Whitepaper

How Can Health Systems Ramp Up Elective Surgery Volumes?

Health systems' guide to preparing for the return of elective surgeries and devising a strategy to realize higher revenues, lower readmissions, and greater patient throughput in the post-COVID-19 era

innovaccer

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Executive Summary

COVID-19 has challenged traditional healthcare delivery systems and methods globally. The pandemic has pushed a majority of healthcare procedures to the new normal of virtualized care, leading to a series of fundamental changes in the care processes. During these tough times, federal regulations and the needs and adaptations of healthcare stakeholders and unpredictable trends of the infection have also been very dynamic.

With the array of regulations addressing the public health crisis, the postponement of elective surgeries and other non-essential medical care by federal organizations came across as a major headline for health systems and patients alike to preserve the PPE (Personal Protective Equipment) kits for providers and other critical healthcare resources.

On March 17, 2020, the Centers for Medicare and Medicaid Services (CMS) announced[1] that all elective surgeries, non-essential medical, surgical, and dental procedures would be delayed during the 2019 Novel Coronavirus (COVID-19) outbreak. The Ambulatory[2] Surgery Center Association and the American College of Surgeons among many organizations suggested that hospitals minimize, postpone, or cancel elective procedures until the COVID-19 pandemic was under control.

Based on the impact of these canceled services, the costs associated with purchasing the PPE, the additional support provided to workers and the effect of COVID-19 hospitalizations on the hospital costs; the AHA estimates a four-month (March 1, 2020, to June 30, 2020) financial impact of $202.6 billion[3] in losses for America's hospitals and health systems, or an average of $50.7 billion per month.

In this whitepaper, we look at the overall impact of delayed elective surgeries on health systems and patients. We take a look at the new focus areas for providers in the post-COVID new normal of limited contact care and understand how patient engagement would change with the return of elective surgeries. As hospitals are preparing to increase the number of procedures, we conclude with an overarching strategy that would allow health systems to realize greater revenues, lower readmissions, increase patient throughput and enhance their surgical outcomes in the current healthcare environment.

Steep Decline in Elective Procedures and its Financial Impact

Though elective surgeries or procedures do not involve medical emergencies, they are often essential and life-changing operations. Health systems rely on these elective surgeries as a significant revenue source, as both private and Medicare insurers pay more for these procedures than for other kinds of care. While combating the pandemic on the frontlines, the halt to "non-essential" medical care has distressed the healthcare system with other critical concerns such as employee safety, job security and economic sustainability.

With concerns around low payment rates and the losses, hospitals have to face due to the pandemic, the Congressional Budget Office projects[3] that between 40 to50% of hospitals could have negative margins by 2025 prior to the pandemic.

Along with canceled elective procedures, social distancing and stay-at-home orders deprived many Americans of primary care and specialty care visits. As a result, both inpatient and outpatient services have decreased by 13% from the previous year3.

Using a combination of 2018 Medicare inpatient and outpatient claims files and the 2018 AHA Annual Survey Database (ASDB), the AHA study[3] estimated the lost revenue from canceled hospital services due to the COVID-19 pandemic. The claims were classified into three categories:

- Emergency department (ED)-related

- Non-ED-related medical

- Non-ED-related surgical

Medicare revenues were calculated from claims data, and revenues for other payers were estimated using ratios of net revenues from the other payers to those from Medicare, derived from the ASDB. The study identified three different levels of service interruptions under which hospitals may operate:

Level 1
cancellation of 67% of ED-related services; cancellation of all non-ED-related services

Level 2
cancellation of 67% of ED-related services; cancellation of 50% of non-ED-related medical services; cancellation of all non-ED-related surgical services

Level 3
cancellation of 67% of ED-related services; cancellation of 50% of all non-ED-related services

When the levels of service interruptions were aggregated over a four-month timeframe to estimate the lost revenue due to canceled services, it was estimated that as a result of canceled hospital services due to the COVID-19 pandemic, U.S. non-federal hospitals stand to lose approximately $161.4 billion in revenue between the period from March to June 2020. This includes canceled surgeries, various levels of canceled non-elective surgeries and outpatient treatment, and reduced emergency department services.

