Clinical Burnout and the Impact of Digital Behavioral Health Solutions

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Introduction

Reported burnout levels have been increasing for years, and concern around the wellbeing and sustainability of healthcare staff during peak times of need have come to the forefront during the COVID-19 pandemic. The experience of stress, trauma, and mental health crises within the current healthcare delivery system requires a change that can no longer be ignored or delayed. Moreover, addressing burnout is not simply a problem to be solved by those individuals experiencing its damaging effects; Healthcare leaders, policy makers, and payers, must come together to support a more manageable and navigable healthcare infrastructure that removes barriers to good care, equips healthcare staff with tools to meet their personal and professional potentials, and builds new approaches to deliver efficient, high-quality care that meets the standards and needs of patients and care teams alike. **The issue and impact of burnout cannot be resolved by one single solution, but rather a combination of enabling technology and processes, creating responsive system changes, and developing proactive support at the individual and population levels.**

Defining Burnout

Burnout is a psychological condition defined as, "emotional and exhausting conditions related to the working environment"[1]. Studies indicate burnout levels at more than 50% for physicians and physicians in training, with 78% of primary care providers (PCPs) reporting feelings of professional burnout "at least sometimes"[2]. Nurses, social workers, support staff and others have also reported significant symptoms of burnout. The symptomatic experience of burnout has been categorized into three domains: emotional exhaustion, depersonalization, and low personal achievement. Transformation from burnout to resilience requires attention to each of these domains and the structures that enable or impede progress.

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Multiple factors contribute to burnout, most typically associated with work-related stressors including: navigating work-life balance, time constraints on patient care, increased clerical burden, electronic health records (EHR), lack of control, and organizational factors (including misalignment on core values, culture, and leadership behaviors)[1,3]. A qualitative study conducted by Agarwal et al (2020) interviewed PCPs to elicit their views on burnout and contributing factors. An overwhelming theme of these interviews focused on the ever-growing workload that detracts from the provider-patient relationship and emphasizes the clerical or "office" focused tasks (paperwork, billing documentation, fielding messages and phone calls) that are impeded by complex or insufficient organizational workflows. The dissonance between the provision of care and the business of medicine resonates as a growing tension between healthcare staff and systems, and a significant contributor to burnout[4].

COVID-19 and Burnout

Within an already overburdened system, the impact of COVID-19 has further exacerbated the growing levels of provider and care-team stress and burnout. While vaccines are now a reality, slow and confusing roll-out coupled with the disproportionate number of Americans who either question the validity of COVID-19 or report they will not be vaccinated against it, keep fear and anxiety levels high amongst healthcare professionals. Over the last year, providers and care-teams have been exposed to immense and multiple levels of trauma, from lack of PPE to protect their health and the health of their loved ones, to being the final and only comfort to a patient dying alone. Feeling underprepared and powerless against a disease with no cure has left a workforce reeling with even higher levels of burnout, coupled with acute stress responses.

Of physicians surveyed August 30th to November 5th, 2020, one in five reported experiencing burnout only in the last year, since the onset of COVID-19[22]. However, it is not only the immediate impact of this dual pandemic that must be considered, but also the long-term mental health impacts. Exposure to trauma is associated with higher rates of PTSD, depression, and substance use disorder; where burnout is associated with increased rates of depression, substance use disorder, and suicide[23]. Together, the risk to our healthcare professionals is profound, and, now more than ever, it is essential that healthcare systems implement strategies to address their crippled workforce.

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Cost of Burnout

The experience of burnout, whether in a single domain or in combination, has serious implications for organizational wellness, patient quality, safety and satisfaction, and provider health.

1 Organizational Wellness

The attributable cost of turnover and reduced productivity from provider burnout is estimated at $4.6B annually[5]. The Physician Burnout Reports states, "The US Department of Health and Human Services (HHS) has predicted a shortage of up to 90,000 physicians by the year 2025. One of the underlying drivers of this shortage will be the loss of practicing clinicians due to burnout. Efforts to replace lost physicians come at a steep cost to employers. One estimate of the lost revenue per full-time-equivalent physician is $990,000"[2]. To quantify this estimate, we assume one fully empaneled FTE seeing 22 patients/day at $150/encounter, taking 10 months to recruit, replace, onboard, and ramp-up a new provider to fully empaneled capacity. The Physician Burnout Report further indicates that the cost alone of recruiting and replacing a physician can range from $500,000 to $1,000,000[2]. **Thus, the total cost of burnout, as a result of lost productivity and poor provider retention, may be as high as nearly $2 million per provider[1].**

② Patient Quality, Safety, and Satisfaction

Burnout has the potential to directly and negatively impact patient access to care, patient safety, and quality of care provision[3]. Studies of resident and practicing physicians show a relationship between burnout and medical errors, with a 1-point increase in either emotional exhaustion or depersonalization on burnout assessments being correlated with a 3-10% increase in likelihood of medical errors in the past 3 months[6]. Studies also show a relationship between physician burnout and job satisfaction with suboptimal patient care, including decreased likelihood to discuss treatment options or answer patient questions, and suboptimal prescribing habits, testing orders, and patient adherence to provider recommendations[6]. **Important still is the indication of the infectious nature of burnout among care team members, resulting in a spread of lost engagement and cynicism.** The erosion of team unity has direct implications for patient safety and quality of care.

