



Advancing High Performance Health

White Paper

***Telemedicine: How
AMGA Members
Adopted, Adapted,
and Are Shaping the
Future***



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White Paper, March 2021



The COVID-19 pandemic has made telemedicine ubiquitous and essential in health systems across the nation, though the concept is nothing new. AMGA member organizations have been on the front lines of telemedicine development for decades. In Montana, where the nearest specialist may be a six-hour drive away, the Billings Clinic has used telemedicine to link rural patients with health practitioners. In 2015, Mercy Health in St. Louis opened its Virtual Care Center, a first-of-its-kind, 125,000-square-foot, state-of-the-art space dedicated entirely to telemedicine.

Yet widespread adoption has remained low in the larger landscape. As recently as 2019, only 33% of inpatient hospitals and 45% of outpatient facilities offered telemedicine services to patients, according to technology provider Definitive Healthcare.

COVID-19 pushed hospitals, physician groups, and health systems into warp-speed telemedicine adoption—as a matter of necessity and survival. In the initial weeks of the pandemic, many AMGA members shut down clinic operations entirely, and according to data from the AMGA Collaborative for Performance Excellence (CPX™), overall patient visit volume in both inpatient and outpatient settings dropped by more than 40%.

As shown in Figure 1, total volumes of E/M visits decreased significantly across 23 participating organizations during late March and April. The CPX™ benchmarks focus on evaluation and management visits and appropriate telemedicine equivalents. Without adopting more telemedicine utilization, total visit volumes may have been even lower at healthcare organizations that limited in-person operations.

Not only did COVID-19 disrupt care delivery, it also had a devastating impact on revenues, particularly for groups in predominantly fee-for-service markets. Providers and administrators had to rethink and readjust nearly every aspect of their operations overnight—and embrace new technology in the process.

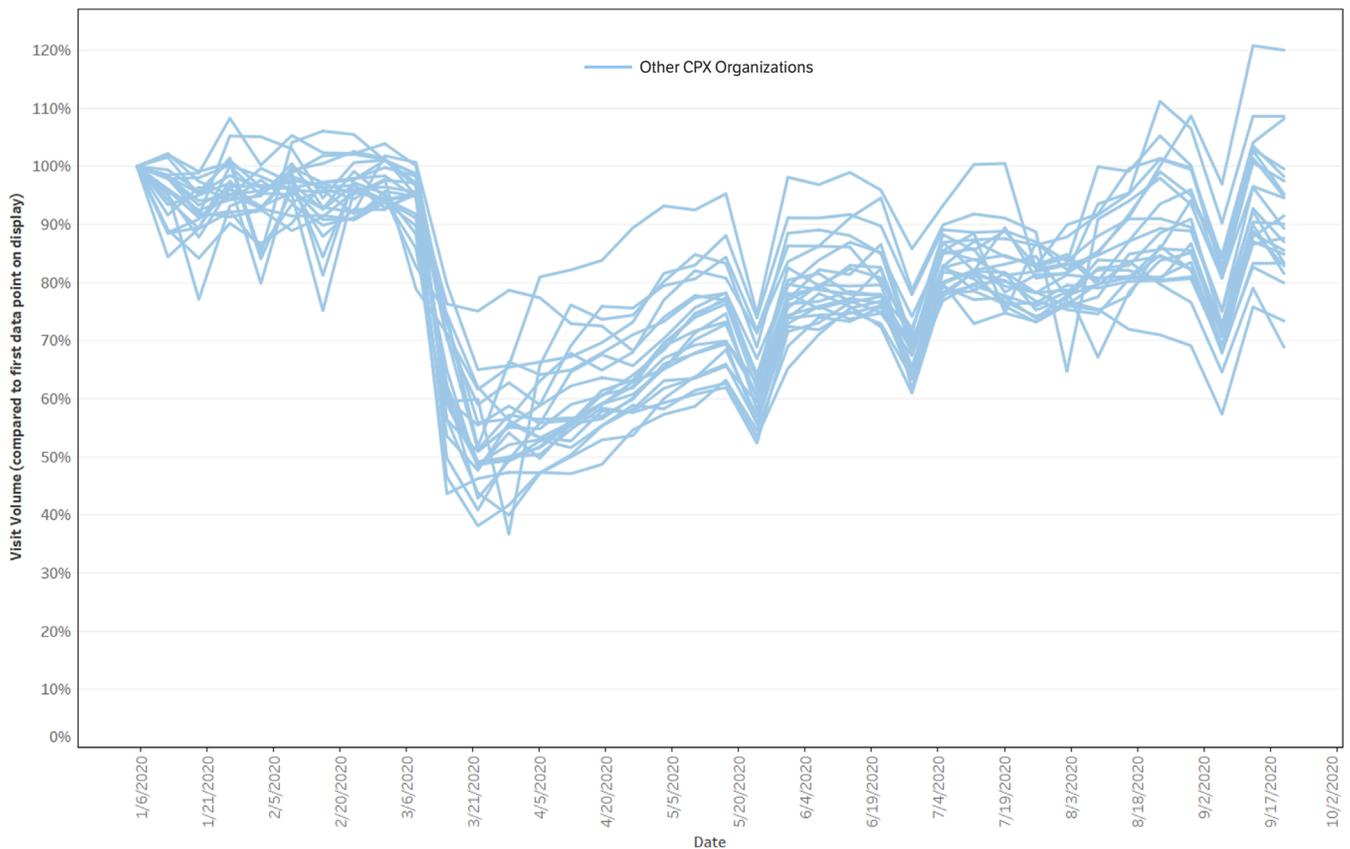
Swiftly Addressing a Need for Information and Collaboration

