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Matched Emotional Supports in Health Care (MESH) Framework: A Stepped Care Model for Health Care Workers

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Frontline health care workers (HCWs) are experiencing a range of emotional responses to the COVID-19 pandemic, including anxiety, traumatic stress, and burnout. As many as half of all HCWs will exhibit clinically significant distress. This distress may endure for years, and health care institutions must respond to these emotional needs. We propose the Matched Emotional Supports in Health Care (MESH) Framework to guide institutions in implementing a tiered, or "stepped care" model for deploying sustainable emotional support programs for HCWs for COVID-19 and beyond. Recognizing the variability in HCWs' response to stress, MESH outlines a continuum of services, including universal (e.g., self-help), selected (e.g., support from trained volunteers), and indicated (e.g., professional therapy, psychotropic medication management) interventions matched to individual need. We provide a targeted review of evidence-based resources available at each level of care and potential processes for determining when higher levels of care are needed. Finally, we delineate key implementation factors for institutions to consider in developing, implementing, and sustaining services for HCWs. Employing the MESH Framework may also facilitate health care institutions' ability to meet the fourth aim of the Quadruple Aims of Health Care to ensure a healthy workforce for this and future crises.

Public Significance Statement

Frontline health care workers in the era of COVID-19 need access to emotional support services. This article provides a framework to guide health care institutions in developing emotional and mental health supports for their workforce during these unprecedented times.

Keywords: COVID-19 pandemic, health care workers, emotional support, stepped model of care, Quadruple Aim of Health Care

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Background

Emerging research from the COVID-19 pandemic suggests heightened anxiety among health care workers (HCWs), including worry about access to appropriate personal protective equipment, exposure to COVID-19, and transmitting the virus to their families (Shanafelt et al., 2020). Family members of HCWs are also likely uniquely affected by pandemic-related stress. Evidence from the severe acute respiratory syndrome (SARS) pandemic suggests that up to one half of HCWs may exhibit enduring, clinically significant distress from COVID-19 and that health care institutions can offer emotional supports that significantly reduce chronic stress for HCWs (Maunder et al., 2008; Shanafelt et al., 2020). Although HCWs have been reluctant to actively seek out mental health resources during previous pandemics, they are open to engaging in emotional supports when they are made readily accessible (Albott et al., 2020).

Health care institutions have ethical obligations and practical reasons to provide accessible emotional support to HCWs; such programming is critical for sustaining a highly functioning workforce. Developing, implementing, and sustaining such programs when systems are already overwhelmed is a significant challenge. This article (a) introduces a framework for developing emotional support programs and (b) offers guidance on implementation.

Matched Emotional Supports in Health Care Framework

We propose the Matched Emotional Supports in Health Care (MESH) Framework, a tiered or "stepped care" guide for deploying emotional support programs to HCWs tailored to the needs and resources of health care institutions. Rooted in a public health approach (Kazak, 2006), the MESH Framework highlights the resilience of many HCWs in the face of COVID-19 but recognizes there is variability in response to stress. MESH proposes a continuum of services, including universal (e.g., self-help), selected (e.g., support from trained volunteers), and indicated (e.g., professional therapy, psychotropic medication management) interventions matched to individual need. Stepped care models have been used successfully for years (Richards et al., 2012). Interventions at each tier should draw from established evidence-based interventions (EBIs) for supporting coping, stress management, and resilience, as well as be accessible to HCWs and their families, when possible (see Figure 1). There also must be clearly delineated procedures to facilitate HCWs seamlessly "stepping up" to a higher level of care when needed.

MESH further proposes that staffing rely on technology and volunteers for intervention delivery at the universal and selected tiers, respectively. For example, lay health workers, with training and supervision, can provide supports that meet the mental health needs of many individuals seeking care (Barnett et al., 2018). This optimizes wide dissemination of universal supports to all HCWs, normalizes COVID-19-related distress, and increases acceptability of emotional supports. This also preserves access to limited professional mental health resources for those experiencing the most distress.

Evidence-Based Supports and Interventions by Tier

Knowing resources vary, institutions should select EBIs for each of the MESH Framework levels that are most feasible. While not prescriptive, Figure 1 provides a targeted review of example resources by tier, with a focus on programs that can be rapidly scaled and widely deployed without overtaxing the health care system.

