IntelliTek Health

A SmarTek Company

Caregiver Experience: Designing digital products to tackle Caregiver Burnout with empathy and compassion.

It was a year ago on January 19th 2020, that the world was awakening to the reality that the reported virus in Wuhan was now being recorded in many other countries. With many references to previous epidemics that had recently emerged as potential killers - SARS, MERS, Avian Flu and Ebola - much was discussed about what the implications would be for the healthcare industry across the globe. By the time the World Health Organization had declared COVID-19 a global pandemic on March 11th, it was already widely predicted by Harvard amongst others that Caregiver burnout was going to be one of the biggest factors affecting the healthcare industry's ability to respond and contain the impending disease.

Nobody could have envisaged what was to follow - the "new normal" became defined by lockdowns, travel restrictions, home-schooling, masks, remote working, zoom calls and social distancing. For the healthcare industry, never before had there been such a spotlight on a profession and their role in the very essence of our lives. One year on, with 96.1m cases and over 2 million deaths worldwide, Caregiver Burnout is synonymous with the challenges in 2020 in the healthcare business.

Working in healthcare in 2020 has been a harrowing experience. In a recent survey conducted in September in the US by Mental Health America, 93% of healthcare staff were experiencing stress, 86% reported experiencing anxiety, 77% reported frustration, 76% reported exhaustion and burnout, and 75% said they were overwhelmed. Emotional exhaustion was the most common answer for changes in how healthcare workers were feeling over the previous three months.

82% were emotionally exhausted, 70% had trouble with sleep, 68% cited physical exhaustion and 63% were experiencing work-related dread.

Over half selected changes in appetite (57%), physical symptoms like headache or stomach ache (56%), questioning career path (55%), compassion fatigue (52%) and heightened awareness or attention to being exposed to COVID-19 (52%). About 39% said they didn't feel like they had adequate emotional support. Nurses were even less likely to have emotional support (45%).

When asked to select their top three work-related stressors, 61% reported uncertainty about when things will settle down or return to normal, and 54% reported experiencing burnout. Nearly half (49%) also reported that their heavy or increased workload was a major stressor in the previous three months.

Berxi, a division of Berkshire Hathaway Specialty Insurance and a provider of professional liability insurance for medical professionals also studied the effects of Covid on healthcare professionals. Alarmingly, 90% said they've been getting less than the recommended eight hours of sleep each night, and one in three admitted to getting four hours or less. Work performance was suffering as a result: One in three healthcare workers feel that they've been making more mistakes at work. Nearly half (48%) have considered either retiring, quitting their jobs, or changing their careers altogether, while the same number say that their mental health has deteriorated.

Of all healthcare professionals surveyed, 49% have cried at work in the past year -- and 67% of all nurse practitioners admitted to doing the same.

This startling mixture of emotional, physical and mental symptoms of burnout - alongside very real concerns around the practicalities of workload, lifestyle and family concerns signals that help is urgently needed. Technology can certainly play a key role here - and thoughtful product design and implementation could alleviate many of the "hidden factors" that are causing such stress and strain on our key workers.

The sad reality of COVID-19 is that there is no going back. For the 52m Covid sufferers who have recovered, further evaluation has shown that they may be prone to ongoing health issues in heart, respiratory and kidney function. The likelihood of a global pandemic of this scale had been predicted for some years - and is now something that will become etched on the consciousness of all parties involved; similar to the devastating tsunami of Boxing Day 2004 - which precipitated the global alliance to implement large scale upgrade in detection, reporting and protection of Tsunami related risks across the globe. The realisation that virus-borne disease is a very present worldwide risk is no longer up for discussion - it is a question of when, not if, the next global pandemic will emerge.

The need therefore is not only to respond to what healthcare workers need now - but to reset for the new realities of treating patients in a pandemic- stricken context.

Longer term measures require big shifts in policy, leadership, investment, technology, culture and communication, regardless of the current regime and prevailing standards.