When the pandemic disrupted “business as usual,” AMGA moved quickly to launch a portal of resources dedicated to combating COVID-19. AMGA staff communicated frequently with members to find out what kind of support they needed to face the pandemic. One common request was for benchmarking data, particularly in the area of telemedicine. *How were other health systems using this technology, and how were their own health system’s efforts measuring up against others?*

CPX™, with its pre-established systems for collecting data and proven structures for collaboration, was a logical tool for finding answers. The collaborative immediately began to develop benchmarking measures that used electronic health record (EHR) and outbound claims billing data with the goal of identifying:

- The number and percentage of in-person visits vs. telemedicine sessions
- Telemedicine usage across specialties, providers, and patient demographics
- Potential relationships between telemedicine and patient outcome data

Figure 1. Weekly Visit Volume CPX™ (Ending 2020 – Q3)



This benchmark displays E/M visit volume each week between 1/5/2020 and 9/30/2020. Visits included are traditional in office Evaluation and Management visits, CMS annual wellness visits, Phone E/M Visits, CMS Virtual communications, E-Visits, and Video visits as indicated by CPT Modifiers or place of service codes. The visit volume is represented as a percentage of the total volume of the first week included, 1/5/2020.

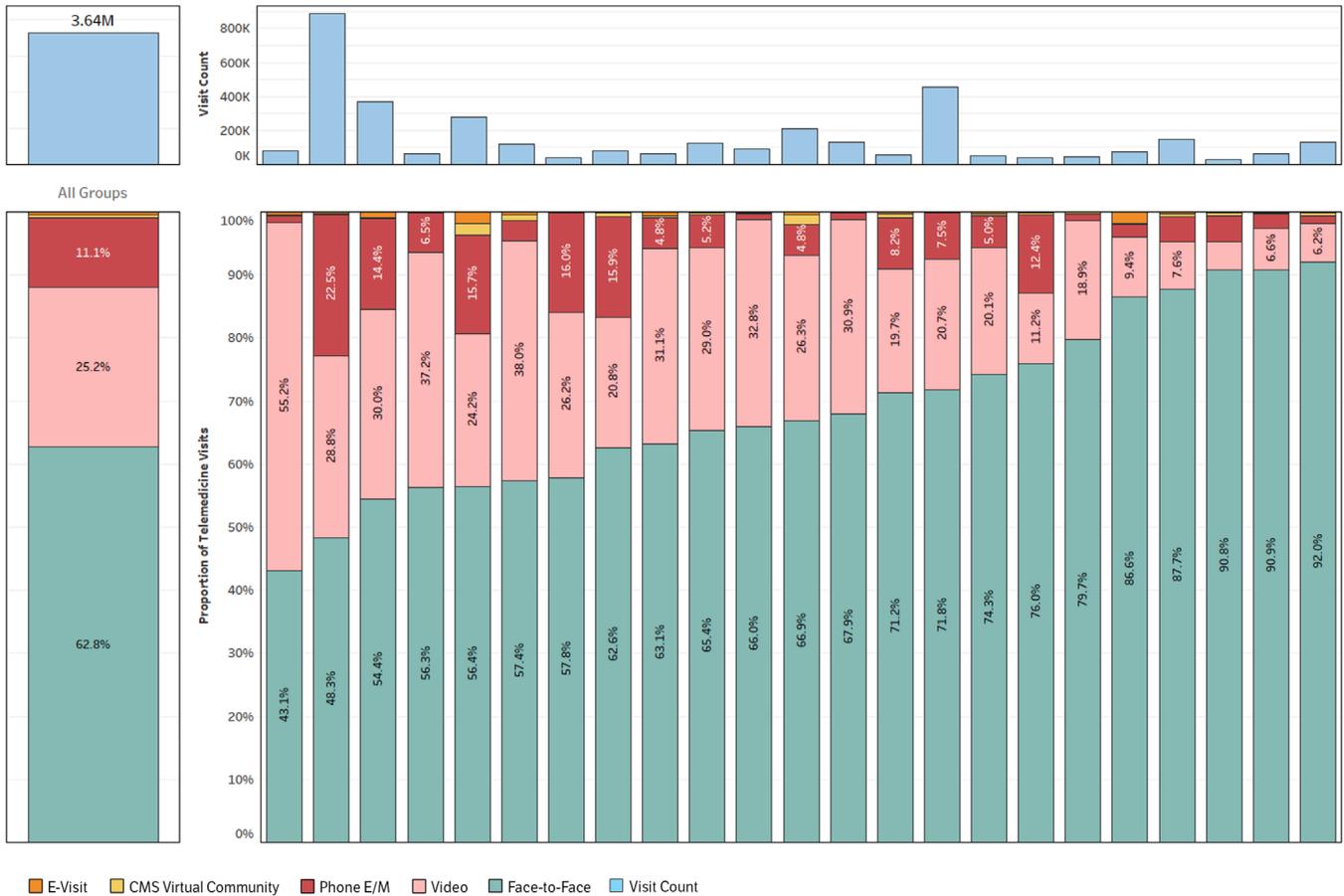
Moving Patients and Providers to Virtual Visits

Data captured in the second quarter of 2020 confirmed expectations and early observations. Groups nationwide had moved from modest telemedicine utilization to thousands of patient visits per day during the pandemic's peak. For example, usage spiked from:

- Approximately 175 visits per week to 92,000 per week in March and April at Henry Ford Health System in Detroit
- 40 visits per day to 3,000 per day at Vanderbilt Health in Nashville
- Essentially zero visits to 2,000 per day at Inova Health System in Northern Virginia

