

The Quadruple-P Framework - Lessons from a Crisis physician's tryst with business management while handling COVID-19

The patient that changed everything

The clock had just struck 03:00 on a cold summer night at a tertiary hospital in Chennai, India. As I looked around the emergency room, all my patients were stable, and my team had dozed off in odd positions. The passage of time had slowed down and everything around me had gone silent. Moments before I could transition into REM sleep, the glass doors sprung wide open with loud cries of anxiety. Through them came two attenders carrying a breathless patient, profusely sweating and complaining of pain with both open palms tightly pressed towards the right side of his chest.

Being the emergency response team leader, I first informed my supervisor and then charted out a critical path to the solution with a unique role assigned to each member. Every individual of the emergency team was recruited by the management for showcasing traits of being calm, acting fast and thinking in a structured manner under pressure. So, instinctively we got to work, gave him anti-angina medicines, started an IV-line, and took an ECG.

The provisional consensus that resulted from our habitual traits of diagnosing patients was incorrect. All cardiac markers tested negative, and all repeat ECGs came out normal. However, the patient's pain continued to increase, so we followed the process put in place for contingency. Upon not reaching consensus from the results of investigations, we treated him basis the 2nd most likely diagnosis – Acute exacerbation of ulcer. In line with this interim diagnosis, we started treatment with IV pantoprazole but again, there was no improvement. The patient progressively became unconscious due to pain and his saturation was dipping. Finally, the only resort left was intubation.

Setting the context

Now that I have given a glimpse of the high-risk, high stakes setting in which emergency physicians operate, let me walk you through my approach methodology to managing crisis, namely the Quadruple-P Framework. It is a 4-stage approach to handling crisis that I developed during my 1st year of B-School at XLRI, India. It involves the application of my learnings from emergency medicine to business management and vice versa.

I shall walk you through each stage by sharing anecdotal references from how my team and I handled the COVID-19 pandemic. Near the middle of each stage, you will find "Diagnostic Notes" summarizing the key learnings for that phase. So, in the story that follows, my team/my organization was the patient, crisis was the presenting symptom, and I was the physician. The essay will transition through how my understanding of crisis management matured at each stage.

Stage 1 – Building People

"Crisis management is a matter of trait."

Let us now go back a year and a half when the first wave of COVID was beginning to peak. With past experience of working in resource-deprived high-density urban-slum settings in India, my colleagues and I could innately foresee the bottleneck that could arise from overburdening the already overworked care providers at every point in the healthcare assembly line.

Provisional Diagnostic Note - During a crisis, you need to let go of your past trajectory, no matter how dear. The next step is to rapidly grow each member in your team to become independent, empowered decision makers capable of leveraging the opportunity in each crisis.

I had taken a calculated risk of shifting from medicine to business management, and my colleague had taken similar leap toward genetic research. We had made significant progress compared to our peers despite starting late in our respective paths, but given the circumstance arising due to the virus, we knew that we had to set aside our growth trajectory to reappraise our role as physicians to serve on the frontline. So, with a stern resolve to do our part, we started our pro bono Initiative called CORONA CONSULT in India to treat COVID-19 patients virtually.

Our re-prioritization of objectives and re-alignment of efforts inspired mentors, peers, and junior colleagues to join the initiative. We realized from our collective experiences of handling emergencies that people are at a heightened state of energy during a crisis, and a leader with clarity of purpose is often all it takes to sway that energy in the positive direction. However, both of us did not have the experience of leading such a diverse team of this scale, so we resorted to the "Nudge theory" by Richard Thaler[1]. Our professor from B-School (XLRI) had used it extensively to inspire us to become the best versions of ourselves, so we knew it would work well on the team. We also focused on empowering each member in the team, inspired by how Drucker's introduction of ownership increased productivity across the ranks in GM[2].

Combining these above two approaches made them believe that they were part of something greater than themselves. We found unstoppable power in the idea of a decentralized organization [3] as it split us into smaller independent units with greater satisfaction, higher risk-taking appetite, and stronger resolve to go the extra mile.

There was also a planned abandonment [4] of every non-essential deliverable and we focused only on two functions: (1) driving positive health-seeking behavior and (2) innovation to detect Infection early and treat them effectively.

We innovated from the get-go by implementing what we felt was logically and intuitively correct. Thus, for example, we delineated the two functions mentioned above and delegated the same to two distinct cohorts to increase efficiency. While the latter fell under the purview of physicians, we allotted the former to undergraduate medical students and budding psychologists.

Considering all of us were working remotely, the above delineation of work taught us the importance of directional communication during Crisis which meant something different for each stakeholder. For patients, it meant listening to their apprehensions, queries in a non-judgmental manner, whereas for team members it meant unambiguous, articulated instructions. Realizing this, we also created a structured approach for resolving conflicts and a recurring meet for sharing actionable insights.