But for now there are a number of interventions that can make a big difference on the ground.

1. Supportive interventions

Support for healthcare workers can be provided by a number of instrumental sources - family members, the government, society/ community, organizations, and colleagues and supervisors. Some practical applications can include

- providing a peer support system
- assigning professional psychotherapy teams
- devoting attention to staff opinions and ideas about various issues related to treatment of COVID-19 via an array of input and feedback channels
- provision of the support for emotional and psychological needs
- providing online psychological services as well as face-to-face psychological crisis intervention
- being confident of receiving in time treatment and care for their infected family members
- regarding HCWs' infection at work as the work-related injuries.

Technology can be quickly deployed to help scale some of these options quickly - particularly when it comes to one-to-one interactions including coaching, counseling and mental health treatment. Mindfulness and other aspects of self-care can also be delivered via mobile apps so they are flexible and can fit the schedule and mindset of the individual.

Another leapfrog is the use of Conversational AI to bring the latest developments in interactive products to all aspects of a patient's journey - from finding the bathroom to managing their own medication to admin-heavy hospital procedures like admissions and discharge.

2. Encouragement & motivation interventions

Across the world, there has been very public recognition of the tremendous efforts of our front-line and key workers with very specific gratitude and appreciation rituals for healthcare workers risking their health to help patients and their families. This also needs to be accompanied by much more tangible recognition from Hospital and Healthcare Provider leadership at a local level as well as the domestic government where many healthcare workers do not feel adequately recognized professionally or valued for their role in society.

On a more micro level, working in tandem with the supportive measures above, making time for and encouraging staff to engage in relaxation techniques such as yoga, meditation, and other relaxation techniques; providing therapists' visit to care for their psychological needs and tackle frustrations via counseling. A core area affecting overall well-being is implementing effective measures to reduce the workloads in terms of number of patients, managing administrative tasks and alleviating other burdens that minimize their ability to focus on patient care. This is another area where technology that gets to the detail of the working realities in clinical environments can be transformative.

In analyzing over 1500 workflows, IntelliTek Health product designers have applied their healthcare expertise to understand where the process can be improved, the burdens of data collection can be relieved and where the interaction between patient and caregiver can be safer, more personal and more rewarding.

For instance, across this set of workflows, 60-70 of the activity involves forms. If you can simplify the form filling in terms of what you need to ask and that they can use spoken responses, then use one form to populate data across a suite of products - this is saving time and money, relieving stress, increasing productivity and putting the patient back into the center of the ecosystem.

3. Protective interventions

This has been one of the most controversial and most visible aspects of the challenges that our healthcare workers have faced.

One estimate suggests that there have been over a billion views of video materials posted across Facebook, You Tube, Instagram and Tik-Tok of healthcare workers talking about PPE.

From faces damaged by masks on long shifts to empassioned pleas for more adequate protective equipment to publicizing the other conditions they faced as patient numbers surged - this has been a cultural phenomena capturing the real-life stories of COVID-19 front-line healthcare workers. It goes beyond providing adequate and effective protective equipment -

- addressing staff physical needs, such as access to healthy meals and hydration
- enabling regular rest breaks

- designing a safe place for their rest and recharging
- considering shorter working hours and rotating shifts especially for those working in high- risk departments
- accommodation and lodging for staff working in high-risk areas and those who are on rapid- cycle shifts that do not live in close proximity to the hospital
- provide support for childcare needs
- dispatching fresh medical teams from other areas with less number of patients
- keep monitoring and check on their physical and mental well-being
- identifying and helping staff who are experiencing burnout or have psychological distress

4. Educational & Training interventions

At times of huge change or prolonged crisis, the need for education, training and general communication is paramount. This is another area that can be transformed by technology and scaled quickly in terms of managing varied content and providing contextual relevance. This has been one area that has created new COVID-19 habits and practices - not just in healthcare but across all workplaces and even into our homes, in lockdown.