Even leading-edge organizations like Northwest Permanente, headquartered in Oregon, who for more than three decades had used the telephone to conduct remote patient visits, with some specialties such as behavioral health with as high as 30-40% visit volume regularly done via telephone, had as many as 90% of their primary care visits done virtually during the height of the pandemic.

Figure 2. Telemedicine Utilization Benchmark – CPX™ (2020 – Q2)



Benchmark data includes visits from 23 healthcare organizations from 04/01/2020 to 06/30/2020. The visit types are defined with the following billing data. Phone E/M: CPT 99441-99443 and 98966-98968 | CMS Virtual Communication: HCPCS G2010 and G2012 | E-Visit: CPT 99421-99423 and HCPCS G2061-G2063 | Video: CPT 99201-99215 with POS=2 or Modifier 95, GO, GQ, GT, and HCPCS G0438-G0439 with POS=2 or Modifier 95, GO, GQ, GT | Face-to-Face: CPT 99201-99215 without place of service code or modifiers indicating telemedicine, and HCPCS G0438-G0439 without place of service code or modifiers indicating telemedicine.

As we see in Figure 2, CPX™ developed a measure that shows the utilization of telemedicine modalities at each CPX™ participant group. During the second quarter of 2020, of the 3.64 million total evaluation and management visits, about 63% were delivered face-to-face, 25% by video, and 11% by phone for all CPX™ organizations. Rates of face-to-face visits vary from 43% of visits to 92% of visits across CPX™ organizations.

Virtual Inroads with Surprising Specialties

Some specialty areas performed as expected in telemedicine adoption. For example, usage was—and remains—high in behavioral health among several AMGA members, including Vanderbilt Health, which reported 85% telemedicine utilization for its care in this area in Q2 of 2020.

Other specialty areas delivered pleasant surprises with regards to their adoption of telemedicine. Henry Ford’s neurology department, for example, had long been adamant about seeing patients in person. However, neurologists discovered for themselves telemedicine’s potential to facilitate great patient care.

