Introduction

The use of telehealth services to support patient care has experienced a rapid expansion in recent years due to the global COVID-19 pandemic. As the world adjusted to a rapidly changing public health response, many health care facilities closed or severely limited access to in-person care. In response, health care providers, many of whom had limited or no prior experience with virtual care, successfully adopted telehealth services to 'keep the lights on.' The volume of care provided virtually jumped drastically from approximately 2% prior to the pandemic to highs of 50% or more as the initial wave of COVID-19 swept the United States.¹ As the world has slowly adjusted to a post-pandemic norm, initial decisions supporting the adoption of telehealth focused on urgency and a need to scale should be revisited to ensure telehealth supports high-quality care in the future.

Acceptance of telehealth from both the patient and provider perspective has grown significantly as use has expanded and reflects an evolution of telehealth from being a siloed, under-utilized modality to a clinically integrated, easy-to-use care option. Defined as a synchronous video visit between a health care provider and patient, telehealth provides a mechanism for connected care in a convenient and comfortable setting for the patient. For health care organizations and providers, telehealth can extend and expand access to care and deliver a high-quality, patient-centered experience, while also providing insight into a patient’s home environment that otherwise may not be visible.

This paper presents five lessons to support the long-term use of telehealth services as a tool to deliver high-quality virtual care. These are based on the experience of seven provider organizations who participated in the CalHIVE Network, a multi-year improvement collaborative run by the California Quality Collaborative (CQC), a program of the Purchaser Business Group on Health (PBGH). As health care organizations prepare for the future of telehealth, these lessons can support their decision making and increase the utility of these services for high-quality patient care. Other stakeholders such as purchasers, health plans, technical assistance organizations and policy makers may also find insights about solutions that they can implement or support.

**Recommendations**

**1**  
Telehealth services require ongoing investments in people and technology and their use should support long-term priorities.

**2**  
Telehealth can be an effective tool for chronic disease management when supported by seamless data exchange and integrated alongside other modalities of care.

**3**  
Principles supporting high quality primary care also apply within a virtual setting but need to be redesigned to support telehealth.

**4**  
Patient and care team feedback should be regularly collected and analyzed to inform a patient-centered and provider-informed approach to virtual care.

**5**  
Telehealth services have the potential to address known health disparities, but data should be examined to understand the impact of virtual services on patient utilization, access, experience, and outcomes.

**About the CalHIVE Network**

The CalHIVE Network (2020-2022) was a two-year improvement collaborative that engaged over 1,300 clinicians to improve access to and outcomes of care delivered through telehealth services. Since launching in the fall 2020, CalHIVE has helped participating health care organizations adopt and refine telehealth and virtual health tools in response to the COVID-19 pandemic. These improvement efforts have included improving telehealth support services for clinicians and patients, adapting care team workflows to support virtual care, analyzing telehealth data to inform decision making and strategically considering how telehealth wove into their organization’s priorities.
### Participating organizations

CalHIVE participants included seven health care organizations across eight California counties serving communities within the Central Valley and Inland Empire.

The seven participants represent a range of delivery organizations including Federally Qualified Health Centers (FQHCs), Independent Physician Associations (IPAs) and Management Services Organizations (MSOs). These organizations deliver care to a diverse set of communities and serve patients across all three major categories of payers – commercial insurance, Medicare and Medicaid. Collectively these organizations provide care for more than 715,000 Californians.