③ Provider Health

A population-based survey of US physicians was conducted in 2014 which further highlighted the significance of burnout and medical errors, with physicians reporting medical errors being more likely to report burnout, fatigue, and recent suicidal ideation[7].

Burnout also has a demonstrable impact on physician work hours and professional exit. Every one-point increase in burnout (on a seven-point scale) is associated with a 30–40% increase in the likelihood that physicians will reduce their work hours in the next two years. Overall, burnout contributes to a 1% reduction in physicians' professional work effort. **This reduction roughly equates to losing the graduates of seven medical schools annually — before accounting for other outcomes of burnout such as early retirement or leaving the profession altogether[5].**

Interventions to Address Burnout

To optimize health system performance, the triple aim was created in 2007 to simultaneously focus on three significant criteria: improving patient outcomes, improving patient experience, and decreasing cost of care. Unfortunately, this approach to care ignored a significant and necessary factor, provider and care-team wellness. To effectively care for the patient, systems must also care for their providers and care-teams. Without sufficient attention to the impact of ever changing workflows and expectations that are associated with efforts to obtain the triple aim, health systems fail at both achieving these aims and maintaining a healthy workforce. As a result, the triple aim was updated in 2017 to the quadruple aim, adding to the existing structure the focus on improved clinician experience.

Paramount to accomplishing this fourth aim, which when addressed will simultaneously improve the other three criterium, is developing an understanding of the root causes and mitigating interventions to address the symptoms of burnout in providers and care teams. Below we identify a range of interventions and strategies to address burnout, and the opportunity for digital health tools to directly impact, enhance, or support these strategies.

1 Team-based Care

Cindy Hupke, Director at the Institute for Healthcare Improvement states, "The current infrastructure for primary care in the US is not sufficient to meet the population management needs of a primary care patient panel...It is not possible to achieve improved population health without substantial (versus incremental) change."[12]

That change is team-based care, the provision of comprehensive health services by at least two health professionals who work collaboratively along with patients, family caregivers, and community service providers on shared goals within and across settings to achieve care that is safe, effective, patient-centered, timely, efficient, and equitable[12]. The impact of team-based care is clear; when teams can work collaboratively, with shared decision making, and individuals that work to the top of their licenses, improvements are seen across the board for patients, teams, and individual providers. Organizations that assess the specific needs of their employees and optimize staffing ratios accordingly, instead of prescribing to a preexisting formula, see even greater results from the implementation of team-based care[12].

A good example of a model that supports the patient-to-consumer transition while addressing the tension that providers experience in managing the personal expectations and healthcare needs of patients is the Patient-Centered Medical Home (PCMH). The PCMH puts patients at the forefront of their care, including them as an active and essential component of the care team. **PCMHs build better relationships between patients and their clinical care teams, improve quality and the patient experience, and increase staff satisfaction, all while reducing healthcare costs[9].**

The Agency for Healthcare Research and Quality indicates that the implementation of the PCMH directly impacted provider work satisfaction and burnout rates. The percentage of staff who reported feeling "extremely satisfied" increased from 38.5% to 42.2%, and burnout rates decreased from 32.7% to 25.8%[3].

The key in this scenario is optimization, or clearly outlining the responsibilities that align with each member of the care team. From administrative roles to clinical providers, allowing each to work to the top of their licensure, while not assigning tasks that exceed these competencies, increases team morale while also increasing efficiencies and trust. Helfich et al. (2014) emphasize the impact of team-based care in a PCMH, showing significant correlation between a fully staffed team and shared decision making, and decreased burnout for the entire care team, even after adjusting for workload and panels that were overcapacity[13].

Digital tools have unique capabilities to address both team efficiencies and optimization, while also supporting depression quality improvement projects. Created to provide solutions that augment and enhance care as usual, digital behavioral health solutions integrate technology that is built on evidence-based models like measurement-based care, cognitive behavioral therapy, and psychiatric collaborative care, directly into EHRs to enhance existing clinical workflows. This data sharing facilitated by digital health tools enables care teams to work more efficiently by automating workflows and allowing targeted interventions based on risk and clinical need. When armed with a more holistic perspective created through data interoperability, roles and responsibilities of individual care-team members can be more accurately defined, empowering providers to address the co-occurring needs of their patients. Together, these optimized teams, enhanced with technology, build on the existing impact of team-based care on care-team burnout.