Dr. Diane George, chief medical officer, primary care, at Henry Ford Health System, shared an example with CPX™ participants during their July virtual meeting, where a telemedicine visit led to a previously overlooked potential

“When COVID-19 hit and normal clinical operations shut down, people who didn’t like virtual became believers overnight.”

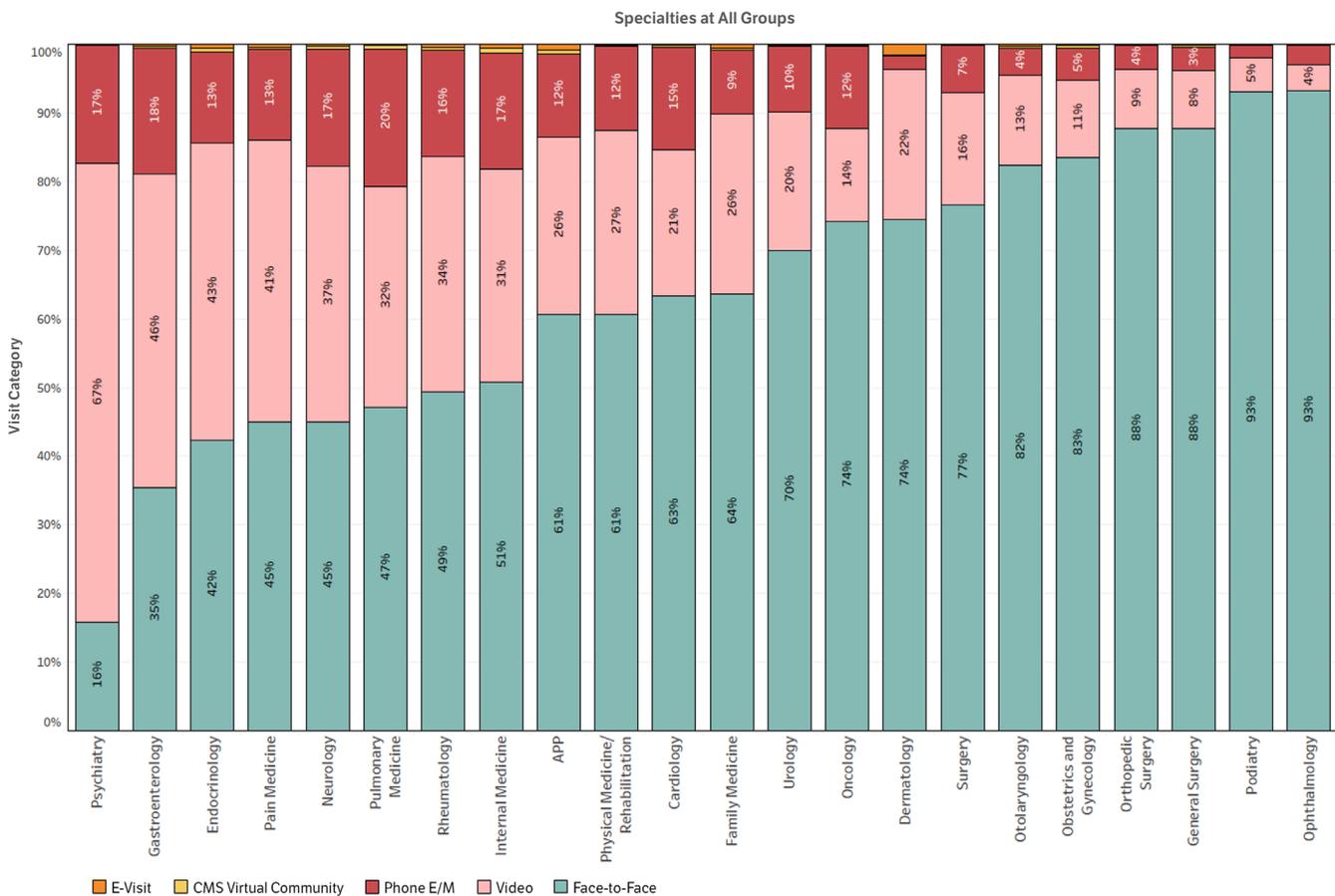
— Diane George, D.O., Chief Medical Officer, Primary Care, Henry Ford Health System

diagnosis—and strengthened the physician-patient relationship. “Through telemedicine, the neurologist really did a comprehensive review of the patient’s record and really listened to her history,” she said. “The patient felt so well cared for.”