<table>
<thead>
<tr>
<th>Organization (Type)</th>
<th>Communities Served</th>
<th>Patients Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAMM/PrimeCare (IPA)*</td>
<td>Inland Empire, San Diego County</td>
<td>220,000</td>
</tr>
<tr>
<td>Prospect Medical Group (MSO)</td>
<td>Inland Empire, Los Angeles County, Orange County, San Diego County</td>
<td>150,000</td>
</tr>
<tr>
<td>Golden Valley Health Centers (FQHC)</td>
<td>Central Valley</td>
<td>135,000</td>
</tr>
<tr>
<td>EPIC Management LLC (MSO)</td>
<td>Inland Empire</td>
<td>90,000</td>
</tr>
<tr>
<td>Desert Oasis Healthcare (IPA)</td>
<td>Inland Empire</td>
<td>50,000</td>
</tr>
<tr>
<td>Choice Medical Group (IPA)</td>
<td>Inland Empire</td>
<td>40,000</td>
</tr>
<tr>
<td>Central City Community Health (FQHC)</td>
<td>Inland Empire, Los Angeles County, Orange County</td>
<td>30,000</td>
</tr>
</tbody>
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*As of June 2022, NAMM PrimeCare is known as OptumCare. For the purposes of this paper, they are referred to as PrimeCare.
Integrated technical assistance

CalHIVE provided three integrated pillars of technical assistance that included individualized coaching or improvement advising; impactful learning activities including skills training, virtual expert presentations and peer sharing; and data analytics based on self-reported, validated data across several performance measures. Technical assistance was geared toward each organization’s centralized quality improvement team, rather than to those providing direct clinical care. This train-the-trainer approach allows organizations to tailor the application of technical assistance to best serve their organizational goals and rapidly implement improvements across a large network of clinics and providers.

The CalHIVE curriculum covered the following areas:

- Quality improvement fundamentals
- Telehealth operations
- Care teams for virtual care
- Patient partnership
- Telehealth sustainability
- Population health management
Lessons for Telehealth’s Future

The five lessons outlined below provide best practices for delivering virtual care, as well as opportunities for health care organizations to support the future of their telehealth services ensuring delivery of high-quality virtual care, based on the experiences of the CalHIVE Network’s participating organizations.

**Lesson 1**

Telehealth services require ongoing investments in people and technology, and their use should support long-term priorities.

Telehealth services require an ongoing investment in both technological platforms that support virtual care and the providers and patients utilizing these services. Investments should align with wider organizational priorities in supporting care teams and patient care.

Across most health care organizations, a hybrid approach to clinical care has become the norm, with virtual services being provided alongside traditional in-office appointments. Decision making to support such a hybrid approach should consider questions around what telehealth platforms will be maintained, how care team members will be trained to support virtual care and methods to maintain flexibility in appointment scheduling for a mix of appointment types.
Desert Oasis Healthcare (DOHC), an IPA and medical group, serves the communities living in the Coachella Valley and Morongo Basin across Riverside and San Bernardino counties. Their expansion of virtual services during the pandemic reflected their mission to provide the highest quality medical care to the residents of the desert communities they serve by expanding traditional access to care beyond the office walls.

Telehealth can expand access to care by connecting patients to their providers and care teams via technology, such as a smart phone, tablet, laptop, etc., in a setting of their choosing, such as at home or work. However, DOHC recognized that these shifts to accessing care did not equally serve all members of their community, and even created new barriers for some. For example, not all patients had access to the required technology or internet services to support a virtual visit. To overcome these challenges, DOHC applied a variety of innovative solutions.

DOHC launched a mobile health unit in the spring of 2021. While traditionally viewed as a tool to support in-person care within the community, DOHC used it to integrate access to their virtual care offerings. Supported by the DOHC pharmacy team, the mobile health unit has predominately been used to offer access to care at large local employers where working hours and transportation historically prohibited in-person office visits. The unit provides access to a care team on-site in the mobile unit, or if preferred, patients can speak directly to their physician via the unit’s virtual exam room. The unit can also enroll patients with diabetes in remote patient monitoring programs, providing glucometers and other necessary devices.

**Recommendations**

There is not a single telehealth strategy that health care organizations should adopt. Instead, they should examine their overall strategic plan, patients’ clinical needs and projected environment to see how telehealth can be an integrated clinical modality, and plan to make associated resource investments.
Lesson 2
Telehealth can be an effective tool for chronic disease management when supported by data exchange and integrated into other care modalities.

