

COVID-19 Process Simulation

Simulating Emergency Response Scenarios

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Process Simulation to Predict Future Scenarios

The effects of the COVID-19 Pandemic on the United States healthcare system are everchanging and unique. Due to the rapid spread of the virus globally, the healthcare industry has had to adapt to a largely unknown, yet changing daily, set of outcomes; which is why we believe that process simulation technology can provide answers and mitigate COVID-19 related impacts. Process simulation technology allows businesses to quickly test a variety of process-driven future scenarios to make decisions on how to best modify processes using real data in real time. It can be applied to a vast number of scenarios and can help leadership navigate the complexity and interrelatedness of processes to predict and guide operational decisions.

Process Simulation Applied to the Effects of COVID-19

Typically, our clients are interested in scenarios where there are expected but variable changes in volume to end-to-end processes; for example, open enrollment, claims, or customer service for health insurance. The COVID-19 pandemic has surfaced varying situations with unknown outcomes, which is precisely where simulation tools and methods can provide critical value. COVID-19 has clearly constrained the supply of personal protective equipment(PPE) and essentially stopped all elective procedures. But what may not be so obvious is knowing how and when your organization can start to transition back to a new normal. This is where Optimity and simulation modeling can help.

Simulation models allow organizations to readily use their own data to bring future process solution options to light and then solidify the decisions to operationalize them. Below are some examples:

- Modeling the impact of the pandemic currently and predicting a future outbreak to ensure preparedness across staffing, supplies, and scheduling

- Planning the reorganization and rescheduling of all staff, including nurses, doctors, and administrative employees to optimize capacity needed to fight current COVID-19 – or future waves
- Demonstrating telemedicine's effect on a population's demands for brick and mortar clinics and how it may impact your business staffing capacity, costs, and ability to serve patients.
- Evaluating processes, for example patient intake and diagnostic testing, to determine inefficiencies, bottleneck hotspots, and quantify opportunities for improvement
- Modeling new diagnosis and treatment coding impacts on downstream customer service and claims capacity, efficiencies, and fraud.

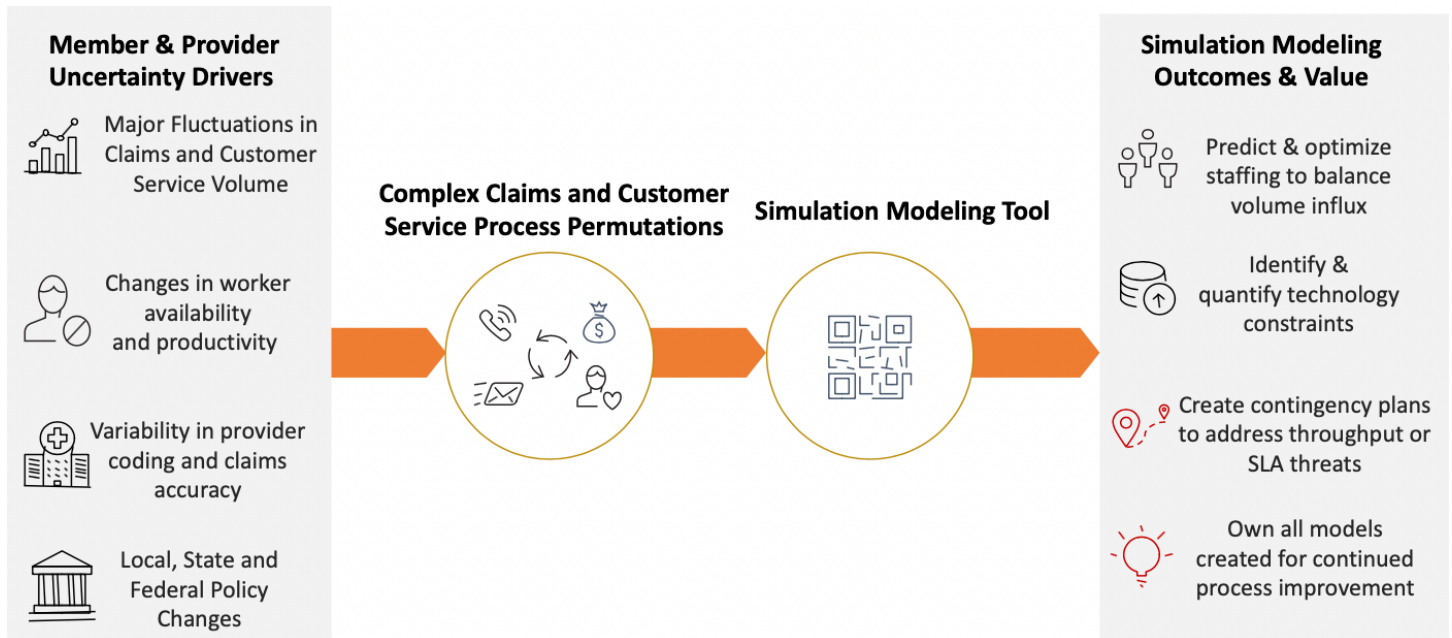
Accelerate Outcome Predictions Using a Baseline Model, Plus Your Data