Data from CPX™ participants shows that Henry Ford wasn’t alone in having neurology be a champion adopter of telemedicine. As we see in Figure 3, neurology was among the top specialties to adapt and utilize telemedicine during the height of the pandemic, with approximately 55% of visit volume done through telemedicine, a majority of that coming from video visits (37%).

While the highest user of telemedicine among all specialties was 84% for psychiatry, endocrinology was another adoption success story. Providers realized telemedicine’s potential to maintain connections with patients with

Figure 3: Telemedicine Utilization by Speciality CPX™ (2020 – Q2)



Visits from 21 Healthcare organizations between 04/01/2020 and 06/30/2020. Each column represents a different provider specialty, and the vertical axis represents the proportion of visits within that specialty that were delivered face to face or by telemedicine. Colors represent visit type, face-to-face or type of telemedicine.

diabetes and work with local outlets to address gaps in care. Some aspects of care—such as data collection and multi-state coverage areas—presented obstacles, but CPX™ participants rose to the challenge.

For patients without Bluetooth-enabled devices at home, Henry Ford scheduled quick, socially distanced visits to capture height, weight, and blood pressure measurements and flag any hypertension issues which may have risen during the pandemic. In other efforts to create the most complete patient visits and maintain quality during COVID-19, Dr. George added that the group is mailing at-home colorectal cancer screening kits to patients with screening gaps and working with its health plan on home HbA1c testing that can be entered into its Epic system.

Maintaining screening and testing across a largely rural five-state region has been Vanderbilt's challenge. The group responded by obtaining emergency telemedicine privileges for its physicians, which it hopes to extend into full licensures. "For patients with comorbidities and chronic conditions, this was a lifesaver," said Tom Nantais, executive vice president for adult ambulatory operations at Vanderbilt University Medical Center. "Once you get outside of Nashville and Knoxville, a lot of people have to travel pretty far for care, so this is something that really made a difference."

Preserving the Patient Experience

Many providers mentioned that one of the key challenges toward adopting telemedicine into their practice was the desire to preserve the patient experience, something that many organizations believed was a driving factor toward bringing patients into their facilities, as well as a competitive differentiator for their organizations.

For Marilu Bintz, M.D., medical vice president at the Gundersen Health System, the answer to this challenge was multifaceted. First, Gundersen developed several training and education programs for their providers to specifically address how they can create a meaningful connection through the screen, emphasizing that the patient is inviting you into their home, which is a significantly different experience from when the patient is sitting in front of you in your clinic, challenging providers to leverage that aspect in building their relationships.

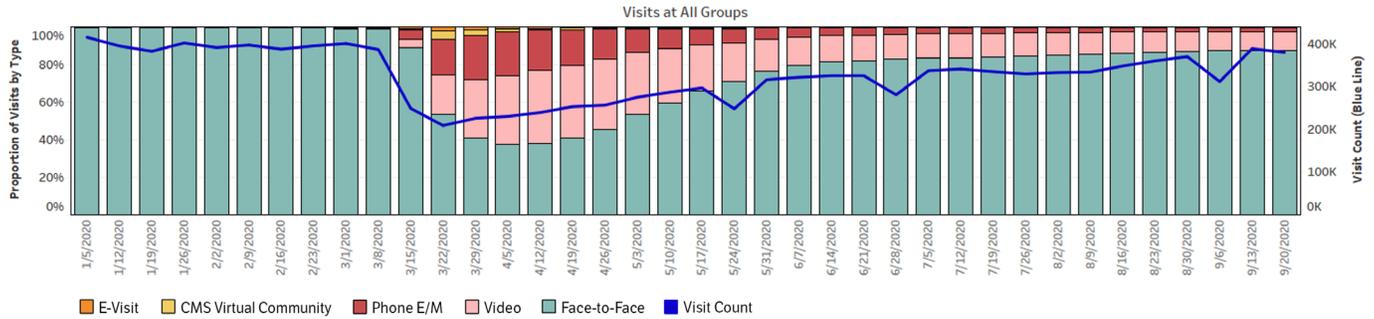
The second was to take a step back and consider ways to create a smooth experience for the patient virtually. "In the old days, we could have the patient come into our lab a few days before the appointment, come in, get your HbA1c, and then when I see you in the clinic we'll discuss it." Gundersen worked with its onsite teams to facilitate and translate that same smooth experience to the virtual world.