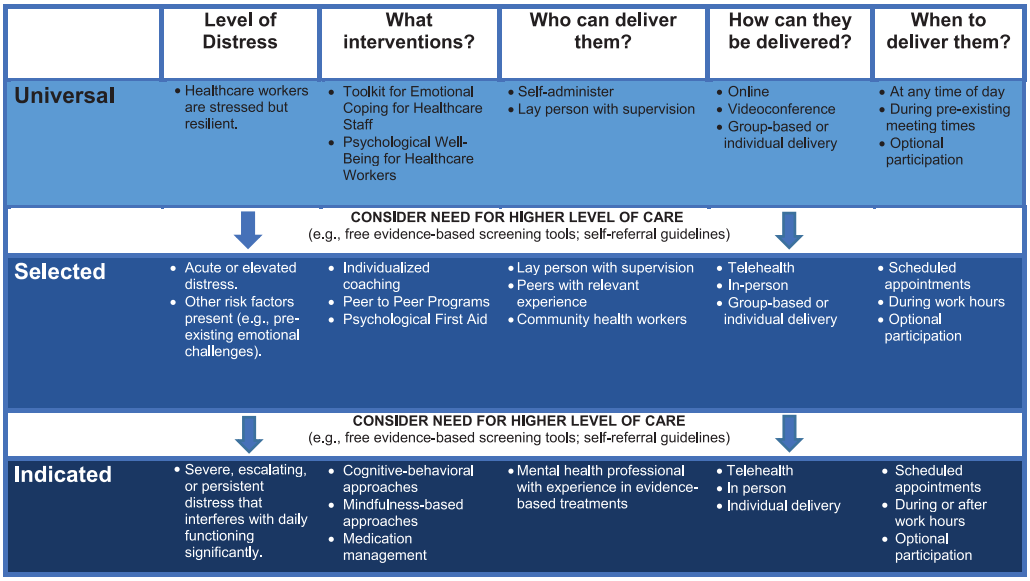
Universal

Self-led and/or online supports for evidence-based coping strategies should be widely available to all HCWs and should also address family-level needs (e.g., resources on talking to young children about COVID-19). Evidence from SARS suggests HCWs who feel supported by their hospitals and who employ evidence-based coping strategies exhibit less chronic stress compared to those who were unable to access resources or used less effective coping strategies, respectively (Maunder et al., 2008).

One example of a universal-level intervention is the Toolkit for Emotional Coping for Healthcare Staff (TECHS; https://bit.ly/COVIDhealthcarecoping), a free, self-led, online, prerecorded webinar and slide set that offers education on traumatic stress in HCWs related to COVID-19 and three tools to manage stress (Price et al., 2020). A second example is Psychological Wellbeing for Health Care Workers, a free, online program that links to a range of resources in the public domain,

Figure 1

Matched Emotional Supports in Health Care (MESH) Framework



Note. Mental health professionals may also be involved in delivering and supporting the implementation of universal and selected programs but that level of training is not typically required. See the online article for the color version of this figure.

including supports for sleep, social stigma, and emotional wellbeing, as well as guidance on when to seek treatment (Blake & Bermingham, 2020).

Selected

HCWs experiencing greater emotional difficulties either identified by established screening procedures or self-identified should be routed to interventions with trained staff who receive supervision from a mental health professional. Evidence from SARS suggests that having a personal or professional connection to the interventionist may be beneficial (Maunder et al., 2008). An example of a selected intervention is Psychological First Aid (PFA), which is support offered by lay workers in times of high stress and disasters, such as adverse events in health care and the Ebola outbreak (Edrees et al., 2016; World Health Organization, 2014).

Indicated

HCWs experiencing persistent, clinically significant emotional difficulties or who exhibit significant functional impairment should receive more specialized, intensive support from mental health professionals. HCWs should receive EBIs, such as cognitive–behavioral therapy (CBT), from experienced professionals. For some, psychotropic medication management may be needed. CBT has the most evidence among psychotherapy interventions for anxiety, depression, traumatic stress, and insomnia (American Psychological Association, Society of Clinical Psychology, 2020; Hofmann et al., 2012). These interventions support targeted skill development to enhance emotion-focused coping.

Selecting Level of Care and Criteria for "Stepping Up"

At the universal and selected levels, institutions must develop procedures to assess need for higher levels of care. This includes helping individuals determine which tier represents their ideal first-line support and when someone may need to "step up" to a higher level. A combination of self-administered evidence-based screening tools and clear self-referral guidelines is recommended (e.g., see TECHS program; Bryant et al., 2000; Price et al., 2020). Institutions should also concurrently develop internal referral guidelines, with support from mental health professionals, to determine

when an HCW may need to "step up" to a higher service tier and how to facilitate that transition. These guidelines should include signs of elevated emotional distress (e.g., marked emotional deterioration, suicidal ideation), signs of functional impairment (e.g., inability to work or care for dependents), and lack of response to lower tier supports.

Employing the MESH Framework

MESH is a novel framework derived from the public health and implementation science literatures, as well as the authors' personal experiences delivering stepped emotional support to HCWs during the unfolding pandemic. MESH does not prescribe a rigid set of interventions; rather, it provides an implementation framework for institutions to develop individualized programs. MESH puts forth the following guidance to support implementation.

Key MESH Implementation Factors

Institutions must carefully consider key implementation factors (Aarons et al., 2011; Damschroder et al., 2009). It is essential that systems deploy emotional supports strategically, in ways that leverage existing resources, expertise, and infrastructure and with attention to accessibility, feasibility, and sustainability. Key considerations for institutional implementation of the MESH Framework are outlined below, using the TEAM mnemonic:

Team Assembly

- Assemble a multidisciplinary leadership team to develop, refine, and evaluate a plan for implementation.
- Identify and prepare the workforce.
  - Medical clinicians and support staff who are in departments that have temporarily ceased or reduced services may be redeployed with proper training and supervision (e.g., to provide selected level supports, to serve as champions).
  - Some mental health professionals can be diverted from caring for patients to caring for HCWs.
- Solicit feedback and consultation from HCWs and other key stakeholders when planning, revising, and marketing programs.