Idle Clinics and Delayed Care: What do the Patients Feel?

Restoring patients' confidence in elective healthcare, after the fear of infection confined everyone to their homes could be challenging for hospitals. However, once health systems and hospitals have a better understanding of their patients' sentiments, it will be easier for providers to bring their patients back to the clinics by resolving their key concerns.

Let us visit the four key findings of a BCG survey analysis[4] that surveyed approximately 7,000 patients across the country to better understand their views on rescheduling elective procedures.

Finding 1

If the virus is effectively managed, patients plan to return to clinics shortly. Around 40% of patients are likely to reschedule their care within three months, while 80% of respondents expect to reschedule delayed care within six months.
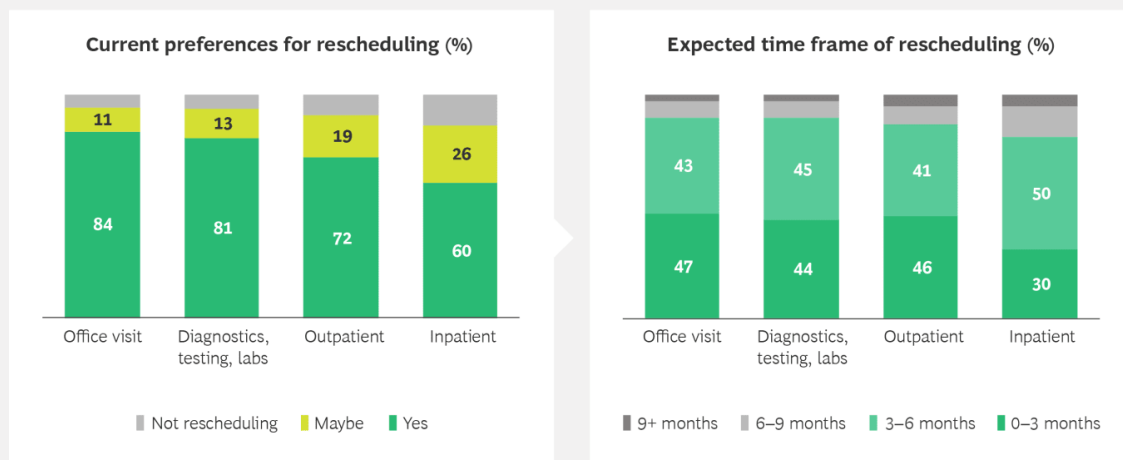

Figure: Exhibit 1, BCG Patient Sentiment Survey, BCG Analysis.