Optimity has developed a baseline model that shows the end-to-end impacts of COVID-19 on a healthcare payer's backoffice operational metrics. Videos and outputs from this model can be found at the associated links. Using your organization's real data, Optimity will work side-by-side with you to map your current processes data and flow and apply the latest COVID-19 inducing stressors that may impact your business. We will guide you through the varying outcomes by building potential simulated process scenarios. We will then test and measure these scenarios with you using each varied COVID-19 input to develop specific actionable recommendations for modifying current business operations. The iterative nature of the simulation scenario modeling will produce rapid and accurate data-driven assessments of how varying COVID-19, or any measurable healthcare condition, will impact your operations. The models built and competencies gained during this crisis can also be applied toward future process throughput, resource, and financial optimization.



Accelerating Outcome Predictions Using a Baseline Model, Plus Your Data

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Scenario	Inputs	Impacts
1. Increased Volume – No change to Staffing, Process, or Technology	<ul style="list-style-type: none"> Standard Claim Volume (Down arrow) Worker Efficiency (Down arrow) COVID19 Claim Volume (Up arrow) Adjustments Volume (Up arrow) 	<ul style="list-style-type: none"> Significant backups in COVID19 claims processing (Warning icon) Significant backup in claims adjudication (Warning icon) SLAs missed in claims payment in adjustment resolution (Warning icon) Increase in call center queries and resubmitted claims; cycle times increase (Warning icon)
2. Increased Volume with Optimized and Increased Staffing	<ul style="list-style-type: none"> Standard Claim Volume (Down arrow) Adjustments Volume (Up arrow) Worker Efficiency (Down arrow) COVID19 Claim Volume (Up arrow) Increased Staffing Adjudication & Adjustments (Up arrow) 	<ul style="list-style-type: none"> Minor backups in COVID19 claims processing (Warning icon) Cost of contracted workers (Warning icon) SLAs rarely missed in COVID19 claims and adjustments (Warning icon) Increased training time and cost (Warning icon)
3. Increased Volume with Improvements in Increased Auto Adjudication	<ul style="list-style-type: none"> Standard Claim Volume (Down arrow) Adjustments Volume (Up arrow) Worker Efficiency (Down arrow) COVID19 Claim Volume (Up arrow) COVID19 Claims Auto-Adjudicated (Up arrow) 	<ul style="list-style-type: none"> Minor backups in COVID19 claims processing (Warning icon) Significant backup in claims adjudication (Warning icon) SLAs rarely missed in COVID19 claims (Warning icon) Minor increase in call center call volume (Warning icon)



THANK YOU

Thank you for your valuable time. For further information, please contact:

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