As the first wave progressed, more people were willing to join the team. However, our trajectory did not sustain. As we approached the peak of the first wave, we had crossed the threshold of patients that we could handle. Unfortunately, we were not able to do justice to sick patients amidst the explosion in the number of mildly symptomatic ones. The workload at our institutions, where we spent our morning hours, progressively took more of our time and energy. To make things even more challenging, the baseline severity in the presentation of our patients for online consultation had increased from mild to moderate.

Being drained to the bone, many in my team had slipped into depression and a significant number suffered from PTSD after losing loved ones to the virus despite best efforts. And I was officially approaching burnout.

"My traits had failed me, and our reliance entirely on our abilities led to us failing each other in the team."

Stage 2 – Building Processes

"Crisis management is a matter of training."

Three months had passed since most of the team burnt out. We resumed both our daily duties and our pro-bono consultation despite the incomplete recovery. Thankfully, the entire state was on the other side of the curve. Being a band of over a dozen physicians that had treated hundreds of patients, we were satisfied. However, we knew that the bell saved us. I took a step back to reflect and document what had happened to figure out how my team and I could come about stronger if such a need arises again. Now I was no longer an emergency physician but rather a full-time student of business management at the most culturally diverse and premier B-Schools in the country – XLRI.

We as a team, were adequate, not because of a habit but rather a trait. As we figured out, that trait has a breaking point and a threshold beyond which utility diminishes. So, I spent the next three months learning from books, peers, and professors from diverse backgrounds about what makes individuals, teams, and organizations sustain efficiency during times of crisis. I tried my best to consciously let go of my biases and traits as a physician to imbibe insights from business management fully.

During this period, I was selected from across India to lead a cross-functional team, ranging from data-scientists to biotechnologists, to solve a live business challenge for Novartis, India. We were able to deliver beyond expectations because of the robust processes we built to reach the solution structured. This exhilarating experience firmly instilled my belief in the "The Medici

Effect" by Frans Johansson [5] and inspired me to tackle the covid-19 from multiple perspectives.

Interim Diagnostic – People are phenomenal, but processes are impregnable, and mutual trust is the missing link that seamlessly forges the two fundamental organizational pillars.

I realized that we did not have objective systems in place to ensure the self-sustenance of the organization and continued innovation. For example, there were no fail-checks in place to detect the physical/mental deterioration of the team, no data capture to identify bottlenecks, and no established measures to evaluate trajectory. So, with this newfound realization, we embarked on the path of continuous betterment by using Chong JK's six steps of crisis management as our guardrails [6].

We were done with coping and rethinking, so it was now time to initiate with sensing. The entire team reached out to family, friends, and acquaintances in other domains adept at handling crisis. These individuals from various walks of life were able to sense where we were falling short and helped us find solutions to overcome the same.

The peers from consulting helped us build a real-time slotting model that dynamically changed the slot scheduling basis the level of severity of patients in the consultation-pipeline. Our friends from the technology sector built an X-ray-based machine learning tool based on our design inputs for the cost-effective diagnosis of COVID-19. Our peers from the operations-sector helped us identify bottlenecks by mapping the patient journey for both online and offline consultation of COVID-19. Together we built a hybrid-model for treating patients wherein offline support by the paramedical team was backed by timely online physician consultation.

During the 2nd wave, our online + offline hybrid support model resulted in a patient cost saving of 97% compared to institutional treatment. The X-ray ML model for early detection of COVID-19 reduced average diagnosis time by 60% and cost by 90%. The optimal mapping of patients to the right slot and care provider enabled the latter to spend ~59% more time treating patients and reported an improvement in the satisfaction of 34.1%.

All was well but things took a sudden turn in April of 2021, when I was called back home from my B-School to serve my ailing grandfather, who had suddenly progressed to a severe stage of COVID-19 Infection. Despite being a part of the physician team that treated him in the ICU, despite our best efforts, he passed away.

As if things were not challenging enough, several family members returning from the funeral contracted COVID-19, including my parents. However, the last straw was when I struggled to find beds for my parents in the very institutions that my family and I served as physicians and surgeons. Like any person in my position, I, too was uncertain about their future, but I was neither angry nor upset. I took the situation as an opportunity to showcase the empathy that I and my team expected from the other side of the healthcare equation.

“My training had failed me as it did not equip me to apply my professional learning to handling a major personal crisis.”

Stage 3 – Building Perseverance

"Crisis management is a matter of tenacity."