Finding 2

Though government guidelines regarding stay-at-home orders and social distancing cannot be controlled by healthcare organizations, the survey found that providers can influence up to 50% of conditions that affect a patient's willingness to reschedule their procedures. The conditions include acknowledging patient concerns such as "provider is willing to see me," "procedures are clear to me," and "location is certified free of COVID-19." Providers need to communicate clear timelines and assure their patients of the safety of testing protocols and procedures. Seamless communication and robust patient engagement could help hospitals in restarting elective procedures.
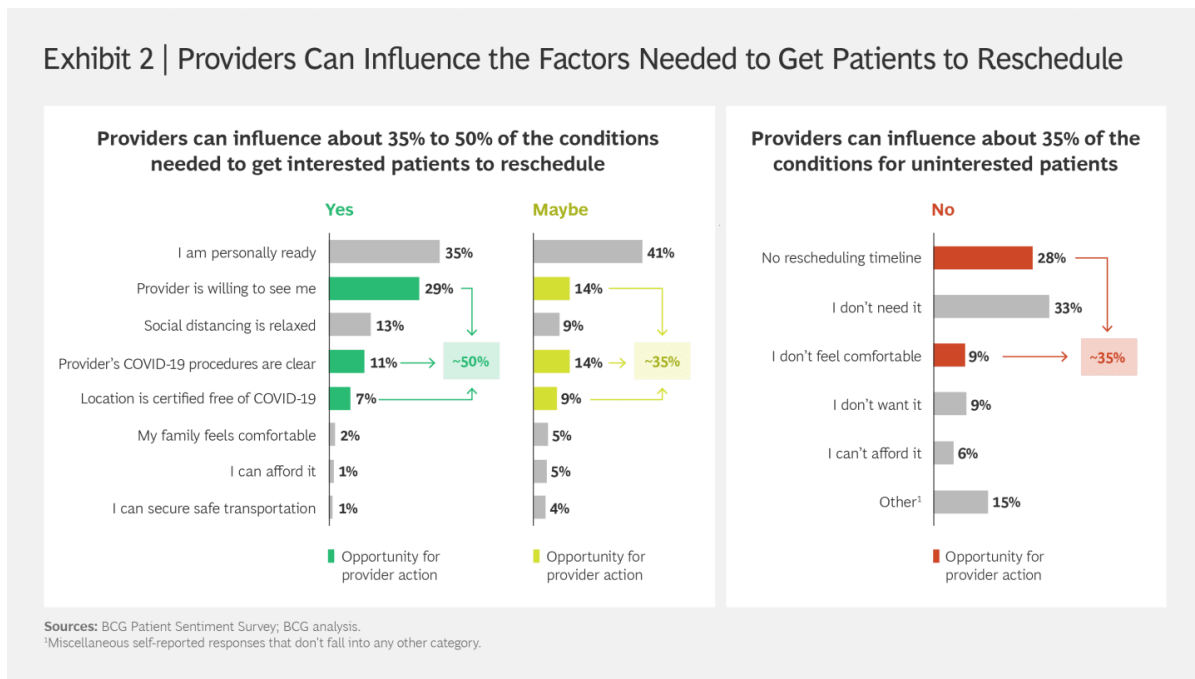

Figure: Exhibit 2, BCG Patient Sentiment Survey, BCG Analysis.

Finding 3

The top four protocols that providers can follow to make their patients more comfortable in rescheduling their procedures, in the decreasing order of significance are:

- Patient engagement through virtual care and telehealth options

- No cancellation or rescheduling penalties

- COVID-19 testing for patients after treatment

- No wait times upon arrival

Health systems are required to meet these conditions to bring back patient volumes to their clinics. These results highlight the need for a stable virtual care network for hospitals, astute surgery planning, expanded COVID-19 testing, and a robust, real-time patient engagement module for hospitals to restart delayed elective procedures in the post-COVID new normal.

Finding 4

The survey sheds light on the opportunity for many types of care including primary care, urgent care and behavioral health to virtualize in the near future. Hospital emergency departments have seen a major shift from in-person to remote care. Around 64% of respondents who received care via telephone or video conferencing, said they had considered going to the ED instead. There is a major shift to remote care and telemedicine, and if adopted by the patients and providers, it might flourish well into the future.

Exhibit 4 | Patients Are Gravitating Toward Video, Phone, and Digital Communications

Service usage before COVID-19: penetration highest for phone consultations and digital communications	Respondents who increased usage during COVID-19 (%)	Respondents who will increase usage after COVID-19 (%)
Video consultation	21	23
Phone consultation	25	21
Digital communication	22	19
Self-health monitoring	9	13
Mail-order pharmacy	9	12
Online tools	11	12
Remote monitoring	6	11
Digital therapeutics	5	8

