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Balancing health and economic factors when reopening business in the age of COVID-19

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Disasters often stress the economy and, as in the case of the current pandemic, expose structural weaknesses that reveal significant gaps in organization, infrastructure and capacity. From the time of its emergence in late 2019, the severe acute respiratory syndromecoronavirus 2 (SARS-COV-2) that causes coronavirus disease 2019 (COVID-19), has swept across the globe causing substantial morbidity and mortality. Without effective pharmacologic interventions, public health policy responses included social distancing, masking, stay-at-home orders, and business closures in efforts to protect lives by slowing the rate of infection. Unfortunately, these mitigation measures have come at a significant financial and economic cost. The trade-off for saving lives has been economic dislocation as many industries have been shut-down and unemployment rates have soared.

As the pandemic surge wanes, attention has shifted to lifting stay-at-home measures and restarting the economy. Political debate, which often falls along partisan lines, has framed the choice as pitting pro-economy *vs* pro-health arguments. We contend that this is a false dichotomy. At the macro-economic level, health and wealth are not only closely related but mutually reinforcing (1). The economic downturnitself is expected to create secondary surges in poor health: increased severity of chronic diseases (ambulatory sensitive and prevention sensitive

conditions) as people have delayed routine healthcare, increased demands on mental health and substance-abuse related services due to the stress and isolation, and overall worsening of physical and mental health due to unemployment (2). Secondary surges in poor healthare likely to disproportionally impact vulnerable individuals and communities (3).

Thus, opening business back up will need to involve a careful balance of health and economic factors emphasizing the importance of both. Instead of continuing polarizing debates about maintaining lockdowns to protect health versus reopening to prevent limits on individual freedom, a need has surfaced for multi-sectoral public-private partnershipsfocused on how best to reopen safely.

Challenge to Business

Businesses impacted by the pandemic are eager to reopen, yet returning to the workplace before a vaccine is available poses risks to front-line employees and organizations. Employers need to plan for a safe way to resume operations. Such planning guidesthe transition of employees back into work environments and prioritization of critical business processes to ameliorate negative economic impacts from the pandemic. The need to reopen in a responsible and safe manner comes with a sense of urgency for business leaders and requires health expertise. Factors that support responsible approaches for return to the workplace include, but are not limited to, monitoring local infection rates and population health trends, monitoring symptoms, referring employees to appropriate testing and medical care, weighing vulnerability, understanding regulations, and responding to a range of employee questions.

Multi-Sector Partnerships and Enablers

We posit that reopening would be well-served by partnerships among he health care, public health, and business sectors since these sectors are uniquely positioned to coordinate a response that represents health and economic factors. Furthermore, these sectors have the ability to access and mobilizecritical resources. Yet, such partnerships may not arise as a matter of course. To be intentional, setting the conditions to enable such public-private partnerships is paramount. A multi-sector partnership guided by three enablers - leadership, culture, and technology - may set the right conditions for successful reopening.

The Public Health Sector

Public health's strength lies in its population perspective and focus on the community. Using tools such as epidemiology, surveillance and mathematical modeling, health agencies provide information inform and support ongoing responseby all sectors. For example, applied guidance for employers includes information sheets, checklists, worker protection tools, and educational infographics. Governmental public healthalso has a unique role in itsauthority to enforce isolation, quarantine and other disease control measures. These strategies can beeffective, but may belimited by political considerations in balancing individual rights with collective welfare.

The Health Care Sector

Being an essential service, health care remained open whenother sectors of the economy were locked down. As a result, important lessons have been learned about what actually works in

keeping the business open safely for workers and customers. Four specific measures haveworked to stop viral spread: hygiene (e.g. hand washing and disinfection of surfaces), screening to identify infected persons, distancing, and wearing masks (4). The effectiveness of this approach is predicated on the ability for any operation to implement all four elements simultaneously, which requires significant redesign in workflow, process and environmental modifications.

