



RESEARCH ARTICLE

Learning of Health Care Management during Covid19 from doctor administrators perspective A Viewpoint

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Abstract:

Covid-19 pandemic created a multitude of acute challenges for health care delivery systems, including inadequate infrastructure and special logistics, supply shortages, the need for care redesign, and financial loss. Complexity science views health care delivery systems as complex adaptive systems that operate in highly complex and unpredictable environments. The perspective assumes that much of system life is unknowable, uncertain, or unpredictable and thus cannot be standardized and controlled. A surprise event can be characterized in three dimensions: the complexity of its source, the speed of its spread, and the unpredictability of its scale and impact. The Covid-19 pandemic is a powerful reminder that we live in a highly complex and unpredictable world. For health care delivery systems, systematic responses to the pandemic have required departures from many conventional practices. The Covid-19 pandemic has presented an array of novel and acute challenges, from managing the supply chain for personal protective equipment (PPE) to adjusting workforce infrastructure and special logistics to coping with financial loss. In the midst of these challenges lies an opportunity for health care leaders to better position and transform their systems for a future of unpredictable surprise.

Key Challenges for Health Care Delivery Systems Infrastructure, special logistics, special training for staffs, management of support staffs Massive social and economic loss d/t continued blockades H.C. Delivery system is highly complex and unpredictable Special need for medicines, unavailability of proper PPE KITS, UNKNOWN COURSE AND DISEASE

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Covid-19 pandemic created a multitude of acute challenges for health care delivery systems, including inadequate infrastructure and special logistics, supply shortages, the need for care redesign, and financial loss. Complexity science views health care delivery systems as complex adaptive systems that operate in highly complex and unpredictable environments. The perspective assumes that much of systemal life is unknowable, uncertain, or unpredictable and thus cannot be standardized and controlled. A surprise event can be characterized in three dimensions: the complexity of its source, the speed of its spread, and the unpredictability of its scale and impact.¹ The Covid-19 pandemic is a powerful reminder that we live in a highly complex and unpredictable world. For health care delivery systems, systematic responses to the pandemic have required departures from many conventional practices. The Covid-19 pandemic has presented an array of novel and acute challenges, from managing the supply chain for personal protective equipment (PPE) to adjusting workforce infrastructure and special logistics to coping with financial loss. In the midst of these challenges lies an opportunity for health care leaders to better position and transform their systems for a future of unpredictable surprise.

Health care delivery systems have faced a myriad of important management challenges during the Covid-19 pandemic. Some of the challenges are idiosyncratic to the individual system; others, however, are broadly faced by almost every health care delivery system and are likely to be faced in any major disaster. The first key challenge is the lack of adequate infrastructure and special logistics to handle the surging patient volume. In many places, the need for intensive care unit (ICU) beds and ventilators as well as staffing far exceeds the maximum infrastructure and special logistics.

A second challenge is the need for customized salutogenic health care models for patients. Given the highly contagious nature and severity of the infection, it is necessary for physicians, nurses, and other clinicians to discover the appropriate care model with health appropriate behaviours. Moreover staff scarcity and shortage due to existent health ratio and compounded with sickness due to covid makes situation more dwindling. Appropriate newly formulated stopgap recruitment and retention policies need to be implemented.

A related challenge is protecting the physical and mental health of frontline staff. Hospitals and clinics have to ensure an adequate supply of PPE for their staff. In addition to the risk of contracting the virus, frontline staff have to cope with tremendous mental stress, which some may find unbearable.⁴ There have been anecdotal reports of frontline staff dying by suicide.

Another challenge for hospitals and clinics during this pandemic is the financial loss due to the cancellation of elective procedures and the disruption of routine care, particularly for hospitals already in financial difficulty.⁵ To manage infrastructure and special logistics, financial loss, and care redesign, health care systems have made the critical decision to release or reduce workforce or to shift many employees to remote work, including clinicians working with telehealth technologies. Rightsizing and retraining workers is difficult in normal times and is even more difficult when changes need to be implemented expeditiously.

These four challenges are likely to arise again in any future surprise event. Whether the event is a natural disaster, terrorism, or a pandemic, health care delivery systems will be challenged to suddenly adjust infrastructure and special logistics, redesign care, manage financial loss, and redeploy staff.

Multistakeholder engagements and community participation needed to play a pivotal role. Ignorance led to fear and opening of covid care centres with round the clock helplines to address their queries and allay fears were set up. Oxygen plants and district administration worked hand in hand to resolve the attached stigma.

