: 2.93	<ul style="list-style-type: none"> • Systematic community engagement³³⁶ • Feedback mechanisms^{337,338} • Professional development^{339,340, 341} 	<ul style="list-style-type: none"> • Feeling valued • Meaningfulness • Future mindset • Optimism 	<ul style="list-style-type: none"> • Connecting to purpose • Seeking growth
Psycho-education for stress management & self-care Evidence Level: 2.89	<ul style="list-style-type: none"> • Workshops & seminars^{342,343,344} • Credited courses^{345,346,347} • Cognitive Behavioral Therapy Education (CBT)^{348,349} 	<ul style="list-style-type: none"> • Future mindset • Knowledge & awareness of stressors, triggers, recovery strategies <p>May include:</p> <ul style="list-style-type: none"> » Skills & self-efficacy – (Cognitive flexibility, Problem-solving, stress management, work-life balance) 	<ul style="list-style-type: none"> • Seeking growth <p>May include:</p> <ul style="list-style-type: none"> » Cognitive behavioral stress management » Practicing mindfulness & relaxation » Engaging in self-care » Connecting with others » Connecting to purpose
Mentorship & leadership Evidence Level: 2.85	<ul style="list-style-type: none"> • Formal mentoring^{350,351,352} • Informal mentoring^{353,354,355,356} • Leading by example^{357,358} 	<ul style="list-style-type: none"> • Future mindset • Optimism • Institutional support • Social support 	<ul style="list-style-type: none"> • Connecting to purpose • Seeking growth • Connecting to others • Seeking support when needed
Spiritual-, religious-, and/or faith-based practice Evidence Level: 2.64	<ul style="list-style-type: none"> • Spiritual practice^{359,360} • Pastoral care³⁶¹ • Faith (meditation/prayer)³⁶² 	<ul style="list-style-type: none"> • Sense of purpose • Meaningfulness • Optimism • Future mindset • Social support 	<ul style="list-style-type: none"> • Connecting to purpose • Seeking growth • Connecting to others • Seeking support when needed
Workplace policies Evidence level: 2.50	<ul style="list-style-type: none"> • Standard operating procedures³⁶³ • Employee assistance programs^{364,365,366,367} • Nurse safety & protection programs³⁶⁸ 	<ul style="list-style-type: none"> • Institutional support 	<ul style="list-style-type: none"> • Seeking further support when needed • Connecting to others <p>May include:</p> <ul style="list-style-type: none"> » Seeking growth



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