Striving for success, especially during a crisis, is like sending a personal invite asking Murphy's law [7] to visit you. Anything that can go wrong will go wrong, and sometimes there is nothing you can do about it. My then mentor told me that every leader, every team, every organization is entitled to a bundle of misfortune that must be exhausted during their lifetime. In his exact words, "It is only the fortunate few who get to exhaust that unfortunate bundle early in their careers and organization's lifetime."

The hardest step for me and my team through this journey was to accept that "outcomes are not always proportional to effort," and the second hardest was to learn "when to let go." Fortunately, my circumstances forced me to acquire this insight at the right time, realizing which I let go of my physician role in the initiative and officially stepped down for the time being. A significant influencer for this decision was the CREDO of Johnson & Johnson, wherein I worked as an intern. The CREDO puts patients right at the top, so stepping down seemed most logical to ensure I focus my efforts on my parents and prevent myself from doing a substandard job to other patients.

The above sentiment might seem paradoxical to what the rest of the essay has been building up to from the beginning. However, the matter remains that you or your organization cannot always predict and forge your reality.

Surprisingly, a scientific principle explaining such uncertainty was deduced much earlier in 1927 by young Werner Heisenberg [8] in the realm of quantum mechanics. His indeterminacy principle states that the more precisely the position of a particle is known, the more uncertain its momentum is and vice versa. The business application of this is that at any given point, the leaders of an enterprise can either know their relative standing in the free market or their absolute trajectory for a specific endeavour but never both.

Final Diagnostic Note – Crisis Management is neither a matter of trait nor training, but rather a consequence of a mindset - One that readily accepts what one cannot change and changes what one can.

The above mindset develops with experience. The more unfavorable the experience, the faster it develops. As motivational speakers say, what makes a diamond shine is its cuts.

There are three approaches to developing this mindset. The first is the passive approach, where one can wait for life to ordain such experiences in your path or embark on a way that increases the probability of encountering such experiences and developing such a mindset. The latter path involves two approaches, the active and the semi-active.

The active path involves chasing and saying yes to those experiences that are progressively outside your comfort zone. This approach is akin to how psychiatrists use of controlled progressive exposure to help patients overcome phobias and anxiety.

The semi-active approach, however, continues to be the more efficient approach. This involves empathetically learning from the experiences of other leaders, teams, and organizations before you. This approach is akin to medical students presenting differential diagnoses for presenting symptoms to solve patient cases and how business students leverage case studies to train the cerebral muscles of decision making.

The semi-active approach is more and more relevant to millennial digital natives like me, who have been accustomed consumers and the producers of roughly 2.5 quintillion bytes of data generated each day [9]. Moreover, having grown up in an age of misinformation, digital lobbying, and cryptocurrency bubble, we have the unique advantage of adding a method to the madness with relatively lesser effort than older generations because this chaos has always been our state of normalcy. Therefore, the onus lies on every one of us to equip ourselves with the verified knowledge of the past, which can be leveraged to handle challenges of the present and become battle-ready for future crisis.

So, what finally happened to the patient?

As most of you would have realized, we have exhausted both people and processes in our attempt to stabilize the patient introduced at the beginning of the essay. What was left to do was to persevere and that was what we did.

We were relentless in forwarding the case report to every relevant consultant to obtain their opinion on the way forward. When that failed, we reached out to our respective Alma Matta but that too did not result in fruition.

With no breakthrough insight, we readied the ventilator and neatly laid it out the bedside instruments. However, moments before introducing the laryngoscope, we got a call from a senior surgeon who suggested we try IV-steroids and anti-inflammatory agents as a last resort. To our blissful surprise, the patient's pain, breathlessness, and saturation improved gradually after just one IV-infusion of the above medications. Thus, we not only averted him from entering the no-return zone of assisted-ventilation but were also able to discharge him without complications in about a week's time.

On retrospective workup, we diagnosed him as a false-negative case of COVID-19 with a rare presentation of myocarditis. The heart and its surrounding layer were literally on fire (inflammation) resulting from the viral infection.

"Tenacity here not only stands for being phenomenally willed, but also being intentional and deliberate in your efforts repeatedly."

Stage 4 – Building Paths

"Crisis management is a matter of path iteration."

Chart out every possible path to failure and every cognizable probability of facing crisis. Then work backward to find those routes that lead you elsewhere. Despite this measure, leaders

embarking on the latter routes will face new crossroads of crisis that were never on the map. In these instances, one must take a calculated risk and stick to it or forge a new path. Both these routes do not lead you to success but give you and your organization a chance to stay in the game. And the journey that results from this process done right repeatedly is what success ought to feel like.

Follow up diagnostic note – Work backward from path dependence theory for averting crisis and work forwards through path creation strategy for overcoming the same.

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