At Henry Ford, medical assistants have been helping patients acclimate to their MyChart platform and getting rave reviews. Dr. Diane George shared a patient letter that she received from her team:

"Everyone was very friendly and helpful in getting me on my first-ever video visit. I was a little worried about starting with a new doctor at this time, and my worries were immediately put at ease. He was very nice and made me feel like you actually cared."

Another important aspect to consider in preserving the patient experience is IT support. Charles Van Duyne, M.D., M.S., associate chief medical information and medical director for digital health, WellMed, and chief medical information officer, USMD Health System, stressed that organizations need to think about support in terms of IT resources, and not just staffing ratios or onsite personnel. "One of the main things is to recognize the need for all the support and operational pieces that have to surround telemedicine," he said. "It's not just getting a platform and sticking it in your EMR and using it, you now have a new process to deal with which is IT support, for the staff, for the patients, and so forth. You don't have to have IT support to tell someone how to drive to your office, park in a lot, and open the door, but you do when they're having trouble with the app. Someone is going to have to help them with that."

Figure 4: Total Visit Volume and Telemedicine Utilization by week CPX™ (2020 – Q3)



This benchmark view describes visit volume and delivery method for 23 healthcare organizations from 1/05/2020 to 9/29/2020, where the horizontal axis represents each week during this time period. The vertical axis on the left represents the proportion of visits each week that were delivered face to face or by one of the telemedicine modalities, indicated by the colors on each bar. The blue line corresponds to the vertical axis on the right and represents the total visit volume, including face to face and telemedicine visits, for each week.

Telemedicine Is Here to Stay

Several organizations within CPX™ reported a leveling off from the peaks of spring—a trend echoed by participant data shown in Figure 4. Through the third quarter of 2020, participant data seems to have stabilized at roughly 15-20% of visit volume being done through telemedicine.

As you can see, CPX™ participating organizations are making plans for telemedicine to be a permanent part of their workflows, whether it be for increasing access to care and optimizing clinic operations, or for managing care during challenging times outside of COVID-19. For example, Wilmington Health, an independent medical group in a coastal region of North Carolina, utilizes their telemedicine platform to care for patients during tropical storms and hurricanes, and many other CPX™ participants shared positive experiences from their rapid implementation earlier in the year.

Telemedicine’s Impact on Total Cost of Care

Telemedicine enabled Henry Ford to expand to 24/7 care—whether through a video visit in the middle of the night or to augment the capacity of clinics limited by occupancy restrictions and social distancing.

Inova reported similar benefits in terms of capacity and access. “Normally, we would have to cut down our volume by 50% by keeping half the people out of the office, but because we are using video visits and telephone visits, we’ve been able to keep up with the volume,” said Neeta Goel, M.D., chief medical officer, ambulatory services at Inova.

These benefits are all ways to achieve not only a competitive advantage in an organization’s region, but also have a positive impact on reducing total cost of care. For example, after-hours telemedicine visits have allowed Inova to reduce emergency department and specialist visits, lowering cost of care for the organization and increasing convenience and satisfaction for patients.

At Vanderbilt, which has too few primary care practitioners spread across a geographically broad rural region, telemedicine has delivered value in areas from patient satisfaction to resource optimization. “A lot of things can be done, like the Medicare annual health visit, and it’s a way for patients to stay in touch with their primary care physician,” said Tom Nantais. “Furthermore, by decreasing the number of in-person visits, telemedicine opens up unused exam rooms for other purposes.”

“Providers and payers will see this as a value, and our patients love the service.”

— *Tom Nantais, Executive Vice President for Adult Ambulatory Operations, Vanderbilt University Medical Center*

Addressing Three Key Telemedicine Challenges

1. New Workflows and Analytics

Other key insights shared with CPX™ participants by Dr. Van Duyne revolved around resource allocation, outside of provider and support staff: “What you also have to take into account is you have new billing practices and collections follow-up. You have to come up with training and education for the providers and staff, coming and going. How you allocate your resources also depends on if you’re doing on-demand virtual services or scheduled services. It was easy during the early days of COVID-19, because nobody was coming into the office, so you had lots of staff with extra bandwidth. The challenge is now, going the other way, how exactly are we going to execute on that?”