Never   Rarely   Sometimes   Very often   Always

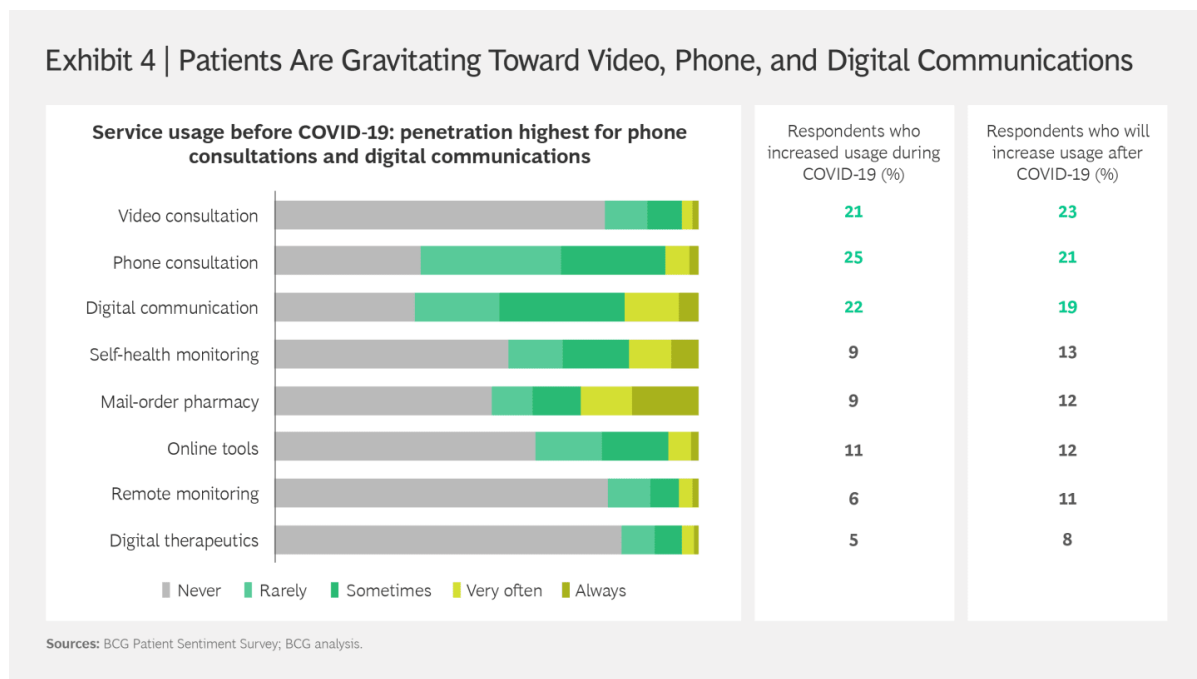**Sources:** BCG Patient Sentiment Survey; BCG analysis.

Figure: Exhibit 4, BCG Patient Sentiment Survey, BCG Analysis.

In this scenario, health systems with enhanced remote care offerings and virtual channels are anticipated to have a significant advantage as social distancing and virtual care are set to reshape the future of healthcare delivery.

Ramping Up Elective Surgeries with FHIR-enabled Data Activation Platform

With about 28 million surgeries[5] canceled worldwide, non-COVID medical care has suffered tremendously. Canceled elective surgeries have impacted patient health conditions and the economic sustainability of health systems. As a result, hospitals are preparing their physical infrastructure and virtual care platforms to restart elective procedures for their patients.

However, with new patient expectations and fear of the virus, resuming procedures is not easy for health systems. A recent survey[6] suggests that hospitals would have to increase greater than triple their current testing capacity to begin resuming services. Grappling with the idea of keeping patients and workers safe and arranging resources like PPE kits, gloves, gowns among other resources, hospitals have started reaching out virtually to their patients who do not have the virus but whose conditions might deteriorate in the absence of care. Amid this, it is also important for hospitals to realize some of the undeniable steps that can be taken by health systems to ramp up their surgery volumes:

Focus on Virtual Care

A virtual care solution must be analyzed comprehensively from the perspective of a patient and a provider to make the transition seamless for both parties. Primary care physicians need to offer the treatment patients need safely and effectively while preserving the hospital's capacity, emergency rooms, and other resources. For this, it is essential that the virtual care solution seamlessly integrates with provider workflows. Physicians must have near real-time visibility into the gaps and utilization data inclusive of all claims, clinical, labs, and pharmacies so that it's easier for them to keep track of the patient's health. Unified data plays an important role in saving time during virtual visits. Once providers know the medical history and risk factors for the patients, it is easier for them to triage patients who might require emergency care.