Telehealth can help support patients living with chronic conditions, such as asthma and diabetes, by offering them flexibility in how they can meet with their providers and new ways to track and manage symptoms. Research has shown that adding telehealth as an option for patients can help improve diabetes control by increasing self-monitoring, clinical visit frequency and self-ownership of health improvements.\(^3\)

With advances in telehealth platforms and remote monitoring technology, health care providers using telehealth should have easy access to patients’ clinical records from virtual and in-person encounters. However, due to differing health IT systems, siloed telehealth platforms and complicated technical integrations, telehealth encounters can live outside patients’ standard electronic health records, meaning clinicians and care teams often have to take the extra steps to locate all of a patient’s records, and in some cases, may not even have access to a platform where some of the records are stored.

This integration issue is exacerbated with the plethora of technical solutions. One CalHIVE participating organization surveyed network providers in fall 2021 and found more than thirty different telehealth platforms were being used across twelve IPAs. For centralized provider organizations such as IPAs and MSOs, supporting providers becomes more challenging with questions like which workflows and resources should be vendor-agnostic, and which should be specific to telehealth technologies.

Recommendations
Provider organizations should consider how a virtual care platform integrates with the current technology used by most of their network’s providers and ensure they understand which products are being used in their networks. Organizations may consider peer groups or information and resource sharing based on the most utilized platforms. Additionally, many telehealth technologies are focused on primary care, rather than specialty care, a huge gap when aiming for care integration. Technology and associated resources should be tailored to support as many specialties as possible.

Moving beyond the delivery system, health plans and purchasers frequently offer point-of-care telehealth solutions for providers or patients in their networks. While these systems often fulfill a need, information from these visits is frequently not shared with a patient’s primary care provider, further fragmenting care and data. Health plans and purchasers should ensure that their vendors have the capability to, and do, follow up with clinical summaries for patients’ assigned providers.

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A strong, well-functioning care team is vital to support telehealth. Care teams need to be supported with clear, tested workflows and guidance for what types of care are suitable for virtual appointments. Effective team-based care has been a key attribute of high-performing primary care delivery for many years. However, when it comes to telehealth, many organizations feel like they are still operating in the “emergent” phase – even past the early months of the pandemic – because they have not had the bandwidth to redesign their workflows, or maybe are not sure what needs to be redesigned.

Telehealth’s new challenges for clinics and practices, even those with established care teams include:

- Which team member provides technical support for patients?
- What does “rooming” look like for a virtual visit?
- How should time be allocated for front-office staff between virtual and in-person care?
- When should a visit be in person and when should it be virtual?

The answers to all these questions are being piloted and tested by practices and clinics of all sizes.

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Choice Medical Group is an IPA that provides care for 35,000 patients in the Inland Empire’s high desert. After the launch of their telehealth platform during the pandemic, Choice identified challenges related to both patient and care team workflows for virtual visits. Workflows for in-person care did not translate to virtual care and resulted in excess work for care team members and a poor patient experience. As a result, many attempted video visits had technical challenges requiring them to transition to telephone encounters.

In response to these issues, Choice used their morning huddles to gather feedback on virtual appointment workflows and to proactively engage staff in problem solving. Feedback supported improvements to care team member training around telehealth workflows and adjustments to their telehealth platform to streamline the patient experience. For example, based on feedback shared by staff, Choice removed a requirement for their patients to download a mobile application to support participation in a virtual visit and disabled their virtual waiting room.

Additionally, Choice developed a triage tool to help staff define appropriateness of in-person versus virtual appointments for different types of visits and conditions. The triage tool applied a decision tree methodology and enabled staff to guide appointment scheduling to an appropriate modality. Decision criteria were based on patient history (i.e., existing or new patient), a symptom checklist for certain conditions (e.g., COVID, UTI, etc.) and appropriate setting (e.g., emergency room, in-person or video).

### Recommendations

Virtual appointment workflows need to be developed with input from care team members and frontline staff. Workflows should delineate roles and responsibilities needed to support virtual appointments and how these align with needs for in-person care, resulting in a hybrid model with a blend of in-person and virtual appointments.

