

## Burnout as Chronic Disease

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### Burnout Defined

Burnout is defined as a constellation of symptoms including emotional exhaustion, disengagement with work, and low sense of personal accomplishment [1]. Work by Tait Shanafelt and others have demonstrated an average prevalence of 45-55% in large cohort studies, a relatively stable number over the past 20 years [2, 3]. Burnout is not a psychiatric condition in the DSM-V [1]. Rather, burnout is a complex, job-related syndrome with multifactorial influences [1]. Extrinsic factors, such as a difficult work environment, lack of leadership support, and excessive administrative tasks are associated with increased burnout [4]. Similarly, intrinsic traits such as anxiety, denial, and disengagement are associated with increased burnout; positive reframing, optimism, and planning are associated with lower burnout [4]. Burnout is associated with increased medical errors, poor professionalism, worse mental health, and increased job turnover [5].

Presently, we have a “fix-it” model for burnout. Burnout is something to be cured, excised, and erased. Given the endemic nature of burnout, the Chronic Disease Model (CDM) offers hope to manage this challenging syndrome. The Chronic Disease Model (CDM) was developed by the MacColl Institute for Healthcare Innovation in the mid 1990’s and evaluated by the Robert Wood Johnson Foundation [6]. The six essential elements of CDM include:

- The community: mobilizing resources to meet the needs of patients
- The health system: creating an organization of safe, high-quality care
- Self-management support: empowering self-care among patients
- Delivery system design: assure effective, efficient care and self-management support
- Decision support: promote care consistent with scientific data and patient preferences
- Clinical information systems: Organize data to facilitate efficient and effective care

Most often applied to patients with complex diseases (eg. diabetes, coronary artery disease, or congestive heart failure) use of the CDM can improve outcomes in a variety of metrics [7]. For example, among patients with diabetes, the CDM model acknowledges the individual’s role in their disease management but also recognizes the complex milieu of disease: food deserts, difficulty with insurance coverage, high insulin prices, complexity with navigating the healthcare system, and tracking important health screening (ie. podiatry, ophthalmology). In response, a well-resourced CDM model encourages nutrition support and counseling, health navigators and nursing support, and education programs. A systematic review demonstrated improved hemoglobin a1c control among other metrics [8].

The CDM model improves outcomes in patients with asthma and COPD. One study demonstrated that having respiratory therapists embedded in primary care offices to educate patients reduced their rescue inhaler use by 75% and their symptom score decreased by 49%. Length of stay in the emergency department was reduced from 278 to 168 minutes [9]. CDM for asthma and COPD ensured that each patient had an asthma action plan; and peak flow meters were distributed in the community. The intervention proved cost neutral: billing from increased spirometry testing equaled the costs of the respiratory therapists. A CDM model for patients with congestive heart failure (CHF) included proactively planned follow-up visits, individualized counseling to optimize lifestyle modifications, and adherence to pathways. This program resulted in an 18% reduction in mortality [10].

Further, the CDM model emphasizes a community panel management approach that tracks the status of core measures. What percentage of patients have good control of their diabetes? Who needs extra outreach and support? Which patients have not had a screening foot exam, echocardiogram, or mammogram? We have only begun to tap into the potential of increasingly sophisticated EHRs. The CDM model has shown improved outcomes, reduced morbidity and mortality, as well as cost-savings [7-10].

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## Burnout and the Chronic Disease Model

The same CDM principles could be applied to burnout in healthcare professionals. In the domains of community, self-management support, and health system, we should ask “What do healthcare workers really need?” A qualitative study among thriving physicians showed that social connections and autonomy were important predictors of high job satisfaction [11]. Do physicians need better job-sharing? Optimal work hours to pick up their kids? More job flexibility? Opportunities for further training and growth? Better ancillary support for scut work? While physicians and other healthcare professionals may not have flexible job descriptions, small tweaks may greatly improve satisfaction. The increased awareness of mental health issues in the workplace has led to an expansion in Employee Assistance Programs (EAP), including access to counseling and stress reduction programs. Not everyone needs mindfulness training. Physician appreciation days and free water bottles smack of tokenism.

Hot-spotting shows promise to address burnout within the framework of a CDM model [12]. Hot-spotting typically described the identification of and resource allocation toward patients who accumulate high-costs in a healthcare setting. The concept can be extended to devotion of resources to specific conditions with high-prevalence – such as gun violence or influenza. A research study focused on administrative tasks considered undesirable to primary care physicians. The delegation of non-physician tasks to support staff resulted in improvements in both patient and provider satisfaction [13]. A similar study among floor nurses revealed increases in job satisfaction [14]. One intriguing study predicted which physicians would leave their jobs based on the creeping length on their electronic health record (EHR) inbox [15]. In several studies the EHR correlates with increased burnout and intention to leave [4, 15, 16]. Directly addressing the underlying issues that cause the stress may be more important than stress reduction classes. The hot-spotter approach is more likely to detect root causes of burnout and lead to real-world solutions to reverse it.

Critics of the CDM approach cite its cost. Increased job flexibility, expanded EAP resources, and a hot-spotting approach could imply higher administrative burden and financial cost. However, lost productivity, recruitment costs, and decreased efficiency from staffing shortages also cost the system. Replacing a physician, when factoring in lost billing and recruitment costs, costs \$250,000 - \$500,000 [16]. Ultimately, the CDM approach to burnout may result in cost savings and will certainly result in a stronger workforce.

A CDM approach to burnout expands the treatment repertoire and justifies appropriation of institutional resources. The CDM model aligns with the quadruple aim in healthcare: in addition to improving the patient experience, improving population health, and reducing healthcare costs, the healthcare system needs to address the well-being of the healthcare provider [17]. Addressing burnout as a chronic disease acknowledges reality: burnout is endemic. The piece-meal, disease-oriented model has not moved the needle on this chronic disease. It is time to adopt a comprehensive approach to address it.

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