The Business Sector

Business hasrallied to provide critical support inrepurposing assets for manufacturing of resources that were in short supply such as masks, ventilators, and hand sanitizer. The private sector has responded in the search for treatment bystudying and repurposing existing pharmaceutical compounds (e.g.,Remdesivir) for clinical efficacyand in mobilizing to develop testing strategies and a vaccine.Local business support for those in need of food or other vital services are seen in communities across the country. Companies leverage significant expertise in areas such as supply chains, continuity of operations process, communication, and implementation, thereby lending support to response and recovery in ways that nonprofit and government organizations cannot (5).

Leadership

The COVID-19 pandemic has clearly shown that the health of the public impacts business operations and the economy. Leaders from health care, public health, and business are needed to build public-private partnerships designed to benefit the health of the economy and society. Leadership's role is to set a vision for a future state and to mobilize resources that help us get there in a safe and constructive manner. Leadersneed to engage with multi-sector partners and use a "creating shared value" approach that provides benefits to each stakeholder while generating social value in the interests of public health (6).

Culture

The ability of any organization to diligently implement the required elements needed to control the virus and maintain confidence in a safe work environment will be a reflection of its culture—is "the way things are done around here" consistent with the behaviors, systems, and policies needed to stop the virus from spreading? The SARS-COV-2 experience has already taught us that health care has a culture in which it is possible to slow or halt the transfer of the virus (4). These insights should find their way into adaptations to the culture of organizations and increase the likelihood of safe and successful reopening.

Technology

Mounting an effective pandemic response involves a diverse set of functions that relies on data andtechnology (7).Telecommunications has helped to facilitate remote healthcare visits, and work from home. Technology has enabled rapid sequencing of the SARS-COV-2 genome, acceleratedclinical trials, and holds promise for novel approaches to surveillance (e.g.,blockchain) and contact tracing (e.g.,proximity analysis via mobile devices).Yet, while new analytic methods such as machine learning can improve predictive modeling, the need for human judgment remains. In the face of scarce data models can help, but balancing competing concerns may be more of an art best accomplished via multi-sector dialogue and collaboration.

Conclusion

Reopening business, along with maintaining critical infrastructure, restoring essential services, protecting health, saving lives, and maintaining community vitality, necessitate a coordinated response across public health, healthcare, and private sector organizations. Leadership, culture, and technology may need to surface as critical enabling factors in bringing a balanced approach to opening the business sector back up while maintaining health and safety for workers, customers, and the public.



References:

- Bloom DE, Canning D. The health and wealth of nations. *Science* 2000:287(5456);1207-1209. DOI: 10.1126/science.287.5456.1207
- Norström F, Virtanen P, Hammarström A, Gustafsson P, Janlert U. How does unemployment affect self-assessed health? A systematic review focusing on subgroup effects. *BMC Public Health* 2014;14(1):1310.
- Runkle JD, Brock-Martin A, Karmaus W, Svendsen ER. Secondary surge capacity: A framework for understanding long-term access to primary care for medically vulnerable populations in disaster recovery. *Am J Public Health* 2012:102(12);e24-e32. https://doi.org/10.2105/AJPH.2012.301027
- Gawande A. Amid the Coronavirus crisis, a regimen for reentry. *The New Yorker*. May 13, 2020. <u>https://www.newyorker.com/science/medical-dispatch/amid-the-coronavirus-crisis-a-regimen-for-reentry</u>
- Kassler W. Turning barriers into benefits to facilitate public health and business partnership. *Am J Public Health* 2020;110(4):443-445.
- Pronk NP. Public health, business, and the shared value of workforce health and wellbeing. *The Lancet Public Health* 2019;4(7): E323, July 1. https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(19)30078-7/fulltext
- Keesara S, Jonas A, Schulman K. Covid-19 and health care's digital revolution. *N Engl J Med*.2020; 382:e82. DOI: 10.1056/NEJMp2005835