Additionally, a successful virtual experience requires careful planning and execution on the part of both the care team and patient. Patients and caregivers often need explanation of how they can best prepare and sign-on for their virtual visit, and additional support may be required for patients requiring digital literacy or additional broadband support. Patient and caregiver telehealth onboarding materials should be maintained and distributed.
As a clinical modality, telehealth should be integrated into a health care organization’s ongoing work to capture and act on feedback from patients, caregivers and members of the care team. Beyond existing channels to collecting patient experience information, organizations should consider the adoption of telehealth specific questions, such as how user-friendly the technology was and how effective the visit was for the patient’s clinical needs. Furthermore, given the extraordinary stressors placed on the health care workforce in recent years, organizations should regularly ask providers, care teams and employees about their telehealth experience to determine if workflows, training and functionality can be improved.

**Lesson 4**

Patient and care team feedback should be regularly collected and analyzed to ensure a patient-centered and provider-informed approach to virtual care.
PrimeCare, a network serving twelve IPAs across Riverside and San Bernadino counties and representing over 500 primary care physicians, regularly conducts network-wide provider surveys on a range of topics to improve the delivery of centralized services. In mid-2021, PrimeCare surveyed their network to understand the breadth of telehealth adoption and the volume of usage by providers. Results indicated more than 80% of providers were offering telehealth appointments and planned to continue offering virtual appointments beyond the initial wave of the pandemic. Telehealth was being provided over a large variety of different platforms and services, with over 30 distinct solutions identified in the survey. The survey also highlighted challenges faced by the provider community related to coding, reimbursement and patient education materials to support participation in virtual appointments.

In response, PrimeCare implemented several centralized support services for their network by developing telehealth best practice guides, educating providers and staff through individualized meetings and adding specific telehealth-focused questions to its annual provider survey. Additionally, PrimeCare now measures patient satisfaction related to telehealth encounters. Patients are sent surveys after each virtual appointment and asked to share feedback on their overall experience. Feedback has been positive with 80% of patients reporting a positive telehealth experience between 2020 and 2021. This patient feedback has been used to develop a patient education campaign, highlighting some of the advantages of virtual appointments over traditional in-person care, such as scheduling flexibility.

**Recommendations**

Health care organizations should ensure that they collect patient experience data around telehealth by including telehealth questions in regularly scheduled satisfaction surveys, both for patients and care providers. Results should be stratified between in-person and virtual care, and further between phone and video visits if possible. To better understand challenges and gaps, organizations could also consider conducting patient and provider interviews and/or focus groups.
All health care organizations share responsibility for ensuring that the care they provide is equitable to all patients, regardless of race, ethnicity, gender identity, sexuality orientation or any other social or identity dimension. With virtual care, there are known challenges patients and families face around access to broadband and digital devices, digital literacy and comfort with using telehealth for their specific health need. To better understand if telehealth is meeting patients’ needs, health care organizations should examine telehealth data, including utilization, access, experience and outcomes by key patient demographic fields and identify improvement actions to ensure telehealth is effective for all patients.

Lesson 5
Telehealth services have the potential to address known health disparities, but data should be examined to understand the impact of virtual services on patient utilization, access, experience and outcomes.
CalHIVE Spotlight
Golden Valley Health Centers’ Equity Work

Golden Valley Health Centers (GVHC), an FQHC in the Central Valley, annually serves over 130,000 patients, a large portion of which are Medi-Cal and under-insured populations. Given the diversity of their patients, GVHC strives to ensure that all patients have access to services to meet their health care needs. To meet that mission, GVHC launched telehealth visits during spring 2020 at select clinic sites, with two sites piloting video visits and the remaining sites using phone-only visits.

As part of their internal evaluation in 2021, quality and data staff looked at the language data available across all modalities of telehealth to assess if patients’ spoken language needs during virtual visits affected the visit’s clinical quality or their experience. GVHC knew that non-English speaking patients generally used telehealth modalities less than English speaking patients and wanted to understand the data trends as well as root causes. Utilization data for video and phone visits was stratified by patient language spoken, based on information shared by patients during the intake process.