Innovaccer's virtual care solution delivers an array of offerings created to empower providers and patients with simple and secure virtual assistance and telehealth features. It is designed to fit into the clinician's workflow and adds a new point-of-care experience to help save time during virtual visits. It offers an uninterrupted virtual consultation experience for physicians, from the chart review into the patient's EHR with workflows designed to facilitate coordinated care with features such as virtual waiting rooms.
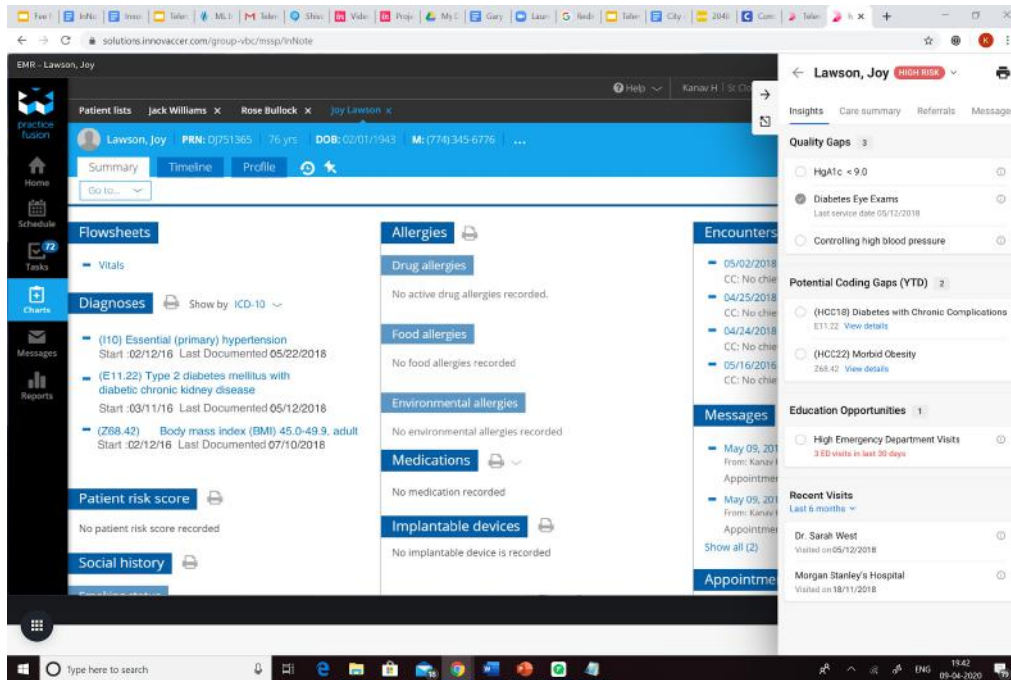

Figure: Integrated Virtual Visits in Provider Workflows

Focus on Contactless Care

Moving away from traditional, in-person visits, patients need to be cared for with equal or greater comfort on virtual platforms. In a recent survey[7], 38% of patients liked the idea of receiving a potential diagnosis without being around other sick people in a traditional waiting room. The survey also found that 36% of respondents preferred appointments without commuting to the clinic, and an additional 12% of people found the ability to schedule same-day care appealing.