Hospitals, health systems, and medical practices, as these systems are comprised of highly interdependent, heterogeneous, dynamic, and interacting agents and units. These set ups have an interplay which also change over time but the essence of patient driven care remains same. From opening of quarantine centres to home isolations to testing kiosks to home tests and leaves for covid related sickness, sudden myocardial deaths in young to migration of migrants and corollary health data dwindling the times were tough.

Yet health care administrators managed it all with limited resources. Sensemaking is the process by which people give meaning to their collective experiences: “the ongoing retrospective development of plausible images that rationalize what people are doing.”⁸ This term came anew with development of newer protocols, capacity building of staffs, setting up of newer infrastructure, redesigning the old alongside pooling of covid related wards and patients away from the main hospital. Opening of Screening clinics with fully functional independent set up saved the mayhem.

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Re-deployment of nurses to multidisciplinary teams all was done and administrators were both doctors as well as liaising with the government officials and political bureaucracy.

During the Covid-19 crisis, health care systems that have emphasized communication, connection, and innovation have effectively addressed the challenges to adjust infrastructure and special logistics, redesign care models, redeploy staff, and overcome financial loss. Health care systems, particularly those that have entered the recovery and rebuild stage, can use the Covid-19 pandemic as an opportunity to transform into more agile and resilient learning systems.

However digital illiteracy and ignorance alongside poverty leading to inaccessibility of mobile phones in remote peripheries was a challenge as India's three tier health care delivery system was entirely functional in physical mode. Sudden advent of online service delivery created an initial jeopardy.

Specifically speaking about rural medical college located in a periphery away from the main city has its own constraints and set back. Distance from main city, transport closed, any logistics and information reaching late, local people entirely dependent on the college, less resources, so if few covid affected huge burden on others. Among the benefits counted are unanimous decision, strong leadership, team work, every set up working autonomously yet in coordination, easy as we all knew one for each other, implementing preventive health interventions and other laws easier, district working in close coordination, telemedicine developed. Regarding another college located in heart of the city in far North East- The entire college was transformed into COVID Hospital with redesigning of blocks, fitting oxygen plant, creating ICUS, huge staff deployment for the cause, working 24*7, catering all patients coming along with running regular activity, regular meetings with district and state, creating dedicated triaging to identify and treat the cause, preventive interventions running. However being centrally located burden of expectations and constant monitoring from centre was a challenge to put up. COVID created fear and stigma among general people hence handling patients, staffs, media was an issue. Exemplary leadership skills, team work, dedication, liaison helped tide over the crisis

REFERENCE

[1]. W Begun, HJ Jiang. Changing systems for their likely mass-casualties future. *Adv Health Care Manag*2004; 4:163-180. 10.1016/S1474-8231 (04) 04007-8.

Crossref, Google Scholar

[2]. Global Change Data Lab. Our World in Data. Cumulative confirmed Covid-19 cases, Map and country time-series. Total confirmed Covid-19 deaths, Map and country time-series. <https://ourworldindata.org/coronavirus>

Google Scholar

[3]. A Uppal, DM Silvestri, M Siegler. Critical care and emergency department response at the epicenter of the Covid-19 pandemic. *HealthAff (Millwood)*2020; 39:1443-1449 <https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00901>. 10.1377/hlthaff.2020.00901. 32525713.

Crossref, Medline, Google Scholar

[4]. Fischer-Sanchez D. Mental Health Care during the Covid-19 Pandemic. *WillisTowersWatson Insight*. May 11, 2020. <https://www.willistowerswatson.com/en-US/Insights/2020/05/mental-health-care-during-the-covid-19-pandemic>

Google Scholar

[5]. D Khullar, AM Bond, WL Schpero. COVID-19 and the Financial Health of US Hospitals. *JAMA*2020; 323:2127-2128 .10.1001/jama.2020.6269.32364565. Crossref, Medline,

Google Scholar

[6]. Begun JW, Thygeson M. Managing complex health systems. In: Fottler MD, Malvey D, Slovensky D, eds. *Handbook of Healthcare Management*. Northampton, MA: Edward Elgar Publishing, 2015:1-17.

Google Scholar

[7]. Begun JW, Zimmerman B, Dooley KJ. Health care systems as complex adaptive systems. In: Mick SS, Wyttenbach ME, eds. *Advances in Health Care System Theory*. San Francisco: Jossey-Bass, 2003: 253-288.

Google Scholar

[8]. K Weick, KM Sutcliffe, D Obstfeld. Organizing and the process of sensemaking. *Organ Sci*2005; 16:409-421. 10.1287/orsc.1050.0133. Crossref,

Google Scholar

[9]. Institute of Medicine (US) Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington (DC): National Academies Press (US); 2001. PMID: 25057539.