2 Growing Competency and Awareness in Treating Behavioral Health

About 50% of people will experience a mental health disorder in their lifetime[14]; and about 1 in 5 people will experience a mental health disorder each year[15]. While as much as 75% of patients have a relationship with a primary care provider[16], depression, the most ubiquitous mental health diagnosis, is screened for in only 5% of primary care populations[17] and goes undiagnosed in about 50% of primary care patients[18]. **Despite the prevalence of behavioral health disorders, and its impact on functioning, productivity, and overall healthcare costs, of those we identify with a behavioral health disorder, two-thirds will go untreated each year[19].** Due to the shortage of available access to mental health services, and an overall lack of confidence and competence to treat these disorders in primary care, the crisis only grows in magnitude.

PCP's report four primary themes related to lack of competency in behavioral health: 1) medical knowledge, 2) clinical experience in treating mental illness, 3) communication skills during challenging patient interactions, and 4) managing emotional responses to patients[20]. While the optimal response may be to refer patients to behavioral specialists, 67% of primary care providers report not being able to access outpatient behavioral health for patients due to shortages of mental health care providers, health plan barriers, and a lack of coverage or inadequate coverage for services[21]. As a result, many PCPs either feel obligated to address an area of care they are deficient to support, or actively avoid acknowledging and treating behavioral health issues altogether. Either scenario contributes to the emotional toll and burnout associated with treating complex primary care patients. Beyond the direct benefits of alleviating stress and pressure on PCPs, Integrating behavioral health services into primary care can both improve patient outcomes and enhance a team-based model allowing each member to work to the top of license. Additionally, proper integration can increase competencies across team members through shared decision making and improved communication.

Training and technical assistance or practice coaching can be a valuable tool to increase PCP knowledge, skill and comfort in addressing behavioral health concerns; however, providers may face practical difficulties such as lack of covered time out of the clinic or access to resources. When local team-based care and interdisciplinary knowledge sharing may not be immediately accessible, organizations including the Primary Care Development Corporation provide trainings specifically designed for PCPs to increase knowledge and skill in addressing behavioral health needs. Nationally, free and low-cost resources are made available on-demand on core competences that PCPs can utilize to address needs that cross physical and behavioral health, including behaviorally-informed interventions for sleep health, diabetes management, and substance use screening and referrals. PCPs may be more receptive to learning skills from primary-care aligned organizations that "speak the language" of primary care and are sensitive to the many demands already faced by PCPs.

Additionally, the use of digital health technology enables population-focused behavioral health integration at scale, creating a person-centered environment that links the patient, their medical providers, and behavioral health care managers to create a closed data loop for shared clinical decision making. The digital delivery of validated screenings and assessments, in combination with other subjective data helps to inform symptom severity and drive automated tailored content. This allows technology to enhance care as usual, while improving awareness and competency for PCP's.

③ Health Professional-Directed Techniques

Directly providing access to wellness and resiliency tools is an underutilized strategy to improve care-team burnout. Health professional directed techniques include mindfulness, stress management, and cognitive-behavioral techniques that simultaneously improve personal coping, competence, communication[1]. A study by Krasner et al. reviewed an eight-week mindfulness course, which was followed by a 10-month maintenance course. In this study, participants achieved both short and long-term improvements in attitudes and well being of patient centered care[10]. Another study by RØ et al. showed that therapy using motivational interviewing, psychoeducation, psychodynamic, and cognitive interventions was associated with a reduction in emotional exhaustion amongst providers[11].

A long-standing barrier to addressing burnout, and overall health needs of providers has been stigma, often driven by a culture of immense personal and professional expectations (e.g., working long hours, facing repeated high-stress situations that are quite literally life or death), and concern about ramifications of seeking help. PCPs have cited fears that seeking support including counseling or even less formal peer support, may impact their ability to maintain licensing or clinical credentialing. Recently, entities such as The Joint Commission and the American Medical Association have made assertions that health systems not ask unnecessarily probing questions about historical behavioral health treatment that providers have sought, and instead focus on their current capacity to provide care.

In addition to clearly addressing these sources of stigma, employers of PCPs are well-served to consider multiple forms of support. In the case of group or peer support, some PCPs may prefer to seek support in-person groups (which can be as informal as sharing during team huddles), or remotely (even anonymously via web-based platforms). Some providers have reported a preference for only sharing their experiences and seeking support from those that work in a similar field (e.g., other PCPs) and others actually benefit more from a professionally diverse group. Resiliency-building efforts should take into account individual differences, an appreciation for potential stigma, and privacy concerns.