While convenience is a factor supporting the virtual care solution in the long-run, other features can encourage patients to adapt to these solutions. Innovaccer's virtual care solution eliminates the need to download an application to receive quality virtual care. It provides patients with instructions in the virtual waiting rooms to smoothen their transition, and masks voice calls to significantly reduce the call failure rates.
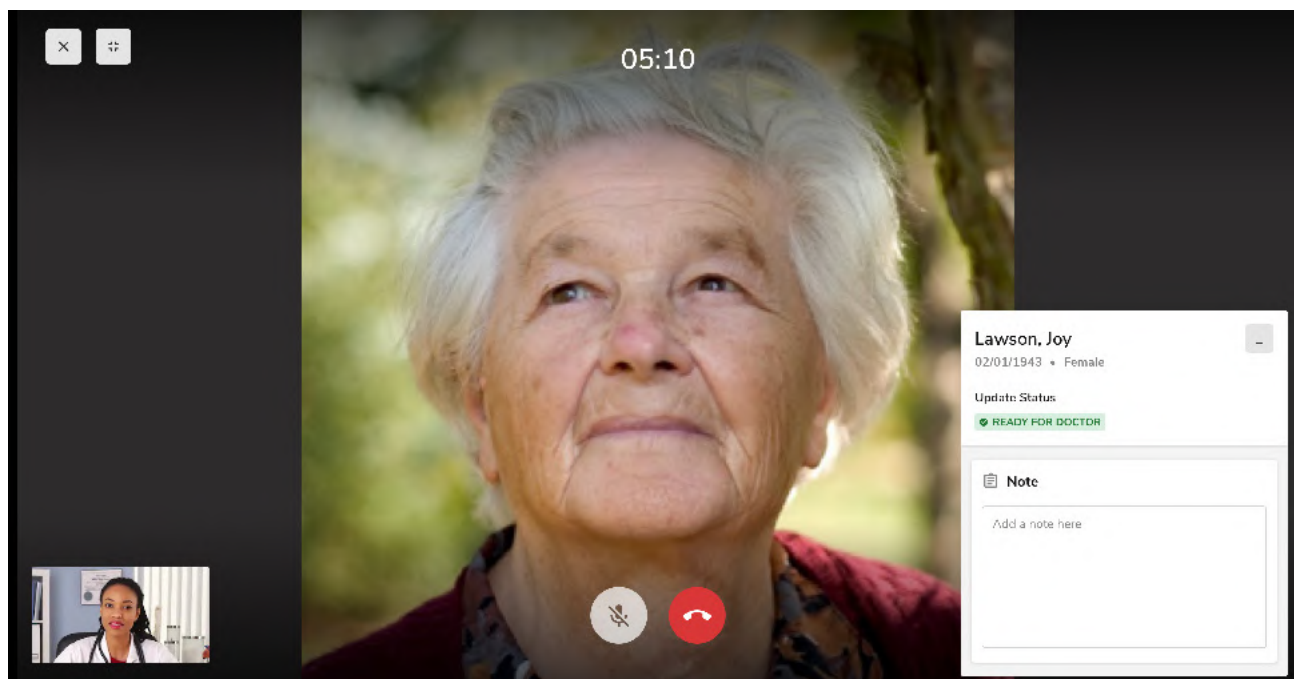

Figure: Virtual Visits with built-in provider notes

Through smart summaries and continuous data feeds on clinical insights, the solution assists care managers in synchronizing care. It also helps providers in adding value to care through real-time visibility of patient status, from the comfort of their home or office.

Focus on Engaging Patients Proactively

As health systems plan to resume elective procedures, care managers will need to engage the patient remotely on virtual pre-surgical interventions. These include comprehensive patient engagement, assessment, triage, education, and care navigation. With Innovaccer's solution, care managers follow pre-built care protocols within workflows to engage the patients. They recommend virtual physician follow-up to address critical pre-surgical health conditions or symptoms in the patient. These care protocols help care managers optimize patients before the surgery. Healthcare teams also conduct outreach to disseminate relevant wellness and self-care patient guides before the surgery. Additionally, with an effective care management module in place, patients with less serious conditions can also be provided with regular touchpoints with their providers to ensure that their medication and health-related questions and concerns are resolved in a timely manner.

Innovaccer's framework has an EHR-agnostic, FHIR-interoperable and HIPAA-compliant structure that makes it a future-ready tool for enhanced care delivery. This solution is designed to work with any EHR, without the requirement of any integration. It is curated for healthcare with six layers of security, HIPAA-compliant video and text and end-to-end encryption. It integrates with provider EMR and PMS systems using FHIR standards to facilitate scheduling and data sharing. Making the virtual care delivery comfortable for providers, the solution is multiscreen compatible and seamlessly works across all devices including laptop, mobile or iPad.