Establish Your Tiered Program

- Identify interventions at the universal, selected, and indicated levels that are rooted in evidence and are feasible for your institution, leveraging existing programs and expertise.
- Develop processes to guide HCWs in determining which level of care best matches their need.
- Define confidentiality for all support services and develop language to communicate these. Consult with labor unions or institutional legal entities to ensure workers who avail themselves of services are protected.
- Ensure programs are optional. Some will not feel comfortable or interested in receiving emotional support through their employer.
- Develop crisis management procedures. Ensure that staff delivering services, if not licensed mental health clinicians themselves, have access to an on-call clinician and regular supervision.

Accessibility Is Critical

- Disseminate information in brief, clear, consistent and repeated communications to all HCWs. Communicate in different settings and formats (e.g., email, during regularly scheduled meetings).
- Offer universal care during regularly scheduled meetings and/or during open, standing meetings that occur at varying days and times.
- Demonstrate commitment to the emotional functioning of HCWs by including selected and indicated supports as part of the paid workday. This approach may be particularly important for hourly HCWs; if this is not feasible, ensure that services are available during nonwork hours.
- Make supports available to all employees in need, including frontline HCWs, trainees, hospital support staff, administrators, and HCWs' families.

Maintain Supports Across Time

- Plan at the outset to maintain programs developed during this pandemic with periodic review (e.g., every 3–6 months) to assess whether programs should be expanded or reduced based on utilization and demand. The emotional aftermath of COVID-19 will

persist; the need for emotional support programs for HCWs transcends COVID-19.
- Partner with community mental health groups to meet the needs of HCWs that cannot be met with institutional resources alone.
- Develop short- and long-term financial models for supporting HCWs' emotional health.

Applications of the MESH Framework

Health care institutions will need to develop and tailor HCW emotional support programs rooted in the MESH Framework. For illustrative purposes, we offer an example of early implementation of universal- and selected-level programs at two different institutions.

The Center for Pediatric Traumatic Stress (CPTS), colocated at Nemours Children's Health System and the Children's Hospital of Philadelphia, developed the universal-level program, TECHS within the first month of the COVID-19 pandemic in the United States. The CPTS partnered with professional organizations to optimize awareness of this free, online resource nationally and internationally. Such partnerships also led to translations of TECHS into Spanish and Japanese. TECHS was viewed over 4,400 times worldwide in the first 2 months of its release online in April 2020. Within Nemours, TECHS was rolled out in a manner consistent with the key factors for implementation of MESH Framework–based programs described above. This universal program was promoted to Nemours HCWs in a multipronged approach, including hospital-wide emails, a grand rounds presentation, and targeted outreach to divisions and hospital units via email and brief presentations during regularly scheduled meetings. While data on the proportion of Nemours HCWs accessing this online program are not available, it is likely that only a portion of staff engaged in this support. Continued outreach, update of the program to optimize relevance in an unfolding pandemic, and institutional support for HCWs to have time to engage in universal emotional support programs are needed.

In response to the COVID-19 pandemic, Penn Medicine developed a program known as Coping First Aid, in which volunteer staff from the Penn community are trained and supervised in providing one-on-one emotional support and coaching to any Penn Medicine employee experiencing distress related to COVID-19. Volunteer staff are supervised by licensed mental health clinicians who donate their time to the program. Training and supervision content was informed by PFA principles and developed in accordance with the MESH implementation principles described above. Program content includes a clear escalation pathway and connections to a larger suite of wellness services offered to employees by health system leadership. To date, we have trained 4 supervisors and over 40 coaches, as well as supported more than 200 employees and trainees using this model. While this is encouraging in demonstrating initial feasibility of the model, the program is serving only a small fraction of employees in the health system. Additional resources and efforts to market the program and outreach to employees in distress are needed to increase scaleup.

Some challenges in the application of the MESH Framework are common across institutions, particularly organizing and coordinating multiple efforts by different groups within the organization to support HCWs. This underscores the difficulty of creating new programming in the midst of a pandemic crisis and points to the critical need for a theoretical framework, such as MESH, to guide a larger vision for such programs.

Next Steps for the Field

The Quadruple Aim of Health Care includes improving the work life of all HCWs (Bodenheimer & Sinsky, 2014). COVID-19 has exacerbated long-standing issues of burnout and emotional distress among HCWs. A paradigm shift toward consistency with the Quadruple Aim is overdue and needed to maintain a healthy, optimal health care workforce that sustains this and future crises. Implementing the MESH Framework using TEAM principles not only supports HCWs' coping with COVID-19 in the short term but also establishes a model for health care institutions to provide long-term emotional support to their workforce consistent with the Quadruple Aim. COVID-19 has provided impetus to implement emotional supports for HCWs, but emotional supports have long been, and will continue to be, needed. Health systems are rapidly developing supports like these (American Medical Association, 2020). Future studies should evaluate the rapid development and implementation, as well as longer-term maintenance, of these programs.

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