Google Scholar

[10]. EM Lancaster, JA Sosa, A Sammann. Rapid response of an academic surgical department to the Covid-19 pandemic: implications for patients, surgeons, and the community. *J Am Coll Surg*2020; 230:1064-1073 .10.1016/j.jamcollsurg.2020.04.007. 32278726.

Crossref, Medline, Google Scholar

[11]. N Peiffer-Smadja, JC Lucet, G Bendjelloul. Challenges and issues about organizing a hospital to respond to the COVID-19 outbreak: experience from a French reference centre. *ClinMicrobiol Infect*2020; 26:669-672 .10.1016/j.cmi.2020.04.002. 32278082.

Crossref, Medline, Google Scholar

- [12]. Slotkin JR, Murphy K, Ryu J. How one health system is transforming in response to Covid-19. HBR.org. June 11, 2020. <https://hbr.org/2020/06/how-one-health-system-is-transforming-in-response-to-covid-19>
Google Scholar
- [13]. C Keeley, J Jimenez, H Jackson Staffing up for the surge: expanding the New York City public hospital workforce during the Covid-19 pandemic. HealthAff (Millwood)2020; 39:1426-1430 <https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00904.10.1377/hlthaff.2020.00904.32525704>.
Crossref, Medline, Google Scholar
- [14]. E Wei, J Segall, Y Villanueva Coping with trauma, celebrating life: reinventing patient and staff support during the Covid-19 pandemic. HealthAff (Millwood)2020; 39:1597-1600 <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00929.10.1377/hlthaff.2020.00929.32673086>.
Crossref, Medline, Google Scholar
- [15]. RJ Salway, D Silvestri, EK Wei, M Bouton. Using information technology to improve Covid-19 care at New York City Health + Hospitals. HealthAff (Millwood)2020; 39:1601-1604 <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00930.10.1377/hlthaff.2020.00930.32673131>.
Crossref, Medline, Google Scholar
- [16]. J Lau, J Knudsen, H Jackson Staying connected in the Covid-19 pandemic: telehealth at the largest safety-net system in the United States. HealthAff (Millwood)2020; 39:1437-1442 <https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00903.10.1377/hlthaff.2020.00903.32525705>.
Crossref, Medline, Google Scholar
- [17]. Hancock SC. Perspective: An inside look at a rural hospital preparing for the wave. Kansas Leadership Center Journal. April 6, 2020. <https://klcjournal.com/inside-rural-hospital-covid-19/>
Google Scholar
- [18]. Feldman SL, Mayer PA. Arizona Health Care Systems' Coordinated Response to Covid-19—"In It Together." JAMA Health Forum. August 24, 2020. <https://jamanetwork.com/channels/health-forum/fullarticle/2769929>
Google Scholar
- [19]. IM Nembhard, LR Burns, SM Shortell. Responding to Covid-19: lessons from management research. NEJM Catalyst2020. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0111>.
Google Scholar
- [20]. M Prasad. On the Frontlines of the Coronavirus Disease 2019 (COVID-19) Crisis-The Many Faces of Leadership. JAMA Cardiol2020; 5:983-984 <https://jamanetwork.com/journals/jamacardiology/fullarticle/2767015.10.1001/jamacardio.2020.2240.32936275>.
Crossref, Medline, Google Scholar
- [21]. Forgrave R. Battle-tested military vet helps lead M Health Fairview's Covid-19 response. Minneapolis StarTribune. July 8, 2020. <https://www.startribune.com/battle-tested-military-vet-helps-lead-m-health-fairview-s-covid-19-response/571663602/>
Google Scholar
- [22]. McWilliams JM. Professionalism revealed: rethinking quality improvement in the wake of a pandemic. NEJM Catalyst 2020. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0226>
Google Scholar
- [23]. M Uhl-Bien, R Marion, B McKelvey. Complexity leadership theory: shifting leadership from the industrial age to the knowledge era. Leadersh Q2007; 18:298-318. 10.1016/j.leaqua.2007.04.002.
Crossref, Google Scholar
- [24]. JS Toussaint, JR Griffith, SM Shortell. Lean, Shingo, and the Baldrige framework: a comprehensive method to achieve a continuous-improvement management system. NEJM Catalyst2020. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0114>.
Link,
Google Scholar
- [25]. J Ryu, K Russell, W Shrank. A flower blooms in the bitter soil of the Covid-19 crisis. NEJM Catalyst2020. <https://catalyst.nejm.org/doi/pdf/10.1056/CAT.20.0321>.
Google Scholar
- [26]. JG March. Exploration and exploitation in system learning. Organ Sci1991; 2:71-87. 10.1287/orsc.2.1.71.
Crossref, Google Scholar