Focus on Communicating Hospital Safety to the Patients

While reopening facilities for elective procedures, health systems will be required to enable virtual pre-operative interventions and comprehensive engagement for prioritized patients ready to undergo surgery. After the surgery is successfully completed, a robust care management solution will facilitate communication to help physicians and care managers care as one. This approach will reduce the readmission rates for hospitals and help them improve their patient throughput.

To coordinate care and leverage outreach, Innovaccer's Virtual Care Network disseminates helpful guides to address patients, identifying needs and social barriers. Besides providing end-to-end care management, the solution also simplifies triaging by prioritizing patient care based on symptom assessment. It provides healthcare professionals with the ability to care as one and helps in building successful health outcomes by improving each step in the patients' healthcare journey.
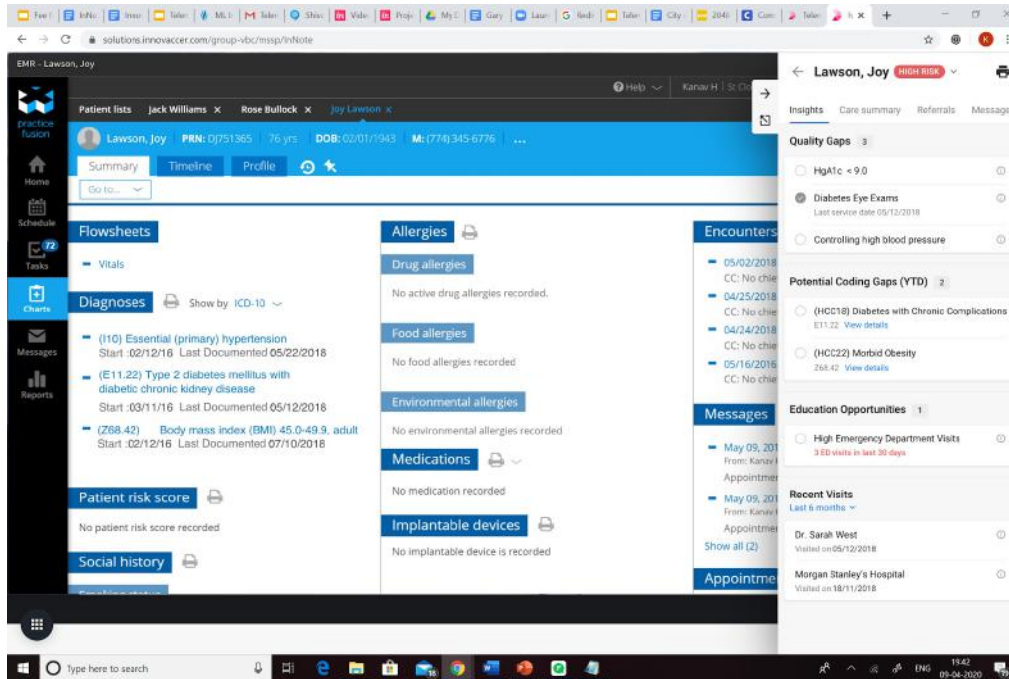
Figure: Care Management Module for the Virtual Care Network

Innovaccer's Pre-surgical Optimization solution is designed to boost the post-surgical outcomes for health systems. It is built to refine the pre-operative planning and optimization process and post-discharge surgery planning with seamless robust care management and care coordination. The solution improves pre-surgical planning with four key sequences:

- Data integration and activation by analyzing clinical and social factors,

- Execution of machine-learning algorithms to proactively identify high-risk surgical patients,

- Virtual pre-operative interventions and comprehensive engagement for prioritized patients ready to undergo surgery, and

- Patient follow up with pre-built care protocols that significantly reduce the post-surgery readmission rate

The Pre-surgical Optimization solution assists health systems and hospitals in engaging patients early, identifying patients in need of elective surgery, and improving the post-surgical health outcomes for their patients. Combined with the Virtual Care Solution, the package streamlines surgical planning and virtual assistance for providers to deliver seamless virtual care and resume elective procedures.