Investigating the workflows showed that there was an easy process to screen and integrate a third-party audio translator, or “language line,” for phone visits. The process was far more difficult in video visits and often led to poor audio reception, negative feedback from patients and a delay in appointments that impacted staff. Updated workflows, including a new standard work around for the “language line” instructions, and additional training and education for frontline staff have been generally successful in supporting non-English speaking patients.

Recommendations

Health care organizations should analyze and stratify the patient demographic data they have available, even if it is incomplete. As a part of the CalHIVE program, learning activities included examining utilization of telehealth services stratified by a patient’s primary language found in demographic data and encounter data. Participants identified several challenges in utilizing data that has generally been siloed within their organizations, such as matching patients and providers who speak the same language, getting timely and accurate data from plans and translating the data into opportunities to improve their telehealth services. While these challenges exist, they should not stop health care organizations from working toward improvement now. Organizations should utilize the patient demographic data they have available to stratify and analyze their telehealth encounters to identify disparities and respond appropriately.

At the same time, there needs to be an industry-wide improvement in the collection of patient race, ethnicity and language data to support a deeper understanding of health disparities and identify appropriate remedies. Improved standards for collecting and sharing this information between health plans and purchasers can support this work and be applied to use cases beyond telehealth.
Conclusion

The health care delivery system was adept and responsive to the evolving nature of the COVID-19 pandemic. When lockdowns took hold and the delivery of in-person care came to a halt, the widespread transition to telehealth began. Many patients and providers readily adopted the technology, and most found it extremely beneficial. Yet health care providers cannot support telehealth alone; as a result of our work with the CalHIVE Network over the past two years, CQC has identified the following opportunities for the health care delivery system:

• Purchasers, payers and delivery organizations should prioritize payment parity for in-person and virtual care to drive continued investment in virtual service lines.

• Payer alignment and standardization of coding for telehealth services is necessary to reduce the administrative burden for delivery organizations.

• Practices of all sizes will need continued technical assistance to manage the transition to a hybrid model of care with a mix of in-person and virtual visits, particularly around workflows, scheduling and appropriateness of care type.

• Rather than increasing standalone systems, technology solutions and data collection should be integrated to ensure platforms, such as telehealth platforms, electronic medical records and patient portals, interact. Technology should support a seamless experience for care teams and patients.

• Improved collection and sharing of patient demographic data is needed for virtual visits.

As we transition toward a new ‘normal’ with care being provided both virtually and in-person, it is an opportune moment to think about long-term needs and how to support the future of virtual care. As one participating organization stated, “Telehealth is here to stay, so organizations need to commit to an ongoing investment to support it.”

Beyond the CalHIVE Network, CQC has identified a continued need for technical assistance for small and mid-sized practices and networks across much of California. Our technical assistance has a track record of sustaining improvements and preparing practices to succeed in advanced payment models. CQC’s programming can be uniquely tailored to meet an organization’s needs and includes foundational elements as well as support for advanced primary care. Telehealth and virtual care services, behavioral health integration and health equity span all these focus areas and will be integrated into future technical assistance offerings.
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• California Health Care Foundation (CHCF), which works to ensure that people have access to the care they need, when they need it, at a price they can afford. Visit https://www.chcf.org to learn more.

About the Purchaser Business Group on Health (PBGH)

Purchaser Business Group on Health (PBGH) is a nonprofit coalition representing nearly 40 private employers and public entities across the U.S. that collectively spend $350 billion annually purchasing health care services for more than 21 million Americans and their families. PBGH has a 30-year track record of incubating new, disruptive operational programs in partnership with large employers and other health care purchasers. Our initiatives are designed to test innovative methods and scale successful approaches that lower health care costs and increase quality across the U.S.

About the California Quality Collaborative (CQC)

California Quality Collaborative (CQC), a program of PBGH, is health care improvement program dedicated to helping care teams gain the expertise, infrastructure and tools they need to advance care quality, be patient-centered, improve efficiency and thrive in today’s rapidly changing environment.

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