It’s important groups be flexible and mindful as they outline their plans moving forward post COVID-19, to see where the need is going to be in the short term and where the expected volume is going to be long term. A key piece to that is data and analytics, identifying what KPIs your organization is going to track and measure. “You can’t just walk over to your IT folks and say, here I need a report on this, when you haven’t told them exactly what you want or thought about it yourself,” said Dr. Van Duyne.

2. Managing Co-pays and Collections

In the pandemic’s early days, telemedicine reimbursements and co-pays took a back burner to protection and patient care. “We started doing telephone visits really quickly,” said Inova’s Dr. Goel. “At that point, nobody had announced if telephone visits would be covered or not. Safety was the most important thing.”

However, collections required rethinking. As telemedicine patients log in to a digital platform rather than submit their co-pay in person at a clinic’s front desk, some payments slipped through the cracks. Vanderbilt was collecting close to 85% of co-pays prior to COVID-19 and somewhere in the 65% range during the height of the pandemic, Nantais estimated. Since then, Vanderbilt has worked with its Epic platform, which allows patients to store a credit card so they can submit a co-pay at the point of the visit.

The task now is patient education, Nantais said—getting people to understand the new co-pay process before their telemedicine visit so they’re prepared to share their credit card number or authorize usage of a pre-stored card.

3. Addressing Regulatory Headwinds

Some organizations in CPX™ and around the country have shared their challenges with getting telemedicine adopted at specific parts of their organization. Gundersen Health mentioned that they had difficulty getting adoption at their critical access hospitals and clinics, not because the clinicians were unenthusiastic, but, as Dr. Bintz shared, “Quite honestly, because the policies and regulations are so outdated. Critical access hospitals and clinics lose somewhere in the range of \$200-\$250 every single time they do a virtual visit, as opposed to bringing them in.”

To continue to make telemedicine a reality for viable patient care, we have to get the reimbursement model right. As many organizations believe offering telemedicine is the right thing to do for the patient, offering a value proposition that often exceeds in-person visits in most cases, it is important organizations continue to advocate on behalf of telemedicine to state and national legislatures so that there isn’t an automatic disincentive for progressing forward.

The Future of Telemedicine: Bringing Care to the Patient

Henry Ford is continuing to explore how virtual care fits into its overall strategy of providing better care for patients where they live, across the continuum. For example, on-demand care could start with Henry Ford’s “MyCare” advice line, which is available 24/7 to patients who have a Henry Ford primary care provider, then could move to an on-demand visit or a scheduled video visit for chronic problems. Concurrently, engagements such as at-home check-ins and post-discharge visits could move to the virtual realm.

Dr. Imelda Dacones, M.D., president and chief executive officer, Northwest Permanente Physicians and Surgeons, P.C., is taking that a step further, challenging each of their 1,300+ physicians and providers to take a critical look at when they will need to bring patients into their clinics in the future, providing them with a simple “TSA” framework that leverages technology:

- When you need to **Talk** to your patient, there’s the telephone.
- When you need to **See** your patient, you can use video.
- When you need to **Auscultate**, that’s when you bring them in person.

She continued, “A guiding principle for me, really the framework around three ‘R’s’ for our physicians and clinicians to think about, how we reimagine, reengineer, so that we can reinvigorate our practice and ourselves. If the brave new world is bringing care to the patient—agnostic of venue, agnostic of time—if we really are to function as doctors without borders, the question is how do we get all of the ecosystem of IT support, technology and accessories in terms of remote patient monitoring, with a better platform to ensure stability and resilience. Care at home could be primary care at home, chronic condition management at home, all the way up to hospital level care at home, to skilled nursing facilities at home through technology. Wherever the patient is, we bring the care to you, and think hard about when and if we bring the patient to the facility.”

What’s Next for CPX™ and Telemedicine

New technologies and tools pose many questions, particularly during times of disruption. Are care teams relying on telemedicine too much—or not enough? What can organizations do to increase specialist adoption? How will patient outcomes—and the measurement of these outcomes—change as more visits become virtual?

Data will be key to answering these questions and more. As health systems continue to normalize telemedicine at their practices, CPX™ now offers a way to see how they compare against other groups and gain helpful tips from organizations who are dealing with similar challenges.

CPX™ combines the industry’s premier analytic tools with AMGA’s trusted expertise in best practice sharing in:

- Clinical Quality and Safety
- Total Cost of Care
- Practice Efficiency
- High-Risk Patients

Learn more about CPX™ and how to get involved at amga.org/cpx.

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