Digital health solutions that enhance care team resiliency and emotional health are a necessary intervention to develop wellness and mindfulness skills. Empowering care teams with technology enabled wellness and mindfulness solutions allows providers and support staff access to personalized content and support available 24-7. **By decreasing barriers to accessing support, care team members regain control of their emotional health, a lack of which contributes to their experience of burnout, while developing the skills to ensure long-term wellness.**

Quadruple Aim

Since the Triple Aim failed to acknowledge the critical role of the workforce in health care transformation, the Quadruple Aim was ushered in with its goal of improving the experience of health care providers, including clinicians and staff.

Improve Health Outcomes

Lower Costs

Better Patient Experience

Improve Physician Satisfaction
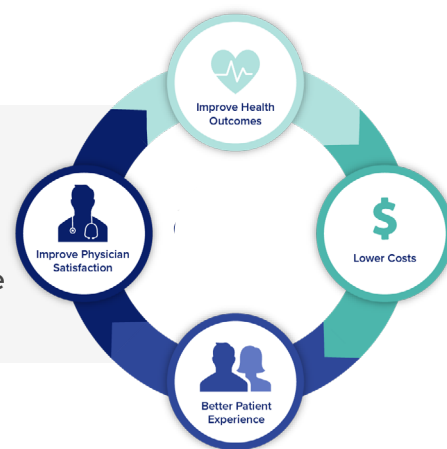
Turning to Tech and Trainings to Address Burnout

Provider burnout has reached historic levels in the United States, only exacerbated by the impact of a global health pandemic. The result is a dwindling workforce that is overwhelmed and underperforming, with growing costs for healthcare systems in the forms of poor provider retention, recruitment and onboarding costs, slowing revenue, and less than optimal quality outcomes.

By deploying digital health solutions like **NeuroFlow** or targeted trainings from **PCDC**, healthcare organizations can proactively address this mounting dilemma. A multifaceted approach that targets both care providers and patients can support holistic organizational wellness and patient care and get healthcare organizations back on track to achieving the quadruple aim.

"NeuroFlow will deliver better outcomes and reduce the administrative burden placed on our providers"

Stephen K. Klasko, MD, MBA
CEO, Jefferson Health

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Rachel Blanton
Chief Officer of Innovation and Operations,
Cornerstone Whole Healthcare Organization

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Amanda Brooks, LCSW, CADC is a Licensed Clinical Social Worker and Certified Alcohol and Drug Counselor. Having served as both clinical provider and administrator, Amanda is an expert in developing and executing sustainable integrated mental health, substance use, and care management programs. Most recently Amanda served as Chief Population Health Officer for a multi-site FQHC specializing in the Primary Care Behavioral Health model of integrated care. In this role, Amanda developed and implemented Chicago's largest integrated chemical dependency treatment program, including an outpatient prenatal and substance abuse treatment program for women with opioid use disorder. Amanda was a collaborator and content contributor to the Chicago Department of Public Health Medication Assisted Treatment (MAT) Learning Collaborative, supporting both administrators and clinicians in developing evidence-based MAT treatment models within their organizations. Amanda now serves as Managing Principal of Brooks Integrated Health Solutions, whose mission is to support organizations in executing sustainable whole person innovations that promote quality patient outcomes and organizational wellness.the quadruple aim.

Dr. Andrew C. Philip is the Clinical Lead and Senior Director of Partnerships at Primary Care Development Corporation: a national nonprofit and community development financial institution that catalyzes excellence in primary care through strategic community investment, capacity building, and policy initiatives to achieve health equity. Andrew is a clinical health psychologist with a background working shoulder-to-shoulder with many other disciplines in medical settings including acute trauma and intensive care, burn, neurology, palliative care, psychiatry, infectious disease, and primary care. Andrew is passionate about driving scalable, high-impact initiatives around integrating physical and behavioral healthcare, improving clinician resiliency in the face of unprecedented stress, and enhancing care for under-served, under-represented, and frankly under-valued populations. Andrew is the immediate past Deputy Director of the SAMHSA-HRSA Center for Integrated Health Solutions and past national trainer for the Department of Defense's primary care behavioral health integration program. In addition to his work with PCDC, Andrew remains active in private practice with a focus on behavioral medicine and LGBTQ+ health, serves as Faculty for University of Michigan's integrated care certificate program and Assistant Editor-in-Chief to the peer-reviewed journal, Telehealth and Medicine Today.

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