Improving Holistic Healthcare Delivery with FHIR-enabled

Data Activation Platform

The FHIR-enabled Data Activation Platform allows providers access to care insights and enables priority actions that they cannot take using their EHRs alone. It offers an in-workflow approach to enable cost-effective care delivery at the point of care without any EHR integration dependencies. With this platform, providers have the resources that enable them to improve clinical outcomes and boost the overall network performance.

The following solutions are built on Innovaccer's FHIR-enabled Data Activation Platform:

inapi

Innovaccer's advanced healthcare data integration engine provides one-click interfacing mechanisms to a wide breadth of healthcare data systems and a seamless bidirectional flow of data.

incare

Smart, AI-assisted care management solution, with patient-centered medical home (PCMH) level care delivery, hardcoded into the workflow. InCare streamlines the care management process enabling systems to scale care management programs at lower costs and higher quality.

ingraph

InGraph is the most intuitive healthcare analytics offering for population management health strategies in the industry. It has over 800+ measures to track network performance and outcomes, customizable measures and dashboards accessible across the network, and automated reporting on quality measures.

innote

A smart, lightweight physician's digital assistant that surfaces critical system and population health insights derived from multiple data sources, at the point of care. Using InNote, insights such as care gaps, dropped codes, process measures and referrals information can be shared with the clinician - without having to leave the EHR experience.

inconnect

An automated analytics-driven patient engagement solution to scale patient outreach workflow and bring patients closer to the care team.

About Innovaccer

Innovaccer, Inc. is a leading San Francisco-based healthcare technology company committed to making a powerful and enduring difference in the way care is delivered. The company leverages artificial intelligence and analytics to automate routine workflows and reduce manual overhead to facilitate more person-centered care. Its KLAS-recognized products have been deployed all over the U.S. across more than 1,000 locations, enabling more than 25,000 providers to transform care delivery and work collaboratively with payers. Innovaccer's FHIR®-enabled Data Activation Platform has been successfully implemented with healthcare institutions, private health plans, and government organizations. By using the connected care framework, Innovaccer has unified more than 3.8 million patient records and generated more than $400M in savings.

For more information, please visit innovaccer.com.

References

- CMS Releases Recommendations on Adult Elective Surgeries, Non-Essential Medical, Surgical, and Dental Procedures During COVID-19 Response

https://www.cms.gov/newsroom/press-releases/cms-releases-recommendations-adult-elective-surgeries-non-essential-medical-surgical-and-dental

- Hospitals forfeit major revenue stream by delaying elective surgeries — 5 things to know

https://www.beckersasc.com/asc-coding-billing-and-collections/hospitals-forfeit-major-revenue-stream-by-delaying-elective-surgeries-5-things-to-know.html

- Hospitals and Health Systems Face Unprecedented Financial Pressures Due to COVID-19

https://www.aha.org/guidesreports/2020-05-05-hospitals-and-health-systems-face-unprecedented-financial-pressures-due

- Restoring Patients' Confidence in Elective Health Care

https://www.bcg.com/en-in/publications/2020/elective-health-care-post-covid-19.aspx

- 28 million elective surgeries may be canceled worldwide: how non-COVID-19 medical care is suffering

https://www.weforum.org/agenda/2020/05/covid-19-elective-surgery-cancellation-cancer-pandemic/

- Hospitals Struggle to Restart Lucrative Elective Care After Coronavirus Shutdowns

https://www.nytimes.com/2020/05/09/health/hospitals-coronavirus-reopening.html

- Survey: Americans' perceptions of telehealth in the COVID-19 era

https://www.healthcareitnews.com/news/survey-americans-perceptions-telehealth-covid-19-era

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535 Mission Street Floor 18th, Suite 1829
San Francisco, CA 94105
innovaccer.com

📞 +1 415 504 3851

💬 team@innovaccer.com