Zoom, Tik-Tok, Instacart, Peloton, Netflix, Robinhood, Deliveroo, Siri and Alexa are all AI enabled tech-brands that have changed the way we live and connect with each other as our daily routines of commuting, working, shopping, socializing and spending money have all changed beyond recognition.

Specifically for healthcare, there are many opportunities here:

- providing online psychological and mental health education via communication programs
- development and publish the relevant guidelines and operating manuals
- Publish handbooks, directives and procedural documents
- online educational articles/ videos
- provision of the critical incident stress management
- Compliance training
- mindfulness training
- assertiveness training

- self-awareness training
- protection training
- Gender bias, Diversity and Inclusion training

Platforms and formats for training and communication content have proliferated greatly in the last few years - podcasts, collaboration apps like Slack, remote video-conferencing, digital personal assistants, document transfer, SaaS & Cloud services are all driving the proliferation of how we are served, consume and store content. Increasingly, we are seeing these applications use AI enabled capabilities and offer greater sophistication and credentials for security to make them more robust and workable at scale.

5. Using the platform of technology and online services

There are a number of drivers that are fueling the need for rapid technological adoption and digital transformation worldwide. In COVID-19 conditions, face to face contact increases the risk of infection and transmission. This has created mandates for remote working/schooling and many countries have been enforcing quarantine conditions that by definition isolate people away from their normal infrastructure and places of work. Add to this the widespread adoption of smartphones which accompany us everywhere - and then the substitution of the physical environment for an online environment for banking, shopping, movies, live events, socialization and media - we are accelerating the digitization of our lives at an alarming rate. Information technology and online services have been widely adopted in healthcare too. Now, most supportive, educational, and psychological interventions in the pandemic are performed using internet and online tools. Telemedicine is not only safe, reliable and practical, it is also highly personal and intimate. In 2019, 11% of patients in the US had tried Telemedicine; in 2020 it had risen to 46%. The benefits were resounding to patients and caregivers alike - reducing unnecessary visits, decreasing the risk of infection, reducing workload, and optimizing time to care for patients with acute conditions, which healthcare workers consider to be their vocational purpose.

One of the practical technologies that can be used to minimize health staff's work pressure is mHealth (mobile health). We all accept that user-friendly apps can create great responses through notifications and reminders of the time of care, provide online mental health education and psychological counseling services as well as psychological self-help intervention systems that you can personalize for your own circumstances and goals.

Artificial intelligence (AI) technology is being widely applied across a number of use cases. Intelligently designed into an application, AI capability will drive performance of the product to increase efficiency, effectiveness and create better experiences. One example of how the technology can have empathy for the environment and the people who will be using the product is the application of "smartbots" in a clinical situation.

IntelliTek Health create Conversational AI products that enable the caregiver and patient to interact authentically in context.connect with each other as our daily routines of commuting, working, shopping, socializing and spending money have all changed beyond recognition.

The creation of their products starts with healthcare expertise within their product development teams, who collaborate with the healthcare teams on the ground to analyze the workflows and then design a solution that covers all the aspects of the end to end process to a desired outcome - measurable and accountable from the start. They include the criteria to be JCI compliant so that this is no longer a problem for the healthcare team - daily tasks are logged, recorded, monitored and reported without any human intervention. Their product suite covers experiences as diverse as Patient Admission, Medication Management, Pre and Post Operative care, Campus Wayfinding and Inventory Management. For the caregiver, the administration burden is relieved, the risk of "click fatigue" with unreasonable computer based workloads is removed and the rewarding part of delivering a meaningful interaction with the patient is at the heart of the product design.

As the conditions for Caregiver burnout get more acute and intense, thoughtful technology can provide a shield against the problems that are causing many caregivers to feel emotionally, mentally and physically challenged at work. Products designed and implemented with the intricacy of the caregiver-patient relationship as the focus of the experience will not only create very rewarding interactions, they will also deliver the ROI and performance that meets the ever-increasing demands of healthcare economics.

References include Healthcare Finance Dec 2020

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